

Determinants Influencing Users' Satisfaction with Staff Housing Facilities in the University of Calabar, Cross River State, Nigeria

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Abstract

In University of Calabar, the residential quarters are occupied by varying categories of Staff. Arguably, the occupants or users have different feelings concerning the extent of satisfaction derived from the housing quality. The tasks confronting providers of these universities' residential facilities and other stakeholders are to identify as well as analyze the factors determining adequate and satisfactory housing that will serve as a guide for future housing design and development. This study aimed at examining the users' satisfaction with residential facilities in the University of Calabar, Cross River state a view to raising options for better housing delivery. The study was conducted using survey research method. Primary data were collected with the aid of structured questionnaires and interviews. A total of 378 copies of questionnaires were used for the analysis in the residential housing estate of the University. Stratified sampling technique and simple random sampling technique were used in the study. The major statistical tool employed in this research was the Principal Component Analysis (PCA), The study identified and classified the factors that influence users' satisfaction with their dwelling units into six components which explained 98.5 percent of observed variation in public housing satisfaction variables. The six factors are proper estate management (2.489), nearness to facilities (1.676), overall appearance of buildings (1.625), availability of facilities (1.233), number of rooms in a unit house (1.055) and security were the major factors that influence users' satisfaction with their residential facilities. The study recommended among others that physical planning department of the university who are saddled with the responsibility of managing the staff quarters should ensure that some set rules concerning the proper management and the sanitation of the quarters estate are maintained

Key Words: Satisfaction, Quarters, Adequate, residential

1. Introduction

The importance of housing covers the entire aspects of human life. Primarily, it involves physical protection from hazards which ordinarily may be regarded as shelter but also provide the setting from many of the basic biological and social processes necessary to sustain life, which permitting the healthy growth and development of the mind. In all, housing as a unit of the environment of man, has a profound influence on the health, social behaviour, satisfaction and general welfare of the community. It reflects the cultural, social and economic values of a society as it is the best physical and historical evidence of civilization in a country (Amole, 2009). Housing all over the world has remained an interdependent phenomenon that affects every facet of humanity. The importance of housing satisfaction globally is so pronounce that it imparts on the social, physical, and psychological well being of every household, irrespective of socio-economic status, colour and race.

Over the last three decades, Nigeria, like several developing countries, has emphasised affordable housing schemes, but with little success (Ukoha, and Beamish, 2002). Nigeria has a population of over 140 million people (NPC, 2006). Considering this figure, to provide adequate and satisfactory housing for Nigerian households is definitely an issue of dire national importance. Housing experts in Nigeria however believe that, more than 50 percent of Nigerians are without satisfactory shelter (Ibem, 2011; Ha, 2008). Accordingly, the Federal Mortgage Bank of Nigeria, (2010) recommended that by the year 2015, about N56 trillion would be required to provide 16 million housing units for the low-income group alone in Nigeria.

Since housing is no doubt an important national investment and a right of every individual, the ultimate aim of any housing program is to improve its adequacy in order to satisfy the needs of its occupants. Nevertheless, the housing situation in Nigeria is characterized by some inadequacies, which are qualitative and quantitative in nature (NHP, 1991; Oladapo, 2006). While the quantitative housing problem could be solved by increasing the number of existing stock, the qualitative inadequacies are enormous and complex.

Staff housing has for long been thought of as a vital component of university Campuses. According to Hassanain (2007), a well-planned out housing facilities promotes desirable educational outcomes and help to achieve the broader objectives such as social cohesion and responsible citizenship. Hassanain (2007) confirmed that Universities worldwide have realized the contribution of development facilities and infrastructure make towards achieving their objectives. According to the author, campus housing facilities operate as an integral component of the university which contributes to it achieving its overall mission.

