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A Survey on Student Preferences for On-Campus Hostel Accommodation at Kogi State University, Kabba, Kogi State Nigeria

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ABSTRACT

Aims. The achievement of academic excellence is intrinsically associated to the standard of students' accommodation. This survey sought to investigate students' preferences regarding on-campus university accommodation at newly gone operational Kogi State University, Kabba, Nigeria.

Methods: A school-based cross-sectional with a purposive sampling study was conducted from February 2024 to March 2024. A Close-ended, self-administered and pre-tested questionnaires were used to collect data. Data entry and cleaning were carried out on excel and analyzed using SPSS version 20.0. Analysis was done to measure the strength of association between potential predictive factors and students' rooms preferences.

Results: A total of 844 students participated in the study, giving an overall response rate of 84.4%. Students of $>20 - \leq 25$ years old were 2.1 times ($p=0.001$) more likely to reside in cheaper room, 2.3 times room with an attached toilet ($p=0.005$), and 2.084 times in a new building ($p=0.003$) than younger one (>20 years). The students affiliated at the faculty of SC were 1.404 times more likely to share their rooms with students of their own State ($p=0.033$), 1.588 times advocating entertainment halls in the residence ($p=0.010$) compared to students from MASS. The survey indicated significant differences in the students' preferences based on their age, gender, state/geopolitical location of the secondary schools, and faculties.

Conclusion. Students room' preferences were living in a new building, attached toilet to the room and the rental cost. Taken into accounts these attributes while conceptualizing, designing and constructing hostel accommodations for the students will create an ideal environment for them to excel academically.

Keywords: *Students, hostel, housing, accommodation, attributes, campus, Kogi State University and Kabba.*

1. INTRODUCTION

There is a body of evidence suggesting that appropriate, well designed and decent hostel accommodations have a positive impact in the progress, behaviour, social and academic performances of students in the universities (1). Dizaj (2022) has postulated that ignoring students' preferences, differences and similarities by the designer/developers of hostel accommodations will lead to dissatisfaction and possibly serious emotional and psychological complications in students. Consequently, the academic level of students can be negatively be impacted by the hostel environment (2).

New admitted students have high expectations finding a conducive and futurist hostel facilities to rent. In the recent years, Nigeria has witnessed an exponential increase of Federal, State and privately-owned universities consecutive to high demand for tertiary education. The phenomenon has brought about a growth in student numbers which has consequently resulted in high demand for hostel accommodations. Hostel accommodation is supervised living-learning hostel consisting of basic housing as well as learning facilities and amenities, and is administered to accommodate undergraduate and postgraduate students (3). Hostel accommodation for students can be referred as student housing, dormitories, campus apartments, student hostels, halls of residence and student accommodation housing (4).

In Nigeria, the Eliot Commission of 1945 and Ashby Commission of 1960 clearly highlighted the necessity to accommodate undergraduates on-campus for educational, economic and social reasons, thus every newly admitted student into the university is expected to be given a living space. In the last decades, the student enrolment has witnessed an unprecedented increase in Nigeria tertiary level of education, hence, securing a hostel for incoming students a herculean task (5). For instance, in 2005 only 200,000 students were successfully admitted into Nigerian universities (6). Astonishingly, rising from 1.274261 to 1.7million students in 2012 and 2017 respectively were declared to have been successfully been admitted (7).

In the first-generation university such as Obafemi Awolowo University, Ile-Ife, among others, the situation is gloomy. The University, which was built for 244 students all properly accommodated, had 37,000 as of 2017, but the available bed- space could only comfortably cater for less than 11,000 (5). Report by Azeez and Taiwo (2016) indicated that student hostel accommodation remained one of the major concerns in the Nigerian tertiary institutions due to the aforementioned issue (8). A survey on the effects of Students' Housing on Academic conducted at the University of Ibadan, Nigerian by Owolabi (2015) demonstrated that hostel accommodation improves academic excellence, more importantly among the students of poor

58 background and subsequently blend this category of students with the bright ones, expand
59 students' interaction and networking social values and prepared students for job market and
60 leadership (9). Cain (2006) concluded that the main reason of rejecting a tertiary institution
61 was considered as dilapidated, old and insecure physical structure. In spite of the fact that
62 more than seventeen years have elapsed since the study was published, the facts continue to
63 reverberate and remain factual till day (10).

64 The demand for on-campus accommodations in tertiary institutions in Nigeria is on increase
65 and as well as add-on facilities and services meant to meet the social recreational and
66 academic needs of in-coming students (4). Thus, student on-campus housing is not only
67 shelter, but comprises the immediate environment and other economic and social activities
68 that are in accord with academic work. On-campus accommodation provides proximity to
69 faculties and lecture halls, convenience shops, entertainment hall, communal rooms because
70 it becomes cheaper and is more convenient than off-campus (9). However, some students
71 showed the preferences to off-campus model of accommodation privately owned which
72 provide maximum comfort (11), building with latest architectural design and higher privacy,
73 In the last decade, the rental cost of student's hostel has witness significant changes. In a
74 study by Claire (2010), students were ready to pay more for their accommodation including
75 certain facilities and amenities, contrary to their parents (12). Notwithstanding, Gawilk (2017)
76 found out that, the cost of off-campus accommodation elicits high apprehension in the
77 students. Also, off-campus accommodations among other things may lead to late coming to
78 classes and exams, due to poor transport system and traffic congestion (13), which are
79 worsened during transporters/drivers strikes and fuel scarcity.

80 Students find solace in hostels that have been provided with spacious room size, individual
81 bathrooms, personal kitchen, laundries, electricity, water and electricity supplies, easy
82 accessibility to faculties, noise free areas, cleanliness and support facilities like internet,
83 security and wireless internet as postulated by Maina and Aji (2017) (14). For instance, recent
84 study in Ghana revealed that students had high regard for the cleanliness of hostel
85 accommodation followed by the availability of electricity, bathroom and toilet facilities, security
86 services, kitchen and comfortable beds (15). Those amenities were portrayed in university
87 such as Chandigarh University, India that is equipped with 24 hours power supply, music
88 room, cable TV, guest room, hot and cold-water bathroom, visitors room among others (16)

89 Achievement of the Sustainable Development Goals 11 (SDG11) that are the creation of
90 hostel accommodations open to students, safe, and durable to provide equal education to
91 everyone requires a good implementation of appropriate protective measures to avoid the loss
92 of lives and properties. Thus, Eseyin (2017) required that safety deals should be putting the
93 right rules, people and resources in place to prevent unforeseen events that can cause

damages or loss (17). Thus, adequate hostel accommodations should provide for the students for their protection and safety from internal (rape, bullying, cultism and theft) or external threats such as kidnapping and armed robbery ravaging Nigeria at this time, that can jeopardize their sojourn in the university.

Several studies have dwelled on student housing that focus on students' satisfaction, the shortage and quality and quantity of the accommodations (9, 18). However, there is a paucity of information related to newly admitted students' preferences on model hostel accommodation. The housing futurist architectural design and coupled with appealing and homey amenities and facilities have become an essential tool for enticing the gen Apha students. Seemiller and Grace (19) hypothesized that university administrators must gain better understanding of the new generational cohort's defining personalities, views, attitudes and learning flairs in order to attract, educate, and impact them successfully. Consequently, there is a need to design a critical agenda to gain insights into new generation students' points of view to ensure that the design of the university hostel remains relevant to them. The survey aims to provide information on the current housing situation among students of the Kogi State University and determine students' rooms preference for a model hostel accommodation. Data generated from the study would inform policy makers and accommodation developers on models housing to provide the post-millennium students.

2. MATERIAL AND METHODS

2.1 Study Area and population

The Kogi State University, Kabba came into legal existence in April 2023 as one of the full-fledged State Universities in Nigeria. The institution is located at Kabba-Bunu LGA of Kogi State (Latitude 7° 49' 37" N; Longitude 6° 4' 30"E) situated at 512 km from Lokoja, the State capital in the North-Central geopolitical zone of Nigeria (20). Its maiden matriculation took place in January, 2024 and the total number of students enrolled in various programs pegged at 1200 for the 2023/2024 session. Moreover, the University hosts students from different cultural, social and religious backgrounds residing off-campus. The institution has no provision for on-campus student' accommodation facilities yet. The institution offers 24-degree programme distributed as followed; Faculty of Arts and Humanities (5), Faculty of Science and Computing (11) and the Faculty of Management, Administration, and Social Science (8).

