



Post Occupancy Evaluation of Students' Satisfaction with Hostel Facilities in Federal Polytechnic Offa, Kwara State, Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study focuses on post occupancy evaluation of students' satisfaction with hostels facilities in Federal Polytechnic Offa, Kwara State with a view to determine factors that promote users' satisfaction with the hostel facility in terms of its services/amenities provided, structural features, environmental features, accommodation details and locational attributes. The hostel is wholly under the management and control of the Polytechnic. Four Hundred and Sixty (460) respondents were taken as the sample size for the study. 28 structured questionnaires were administered to the workforce of the hostel management using purposive sampling while 432 structured questionnaires were administered to the students occupying the school hostel. A total of 341 (74%) questionnaires was returned and found valid for analysis. Data analysis was conducted using descriptive statistical techniques such as frequency distribution table, Weighted Mean Score (WMS) and Relative Importance Indexes (RII). Findings revealed that there were mixed levels of satisfaction with elements of student hostel facilities. There was a strong indication of satisfaction with the environmental features compared to the other four elements of the

hostel facilities. The students were dissatisfied with facilities either because they are inadequate in number or quality or because of the location. The study recommends that the polytechnic management should ensure that facilities that aid students' academic performance should be prioritized. This will help to improve the satisfaction level among students with hostel facilities.

Keywords: Evaluation; post occupancy; students' satisfaction; hostel facilities; higher institution.

1. INTRODUCTION

The practice of post occupancy evaluation is a growing trend, in the United State of America, Australia and some European countries than it is in Africa [1]. Nawawi and Khalil [2], defined post occupancy evaluation as the evaluation of the performance of buildings in usage for improvement and fitness for purpose. The studies on post occupancy evaluation of hostel accommodation have usually examined it as a whole environment [3]. The concept of post occupancy survey moved in to fill the gap in the typical building process which consists of planning, programming, design, construction and occupancy of a building. Moreover, it has been observed that the application of post occupancy survey depends largely on the drivers and one of such is users' satisfaction [2]. Similarly, Watson [4], opined that the specific reasons for evaluation of buildings include; fine tuning old and new buildings, improving design for future buildings, demonstrating best value, building stakeholder commitment and evaluation existing building and also lack of evaluation and study leads to a situation in which every single building remains a unique specimen, design mistakes are repeated and some re-evaluation of the building as an end product is undertaken. Musa [5], noted that lack of school facilities resulted in depreciation in the academic program and performance of students. Furthermore, when facilities are not maintained, they constitute health hazards to the users of the facilities in which the students' academic performance will be negatively affected and the tone of the school will be at its lowest ebb tide, as well as human and material resources. It is evident in the research work of Hughes [6], that students' achievement depends upon the physical school facility, its age, the design and the condition of the school. However, no matter the strength of manpower resources in the system, educational processes require conducive physical accommodation, libraries, furniture, and playground amongst others. It is against this background that this study examines the post occupancy evaluation of students' satisfaction with hostels facilities in Federal Polytechnic Offa, Kwara State.

There have been several studies on post occupancy evaluation of institutional buildings in countries like United State of America, Johannesburg, Malaysia and Nigeria. For instance, Mehta [7], examined the post occupancy evaluation of LEED K-12 Schools in the United State of America. Descriptive statistics such as frequencies and percentages were employed. The study revealed that the barriers of post occupancy evaluation in the school include; the users not familiar with how to conduct a post occupancy evaluation, lack of financial resources, question of ownership of post occupancy evaluation, participation, commitment, low benefit-cost ratio and time needed to complete the post occupancy evaluation.

Similarly, Olatunji [8], examined the post occupancy evaluation exercise on the facilities of Lagos State Polytechnic. Descriptive statistics such as frequencies and percentages were employed. The study revealed that areas of deficiency in the level of noise and conveniences can be addressed to facilitate the assessment of the overall performance of the building. The study also revealed how polytechnics in Nigeria can use users' feedback to formulate maintenance policy and improve on future Infrastructural development in their institutions from the design stage. The study however considered facilities in Lagos State Polytechnic while this particular study on the other hand focused on hostel facilities in Federal Polytechnic, Offa. There exist overcrowding of the hostels thereby putting pressure on available infrastructure and attendant stress on students, leading towards anti-social behavior in federal polytechnic Offa. It has, therefore, become necessary to prevent the reoccurrence of these problems in Nigerian tertiary institutions and one way of doing this is to look into the quality of maintenance and the management of these hostel facilities This study will in turn fill the identified gaps. The study will enlighten the governing council of the Nigeria Polytechnics, the students and the general public at large whose knowledge will be enriched by the findings of this study. The aim of this research is to assess the post occupancy evaluation of hostel facilities in Federal Polytechnic Offa, with a view to