Although, this line of thought can be considered proper if first demonstrated in the provision of hostels for student, the same may as well be true for university staff quarters. Mbali & Okoli (2012) affirmed that adequate provision of staff quarter accommodation buildings in a university have notable advantage which include: punctuality to classes as against having to come from outside the university campus, which most times, is prone to traffic congestion fostering perpetual lateness to work. The authors also confirmed that the peace and tranquility derivable

from a campus environment is also very important in an institution where adequate housing is being provided as faculty from various parts of the country would be attracted because of infrastructural provision such as security, internet connectivity, functional public utility e.g. constant power supply and portable water. This, the author believes will ultimately increase human productivity in terms of output. It is crucial to note that staff residents must not only be adequately provided for in relation to the staff population of a university, but it must also be able to satisfy their needs if the best is to be appropriated from them. Satisfaction being a process of evaluation between what was received and what was expected is the most widely adopted description of user satisfaction in the current literature (Parker and Mathews, 2001). Satisfaction evaluation study within a University staff quarters reflect staff's perception of such quarters. Satisfying users of any facility (including staff resident facility) should be one of the main objectives of providing such facility in the first instance. Singh (2006) believes that user satisfaction has a positive effect on an organisation's profitability, educational institution inclusive. Some authors further state that it is not enough to merely satisfy users but importantly, ensure users are extremely satisfied (Sivadas and Baker-Prewitt, 2000; Bowen and Chen, 2001). Most residential buildings in the university, especially the staff residential estates are erected with the general desire to satisfy the housing demands of the staff (residents). In University of Calabar, the staff residential estate are occupied by varying categories of persons (the academic and the non-academic staff) and arguably the occupants have different feeling concerning the extent of housing quality satisfaction derived from their unit of houses dwelled by them. At times, these residents do build additional structures or bedrooms in the already designed houses; this suggests that they may not be satisfied with the houses in the estate as it was designed. Therefore the tasks confronting planners and policy makers and all those concerned with providing housing especially in the University residential areas, are not only to appreciate the satisfaction level of the residents, but also to be able to identify the factors which determine adequate and satisfactory housing, and use them as inputs to housing design and development. This forms the matter in this study. Despite the importance of satisfying users including users of University staff quarters, not much literature is available on users' satisfaction of residential staff quarters unlike those of student resident (Amole, 2009; Adewunmi et al, 2011, Kellekci, & Berköz, 2006). The result of their studies emphasized more on satisfaction by university students as it relates to their hostel accommodation. Hence, the need to have an empirical feedback on the users' satisfaction with residential facilities in University of Calabar, Cross River state is put forwards as a problem of the research. The cardinal aim of the study is to examine the factors that influence users' satisfaction with residential facilities in the University of Calabar, Cross River state with a view to raising options for better housing delivery. The study hypothesized that factors that influence users' satisfaction with residential facilities in the University of Calabar, Cross River state cannot be identified. In this study, students residential hostels were not part of the areas examined but the staff residential areas. The selected residential housing estate covers those resided by the three major categories of staff in the institution: the junior, the senior and the professor (or the principal officers) in the study area. The parameters that will be used to assess the satisfaction of the users was based on the users' satisfaction attributes generated from literature. These derived attributes will be used in testing the hypotheses and other subsequent analysis quantitatively. The users are staff of the

university community that lives in the residential staff quarters of the university. This study will serve as a good feedback to government and university administrators in particular, by providing them with relevant information that will guide in housing improvement and development in university community.

2. Literature Review

The assessment of housing satisfaction is a complex task rooted in diverse theories and concepts, as noted by Jiwane (2021). The interaction between residents and their environment, influenced by both objective and subjective factors, poses challenges in accurately measuring their dynamic reactions. Personal attributes like household size, income, and cultural background, among others, contribute to housing satisfaction. Anh et al. (2018) emphasize that housing performance assessment requires appropriate criteria, with housing satisfaction being a widely utilized measure. It gauges perceived home quality through general attitudinal evaluations and is relevant to various residential settings.