Study Design

129 The study was a school-based cross sectional conducted in February- March 2024 at the Kogi
130 State University, Kabba. A close-ended questionnaire was used to collect data on students'
131 rooms attributes of an ideal hostel accommodation.

132 **Sampling Technique**

133 Participants were selected using purposive sampling methods with all students having equal
134 probability of being included in the sample. The sampling technique was selected due to the
135 fact that structurally no students stayed on-campus, consequently no sampling frame for the
136 population of interest. The study area was constituted of a single location; thus, respondents
137 were selected purposively.

138 **Data Collection tool**

139 Questionnaires were prepared, pre-tested on students in the neighbourhood of the university
140 to determine its clarity and comprehension and distributed to students on campus. A close-
141 ended questionnaire was used to collect socio-demographic data, the current accommodation
142 situation and attributes of room preferences of students and determine potential predictors.

143 **Questionnaire Administration**

144 A total of 1000 closed-ended and self-administrated questionnaire was used for obtaining the
145 student's room preferences in the study. Surveys were conducted within the university
146 premises with the assistance of Nigeria Youth Service (NYS) members performing their one-
147 year military service to the nation. The information provided by the office of the Vice Chancellor
148 (VC) showed that they are above 1200 students on campus for the 2023/ 2024 academic year.
149 The questionnaire consisted of three sections: (1) quatre items on socio-demographic
150 information. (2) twenty items on room attributes, (3) twelve items on current location.

151 **Statistical Analysis**

152 The data were entered, cleaned, edited, and coded using excel spreadsheet and then
153 exported to SPSS 22.0 for analysis. In the study, the dependant variable were the students'
154 preferences for hostel accommodation. The independent variables were the age, gender,
155 State/geopolitical zone of the secondary school and faculty. Descriptive statistics were used
156 to assess the socio-demographic characteristics of the participants and were summarized into
157 proportions and frequency tables. Comparison of proportions between sociodemographic
158 characteristics of participants and the room attributes was performed by cross-tabulation using
159 the Chi-square test. Multivariate logistic regression model was performed to identify potential
160 predictors of rooms attributes. A p-value of less than 0.05 was considered significant.

162 **Ethical considerations**

163 Ethical issues related to social sciences research were observed. Verbal consent was sought
 164 from respondents after comprehensive explanation. Study identification numbers were used
 165 instead of participant's names while the confidentiality and anonymity strictly observed.

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167 **3. RESULTS**

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169 **Socio-characteristics of the students**

170 Out of the 1000 questionnaires administered, only 844 were valid (properly completed), thus
 171 giving the response rate of 84.4%. Most of the respondents were females 54.6% (461/844),
 172 77.1% (651/844) aged ≤ 20 years, 55.6% (469/844) attended secondary school in Kogi State
 173 (Table 1). As regards to the faculty selected, the respondents were mainly from the
 174 Management, Administration and Social Science (MASS) with 51.5 % (435/844), which is not
 175 surprising as this is the largest faculty with 47.1% of total enrolments. The mean age was
 176 19.36 with a standard deviation of 2.50.

177 **Table 1. Socio-characteristics of the students**

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Variable	Category	Number(n)	Frequency (%)
Gender	Female	461	54.6
	Male	383	45.4
Age group	≤ 20 years	655	76.6
	> 20- ≤ 25 years	175	20.7
	> 25 years	14	1.7
Secondary school attended (State/Geopolitical zone)	Kogi	469	55.6
	FCT	81	9.6
	North Central (Except Kogi)	104	12.3
	South West	119	14.1
	South East	41	4.9
	Others	30	3.6
Faculty	AH	102	12.1
	SC	307	36.4
	MASS	435	51.5
Study level	First year	844	100
Total	Total	844	

179 FCT: Federal Capital Territory/Abuja

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181 **Current location and accommodation**

182 In the present study, students were asked to indicate the category encompassing various
 183 attributes that best describes the room they had been staying. The table 2 showed that 844
 184 (100%) students lived off-campus, 84.2% (711) live on a single room, 62.4% (527) share their
 185 room with one student only and 35.2% (297) share their room with more than two students.
 186 Surprisingly, 27.0% (228) share the kitchen with more than seven people and 61.1% (516)
 187 share toilet and shower with other occupants. Regarding the room size, majority of students
 188 45.3% (382) live in 8 square metres (2x4), 247(29.3%) in 12 square metres (3x4) and 25.5%

(215) in the room of approximately 18 square metres (3x6). Concerning transportation fares to campus, 42.2% (356) paid ≤ ₦2000 per month and 29.9% (252) disbursed between ₦2000 - ≤ ₦3000. Regarding water supply, the data revealed that, a substantial proportion of the students 14.1% (119) get their water supply from the nearby rivers. However, Public Tap 24.4% (206), Borehole 22.6% (191), Private Tap 20.0% (169), Shallow Well 18.8 % (159) are representing the major sources of water supply of the students. To ensure steady wireless connection, 35.1% (296) of respondents readily pay ₦1500 while 26.2 % (221) of them spend ₦3000 monthly.

Table 2. Current housing situation

Variables	Category	Frequency n (%)	
		No	Yes
Do you have your own room?		133(15.8%)	711(84.2%)
Do you share the room with	one student only?	317(37.6%)	527(62.4%)
	more than two students?	547(64.8%)	297(35.2%)
Do you share toilet with	four people?	486(57.6%)	358(42.4%)
	other people?	328(38.9%)	516(61.1%)
Do you have your own kitchen?		380(45.0%)	464(55.0%)
Do you share the kitchen with	up to four other people?	553(65.5%)	290(34.4%)
	more than seven people?	616 (73.0%)	228(27.0%)
Do you have a pre-paid electricity meter?		551(65.3%)	293(34.7%)
Is your room WIFI provided by the landlord?		654(77.5%)	190(22.5%)
How is the approximate surface area of your room?	18 square metres (3X6)	215(25.5%)	
	12 square metres (3X4)	247(29.3%)	
	8 square metres (2X4)	382(45.3%)	
Transport fares to campus per month	≤ ₦2000	356(42.2%)	
	>₦2000 - ≤ ₦3000	252(29.9%)	
	>₦3000 - ₦10000	179(21.2%)	
	None	57(6.8%)	
Source of water supply	Borehole	191(22.6%)	
	Shallow Well	159(18.8%)	
	Public Tap	206(24.4%)	
	Private Tap	169(20.0%)	
	River	119(14.1%)	
Where do you live now?	On-campus	0(0.0%)	
	off-campus	100 (100%)	
What is your average monthly WIFI bills?	₦1500	296 (35.1%)	
	₦2000	164 (19.4%)	
	₦3000	221 (26.2%)	
	None	163 (19.3%)	

₦=Naira, 1US Dollar = ₦1200

Hostel room attributes

Table 3 depicts the most important attributes of student room. There should be provision of attached toilet to their room 793(94.0%), followed by living on single room 790(93.6%), living in a new building (89.7%) and have a 24-hour computer lab in the building 757(89.6%). More than half of the respondent's dislike sharing their room with someone else 476(56.6%). The provision of wireless internet 748(88.6%) and their security 730(86.5%) were also key attributes requested by the students. The vast majority of respondents 578(68.5%) agreed that they would prefer to share their rooms with only students of their own State and share the toilet with students of the same gender 664(78.7%). The favourable attitude towards a convenience shop/ kiosk/ provision store 719(85.2%) and entertainment hall 667(79.0%) in the hostel accommodations were very high among the respondents.