developing a guideline on improving the users' satisfaction with the hostel facilities in the study area. It is important to ask the following questions. What are the facilities provided in the hostel in Federal Polytechnic Offa, Nigeria? What is the level of satisfaction of users with the hostels facilities in the study area? This research focuses on post occupancy evaluation of hostels facilities in Federal Polytechnic Offa, Nigeria because it is restricted to Federal Polytechnic Offa, The scope of the study will be restricted to the perception of on-campus students' hostel in main campus towards their level of satisfaction with the hostel facilities provided in the Institution and the post occupancy evaluation of hostel facilities with the view of collecting much needed first hand information on the management of the hostel. Also, the study will cover the status, efficiency and management strategies of the hostel and how effective the management of the hostel has been in terms of satisfying the needs of the students.

2. LITERATURE REVIEW

2.1 Overview of Post Occupancy Evaluation

Post occupancy evaluation evolved from the architectural programming techniques of the late 1950s and early 1960s [9]. Post occupancy evaluation can be seen as a multifaceted tool to be adopted in solving problems of building and facilities management, as it evaluates the performance of buildings and facilities systematically. Post occupancy evaluation as defined by Baird [10] is "generic term for a variety of general programs and procedures as well as specific techniques for the evaluation of existing buildings and facilities". It involves systematic evaluation of opinions about buildings in use, from the perspective of the people who use them. Additionally, Preiser and Vischer [11], described post occupancy evaluation as the activity of evaluating buildings in use. For the purpose of this study, post occupancy evaluation is defined as a broad term for a variety of activities targeted at appraising the performance of hostel facilities and the satisfaction occupants derive from the created environment [12]. Similarly, Buba, Damina, Ka'ase, and Ojile [13], carried out post - occupancy evaluation of female students' hostel at Waziri Umaru Federal Polytechnic, Birnin Kebbi, North-West Nigeria. The study collected data through interview and questionnaire randomly administered on the

respondents. Data was analysed through the use of Relative Satisfaction Indexes (RSI). The study found out that the performance of the hostel was not up to reasonable satisfactory level. Equally, Philip, Ileanwa, and El-Hussain [14], examined post-occupancy evaluation of students hostel facilities in Federal Universities in North Central, Nigeria. The study utilized questionnaire and observation to elicit the data. Data was analysed with the use of Statistical Packages for Social Scientist (SPSS) software and results indicated that there was inadequate of facilities which resulted to overcrowding. Furthermore, Adegoke, Ajayi, Oladokun, and Ayodele [15], studied the post-occupancy evaluation of students' halls of residence in Obafemi Awolowo University, Ile-Ife, Nigeria. The study used simple random sampling technique to elicit data from 245 students. The study employed descriptive statistical tools of mean, standard deviation and Relative Importance Index (RII); the inferential statistical tools of Independent Samples t-test and Kendall Tau correlation. The findings from the study revealed that both genders were not totally satisfied with the facilities and supporting services.

It is to be noted that, these studies provides basis for this study. Meanwhile, the present study is on post occupancy evaluation of students' satisfaction with hostel facilities in Federal Polytechnic Offa, Kwara State, Nigeria. Adoption of questionnaire to elicit data from respondents and analysis of data through Relative Importance Indexes will help to achieve the aim of the study.

2.2 Hostel Facilities and Satisfaction of Students

Student housing forms part of the facilities that students take into consideration before making a choice of the school they intend to attend among other considerations [16]. The concept of school hostel accommodation has been defined by many authors from different perspectives. Susilawati [17], defined school hostel as a densely building with many rooms in which each room contains several beds. According to Najib, lyani, Yusof, and Osman [18], Students' hostel is said to include basic necessity facilities such as bedrooms which can serve the dual purpose of study and sleeping, bathrooms and toilets, laundry, kitchen and common room which student use it for recreational areas. In addition, Abramson [19], Toyin Sawyerr and Yusof [20], noted that there is need for cafeteria, mini market or bookshop and banking system inclusive of

automated teller machine within the vicinity of the student housing.