Housing satisfaction, as explained by Anqi (2022), hinges on a blend of objectively perceived and subjectively felt conditions. Not only engineering aspects, but also physical, social, cultural, and behavioral factors, affect this assessment. The link between housing and neighborhood satisfaction becomes a vital indicator of overall quality of life. Satisfaction involves the match between current and desired housing conditions. Umar et al. (2019) categorize variables impacting post-occupancy housing satisfaction across diverse housing types into six components: Physical, Environmental, Economical, Social/Behavioral, Functionality, and Timing.

The multi-dimensional nature of housing satisfaction is highlighted by Abidin et al. (2019). Empirical studies have generated variables focused on perceived environmental quality, living arrangement satisfaction, socio-demographic characteristics, neighborhood attributes, and behavioral aspects. These variables constitute key elements in cross-cultural investigations of housing satisfaction. All of which are discussed below:

2.1 Social Demographic Characteristic

Housing satisfaction has been found to have a favorable link with ages, income, level of education, and job position, as well as the length of residence stay and home ownership (Abidin et al., 2019). In some studies, housing satisfaction does not seem to be much impacted by education., but the results of other studies show that education level affects residents' housing satisfaction levels (Abidin et al., 2019). According to Abidin et al. (2019), age may have a beneficial impact on housing satisfaction, which is why older individuals tend to have higher levels of contentment with their homes than younger people do. In terms of income, a household with a better income can relocate to a suitable house in a desirable neighborhood, which can lead to more enjoyment. Therefore, households of higher income are typically content with their housing (Abidin et al., 2019). Studies show that socio-demographic characteristics, such as age, marital status, gender, income, education, race, job status, length of residence, size of household, and type of tenure, are

positively correlated to overall residential satisfaction, even though the results regarding inhabitants' attributes and housing satisfaction are inconclusive (Abidin et al., 2019). The age of occupants has an ambiguous impact on housing satisfaction. In some situations, older inhabitants were less content with their home than younger ones, however other research discovered that older age was a determinant in increased housing satisfaction (Anh et al., 2017). In other circumstances, however, even after adjusting for numerous characteristics of residents and the residential environment, there is no significant influence of age on residential satisfaction (Anh et al., 2017).

In terms of the influence of gender on housing satisfaction, women are generally more content with their homes than males. In urban Taiwan and urban China, it has been discovered that education has a positive effect on residential contentment, but a negative influence in Ghana (Anh et al., 2017). In contrast to Westerners, Asians' residence satisfaction is also significantly influenced by their level of education. A negative correlation between household size and other factors has also been discovered (Anh et al., 2017). According to Anh et al. (2017), larger houses, better interior structures, better house types, a favorable setting and a tidy atmosphere in the neighborhood all correlate with higher housing satisfaction.

2.2. Theories Of Housing Satisfaction

According to Abidin et al. (2019), there are a number of theories that are connected to residential satisfaction. Mohammad and Adel, 2014 explained that all residential satisfaction theories start with the notion that they quantify the differences between idealized and actual housing and neighborhood circumstances. The premise underlying the theories on housing satisfaction is that it measures the difference between residents' current residence and their ideal home, as well as their neighborhood circumstances (Jiwane, 2021). Theories of housing satisfaction are discussed below:

2.2.1 Marxist Housing Theory

The Marxist theory first appeared as a social transformation hypothesis between 1844 and 1848. It was developed by Karl Marx and Friedrich Engels with the intention of assisting the proletariat in regaining control over every aspect of their lives (Silvija et al., 2018). Research on housing satisfaction, which focused on assessments of land use, rental housing, deterioration of residences, etc., have also employed the theory, which is based on economic aspects of human existence. One of the first views on housing, Marxism assumes that everyone has a right to a decent place to live, regardless of their financial situation; i.e., that the disparities in family income between the wealthy and the poor should be as little as possible (Silvija et al., 2018). Given that Marxism is based on the "destruction" of capitalist perspectives on housing satisfaction, Marx and Engels argued that the economic discrepancies across the upper class and the lower classes should be minimized, which would also lead to a decrease in the disparities in housing satisfaction. (Silvija et al., 2018).