Table 3. Hostel room attributes

Variables	Frequency (%)	
	No	Yes
Do you want your own room?	54(6.4%)	790(93.6%)
Do you want an attached toilet to the room?	51(6.0%)	793(94.0%)
Do you want a cheapest room?	102(12.1%)	742(87.9%)
Do you want a cleaning service for the hostel?	227(26.9%)	617(73.1%)
Do you want to live in a new building?	87(10.3%)	757(89.7%)
Do you want sharing your room with someone else?	366(43.4%)	476(56.6%)
Do you want a 24-hour computer lab in the building?	88(10.4%)	756(89.6%)
Do you want to have unlimited Wifi at ₦2000 per month?	96(11.4%)	748(88.6%)
Do you want to have 24-hour security?	114(13.5%)	730(86.5%)
Do you want to have in-house laundry facilities?	170(20.1%)	674(79.9%)
Do you want to have a shuttle service to and fro campus	112(13.3%)	732(86.7%)
Do you want to have a self-catering kitchen in the hostel?	118(14.0%)	726(86.0%)
Do you want to have communal study room in the building?	102(12.1%)	742(87.9%)
Do you want to have a TV in your room?	328(38.9%)	516(61.1%)
Do you want to share your room with students of your own State?	266(31.5%)	578(68.5%)
Do you want to share the toilet with students of your gender?	180(21.3%)	664(78.7%)
Do you want to be within walking distance to faculty?	186(22.0%)	658(78.0%)
Do you want provision stores in the residence hall?	125(14.8%)	719(85.2%)
Do you want to an entertainment hall in the residence?	772(21.0%)	667(79.0%)
Do you want to live	Off - campus 426(50.5%)	On-campus 418(49.5%)

The relationship between the gender and age group among participants and responses to the room' attributes

The results in Table 4 revealed a significant difference between respondents of >20 - ≤25 years of age and their preferences for residing in cheaper rooms ($p=0.002$), requesting an attached toilet to the room ($p=0.016$) and living in a new building($p=0.009$) while those of ≤ 20 years of age chosen having provision stores in the residence ($p=0.003$) and entertainment halls in the residence ($p=0.009$).

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Table 4. Hostel room attributes by gender and age group among participants

Variables	Gender n (%)		Age group n (%)		
	Female	Male	≤ 20 years	>20 - ≤25 years	>25 years
Do you want your own room?	432(93.7%)	358(93.5%)	615(93.9%)	161(92.0%)	14(100.0%)
Total			790(93.6%)		
<i>P</i> -value	0.889			0.407	
Do you want an attached toilet in the room?	436(94.6%)	357(93.2%)	400(61.1%)	116(66.3%)	11(78.6%)
Total			793(94.0%)		
<i>P</i> -value	0.407			0.204	
Do you want a cheapest room?	405(87.9%)	337(88.0%)	587(89.6%)	141(80.6%)	14(100.0%)
Total			742(87.9%)		
<i>P</i> -value	0.952			0.002	
Do you want your own toilet in the room?	433 (93.9%)	355(92.7%)	94.7% (94.7%)	155(88.6%)	13(92.9%)
Total			788(93.4%)		
<i>P</i> -value	0.472			0.016	
Do you want a cleaning service for the hostel?	335(72.7%)	282(73.6%)	479(73.1%)	129(73.7%)	9(64.3%)
Total	617(73.1%)			617(73.1%)	
<i>P</i> -value	0.754			0.746	
Do you want to live in a new building?	411(89.2%)	346(90.3%)	598(91.3%)	146(83.4%)	13(92.9%)
Total	757(89.7%)			757(89.7%)	
<i>P</i> -value	0.573			0.009	
Do you want sharing your room with someone else?	248 (53.8%)	230(60.1%)	357(54.7%)	113 (64.6%)	8(57.1%)
Total	478(56.6%)			478(56.6%)	
<i>P</i> -value	0.068			0.058	
Do you want a 24-hour computer lab in the building?	408(88.5%)	348(90.9%)	592(90.4%)	151(86.3%)	13(92.9%)
Total	756(89.6%)			756(89.6%)	
<i>P</i> -value	0.264			0.266	
Do you want to have unlimited Wifi at ₦2000 per month?	402 (87.2%)	346(90.3%)	582(88.9%)	153(87.4%)	13(92.9%)
Total			748(88.6%)		
<i>P</i> -value	0.153			0.767	
Do you want to have 24-hour security?	405 (87.9%)	325(84.9%)	357(54.5%)	113(64.6%)	8(57.1%)
Total	730(86.5%)			730(86.5%)	
<i>P</i> -value	0.205			0.058	
Do you want to have in-house laundry facilities?	369(80.0%)	305(79.6%)	524(80.0%)	141(80.6%)	9(64.3%)
Total	674(79.6%)				
<i>P</i> -value	0.883			0.337	

Do you want to have a shuttle service to and fro campus?	399(86.6%)	333(86.9%)	568(86.7%)	151(86.3%)	13(92.9%)
Total	732 (86.7%)			732(86.7%)	
P-value	0.867			0.784	
Do you want to have a self-catering kitchen in the hostel	394(85.5%)	332(86.7%)	570(87.0%)	145(82.9%)	11(78.6%)
Total	726(86.0%)			726(86.0%)	
P-value	0.612			0.266	
Do you want to have communal study room in the building?	402(87.2%)	340(88.8%)	576(87.9%)	133(87.4%)	13(92.9%)
Total	742(87.9%)			742(87.9%)	
P-value	0.486			0.835	
Do you want to have a TV in your room?	269(58.4%)	247(64.5%)	399(60.9%)	107(61.1%)	10(71.4%)
Total	560(61.1%)			516(61.1%)	
P-value	0.134			0.727	
Do you want to live					
Off-campus	229(49.7%)	197(51.4%)	332(50.7%)	87(49.7%)	7(50.0)
On-campus	232(50.3%)	186(48.6%)	323(49.3%)	88(50.3)	7(50.0)
P-value	0.610			0.974	
Do you want to share your room with students of your own State?	304(65.9%)	274(71.5%)	436(66.6%)	130(74.3%)	12(85.7%)
P-value	0.087			0.056	
Do you want to share the toilet with students of your gender?	347(75.3%)	317(82.8%)	521(79.5%)	132(75.4%)	11(78.6%)
P-value	0.008			0.498	
Do you want to be within walking distance to faculty?	354(76.8%)	304(79.4%)	518(79.1%)	130(74.3%)	10(71.4%)
P-value	0.367			0.332	
Do you want provision store in the residence?	397(86.1%)	322(84.1%)	571(87.2%)	139(79.4%)	9(64.3%)
P-value	0.405			0.003	
Do you want to an entertainment hall in the residence?	356(77.2%)	311(81.2%)	531(81.1%)	128(73.1%)	8(57.1%)
P-value	0.158			0.009	

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Hostel room attributes by students' secondary schools State/Geopolitical zone and faculties.

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227 Students that attended secondary school in Kogi State and South West geopolitical zone
228 significantly preferred cheapest room ($P=0.040$) than other students. The questions 'Do you
229 want to live in a new building?' ($P=0.011$) and 'Do you want sharing your room with someone
230 else?' ($P=0.021$) were attributes that significantly varied among students according to their
231 secondary school (State/geopolitical zone) as shown in the table 5. However, students have
232 similar opinions on the questions "Do you want your own room?", "Do you want an attached
233 toilet in the room?", "Do you want a cleaning service for the hostel?", "Do you want to have
234 unlimited WiFi at ₦2000 per month?", "Do you want to have in-house laundry facilities?"

irrespective of the secondary attended and faculty in which they have enrolled. However, a significant difference was found between students on their preferences for the yearly accommodation fee ($p=0.040$), residing in the new residence halls ($p=0.011$), sharing your room with someone else ($p=0.021$), the number of people sharing a kitchen ($p=0.021$), been in the within walking distance to campus ($p=0.042$) and location of their secondary school (Table 5).

The table 5. Hostel room attributes by students' secondary schools State/Geopolitical zone and faculties.