Several models have been used in measuring satisfaction in relation to student housing facilities. SERVQUAL and POE are normally used in this regard which is based on the students' actual experience while residing on the on campus student residence [21,3]. Abbasi, Malik, Chaudhry, and Imdadullah [22], in Pakistan measured the level of student satisfaction with current services offered by Pakistani universities. A cross section of 401 students of Bahauddin Zakariya University (BZU) was sampled through a questionnaire. Mean was adopted to analyze the resultant data. The study revealed that students were dissatisfied with many care services and facilities like teaching, administrative support, library, laboratories, accommodation, medical, and sports. It further showed the students were only satisfied with transportation, classroom and prayer facilities.

In a similar study in Nigeria, Ajayi, Nwosu, and Ajani [23], examined students' satisfaction with hostel facilities at the Federal University of Technology, Akure, Nigeria. The study used questionnaire to gather the data and employed Relative Satisfaction Index (RSI) to analyse it. The study found out that the respondents showed their dissatisfaction with the adequacy and functionality of facilities in the hostel. Further, Toyin Sawyerr and Yusof [20], investigated student satisfaction with hostel facilities in Nigerian polytechnics. The study evaluates the adequacy of the facilities as well as level of satisfaction of the students to the facilities provided. The study used questionnaire to elicit the data and employed descriptive statistics of mean score and standard deviation to analyse the data. The study found out that students were not satisfy with the hostel facilities. The study was limited to students' satisfaction with hostel facilities. The study did not actually focus much on post occupancy evaluation of students' hostel facilities.

Abdullahi [24], examined the level of satisfaction among the University Utara Malaysia students towards the facilities provided such as the sports facilities, accommodation, and bus transportation. A cross-section of 51 respondents was surveyed through questionnaire and data analyzed with descriptive statistics. The study found out that the level of satisfaction among students was mixed; however, majority of the students were satisfied with the facilities provided

by the University. Meanwhile, Lawrence [25], examined the post occupancy evaluation of on-campus housing in Obafemi Awolowo University Ile-Ife, Nigeria and the study revealed that satisfaction level was on average level due to problems of poor sanitary facilities, lack of privacy and lack of good water supply and small size of the room. However, a well-managed students' hostel is that in which these facilities are functional, with regular updating of obsolete accessories and periodic maintenance or replacement of defaulted accessories. This in no small measure has a significant influence on the comforts of students who live in school hostels, which will ultimately impart positively on their academic achievements [26].

Nwanekezie and Mendie [27] examined the condition of hostel facilities and satisfaction level of the students with the facilities at the University of Uyo, Akwa Ibom State, Nigeria through the use of questionnaire. The study employed percentage and Relative Importance Indexes (RII) to analyse the data. The study found out that University hostels were of interest to students than private accommodation and were not satisfied with the maintenance of the hostel. The study further revealed that most of the respondents have occupied the hostel for over a year. The study focused on hostel facilities in University in South – South , Nigeria. Though the study was on University hostel facilities, it helps the present study to have a footing for discussion since it is on evaluation of students' satisfaction with hostel facilities in higher institution. The present study focuses on post occupancy evaluation of students' satisfaction with hostel facilities in Federal Polytechnic Offa, North Central Nigeria.

Considering the reviewed literatures, these studies did not comprehensively cover the five elements of users' satisfaction assessment and post occupancy evaluation as covered in this study; a gap that this study seeks to fill among others.

3. MATERIALS AND METHODS

The study sought to evaluate the post occupancy evaluation of students' satisfaction with hostels facilities in Federal Polytechnic Offa, Kwara State. The study adopts survey research design. The population consists of students living in the school on-campus hostel of Federal Polytechnic Offa, Kwara State main campus and the hostel management staffs. 432 copies of questionnaire

were administered to students residing in Male Block (Boys Hostel), Female Block 'A', Female Block 'B', Female Block 'C', Female Block 'D' and Marble Lodge (Female HND Student's Hostel) out of which 319 (73.8%) of the retrieved were found useful for analysis while 28 questionnaires were administered to the workforce of the hostel management i.e. hostel porters, cleaners, security staffs, electricians and plumber out of which 22 (78.6%) questionnaires were retrieved and also used for the analysis.