According to Silvija et al. (2018), the capitalist housing theory was supported by A. Skarburskis, S. E. Barton, and M. Moos, who argued that under a capitalist system, the proletariat would grow

conscious of its precarious situation and serve as a catalyst for reform in that social class. Specifically, for the individual to feel that they have made progress, the situation must first be less developed (Silvija et al., 2018). According to Silvija et al. (2018), the Marxist housing theory offers multiple descriptions of housing that were later used in numerous works, especially by geographers. The Marxist approach, as defined by Silvija et al. (2018), Housing is defined in terms of three essential components, including:

- 1) Housing is an essential good, a means of sustenance required for the reproduction of the labor force, and as such, its price affects the production of all commodities, whether directly or indirectly. As a result, classes of individuals interested in housing in a capitalist social system other than those who directly consume it. (Silvija et al., 2018).
- 2) A fixed good is a house. A home must occupy land in a certain place as a material prerequisite for its creation. Land is a finite resource, and legal restrictions protect the right to utilize it. (Silvija et al., 2018)
- 3) Housing has been, or could turn into an asset, and only those with a need for it and the financial means to purchase it may consume it. (Silvija et al., 2018). Housing has a function and an exchange value in a capitalist social construction.

This idea contends that the satisfaction of fundamental human needs, including housing and the standard of living it provides, is the main goal of economic activity. Different definitions of housing were offered by proponents of the liberal idea. According to Silvija et al. (2018), "For them, living is a dynamic process that depends on the needs of the residents as well as their engagement and connection to other community members. Due to the materials, components, and services it uses, housing is an essential feature of living that adapts to changes in economic, social, and cultural factors. The home also reflects the residents' lifestyle as well as the customs and histories of each socioeconomic group (Silvija et al., 2018). Liberal theory gives particular attention to the socioeconomic disparities that exist within the family, which have an impact on both the family's housing needs and the different viewpoints on housing satisfaction. Marxist theory served as a foundation for the new concepts whose principles contributed to the development of the concept of housing satisfaction. (Silvija et al., 2018).

2.2.2 The Positivists Housing Theory

The primary tenet of positivism, which was formed by Auguste Comte, is that phenomena may be measured, meaning that any phenomena for which cause and effect can be shown are included in the theory, whereas emotional views are irrelevant. (Silvija et al., 2018). Positivists characterized housing in three aspects, according to Silvija et al. (2018):

- 1) The economic standing, which affects the physical upkeep of the dwelling unit and increases its economic value;

2) The measureable level of well-being of the residents within the dwelling units; i.e., people should reside in facilities that promote good health for the continued advancement of the community as a whole; and

3) The government's role in ensuring dwelling units, where the government ought to guarantee that individual needs are adequately accommodated (Silvija et al., 2018).

Positivist theory is generally based on a "objective" method to judging specific occurrences, However, the "subjective" aspect of housing satisfaction research—that is, people's opinions and feelings—is just as important. This hypothesis is noteworthy because it takes into account "objective indicators" that were typically ignored by earlier theories. The notion of quality of life—which in some way encompasses housing satisfaction—also highlighted the importance of objective measures. The notion of satisfaction should thus incorporate some extra ideas that involve the subjective component, as opposed to housing satisfaction research being only centered on positivist theory. (Silvija et al, 2018).

3. Research methods

The study adopted survey research design. The population of the study comprised of staff in the staff quarters. The household heads (staff) that have lived in the staff quarters continuously for not less than a year formed the respondents. The collection of primary data was accomplished by conducting reconnaissance survey and administering copies of questionnaire. There are basically three types of housing units in the residential quarters of the study area.- tenement building (Boys' quarters), bungalows and the high rising buildings. The tenement buildings have 162 households, 60 households for high rising building and 486 households in bungalows. Thus, a sample frame of 708 households was used. The housing units in tenement building (Boys' quarters), bungalows and the high rising buildings were 12, 72 and 60 in number. This totaled 144 housing units.