Variables	Secondary school (State/geopolitical zone) n (%)							Faculty n (%)	
	Kogi	FCT	North Central	South West	South East	Others	HA	SC	MASS
Do you want your own room?	438(93.4%)	79(97.5%)	97(93.3%)	112(94.1%)	36(87.8%)	28(93.3%)	97(95.1%)	285(92.8%)	408(93.8%)
Total			790(93.6%)					790(93.6%)	
P-value			0.480					0.701	
Do you want a cheapest room?	419(89.3%)	72(88.9%)	85(81.7%)	108(90.8%)	36(87.8%)	22(73.3%)	88(86.3%)	269(87.6%)	385(88.5%)
Total			742(87.9%)					742(87.9%)	
P-value			0.040					0.808	
Do you want an attached toilet in the room?	437(93.2%)	77(95.1%)	98(94.2%)	114(95.8%)	36(87.8%)	26(86.7%)	94(92.2%)	286(93.2%)	408(93.8%)
Total			788(93.4%)					788(93.4%)	
P-value			0.318					0.823	
Do you want a cleaning service for the hostel?	332(70.8%)	62(76.5%)	77(74.0%)	94(79.0%)	32(78.0%)	20(66.7%)	82(80.4%)	216(70.4%)	319(73.3%)
Total			617(73.1%)					617(73.1%)	
P-value			0.410					0.139	
Do you want to live in a new building?	433(92.3%)	74(91.4%)	85(81.7%)	106(89.1%)	35(85.4%)	24(80.0%)	91(89.2%)	277(90.2%)	389(89.4%)
Total			757(89.7%)					757(89.7%)	
P-value			0.011					0.926	
Do you want sharing your room with someone else?	250(53.3%)	45(55.6%)	59(56.7%)	70(58.8%)	31(75.6%)	23(76.7%)	63(61.8%)	178(58.0%)	237(54.5%)
Total			478(56.6%)					478(56.6%)	
P-value			0.021					0.343	
Do you want a 24-hour computer lab in the building?	417(88.9%)	77(95.1%)	90(86.5%)	110(92.4%)	36(87.8%)	26(86.7%)	95(93.1%)	273(88.9%)	388(89.2%)
Total			756(89.6%)					756(89.6%)	
P-value			0.379					0.451	
Do you want to have unlimited WiFi at ₦2000 per month?	418(89.1%)	73(90.1%)	92(88.5%)	100(84.0%)	38(92.7%)	27(90.0%)	94(92.2%)	272(88.6%)	382(87.8%)
Total			748(88.6%)					748(88.6%)	
P-value			0.621					0.462	
Do you want to have 24-hour security?	408(87.0%)	74(91.4%)	89(85.6%)	101(84.9%)	34(82.9%)	24(80.0%)	88(86.3%)	262(85.3%)	380(87.4%)
Total			730(86.5%)					730(86.5%)	
P-value			0.606					0.730	

Do you want to have in-house laundry facilities?	368(78.5%)	68(84.0%)	85(81.7%)	99(83.2%)	31(75.6%)	23(76.7%)	77(75.5%)	247(80.5%)	350(80.5%)
Total			674(79.9%)					674(79.9%)	
P-value			0.683					0.503	
Do you want to have a shuttle service to and from campus?	399(85.1%)	73(90.1%)	93(89.4%)	109(91.6%)	32(78.0%)	26(86.7%)	91(89.2%)	268(87.3%)	373(85.7%)
Total			732(86.7%)					732(86.7%)	
P-value			0.173					0.607	
Do you want to have a self-catering kitchen in the hostel?	402(85.7%)	71(87.7%)	86(82.7%)	106(89.1%)	36(87.8%)	25(83.3%)	95(93.1%)	260(84.7%)	371(85.3%)
Total			726(86.0%)					726(86.0%)	
P-value			0.793					0.085	
Do you want to have communal study room in the building?	413(88.1%)	75(92.6%)	90(86.5%)	106(89.1%)	34(82.9%)	24(80.0%)	97(95.1%)	267(87.0%)	378(86.9%)
Total			742(87.9%)					742(87.9%)	
P-value			0.448					0.060	
Do you want to have your own TV in my room?	280(59.7%)	49(60.5%)	62(59.6%)	85(71.4%)	26(63.4%)	14(46.7%)	56(54.9%)	192(62.5%)	268(61.6%)
Total			516(61.1%)					516(61.1%)	
P-value			0.128					0.374	
Do you want to live?	230(49.0%)	35(43.2%)	53(51.0%)	61(51.3%)	24(58.5%)	15(50.0%)	47(46.1%)	153(49.8%)	218(50.1%)
Total			418(49.5%)					418(49.5%)	
P-value			0.715					0.757	
Do you want to share your room with students of your own State?	321(68.4%)	52(64.2%)	77(74.0%)	78(65.5%)	25(61.0%)	25(83.3%)	72(70.6%)	196(63.8%)	310(71.3%)
Total			578(68.5%)					578(68.5%)	
P-value			0.237					0.089	
Do you want to share the toilet with students of your gender?	364 (77.6%)	63(77.8%)	91(87.5%)	89(74.8%)	33(80.5%)	24(80.0%)	85(83.3%)	243(79.2%)	336(77.2%)
Total			664(78.7%)					664(78.7%)	
P-value			0.272					0.388	
Do you want to be within walking distance to faculty?	363(77.4%)	66(81.5%)	92(88.5%)	85(71.4%)	31(75.6%)	21(70.0%)	82(80.4%)	237(77.2%)	339(77.9%)
Total			658(78.0%)					658(78.0%)	
P-value			0.042					0.797	
Do you want provision store in the residence?	400(85.3%)	75(92.6%)	91(87.5%)	94(79.0%)	32(78.0%)	27(90.0%)	87(85.3%)	261(85.0%)	371(85.3%)
Total			719(85.2%)					719(85.2%)	
P-value			0.081					0.994	
Do you want to an entertainment hall in the residence?	372(79.3%)	63(77.8%)	86(82.7%)	96(80.7%)	29(70.7%)	21(70.0%)	84(82.4%)	227(73.9%)	3568(1.8%)
Total			667(79.0%)					667(79.0%)	
P-value			0.505					0.023	

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Sociodemographic characteristics as predictors of hostel room' preferences

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Students of >20 - ≤25 years old were 2.1 times (p=0.001) more likely to reside in cheaper room, 2.3 times room with an attached toilet (p=0.005), and 2.084 times live in a new building (p=0.003) than younger one (>20). The students registered in the faculty of SC were 1.404 times more likely to share your room with students of their own State (p=0.033), 1.588 times having entertainment hall in the residence (p=0.010) compared to students from MASS (Table 6).

Table 6. Independent predictors of hostel room attributes among newly admitted's students at Kogi State University, Kabba, Kogi State (n = 844) based on the final logistic regression model (Crude odds ratios).

haracteristics	Attributes	P-value	Odds ratio	95%CI
Age group	Do you want a cheapest room?	Reference		
≤ 20 years (655)		0.001	2.082	1.326 - 3.267
>20 - ≤25 years (175)				
>25 years (14)				
	Do you want an attached toilet in the room?			
≤ 20 years (655)		0.005	2.286	1.284 - 4.070
>20 - ≤25 years (175)		0.769	1.363	0.173 - 10.715
>25 years (14)				
	Do you want to live in a new building?			
≤ 20 years (655)		0.003	2.084	1.287 - 3.375
>20 - ≤25 years (175)		0.838	0.807	0.104 - 6.281
>25 years (14)				
	Do you want to have 24-hour on-site security?			
≤ 20 years (655)		0.002	2.003	1.292 - 3.105
>20 - ≤25 years (175)		0.260	2.109	0.575 - 7.732
>25 years (14)				
	Do you want to be within walking distance to campus?			
≤ 20 years (655)		0.174	1.309	0.888 - 1.929
>20 - ≤25 years (175)		0.490	1.512	0.467 - 4.896
>25 years (14)				
	Do you want to an entertainment hall in the residence?			
≤ 20 years (655)		0.022	1.572	1.068 - 2.316
>20 - ≤25 years (175)				