The questionnaires provided information on the demographic characteristics of respondents, the facilities provided in the school hostel, condition of the facilities, challenges encountered in the management of the hostel facilities and respondents satisfaction level with different aspects of the hostel facilities such as services/amenities provided, structural features, accommodation details, environment features and locational attributes. The respondents were asked to score on the Likert scale of 1 to 5 (where 1=Very dissatisfied and 5= Very satisfied) their levels of satisfaction with the facilities and services. Data obtained from the survey was analysed using Percentage, Weighted Mean Score (WMS) and Relative Importance Index (RII). The WMS was calculated from the formula:

$$WMS = \frac{(5n_5 + 4n_4 + 3n_3 + 2n_2 + n_1)}{(n_5 + n_4 + n_3 + n_2 + n_1)} \quad (1)$$

N_5 = the number of respondents for "Strongly Agree"

N_4 = the number of respondents for "Agree"

N_3 = the number of respondents for "Undecided"

N_2 = the number of respondents for "Disagree"

N_1 = the number of respondents for "Strongly Disagree"

The Relative Important Index (RII) method was used in the study to determine the level of students' satisfaction in line with the formula used by Ugwu and Haupt, [28] and Enshassi, Mohamed and Abushaban [29] as shown in equation 2

$$RII = (\sum W) / (A \times N) \quad (2)$$

Where W is the weight given to each variable by the respondents and ranges from 1-5; A - the highest weight =5; N - the total number of respondents. The RII were then classified as 0-0.359 very low significance (VLS); 0.36- 0.529 low significance (LS); 0.53-0.679 moderate

significance (MS); 0.68-0.839 high significance (HS) and 0.84 – 1.0 very high significance (VHS).

4. RESULTS AND DISCUSSION

4.1 Demographic Characteristics of Respondents

Students' perception of hostel facilities and halls of residences could be affected by demographic issues such as gender, nationality, duration of residency, etc. [30]. To achieve the purpose of determining the satisfaction levels of the students, the understanding of their socioeconomic background was very important. The demography of the respondents considered their gender, age and length of stay in the campus hostel.

Table 1 contains the data on the socio-demographic characteristics of the respondents. The respondents comprises of two categories viz: the students resident in the hostels and the management staff of the students' hostels. As contained in the table in the students' category, majority of the respondents are females (55.8%) and majority of the respondents in the staff category are males (63.6%). With respect to the age categories, majority of the respondents (53.3%) in the student's category and the management staff category (86.4%) are above 31 years. Also, larger percentage of the students (46.7%) have stayed in the school hostel for a year while in the management staff category, majority of them (36.4%) have stayed in the hostel for above five years. The result implies that majority of the respondents have stayed in the property well enough to be able to supply necessary information, hence, information supplied is reliable.

4.2 Facilities Provided in Federal Polytechnic Offa Kwara State Hostels

In Table 2, twenty three items that measured the availability of the facilities provided at Federal Polytechnic Offa, Kwara State were examined. Among these twenty three rated facilities, the findings shows that in the order of availability of facilities at the school hostel, ten facilities/services i.e. security facilities (100%), electricity supply (100%), water supply & treatment (100%), cleaning services (100%), generator maintenance (100%), waste disposal system (100%), clinic (100%), common room (100%), toilet facilities (85%) and provision of

internet facilities (77%) are adequately provided in Federal Polytechnic Offa, Kwara State hostels. Equally, only eight facilities i.e. central air conditioner, sport field, canteen/cafeteria, dining room, library, CCTV surveillance system, mini market and computer room received negative responses from majority of the respondents. The attitudinal disposition of the school management is to provide basic facilities but costly facilities are not given attention as a result of high cost and maintenance difficulties.

Table3 shows the level of satisfaction of users with the hostel facilities in Federal Polytechnic Offa, Kwara State. The students' level of satisfaction was measured by covering the services/amenities provided in the hostel, structural features, environmental features, accommodation details and locational attributes. The students' satisfaction level of the environmental features which includes aesthetics of the building, vehicular parking lots, quality of the building and serenity of the environment with mean scores of 3.81, 3.75, 3.63 and 3.50 respectively were all high, which indicates that these conditions met the student's expectation. With regards to the services/amenities provided in the hostel, the students are satisfied with the generator maintenance (4.05), internet facilities (3.93) and water supply & treatment (3.75). Water disposal system, electricity and cleaning services are rated fairly satisfactory with mean scores of 3.28, 2.90 and 2.55 respectively while