Stratified random and simple random sampling techniques were adopted to reach the target population who were staff in the various housing units on the campus. The residential facilities were stratified into three strata – bungalow, tenements (boys quarters) and high rising building. Simple random sampling was used to select the various categories of staff residing in the housing facilities. From the 144 buildings and the sample frame of 708 staff, a sample size was derived by means of a demographic formula for determination of sample sizes (Otte, 2006). The formula is as follows:

$$N = \frac{P(100 - P)}{Z^2/D^2}$$

Where:

N = required sample size

P = anticipated prevalence

D = allowable error estimate (desired precision)

Z = appropriate value from the normal distribution for the desired confidence level

The research anticipated a minimum response rate of 80% and an allowable error estimated of within 5% of the true prevalence:

$$80 (100 - 80) \times (1.96^2/5^2) = 399$$

Therefore, a total of 399 staff were taken as the sample size for the study. Simple random sampling technique was used to select the various categories of staff – junior, Lower- senior, then the Senior (Professors and principal officers).

A total of 399 copies of questionnaire were administered, and 382 of them were properly filled and returned. This was possible because respondents were encouraged to fill the questionnaires on spot and were collected accordingly. Therefore, the response rate is 95 % as shown in the table 1.

Table 1: Total number of questionnaires distributed to residents the housing quarters.

S/N	Category	No of Housing Unit	Distributed	Returned	% returned
1	Junior	12	113	110	93
2	Lower - senior	72	42	42	100
3	Senior (professors/ principal officers	60	244	240	95
	Total	144	399	382	95%

Source: Researcher’s survey, (2024).

The major instrument that was used in the survey is the questionnaire. The questionnaires were given to the household heads that represent the university staff. Only respondents who have lived for one year and above were considered in the study. The questionnaire comprised of two parts. The first part of the questionnaire examined many socioeconomic aspects of residents, including gender, age, educational attainment, years of schooling, occupation, income level, household size, and period of residency in the estates. The second part was composed of structured and unstructured questions on relevant indicators of housing satisfaction in the various housing estates. The structured or closed questions were meant to tailor the respondents to specific answers that addressed the aim and the hypothesis of the study. Respondents’ satisfaction levels with these variables was obtained using a five-point likert scale ranging from very dissatisfied (rated as 1), to very satisfied (rated as 5). The information from the questionnaire helped to ascertain the residential satisfaction of the study area. Westaway (2006) stated that likert scale is a five point scale in which the interval between each point on the scale is assumed to be equal and it is used to register the extent of agreement or disagreement with a particular statement or an attitude, belief or judgments. The questionnaire was first of all tested with few randomly selected residents in the

staff quarter before administering it to the sampled residents in area. This was done in order to assess the level of comprehension of the contents of the questionnaires by the respondents and make minor changes in the grammar to avoid ambiguity of any sort.

Sixteen variables were used to measure staff' satisfaction indices are listed in Table 2. They were included in the questionnaire as the possible variables that influenced staff' satisfaction with staff quarters in the study area.

Table 2: Determinants that influence users' satisfaction

VARIABLE IDENTITY	VARIABLES
X 1.	Estate Facilities and Amenities
X 2.	overall appearance of housing estate environment
X 3.	dwelling spaces
X 4.	dwelling interior design
X 5.	overall appearance of dwelling
X 6.	dwelling ventilation
X 7.	lighting in dwelling
X 8.	privacy in dwelling
X 9.	number of rooms
X 10.	nearness to facilities
X 11.	management involvement and response rate to damages
X 12.	management's attitude on enforcement of rules
X 13	Presence of security agents
X 14	Social orderliness
X 15	Security system in the house
X 16	Emergency escape routes

Source: Literatures from the study

Two types of statistical tools were employed in this study, inferential and descriptive statistics. The descriptive statistics involves frequencies and percentages. For the inferential statistics, Principal Component Analysis (PCA) was used. Principal Component Analysis (PCA) was used to test the hypothesis by considering whether the factors that influence users' satisfaction with residential facilities in the University of Calabar, Cross River state cannot be identified and classified. This PCA was be used to combine and reduce the tenants' satisfaction attributes into fewer major components. Data processing and analysis for this study were performed using the

Statistical Products and Services Solutions (SPSS) 22 for windows for statistical analysis of the quantitative data.