>25 years (14)		0.034	3.212	1.095 - 9.423
Secondary schools	Do you want a cheapest room?			
Kogi (469)		Reference		
FCT (81)		0.904	0.904	1.048 - .494
North Central (104)		0.033	0.033	1.873 - 1.052
South West (119)		0.651	0.854	0.430 - 1.695
South East (41)		0.762	1.164	.437 - 3.102
Others (30)		0.011	3.047	1.289 - 7.206
Secondary schools	Do you want to live in a new building?			
Kogi (469)				
FCT (81)		0.765	1.138	.488 - 2.652
North Central (104)		0.001	2.689	1.472 - 4.911
South West (119)		0.255	1.475	.756 - 2.879
South East (41)		0.127	2.062	.813 - 5.228
Others (30)		0.024	3.007	1.155 - 7.830
Secondary schools	Do you want sharing your room with someone else?			
Kogi (469)				
FCT (81)		.708	.913	.568 - 1.468
North Central (104)		.526	.871	.567 - 1.336
South West (119)		.281	.799	.532 - 1.201
South East (41)		.008	.368	.176 - .768
Others (30)		.017	.347	.146 - .825
Secondary schools	Do you want to be within walking distance to campus?			
Kogi (469)				
FCT (81)		0.414	0.778	0.427 - 1.419
North Central (104)		0.013	0.447	0.236 - .847
South West (119)		0.173	1.370	0.871 - 2.154
South East (41)		0.793	1.105	0.524 - 2.327
Others (30)		0.353	1.468	0.653 - 3.300
Secondary schools	Do you want to an entertainment hall in the residence?			
Kogi (469)				
FCT (81)		0.753	1.096	0.620 - 1.937
North Central (104)		0.438	0.803	0.461 - 1.398

South West (119)		0.743	0.919	0.553 - 1.525
South East (41)		0.202	1.587	0.781 - 3.224
Others (30)		0.231	1.644	0.730 - 3.703
Faculty	Do you want to an entertainment hall in the residence?			
HA (102)		0.903	0.966	0.549 - 1.698
SC (307)		0.010	1.588	1.116 - 2.260
MASS (435)		Reference		
Faculty	Do you want to share your room with students of your own State?			
HA (102)		0.892	1.033	0.643 - 1.660
SC (307)		0.033	1.404	1.028 - 1.919
MASS (435)				
Faculty	Do you want to have a self-catering kitchen in the hostel?			
HA (102)		0.040	0.427	0.190 - 0.962
SC (307)		.822	1.048	.696 - 1.577
MASS (435)				

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261 **DISCUSSION**

262 This research article reports findings of a cross-sectional exploratory study on students
 263 hostels accommodation preferences conducted among newly admitted students at a
 264 newly created Kogi State University, Kabba, Nigeria. The questionnaire yielded an
 265 84.4% response rate. The high response is similar to that achieved in Malaysia
 266 (92.59%) by Nimrod Siluyel (12) and (91.79%) Khozaei (4) but lower to that recorded
 267 in Johannesburg (50.8%) by Ijasan and Ahmed (21). The preponderance of female
 268 participants is due to the fact that there are more overall female students than male
 269 which in line with school management to empower the female child and the
 270 international student housing studies carried out by Gabbianelli (22) at the University
 271 of Urbin (Italy). However, the findings contrast with lesser female participants in a
 272 study by Siluyele (12).

273 There is body of evidence suggesting that study on student's hostel preferences should
 274 be preceded with a situational analysis of the current conditions. In a survey at School
 275 of Housing Building and Planning, Universiti Sains Malaysia, Khozaei (23)

276 pinpointed the fact that the accessibility of student accommodation hostels has been
277 recognized as one of the major issues that students must consider when choosing a
278 university. Currently, Kogi State University Kabba offers no on-campus
279 accommodation for its students. Consequently, students are facing additional housing
280 pressure specially those coming from others geopolitical zones of Nigeria. More than
281 86.9% of students ≤ 20 years are living singly and share their kitchen with more than
282 seven peoples which may be a cause of concern for parents in view of the rise of
283 security challenges facing the country. The cost of transportation and provision of
284 water supply in the off-campus are major drawbacks and can represent an impediment
285 for academic excellence of the students (24). Substantial proportion of the students
286 still rely on flowing water from the river to cater for their needs. Thus, exposing them
287 to various parasitic and bacteriological, diseases such as malaria, schistosomiasis and
288 onchocerciasis which are still widespread in the areas, and reducing considerably the
289 times allocated for academic purposes.

290 The present study revealed that the concept of privacy is highly valued by the vast
291 majority of the students. In regard to the privacy in the room, students ≤ 20 years of
292 age preferred singly room than rooms of three or even four people and there was
293 significant difference between the age groups ($P=0.0001$). The findings of this study
294 are consistent with a research work assessing various criteria in students' residential
295 preferences by Oppewal (25) which revealed that either undergraduate or graduate
296 students at a university in the United Kingdom are sensitive to sharing rooms and
297 toilets facilities with other students. However, contradicts the work of Olusegun
298 (2015) indicate that, on the average, the occupancy ratio of on-campus accommodation
299 compared to hostels facilities in Nigerian tertiary institutions has increased by 300 per
300 cent, implying that a room designed for four bedspace is occupy by averagely fourteen
301 students (26). Kelly (27) further clarified that some of the standing tables and chairs
302 have been carted away to provide space for supplementary double bunks. Various
303 authors have opined that the concept of privacy is diverse and can vary from intrinsic
304 characteristics, cultures, education levels and social backgrounds, genders, age, as well
305 as economical levels (28). In Nigeria, where the context of extended family is

prevailing, students find it accommodating to have one to two roommates without any difficulty. This is more acceptable if they are coming from the same secondary school/geopolitical zone. The questions 'transport fares to campus per month' ($p=0.023$), 'Water Supply' ($p=0.004$) varied significantly within the age groups. Male students expressed marked preferences for extra-large rooms compared to females ($p=0.047$). Nearly half of male students preferred ($p=0.047$) settling for bigger room compared to female as shown in supplementary Table S1 and S2. The results of the study are consistent with the work of (2), Consequently, developers should adequately factor the size of rooms to meet that particular variable while building new accommodations for new generational Nigerian students. The room size appears to be a crucial attribute in decision making in selecting a room. This is due to the fact that in advent of adding a roommate the room will be wide enough for comfortability (29). The preference for single room occupancy is tantamount to bed and bathroom parity. Our analysis revealed that 94.0% of students preferred attached bathroom in their room and 93.6% a single room occupancy. This fact might be attributed to an increasing appreciation of privacy among students. This tendency illustrates that single room occupancy and a toilet attached that provide more privacy are thereby becoming the hostel accommodation model among students. After the COVID-19 pandemic, single occupancy might become a norm as a means of breaking the transmission of the virus or any emerging viruses. Adama (30) emphasized a huge concern of the new generation for privacy among Nigerian students as one of the keys determining factors in the room preference. Such attitudes were corroborated in Malaysian (4) and Belgian students (31). Other reasons mentioned by Wong (32) were dirtiness, uncomforted, indiscrete. In addition, students do not have to line up to use bathroom, toilets when those facilities are attached to their rooms. In contrast, Olayinka (33) found on-campus hostel accommodation were occupied as much as eight students due to the squatting with fellow students.

The study highlighted the fact that participants with ≤ 20 years of age ($p=0.009$) indicated a greater propensity to live in a new building, as well as students that attended secondary in Kogi State ($p=0.011$). In contrast, Oppewal (25) working on

336 "Student preferences for university accommodation: an application of the stated
337 preference approach" found out that undergraduate students show a strong preference
338 for mixed gender floors and renovated instead of new buildings. This could be
339 attributed to the fact that younger and students residing in Kogi State where the
340 university is located would like to live in a different environment and be empowered
341 and experienced and independent live far from their parental homes.

342 The importance of technological pedagogical and content knowledge (TPACK) in the
343 tertiary education at the twilight of covid-19 pandemic is dramatically growing
344 worldwide. The demands on the teaching in universities level dictated by globalisation
345 necessitate students to be also equipped and stayed connected. ICT infrastructure and
346 access can significantly contribute to improving teaching and learning at university
347 level (34). Access to the internet was reported as one of the highest preferred facilities
348 in the hostel accommodation for students. The results of the present study underline
349 the vitality of internet access to the newly admitted students. For instance, in university
350 residence halls at Universiti Sains Malaysia (USM), Penang Island, Malaysia, by
351 Khozaei (35), free internet access was the most preferred facility. This is in consistent
352 with our study in which students periodize internet connection as one ideal tool to link
353 up with their lecturers, research in the web, search for recent information for their
354 seminars and thesis and submit online their assignments as well as zooming for
355 teleconferences.