the students are strongly dissatisfied with the auditorium hall, central air conditioner and CCTV Surveillance system. The structural features yielded low satisfaction in floor finishes (2.49), high satisfaction in ceiling finishes (3.80), window finishes (3.72) and roof finishes (3.57) and moderate satisfaction in wall finishes (3.20) and door finishes (2.87). The accommodation details yielded low significant in laundry (2.47) and study room (2.25), high satisfaction in the areas of bedroom (3.95), toilet (3.82), and bathroom (3.55) and moderate significant in the lobby (3.28) and common room (3.28). In locational attributes, the result yielded high satisfaction in factors like proximity to other hostels (3.87) and proximity to health center (3.54), it yielded moderate significant in factors like proximity to library (3.00) and proximity to event center (2.75) and low satisfaction in the proximity to lecture area (2.42).

5. DISCUSSION OF FINDINGS

The study has revealed that there are 6 hostels in main campus of Federal Polytechnic Offa, Kwara State.

1 male hostel and 5 female hostels. The study has revealed that many facilities in the hostels are in poor condition. This is attributed to the overcrowding in the Polytechnic hostel which exerts pressure on the facilities thus rendering

Table 1. Socio-demographic characteristics of respondents

Socio-demographic variables	Respondent's categories		Total
	Student	Hostel Management	
Gender			
Male	141 (44.2%)	14 (63.6%)	155 (45.5%)
Female	178 (55.8%)	8 (36.4%)	186 (54.5%)
Total	319 (100.0%)	22 (100.0%)	341 (100.0%)
Age			
15-25 years	66 (20.7%)	0 (0.0%)	66 (19.4%)
26-30 years	83 (26.0%)	3 (13.6%)	86 (25.2%)
Above 31 years	170 (53.3%)	19 (86.4%)	189 (55.4%)
Total	319 (100.0%)	22 (100.0%)	341 (100.0%)
Length of Stay in the Campus Hostel			
Less than a Year	15 (4.7%)	0 (0.0%)	15 (4.4%)
A Year	149 (46.7%)	2 (9.1%)	151 (44.3%)
Two Years	41 (12.9%)	2 (9.1%)	43 (12.6%)
Three Years	82 (25.7%)	2 (9.1%)	84 (24.6%)
Four Years	32 (10.0%)	3 (13.6%)	35 (10.3%)
Five Years	0 (0.0%)	5 (22.7%)	5 (1.5%)
Above Five Years	0 (0.0%)	8 (36.4%)	8 (2.3%)
Total	319 (100.0%)	22 (100.0%)	341 (100.0%)

Source: Field Survey (2021)

Table 2. Level of adequacy with respect to the availability of facilities in the hostel

Facilities /Services	Rank			Percentage		
	High Extent Frequency	Medium Extent Frequency	Low Extent Frequency	% Frequency	% Frequency	% Frequency
Security -Facilities	319	0	0	100	0	0
Electricity supply	319	0	0	100	0	0
Internet -Facilities	247	30	42	77	10	23
Water Supply & Treatment	319	0	0	100	0	0
Cleaning- Services	319	0	0	100	0	0
Fire Services	36	75	208	11	24	65
Auditorium/Hall	0	0	0	0	0	0
Generator -Maintenance	319	0	0	100	0	0
Waste - Disposal System	319	0	0	100	0	0
Central Air Conditioner	0	0	319	0	0	100
Sport Field	0	0	319	0	0	100
Clinic	319	0	0	100	0	0
Canteen/Cafeteria	0	0	319	0	0	100
Common –Room	319	0	0	100	0	0
Dining-Room	0	0	319	0	0	100
Library	0	0	319	0	0	100
Laundry Room	42	72	205	13	23	64
Parking Space	64	60	195	20	19	69
Study Room	35	74	210	11	23	66
Computer- Room	0	0	319	0	0	100
CCTV –Surveillance- System	0	0	319	0	0	100
Mini Market	0	0	319	0	0	100
Toilet -Facilities	272	0	47	85	0	15

Source: Field Survey (2021)