4. Results

Principal Component Analysis (PCA) – a statistical tool was then used to reduce the 16 identified primary satisfaction variables. For proper evaluation, the 382 responses were transformed by 6 data matrix and also the varimax rotation was computed. Thus, their respective eigen-values were derived.

The PCA output classified factors that influence users’ satisfaction with residential facilities in the University of Calabar, Cross River state into 6 components that explain 73.383 percent of observed variation in users satisfaction variables. Each of the factors was given a component name and it is important to note from the table above that each factor has high loadings of between ± 0.45 and ± 0.95 approximately.

For clarity purposes, each of the factors was named to match the variables that are found in them.

- Factor 1 - proper estate management
- Factor 2 - nearness to facilities
- Factor 3 - overall appearance of buildings
- Factor 4 - availability to facilities
- Factor 5 - number of rooms in a unit house
- Factor 6 - Security

In other to have a clearer understanding of the output, below is table 3 that shows the factors and the variables that were the subsets with their factor loading as well as the eigenvalue for each component (factor)

Table 3: Factor groupings of the Primary Satisfaction Variables

COMPONENT NAMES	VARIABLE IDENTITY	FACTOR LOADING
FACTOR 1: <i>Proper estate management</i>		
- Estate Facilities and Amenities	X1	.958
- management involvement and response rate	X11	.953
- management’s attitude on adherence to rules	X12	.939

<p>FACTOR 2: <i>Nearness to facilities</i> - nearness to facilities</p>	X10	.774
<p>FACTOR 3: <i>overall appearance of buildings</i> - overall appearance of housing estate environment - dwelling interior design - overall appearance of dwelling</p>	X2 X4 X5	.740 .680 .506
<p>FACTOR 4: <i>availability of facilities</i> -dwelling spaces privacy in dwelling lighting in dwelling dwelling ventilation -</p>	X5 X8 X7 X6	.990 .817 .710 .518
<p>FACTOR 5: <i>number of rooms in a unit house</i> - number of rooms</p>	X9	.630
<p>FACTOR 6: <i>Security</i> - Presence of security agents - Social orderliness - Security system in the house - Emergency escape routes</p>	X13 X14 X15 X16	0.720 0.690 0.630 0.961

Source: PCA output

5. Discussion of Findings

The study suggests that six major factors influence users' satisfaction with their residential facilities in the residential estates in the university. These factors and their corresponding eigenvalues were proper estate management (3.448), nearness to facilities (2.622), overall appearance of buildings (1.912), availability to facilities (1.354), number of rooms in a unit house (1.227) and security (1.178). These factors were further explained individually.

Factor 1: Proper Estate Management:

This was highly and positively loaded on 3 variables out of the 16 variables in the study. A variable in this factor was Estate Facilities and Amenities with the factor loading of 0.958. Other variables in this factor include Satisfaction with management involvement and response rate with factor loading of .953 and Satisfaction with management's attitude to adherence of rules and regulation with factor loading of .939. This Factor 1 with an Eigen value of 3.448 explains

21.550% of the determining variables of users' satisfaction with their estates in the university. Factor 1 is therefore the most significant housing satisfaction factor contributing to 21.550% variation of the of users' satisfaction with their residential facilities. Factor 1 as defined by **proper estate management**, is therefore identified and classified as one of the major determinants of users' satisfaction for residential facilities in the university residential area.