356 In the recent past, Nigeria has experienced incidents of security breach in educational
357 institutions just to mention among others, as follows: On 2nd April 2023 — Armed
358 bandits abducted two female students at the Federal University Gusau (FUGUS) in
359 Zamfara State (36) and 9th May 2024 armed bandits invaded and abducted 9 students
360 from Confluence University of Science and Technology (CUST), Okene, Kogi State
361 (37). Niyi (36) concluded that insecurity challenges have resulted in kidnapping,
362 maiming, arson, rape, extortion, killing of students, lecturers, non-academic staff and
363 ultimately destruction of infrastructural facilities in Nigeria. Wong (32) in exploring
364 university students' preference for on-campus hostel attributes, revealed that security
365 is the highest among these motivational values and security value relates to the sense

366 of security about their future, personal health and integrity, privacy and safety issues
367 while residing in the university hostel far from home.

368 The present study indicates that the vast majority of students (71.2%) were ready to
369 pay for ₦200.000 yearly for on-campus accommodation. Unexpectedly, students
370 showed a strong preference for an average monthly rent, that falls within the range of
371 rent amounts the highest and the lowest. In comparison, in 2016, the rental fees for the
372 students at the Federal University of Technology living on-campus paid per academic
373 session for a bed space were ₦8,000 for the old hostels and ₦18,000 for the new
374 building (38). This is in agreement with a survey by (12) in Zambia a Survey on
375 Student Preferences of Facilities and Models of Accommodation at Kapasa Makasa
376 University, Zambia which showed that students were strongly reluctant to pay high
377 rental fees if a new hostels accommodations were constructed. This indicates that the
378 student's eagerness to pay an acceptable, reasonable and Affordable accommodation
379 fee that equate the value of the room, the facilities, the amenities and the services in
380 the building.

381 The present study showed that students were consistent for the provision of 24-hour
382 computer lab in the building, unlimited Wifi, 24-hour, on-site security, in-house
383 laundry facilities, a self-catering kitchen, communal study room. Our results are
384 consistent with a student housing research and survey conducted by (39) which
385 revealed that students placed more value on operational facilities, such as Wi-Fi, in-
386 house laundry, 24-hour computer hall, and parking over pools, fitness centres, and hot
387 tubs. Therefore, Booty, (40) emphasized that "student housing is increasingly being
388 positioned at the centre of mixed-use developments". Knight Frank (41) elucidated the
389 concept by adding that mixed-use developments provide a combination of residential,
390 office, hospitality, laundry, fitness centres restaurants and groceries into a single
391 development.

392 Students in their vast majority preferred to have provision store in the building.
393 Though. we found out students affiliated to the faculty of AH have elevated preference
394 to the provision of a provision store/kiosk ($P=0.060$) in the new building. The presence
395 of provision store renders the accessibility of various products needed (groceries,

396 snacks, foods, drinks, toiletries) by the students easy, saves time and energy which
397 will be used for others academic activities. Our findings are consistent with works of
398 Wong (32) and Miller (42) who pinpointed that the provision of laundry facilities,
399 security systems, communal spaces, 24-hour computer hall, coffee shops, satellite
400 dining facilities, convenience stores do blend studying and relaxing for the students.

401 **CONCLUSIONS**

402 The objectives of the survey were to give an insight of the student housing preferences of a
403 newly admitted students in the Kogi State University, Kabba, Nigeria. Our findings revealed
404 that the most considered room' attributes were living in a new building, attached toilet to the
405 room and the rental cost. Taken into accounts these attributes while conceptualizing,
406 designing and constructing hostel accommodations for the students will creates an optimum
407 environment for students to excel academically.
408

409 **Limitation to the study.**

410 The study findings are limited to the Kogi State University, Kabba, Kogi State, Nigeria and as
411 such findings cannot be generalized to other tertiary institutions in the country due to
412 differences in social, cultural and academic environments among tertiary institutions in Nigeria.
413 However, this study can be replicated in other newly approved universities within Nigeria so
414 that findings can be generalized.

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419 The authors declare that they have no competing interests

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423 **Authors' contributions**

424 AM conceive, supervise, secured and transferred all collected data and critically reviewed the
425 manuscript. KITE reviewed the study design, acquired and interpreted the data. OA design
426 the protocol and carried out the statistical analysis. BT conceptualized, designed the study
427 and drafted the manuscript, all authors have read and approved the final manuscript.
428

COMPETING INTERESTS DISCLAIMER:

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REFERENCES

1. Nomkhosi Xulu-Gama. (2019). The Role of Student Housing in Student Success: An Ethnographic Account. *Journal of Student Affairs in Africa*. 7(2), 15-25
2. Dizaj Mohammadreza Daliri & Tohid Hatami Khanghahi (2022). Students' residential preferences: a case study is dormitories of University of Mohaghegh Ardabili, *Journal of Asian Architecture and Building Engineering*, 21:4
3. Najib, M.N.U., Yusof, N.A. and Osman, Z. (2011), "Measuring satisfaction with student housing facilities", *American Journal of Engineering and Applied Sciences*, 4(1), 52-60
4. Khozaei, F., Hassan, A.S., Kodmany, K. and Aara, Y. (2014), Examination of student housing preferences, their similarities and differences. *Facilities*, 32(11/12). 709-722.
5. Subair, S. 'Tayo, Adeniyi, A. Omotosho (2021). Assessment of Availability, Accessibility and Adequacy of Hostel Facilities in Nigerian Universities. *International Journal of Humanities Social Sciences and Education (IJHSSE)*. 8(7), 17-25
6. Dang, Emmanuel Istifanus (2015). The Impact of Nigerian Universities Enrolment and The Unemployment Situation in Nigeria (1980 – 2014). *Journal of Social Sciences and Public Policy*. 7.
7. Hli access network, (2024). Retrieved May, 2024 from, info@waawfoundation.org
8. Azeez T. and Taiwo D. (2016). Comparative Assessment of Students Satisfaction with Hostel Accommodation in Selected Private Universities in Ogun State, Nigeria. *European Scientific Journal*. 123(32). 410 – 425.
9. Owolabi, B. O. (2015). The Effects of Students' Housing on Academic Performance at the University of Ibadan in Nigerian. *International Journal of Scientific & Engineering Research*, 6(3), 1118 – 1132
10. Cain D. and Gary R. (2006). The impact of facilities on recruitment and retention of students. Part 1. *Facilities Manager Magazine*, 22(2006).
11. Siluyele Nimrod, Edward Nkonde, Malawo Mweemba, Goodhope Kaluba and Cleopas Zulu, (2020), A Survey on Student Preferences of Facilities and Models of Accommodation at Kapasa Makasa University, Zambia. In: *Education Quarterly Reviews*. 3(2), 261-270.
12. Claire Reeves Laroche, Mary A. Flanigan and Kenneth P. Copeland Jr. (2010). Students housing: trends, preferences and needs. *Contemporary Issues in Education Research*. 3(10).
13. Gawlik Remigiusz, Michał Głuszak, Agnieszka Małkowska, (2017). The Measurement of Housing Preferences In The Analytic Hierarchy Process. *Folia Oeconomica Stetinensia*
14. Maina, J. and Aji J.Y. (2017) Influence of Accommodation on the academic performance of Architecture Students. *Built Environment Journal*. 14(2).
15. Awotwe Eric, Daniel Abina Dwaase and Elizabeth Okyerewa Obuobi Obese (2022). Ghanaian Students' Expectations on Off-Campus Housing Facilities: A Case of University of Cape Coast. *Journal Of Humanities and Social Science (IOSR-JHSS)*. 27(4). 53-58.
16. Chandigarh University (2013). Hostels: Home away from home. Retrieved May 2024 from <http://www.cuchd.in/student-services/hostel-facility.php>.
17. Emmanuel O. Eseyin (2017). Safety Conditions of Hostel Accommodation in Public Universities in Nigeria. *Knowledge. Review*. 36(1).
18. Olayinka Ajala, Adewale Akingbade, Afolabi Olabamiji, Elijah Folorunsho. Obafemi Awolowo University, Nigeria. Quality of Students' Accommodation in Nigeria's Tertiary Institutions. (2022). Quality of students' accommodation in Nigeria's tertiary institutions. *Interdisciplinary Journal of Education Research*, 4, 60-74,
19. Seemiller, C., & Grace, M. (2017). Generation Z: Educating and Engaging the Next Generation of Students. *About Campus*, 22(3), 21-26. <https://doi.org/10.1002/abc.21293>
20. Mohammed, A. B., Adewumi, M. O., and Omokolu O. A. (2016). Malaria Incidence and Determinant of Welfare Loss Among Farming Households in Kabba/Bunnu Area Of Kogi State, Nigeria, *Nigerian Journal of Agriculture, Food and Environment*. 12(4):105-109,
21. Ijasan, K. & Ahmed, V. 2016. Studentification and the housing needs of international students in Johannesburg. In V. Ahmed, A. Opoku, & Z. Aziz, eds. *Research methodology in the built environment: A selection of case studies*. London: Routledge: 132–150.