Table 3. Students' level of satisfaction with hostel facilities

Services/Amenities Provided	Response					WMS	Rank	Decision
	VS	S	UND	SD	D			
Generator Maintenance	158	166	0	0	0	4.05	1 st	Satisfied
Internet Facilities	139	180	0	0	0	3.93	2 nd	Satisfied
Water Supply & Treatment	109	210	0	0	0	3.75	3 rd	Satisfied
Security Facilities	103	191	0	25	0	3.50	4 th	Satisfied
Waste Disposal System	102	217	0	0	0	3.28	5 th	Neutral
Electricity Supply	96	171	0	52	0	2.90	6 th	Neutral
Cleaning Services	64	194	61	0	0	2.55	7 th	Neutral
Drainage System	31	96	83	45	4	2.00	8 th	Dissatisfied
Fire Services	0	90	127	0	102	1.70	9 th	Dissatisfied
Auditorium Hall	0	0	0	0	319	1.42	10 th	Strongly Dissatisfied
Central Air Conditioner	0	0	0	0	319	1.42	10 th	Strongly Dissatisfied
CCTV Surveillance System	0	0	0	0	319	1.42	10 th	Strongly Dissatisfied
Structural Features								
Ceiling Finishes	73	153	51	0	42	3.80	1 st	Satisfied
Window Finishes	70	149	43	0	0	3.72	2 nd	Satisfied
Roof Finishes	64	185	70	0	0	3.57	3 rd	Satisfied
Wall Finishes	48	191	80	0	0	3.20	4 th	Neutral
Door Finishes	58	165	32	0	64	2.87	5 th	Neutral
Floor Finishes	32	170	83	0	34	2.49	6 th	Dissatisfied
Environmental Features								
Aesthetic of the building	73	150	45	0	51	3.81	1 st	Satisfied
Vehicular Parking lots	64	124	96	0	35	3.75	2 nd	Satisfied
Quality of the building	67	118	70	0	64	3.63	3 rd	Satisfied
Serenity of the environment	32	156	73	0	58	3.50	4 th	Neutral
Structural Features								
Ceiling Finishes	73	153	51	0	42	3.80	1 st	Satisfied
Window Finishes	70	149	43	0	0	3.72	2 nd	Satisfied
Roof Finishes	64	185	70	0	0	3.57	3 rd	Satisfied
Wall Finishes	48	191	80	0	0	3.20	4 th	Neutral
Door Finishes	58	165	32	0	64	2.87	5 th	Neutral
Floor Finishes	32	170	83	0	34	2.49	6 th	Dissatisfied

Environmental Features									
Aesthetic of the building	73	150	45	0	51	3.81	1 st	Satisfied	
Vehicular Parking lots	64	124	96	0	35	3.75	2 nd	Satisfied	
Quality of the building	67	118	70	0	64	3.63	3 rd	Satisfied	
Serenity of the environment	32	156	73	0	58	3.50	4 th	Neutral	
Structural Features									
Ceiling Finishes	73	153	51	0	42	3.80	1 st	Satisfied	
Window Finishes	70	149	43	0	0	3.72	2 nd	Satisfied	
Roof Finishes	64	185	70	0	0	3.57	3 rd	Satisfied	
Wall Finishes	48	191	80	0	0	3.20	4 th	Neutral	
Door Finishes	58	165	32	0	64	2.87	5 th	Neutral	
Floor Finishes	32	70	83	0	34	2.49	6 th	Dissatisfied	
Environmental Features									
Aesthetic of the building	73	50	45	0	51	3.81	1 st	Satisfied	
Vehicular Parking lots	64	24	96	0	35	3.75	2 nd	Satisfied	
Quality of the building	67	118	70	0	64	3.63	3 rd	Satisfied	
Serenity of the environment	32	156	73	0	58	3.50	4 th	Neutral	
Accommodation Detail									
Bedrooms	127	102	0	0	90	3.95	1 st	Satisfied	
Toilet	127	113	0	0	79	3.82	2 nd	Satisfied	
Bathroom	114	119	0	0	86	3.55	3 rd	Satisfied	
Lobby	98	124	0	0	97	3.28	4 th	Neutral	
Common Room	97	146	0	0	76	3.28	4 th	Neutral	
Laundry	38	63	153	0	65	2.47	5 th	Dissatisfied	
Study Room	0	0	158	64	97	2.25	6 th	Dissatisfied	
Locational Attributes									
Proximity to other hostels	94	105	79	0	41	3.87	1 st	Satisfied	
Proximity to Health Center	108	118	57	0	36	3.54	2 nd	Satisfied	
Proximity to Library	61	109	86	0	63	3.00	3 rd	Neutral	
Proximity to Event Center	46	66	95	0	112	2.75	4 th	Neutral	
Proximity to Lecture Area	39	121	87	32	40	2.42	5 th	Dissatisfied	