Factor 2: Nearness to Facilities:

This was highly and positively loaded on 1 variable out of the 16 variables in the study. The defining variable in this factor was Satisfaction with nearness to facilities with the factor loading of 0.774. This Factor 2 with an Eigen value of 2.622, explains 16.389% of the determining variables of users' satisfaction with their estates. Factor 2 is therefore the second most significant housing satisfaction factor contributing to 16.389% of the of users' satisfaction with their estates in the campus. Factor 2 as defined by **Nearness to facilities**, is therefore identified and classified as one of the major determinants of users' satisfaction for university community residents.

Factor 3: Overall Appearance of Buildings: These were positively loaded which included; Satisfaction with overall appearance of housing estate environment (.740), Satisfaction with dwelling interior design loading on (.680) while Satisfaction with overall appearance of dwelling however loaded (.506). With an Eigen value of 1.912, it explained 11.953% of the determining variables of housing satisfaction for residential facilities. Factor 3 as defined by **overall appearance of buildings**, has been identified and classified as the third major determinants of users' satisfaction for university community residents.

Factor 4: Availability of Facilities: These were positively loaded and it has 4 variables out of the 16 variables, it included; Satisfaction with dwelling spaces (.990), Satisfaction with privacy in dwelling (.817), Satisfaction with lighting in dwelling .710) and Satisfaction with dwelling ventilation loaded (.518). With an Eigen value of 1.354, it explained another 8.463% determining variables of housing satisfaction. Factor 4 as defined by **availability of facilities**, has been identified and classified as the forth-major determinants users' satisfaction for university community residents.

Factor 5: Number of Rooms in a Unit House: This was positively loaded with one variable- Satisfaction with number of rooms loading (.630). With an Eigen value of 1.227, it explained another 7.668% determining variables of housing satisfaction. Factor 5 as defined by **number of rooms in a unit house**, has been identified and classified as one of the major determinants of users' satisfaction for university community residents.

Factor 6: Security: These were positively loaded and it has 4 variables out of the 16 variables, it included; Satisfaction with Presence of security agents (.720), Satisfaction with Social orderliness (.690), Emergency escape routes (.961) and Satisfaction with dwelling Security system in the house (.630). With an Eigen value of 1.178, it explained another 7.362% determining variables of housing satisfaction. Factor 4 as defined by **Security**, has been identified and classified as the forth-major determinants users' satisfaction for university community residents

In summary, the above results were consistent with Arimah (1992 and 1996), Daniere (1994), Ubani & Ozogwu (2014) and Kutty (1996) findings, which identified physical adequacy or structure-type indicators to include variables such as wall, floor and roofing materials and used in housing demand analysis as reliable determinants of the users' willingness-to-pay for housing characteristics.

6. Policy Implication/Conclusion

The study was able to highlight the cardinal explanatory variables which include - proper estate management, nearness to facilities, overall appearance of buildings, availability of facilities, number of rooms in a unit house and security - that would normally influence the interest of staff in the university staff quarters. It behooves on the University administrators to cardinaly consider these variables while coming up with housing estates or quarters for their staff. In other word, while planning for any housing development program in the campus, these factors must be predominantly considered. The study was able to address the onerous tasks that had been confronting policy makers and stakeholders as to knowing as well as analyze the factors determining adequate and satisfactory housing that will serve as a guide for future housing design and residential development in Universities.

The implementation of the recommendations made in this study will form a solid a base in stabilizing the unsatisfactory comments and feeling of most dwellers in university residential staff quarters in Nigeria.