22. Gabbianelli Linda and Tonino Pencarelli (2022). On-campus accommodation service quality: the mediating role of students' satisfaction on word of mouth. *Emerald Insigh.* 35(5), 1224-1255
23. Khozaei Fatemeh, Ahmad Sanusi Hassan, Nordin Abd Razak (2011). Development and validation of the student accommodation preferences instrument (SAPI). *Journal of Building Appraisal.* 6(3;4), 299–313
24. Oladiran, O.J. (2013). A post occupancy evaluation of student's hostels accommodation, *Journal of building performance*, volume 4 (1): 33-43.
25. Oppewal, H., Y. Poria, N. Ravenscroft, and G. Speller. (2017). "Student Preferences for University Accommodation: An Application of the Stated Preference Approach." *Housing, Space and Quality of Life Chapter 9*: 113–124
26. Olusegun P.A (2015), Students' Assessment of Hostel Facilities in the Polytechnic Ibadan, Ibadan, Nigeria: Realities and Challenges. *Research on Humanities and Social Sciences.* (5)17
27. Kelly O, Miriam M. N. and Alloys W. M. (2016). The Influence of Availability of College Hostel Accommodation Facilities on Students' Academic Performance in Kenya Medical Training Colleges in Western Kenya Region. *African Journal of Education and Practice.*4, (1).
28. Osman, D.O. and Halime, D. (2000), "Privacy dimensions: a case study in the interior architecture design studio", *Journal of Environmental Psychology*, Vol. 20 No. 1, pp. 53-64;
29. Gbadegesin, Marais, Von Maltitz, Cloete, Lenka, Rani, Campbell, Denoon Stevens, Venter, Koetaan and Pretorius (2022). *Journal of Student Affairs Research and Practice*
30. Adama Joshua Ugbede, Douglas Omoregie Aghimien, Christopher Odunmorayo Fabunmi (2018). Students' Housing in Private Universities in Nigeria: Influencing Factors and Effect on Academic Performance *International Journal of Built Environment and Sustainability.*
31. Verhetsel, A., Kessels, R., Zijlstra, T., and Van Bavel, M. (2017). Housing preferences among students: Collective housing versus individual accommodations? A stated preference study in Antwerp (Belgium). *Journal of Housing and the Built Environment.* 32(3), 449-470.
32. Wong Chih Siong, and Allen Chin Wei Jie (2022). University Students' Preference for On-Campus Hostel Attributes. *International Journal of Social Science and Human Research*
33. Ajala Olayinka, Adewale Akingbade, Afolabi Olabamiji, Elijah Folorunsho (2022). Quality of students' accommodation in Nigeria's tertiary institutions. *Interdisciplinary Journal of Education Research*, 4, 60-74
34. Muianga, X., Klomsri, T., Tedre, M., & Mutimucuo, I. (2018). From teacher-oriented to student-centred learning: Developing an ICT-supported learning approach at the Eduardo Mondlane University, Mozambique. *Turkish Online Journal of Educational Technology*, 17(2), 46- 54.
35. Khozaei Fatemeh, Ahmad Sanusi Hassan and T Ramayah (2011). The students' degree of preference for residence hall facilities and amenities, study of a developing country *African Journal of Business Management.* 5(17), 7335-7341,
36. Ogunode Niyi Jacob, Conrad Ugochukwu Ukozor, Victor Olugbenga Ayoko (2023). Insecurity Challenges and Higher Education in Nigeria, *Best Journal of Innovation In Science, Research and Development.* 2(5).
37. Retrieved May 2024 from <https://punchng.com>kogi-varsity>
38. Oyetunji Abiodun Kolawolea, Abidoye Rotimi Boluwatifeb, (2016) Assessment of The Factors Influencing Students' Choice of Residence in Nigerian Tertiary Institutions. *Sains Humanika.* 8:2, 39–47
39. Meuller, P. and Havsy, J. (2020). The US Student Housing: On-Campus Student Housing and Student-Competitive Properties. Washington, DC: NMHC Research Foundation.
40. Booty, J. D. (2019). Mixed-Use Makes Sense for Student Housing. Arlington, VA: NAA.
41. Knight Frank. (2019). Global Student Property. London, UK: Knight Frank

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536 42. Herman Miller Inc. (2007). Room and board redefined: Trends in residence halls.

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538 **SUPPLEMENTARY TABLES**539 **Table S1. Current student's housing situation by gender and age group among**540 **participants**

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Variables	Category	Gender n (%)		Age group n (%)		
		Female	Male	≤ 20 years	>20 - ≤25 years	>25 years
Do you have your own room		380(82.4%)	331(86.4%)	569(86.9%)	132(75.4%)	10(71.4%)
Total		711(84.2%)				
P-value		0.113		0.0001		
Do you share the room with one student only		282(61.2%)	245(64.0%)	400(61.1%)	116(66.3%)	11(78.6%)
Total		527(62.4%)				
P-value		0.403		0.204		
Do you share the room with more than two students		139(30.2%)	158(41.3%)	214(32.7%)	78(44.6%)	5(35.7%)
Total		297(35.2%)				
P-value		0.001		0.014		
Do you have your own kitchen		246(53.4%)	218(56.9%)	373(56.9%)	84(48.0%)	7(50.0%)
Total		464(55.0%)				
P-value		0.301		0.100		
Do you share the kitchen with more than seven people		103(22.3%)	125(32.6%)	156(23.8%)	67(38.3%)	5(35.7%)
Total		228(27.0%)				
P-value		0.001		0.0001		
Do you share the kitchen with up to four other people		139(30.2%)	151(39.5%)	208(31.8%)	77(44.0%)	5(35.7%)
Total		290(34.4%)				
P-value		0.004		0.011		
Do you share toilet and shower with other people		279(60.5%)	237(61.9%)	391(59.7%)	117(66.9%)	8(57.1%)
Total		516(61.1%)				
P-value		0.687		0.215		
Do you share toilet and shower with four people		183(39.7%)	175(45.7%)	264(40.3%)	86(49.1%)	8(57.1%)
Total		358(42.4%)				
P-value		0.079		0.058		
Do you share toilet and shower with seven people		138(29.9%)	150(39.2%)	201(30.7%)	80(45.7%)	7(50.0%)