Source: Field Survey, 2021

them obsolete. Also some facilities were very poor because they are no more in good condition while some facilities have undergone many years of usage without replacement. The study has revealed that some major facilities that would have improved academic performance are lacking in the hostels. These facilities include central air conditioner, sport field, canteen/cafeteria, dining room, library, study room, computer room, CCTV surveillance system and mini market. The study has revealed that students are moderately satisfied with hostel facilities considering service/amenities, structural features, environmental features, accommodation details and locational attributes. However, the study has revealed that there is high level of satisfaction in all the indicators covering the environmental features which includes aesthetics of the building, vehicular parking lots, quality of the building and serenity of the environment which indicates that these conditions met the student's expectation. Furthermore, the study revealed that there is moderate level of satisfaction in the services/amenities provided, structural features, accommodation details and locational attributes. From the findings, the challenges in the management of the hostel facilities were high level as a result of overcrowding on the facilities, there are no approved guidelines for the safe use of the facilities, users' misuse of building facilities, rapid increase in students' population living in the hostel and there are many non-functional appliances in the hostel.

6. CONCLUSION

The study was conducted to assess the post occupancy evaluation of students' satisfaction with hostels facilities in Federal Polytechnic Offa, Kwara State, Nigeria. The study assessed hostel facilities and the state of the facilities in main campus. From the study, facilities available were identified, the status of the facilities was established and the satisfaction level ascertained. The study has also examined the level of students' satisfaction with the hostel facilities covering services/amenities provided, structural features, environmental features, accommodation details and locational attributes. The management faces challenges ranges from high level of overcrowding of the students on the facilities, there are no approved guidelines for the safe use of the facilities and therefore users' misused the building and the facilities. The polytechnic management should consider ways

of improving hostel facilities in line with the international best practice in such a way it will boost academic performance of students.

7. RECOMMENDATIONS

The Polytechnic management should partner with private organization or Non Governmental Organizations (NGOs,) to build more hostels for both male and female students. The management of school hostels should be handled by a qualified Estate Surveyors and Valuers because they are trained, experienced and expert in the aspect of property management hence this function should be left to them alone for effective service delivery. The Polytechnic management should replace the deficient facilities with the new ones. Most importantly, it should ensure that facilities that aid students' academic performance are prioritized. Regular inspection and maintenance should be carried out in the hostel and adequate funding should be provided for this purpose.

That a committee should be set-up to see to the provision and maintenance of facilities in the hostels especially those variables that were ranked low.

Further to the pandemic and based on the population of students in the hostel, facilities like sanitizers, wash hand instruments should be provided at the entrance each hall of the hostels. This will curtail the spread of COVID - 19 and even when such or similar situation arise.

The Federal Government of Nigeria through the Polytechnic authority should endeavor to invest more in students' hall of residence.