REFERENCES

- Abidin, N. Z., Abdullah, M. I., Basrah, N., & Alias, M. N. (2019). Residential satisfaction: Literature review and a conceptual framework. *IOP Conference Series: Earth and Environmental Science*, 385(1), 012040. <https://doi.org/10.1088/1755-1315/385/1/012040>
- Adewunmi, Y., Omirin, M. and Famuyiwa, F. (2011) Post-Occupancy Evaluation of Postgraduate Hostel Facilities, *Facilities*. 29(3/4) 149-168.
- Amole, D. (2009) Residential Satisfaction in Students' Housing, *Journal of Environmental Psychology*. 29(8) 76–85.
- Anh, T. N., Tuyen, Q.T., Huong, V. V & Dat, Q. L (2018). "Housing satisfaction and its correlates: a quantitative study among residents living in their own affordable apartments in urban Hanoi, Vietnam." *International Journal of Urban Sustainable Development*, 10:1, 79-91.
- Anqi, G. (2022). "Residential Satisfaction in Student Housing: An empirical study in Stockholm, Sweden." KTH Royal institute of technology. Stockholm, Sweden 2022
- Bowen, J. T. and Chen, S. L. (2001), The Relationship Between Customer Loyalty and Customer Satisfaction. *International Journal of Contemporary Hospitality*

Management, 67(5). 213-217.

Ha, S. K (2008) Social Housing Estates and Sustainable Community Development in South Korea. *Habitat International*. 3(2) 349-369.

Hassanain, M. A. (2007) Post-Occupancy Indoor Environmental Quality Evaluation of Student Housing Facilities. *Architectural Engineering and Design Management*, 12(3), 249–256.

Ibem, E. O. (2011) Evaluation of Public Housing in Ogun State, Nigeria, Unpublished PhD Thesis of the Department of Architecture, Covenant University, Ota, Ogun State, Nigeria.

Jiwane, A. (2021). Post Occupancy Evaluation (POE): A tool to investigate the residents' satisfaction and performance of Housing Project, Case Study – Kanhapur, India. *International Journal of Engineering Technologies and Management Research*, 8(10), 1–15.

Kellekci, O. L. and Berköz, L. (2006) Determinants of User Satisfaction in Housing and Environmental Quality: Sample of Istanbul Metropolitan Area

Mbali I, Okoli OG (2012). Affordable Housing for Low-Income Group In Nigeria. A redefinition of the basic parameters. *Housing Today*.1(5): 16-17, Feb-March.

NHP (1991). National Housing policy, Nigeria. Official Gazette. Abuja, Nigeria.

NPC (2006). National Population Census of Nigeria. Federal Republic of Nigeria.

Oladapo AA (2006). A Study of Tenant Maintenance Awareness, Responsibility and Satisfaction in Institutional Housing in Nigeria. *Int. J. Strategic Prop. Manage.* Vilnius Gediminas Technology. University 10: 217-231.

Parker, C. and Mathews, B.P (2001). Customer Satisfaction: Contrasting Academic and Consumers' Interpretations, *Marketing Intelligence & Planning*, 19 (1): 38-46.

Singh, H. (2006) The Importance of Customer Satisfaction in Relation to Customer Loyalty and Retention, pp. 1-7.

Sivadass, E. and Baker-Prewitt, J. L. (2000), An Examination of the Relationship Between Service Quality, Customer Satisfaction, and Store Loyalty. *International Journal of Retail & Distribution Management*, 28 (2), 73-82

Silvija Šiljeg, Ivan Marić, & Branko Cavrić (2018). Theories of Housing Quality Satisfaction: An Overview. 23 / 1 (2018) 51-84

- Ubani O, Mba E & Ozougwu M (2014) An Assessment of the Pollution Levels of Rivers in Enugu Urban Nigeria and their Environmental Implication. *Journal of Environment and Earth Science*, 4(3), 18
- Umar, O. S., Abdulwahab, O. O., Nathaniel O.O., Simeon, O. F., Samuel, A. O., (2019). Residents' Satisfaction with Public Housing in Lagos, Nigeria. *Ghana Journal of Geography*11(1), 2019 pages 180 – 200
- Ukoha, O. and Beamish, J. O. (2002) Assessment of Residents' Satisfaction with Public Housing in Abuja, Nigeria, *Habitat International.*, 21(4), 445-460.
- Westaway, M. S. (2006) A Longitudinal Investigation of Satisfaction with Personal and Environmental Quality of Life in an Informal South African Housing Settlement, Doornkop, Soweto, *Habitat International*, 30(4) 175–189.