Total		288(34.1)				
P-value		0.005		0.0001		
Do you have a pre-paid NEPA meter		149(32.3%)	144(37.6%)	206(31.5%)	82(46.9%)	5(35.7%)
Total		293(34.7%)				
P-value		0.109		0.001		
Is your room wifi provided by the landlord		97(21.0%)	93(24.3%)	122(18.6%)	62(35.4%)	6(42.9%)
Total		190(22.5%)		190(22.5%)		
P-value		0.262		0.0001		
How is the approximate surface area of your room	8 square metres (2X4)	124(26.9%)	164(25.0%)	164(25.0%)	46(26.3%)	5(35.7%)
	12 square metres (3X4)	146(31.7%)	201(30.7%)	201(30.7%)	43(24.6%)	3(21.4%)
	18 square metres (3X6)	191(41.4%)	290(44.3%)	290(44.3%)	86(49.1%)	6(42.9%)
P-value		0.047		0.482		
Transport fares to campus per month	≤2000 Naira	186(40.3%)	170(44.4%)	287(43.8%)	67(38.3%)	2(14.3%)
	₦2000≤₦3000	135(29.3%)	117(30.5%)	180(27.5%)	64(36.6%)	8(57.1%)
	₦3000-₦10000	100(21.7%)	79(20.6%)	138(21.1%)	38(21.7%)	3(21.4%)
	None	40(8.7%)	17(4.4%)	50(7.6%)	6(3.4%)	1(7.1%)
P-value		0.086		0.023		
Water Supply	Borehole	101(21.9%)	90(23.5%)	148(22.6%)	39(22.3%)	4(28.6%)
	Shallow Well	84(18.2%)	75(19.6%)	134(20.5%)	23(13.1%)	2(14.3%)
	Public Tap	120(26.0%)	86(22.5%)	166(25.3%)	38(21.7%)	2(14.3%)
	Private Tap	96(20.8%)	73(19.1%)	133(20.3%)	34(19.4%)	2(14.3%)
	River	60(13.0%)	59(15.4%)	74(11.3%)	41(23.4%)	4(28.6%)
P-value		0.608		0.004		
What is your average WIFI bills per month	₦1500	160(34.7%)	136(35.5%)	226(34.5%)	66(37.7%)	4(28.6%)
	₦2000	81(17.6%)	83(21.7%)	125(19.1%)	35(20.0%)	4(28.6%)
	₦3000	118(25.6%)	103(26.9%)	164(25.0%)	54(30.9%)	3(21.4%)
	None	102(22.1%)	61(15.9%)	140(21.4%)	20(11.4%)	3(21.4%)
P-value		0.105		0.114		

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543 **SUPPLEMENT 2.**

544 **Table S2. Current student' housing situation by Secondary school**
545 **(State/geopolitical zones) and faculty among participants.**

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Variables	Category	Secondary school (State/geopolitical zone) n (%)						Faculty n (%)		
		Kogi	FCT	North Central	South West	South East	Others	HA	SC	MASS
Do you have your own room		396(84.4%)	71(87.7%)	82(78.8%)	100(84.0%)	35(85.4%)	27(90.0%)	86(84.3%)	246(80.1%)	379(87.1%)
Total		711(84.2%)								
P-value		0.579						0.036		
Do you share the room		286(61.0%)	50(61.7%)	67(64.4%)	74(62.2%)	27(65.9%)	23(76.7%)	75(73.5%)	180(58.6%)	272(62.5%)

with one student only											
Total			527(62.4%)								
P-value	0.636							0.027			
Do you share the room with more than two students		158(33.7%)	23(28.4%)	39(37.5%)	44(37.0%)	13(39.0%)	17(56.7%)	42(41.2%)	106(34.5%)	149(34.3%)	
Total		297(35.2%)									
P-value	0.115							0.401			
Do you share toilet and shower with other people		277(59.1%)	47(58.0%)	73(70.2%)	67(56.3%)	25(61.0%)	27(90.0%)	71(69.6%)	194(63.2%)	251(57.7%)	
Total		516(61.1%)									
P-value	0.006							0.055			
Do you share the kitchen with more than seven people		107(22.8%)	18(22.2%)	32(30.8%)	44(37.0%)	15(36.6%)	12(40.0%)	23(22.5%)	98(31.9%)	107(24.6%)	
Total		228(27.0%)									
P-value	0.006							0.048			
Do you share toilet and shower with four people		186(39.7%)	34(42.0%)	46(44.2%)	46(38.7)	22(53.7%)	24(80.0%)	41(40.2%)	143(46.6%)	174(40.0%)	
Total		358(42.4%)									
P-value	0.001							0.180			
Do you share the kitchen with up to four other people		151(32.2%)	26(32.1%)	41(39.4%)	43(36.4%)	13(31.7%)	16(53.3%)	33(32.4%)	118(38.6%)	139(32.0%)	
Total		290(34.4%)									
P-value	0.187							0.158			
Do you share toilet and shower with seven people		152(32.4%)	25(30.9%)	38(36.5%)	41(34.5%)	15(39.0%)	16(53.3%)	35(34.3%)	114(37.1%)	139(32.0%)	
Total		288(34.1%)									
P-value	0.249							0.341			
Do you have your own kitchen		265(56.5%)	42(51.9%)	54(51.9%)	75(63.0%)	17(41.5%)	11(36.7%)	63(61.8%)	150(48.9%)	250(57.7%)	
Total			464(55.0%)								
P-value	0.045							0.020			
Do you have a pre-paid NEPA meter		160(34.1%)	19(23.5%)	38(36.5%)	42(35.3%)	19(46.3%)	15(50.0%)	34(33.3%)	94(30.6%)	165(37.9%)	
Total			293(34.7%)								
P-value	0.067							0.114			
Is your room wifi provided by the landlord		96(20.5%)	18(22.2%)	23(22.1%)	34(28.6%)	6(14.6%)	13(43.3%)	26(25.5%)	61(19.9%)	103(23.7%)	
Total		190(22.5%)									

P-value	0.028							0.352		
How is the surface area of your room	8 square metres (3X4)	115(24.5%)	24(29.6%)	35(33.7%)	25(21.0%)	11(26.8%)	5(16.7%)	27(26.5%)	86(28.0%)	102(23.4%)
	12 square metres (3X4)	133(28.4%)	25(30.9%)	37(35.6%)	33(27.7%)	11(26.8%)	8(26.7%)	28(27.5%)	81(26.4%)	138(31.7%)
	18 square metres (3X6)	221(47.1%)	32(39.5%)	32(30.8%)	61(51.3%)	19(46.3%)	17(56.7%)	47(46.1%)	140(45.6%)	195(44.8%)
P-value		0.140							0.487	
Transport fares to campus per month	≤₦2000	199(42.4%)	34(42.0%)	44(42.3%)	51(42.9%)	16(39.0%)	12(40.0%)	44(43.1%)	139(45.3%)	173(39.8%)
	₦2000-≤₦3000	127(27.1%)	24(29.6%)	33(31.7%)	41(34.5%)	15(36.6%)	12(40.0%)	34(33.3%)	87(28.3%)	130(30.1%)
	₦3000-₦10000	108(23.0%)	19(23.5%)	20(19.2%)	19(16.0%)	9(22.0%)	4(13.3%)	24(23.5%)	68(22.1%)	87(20.0%)
	None	35(7.5%)	4(4.9%)	7(6.7%)	8(6.7%)	1(2.4%)	2(3.5%)	0(0.0%)	13(4.2)	44(10.1%)
P-value		0.855							0.003	
Water Supply	Borehole	106(22.6%)	18(22.2%)	22(21.2%)	30(25.2%)	8(19.5%)	7(23.3%)	29(28.4%)	58(18.9%)	104(23.9%)
	Shallow Well	92(19.6%)	21(25.9%)	20(19.2%)	18(15.1%)	6(14.6%)	2(6.7%)	12(11.8%)	65(21.2%)	82(18.9%)
	Public Tap	119(25.4%)	17(21.0%)	28(26.9%)	25(21.0%)	10(24.4%)	7(23.3%)	26(25.5%)	83(27.0%)	97(22.3%)
	Private Tap	99(21.1%)	13(16.0%)	16(15.4%)	28(23.5%)	7(17.1%)	6(20.0%)	21(20.6%)	67(21.8%)	81(18.6%)
	River	53(11.3%)	12(14.8%)	18(17.3%)	18(15.1%)	10(24.4%)	8(26.7%)	14(13.7%)	34(11.1%)	71(16.3%)
P-value		0.406							0.096	
What is your average WIFI bills per month:	₦1500	146(31.1%)	30(37.0%)	47(45.2%)	50(42.0%)	13(31.7%)	10(33.3%)	39(38.2%)	101(32.9%)	156(35.9%)
	₦2000	93(19.8%)	11(13.6%)	17(16.3%)	31(26.1%)	6(14.6%)	6(20.0%)	27(26.5%)	45(14.7%)	92(21.1%)
	₦3000	131(27.9%)	22(27.2%)	27(26.0%)	21(17.6%)	16(39.0%)	4(1.8%)	31(30.4%)	100(32.6%)	90(20.7%)
	None	99(21.1%)	18(22.2%)	13(12.5%)	17(14.3%)	6(14.6%)	10(1%)	5(4.9%)	61(19.9%)	97(22.3%)
P-value		0.015							0.0001	

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