CONSENT

As per international standard or university standard, participants' written consent has been collected and preserved by the authors.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Amaratunga D, Baldry D. Assessment of Facilities Management Performance. *Facilities*. 2000;18 (7/8):293-301.
2. Nawawi AH, Khalil N. Post occupancy evaluation correlated with building occupants satisfaction with student housing facilities. *International Journal of Social Behavioral, Educational Economic Business, Business and Industrial Engineering* 2008;5(10):1245-1250.
3. Amole D. Residential satisfaction in students' housing", *Journal of Environment Psychology*. 2009;29(1):76-85.
4. Watson C. Review of building quality using post occupancy evaluation. *Journal of Programme Education Building*. 2003; 35:1-5.
5. Musa K. Study of transformational leadership in malaysian changing education environment: A case of high performing schools. *Management Research Journal*. 2013;2:69-79.
6. Hughes J. Bringing emotion to work: emotional intelligence, employee resistance and the reinvention of character. *Work, employment and society*. 2005;19(3):603-625.
7. Mehta A. Post occupancy evaluation (POE) of LEED K-12 schools in the USA (Doctoral dissertation, Colorado State University);2016.
8. Olatunji AA. Post-occupancy evaluation of Lagos state polytechnic facilities: A user-based system. *Journal of emerging trends in engineering and applied sciences*. 2013;4(2):229-236.
9. Ilesanmi AO. Post occupancy evaluation and residents satisfaction with public housing in Lagos, Nigeria: *Journal of Building Appraisal*. 2010;6(2):153.
10. Baird G. Post occupancy evaluation and probe: A New Zealand perspective. *Building Research and Information*. 2001;29:469-472.
11. Preiser W, Vischer J. (Eds.). *Assessing building performance*. Routledge;2006.
12. Hewitt D, Higgins C, Heatherly P, Turner C. A market-friendly post occupancy evaluation: building, *Proceedings of International Association of Societies of Design Research*, 12th – 15th November, The Hong Kong Polytechnic University, China;2006.
13. Buba I, Damina GB, Ka'ase ET, Ojile P. Post-occupancy evaluation of female students' hostel at Waziri Umaru federal polytechnic, Birnin Kebbi, North-West Nigeria. *Journal of Environmental Science, Toxicology and Food Technology*. 2019 ;13(12):6-11.
14. Philip A, Ileanwa AC, El-Hussain AM. Post-occupancy evaluation of students hostel facilities in Federal Universities in North Central, Nigeria. *Architecture Research*. 2018;8(4):123-128.
15. Adegoke AS, Ajayi CA, Oladokun TT, Ayodele TO. A post-occupancy evaluation of students' halls of residence in Obafemi Awolowo University, Ile-Ife, Nigeria. *Property Management*;2020.
16. Price I, Mazdorf F, Smith L, Agahi H. The impact of facilities on students choice of university. *Journal of Facilities*. 2003;21(10):212-222.
17. Susilawati C. Student dormitory development plan with linear programming method. In *Proceeding of the PRREs 7th Annual Conference,(PRREsAC'01)*, Surabaya, Indonesia. 2001;1-8.
18. Najib N, Ulyani M, Yusof NA, Osman Z. The Relationship between Students' Socio- Economic Backgrounds and Student Residential Satisfaction. *International Journal of Social, Behavioral, Educational, Economic and Management Engineering*. 2011;5(8):1200-1206.
19. Abramson P. Green and growing: sustainability and amenities are increasing in new residence hall projects. *Living on Campus, 2010 College Housing Report*. 2010;13(5):20-30.
20. Toyin Sawyerr P, Yusof N. Student satisfaction with hostel facilities in Nigerian polytechnics. *Journal of Facilities Management*. 2013;11(4):306-322. Available:<http://doi.org/10.1108/JFM08-2012-00>
21. Hassanain MA. On the performance evaluation of sustainable student housing facilities. *Journal Facilities Manage*;2008.
22. Abbasi MN, Malik A, Chaudhry IS, Imdadullah M. A study on student satisfaction in Pakistani Universities: The case of Bahauddin Zakariya University, *Pakistani Asian Social Science*. 2011;7 (7):209-219.

23. Ajayi M, Nwosu A, Ajani Y. Students' Satisfaction with Hostel Facilities at the Federal University of Technology, Akure, Nigeria. *European Scientific Journal*. 2015;11(34):402–415.
24. Abdullahi RB. A descriptive study on students' satisfaction towards the services provided by University Utara, Malaysia. Unpublished M. Sc Thesis, University Utara Malaysia; 2009.
25. Lawrence AM. Post Occupancy Evaluation of On- Campus Students Hall of Residence “ A Case Study of Obafemi Awolowo Hall of Residence Ile-Ife ” By Hall of Residence Ile-Ife. *Greener Journal of Science Engineering and Technology Research*. 2013;3(1):001–011.
26. Shakantu W, Simpeh F. On-campus housing facilities: the perceptions of Ghanaian university students. *Journal of Emerging Trends in Economics and Management Sciences*. 2018;9(6):318-324.
27. Nwanekezie OF, Mendie EA. A Study on Students' Satisfaction with Hostel Facilities in Public Universities: The Case of University of Uyo Hostels, Nigeria. *American Journal of Economics*. 2019;9:157-163.
28. Ugwu O, Haupt TC. Key Performance and Indicators and Assessment methods For Infrastructure sustainability. A South African Construction Industry Perspective, *Building and Environment* 2007;42:665-680.
29. Enshassi A, Mohamed S, Abushaban S. Factors affecting the performance of construction projects in the Gaza strip. *Journal of Civil engineering and Management*. 2009;15(3):269-280.
30. Khozaei F, Hassan AS, Khozaei Z. Undergraduate students' satisfaction with hostel and sense of attachment to place: Case study University Sains Malaysia. *American Journal of Engineering & Applied Science*. 2010;3:516-520.

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