Research Paper

Improving Mass Housing in Nigeria through Diagnosis of Users' Satisfaction

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ABSTRACT.
Housing is no doubt an important national investment and a right of every individual. The ultimate aim of any housing program is to improve housing quality and adequacy in order to satisfy the needs of its occupants. Notwithstanding the ultimate aim of the housing programs in Owerri, the housing situation like in other parts of Nigeria is characterized by some inadequacies. Owerri is made up of three local government areas namely; Owerri North, Owerri West and Owerri Municipal, with land size of 551 km2 and a total population of 555,500 according to 2018 projected population. This paper analyzes residents' satisfaction with the public residential buildings in Owerri with the aim of improving quality housing delivery. Copies of questionnaire were administered to sample size of 825 respondents drawn using stratified systematic random sampling technique from the six public housing estates in Owerri. The responses from the respondents were analyzed using frequency tables and pie chart. Findings of the paper are that, about 85 percent of the respondents in the study area live in inadequate and poor quality housing, while about 80 percent of the respondents are dissatisfied with their housing and seek housing improvement. The user's dissatisfaction is the single significant factor that lead to the housing modification going on in the study area. To increase quality housing delivery in the study area the paper concludes by recommending that Government should not engage in direct housing construction and should allocate land to individuals to construct their own homes or adopt user participation strategy.
KEYWORDS: *Users' satisfaction; quality housing; residential buildings; public housing; environmental quality.*

I. INTRODUCTION

Urban residential housing delivery in developing countries, particularly in Nigeria has become a subject of public discourse with regards to quality and quantity. It is believed that the bulk of this housing inadequacy is borne by the less privileged in the society. It is also believed that elites in authority who formulate and implement housing policies were giving wrong impression that any type of housing will do because the urban poor just needs shelter. The goal of every public housing program in Nigeria should always be the provision of satisfactory housing that meets government prescribed standards of quality and users' needs, expectations and aspirations. Contrary to this view, According to UN-HABITAT report (2006); in the past few decades despite governments' laudable efforts, public housing has failed to achieve this goal in Nigeria. In fact, no place is really home if there is no form of satisfaction or comfort derived. Generally, housing satisfaction is a concept with assigned prominent indicators used by many researchers and analysts as an evaluation measure of private and public sector building performance; as an indicator of residential mobility and as an evaluation of occupants' perception of their residential environment and improvements in new projects.

User satisfaction in housing according to Eziyi and Egidario (2013) has been a subject of investigation by scholars and researchers in the field of housing and was defined by Gaster (1987); Hashim (2003); Kaitilla (1993) and Ogu, (2002) as a measure of users' satisfaction with both their housing units and the neighborhood environment. On the other hand, it has also been viewed as an assessment of the extent to which the current housing environment of residents is meeting their needs, expectations and aspirations (Mohit,Ibrahim,&Rashid, 2010; Salleh, 2008). In plain terms, user satisfaction in housing is a reflection of the degree to which the occupants of a dwelling unit feel that their housing helps them to achieve their goals. It is a measure of the degree to which housing performance (quality) is meeting the occupants' expectation in terms of benefit and needs. In another opinion, housing satisfaction is an individual's subjective assessment of whether or not his/her needs are being met (Danes and Morris, 1986).

There are numerous factors that influence user satisfaction in housing, such factors include; age, education, household size and housing quality. This study, therefore, examined six housing estates in the study area, namely; Federal housing estate Egbeada, Aladinma housing estate, Uratta road housing estate, Prefab housing estate, Federal housing estate Egbu road and Trans-Egbu housing estate and analyzed users' satisfaction with their housing as regards the Residential Building type occupied by Respondents, Household size of the respondents, income level of respondents, Present state of respondent's residential building, Respondents satisfaction on functional quality, aesthetic quality and structural quality.

II.   STATEMENT OF THE PROBLEM

High rates of urbanization in developing countries lead to a big and often problematic issue of providing housing and shelter, especially for the urban poor. In Nigeria, past and present government have made several efforts to at least reduce housing problems in the country by addressing basic needs of the urban poor through initiatives such as public housing schemes. In the study area this public housing schemes initiatives have been implemented for many decades which recorded completion of hundreds of houses in the six housing estates in the study area, namely; Federal housing estate Egbeada, Aladinma housing estate, Uratta road housing estate, Prefab housing estate, Federal housing estate Egbu road and Trans-Egbu housing estate. The houses provided were repetitive in nature and attention was towards quantity and not functionality. This method was based on model adopted from the British which has no considerations for social cultural settings, individual users' needs and preferences. According to Dluhosch (2006) the major factor considered in mass housing designs is economic factor and not actually the individual user's satisfaction. In another vain, Kadir (2005) opines that the reputation of housing type that was not based on preconceived knowledge of the users' needs and aspirations was responsible for failure of several housing schemes in Nigeria.

A successful housing is one that meets the needs and aspirations of the end user. Onibokun (1982) affirms that housing is a unit of the environment in which man lives and grows with profound influence on health, satisfaction among others. Contrary to these views, in the study area the residents are not satisfied with their housing in the public residential buildings in the study area. Dissatisfaction of the residents on their housing is evident in the modification going on in almost all the houses in the six housing estates studied. This paper, therefore, analysis users' satisfaction with the public residential buildings in Owerri, Imo State, Nigeria with the aim of improving quality housing delivery in the study area.

III.   RESEARCH METHODOLOGY

There are a total of 2475 houses in the six housing estates under study; Federal housing estate Egbeada, 180; Aladinma housing estate, 885; Uratta road housing estate, 330; Prefab housing estate, 375; Federal housing estate Egbu road, 375 and Trans-Egbu housing estate, 330. A total of 825 houses were sampled out of the total housing population of 2475 houses in the study area using random sampling technique. To get responses from each of the households on the user satisfaction of the public residential buildings in owerri Nigeria, a set of 825 questionnaires were prepared and copies were administered to the 825 households randomly selected across the six housing estates in the study area. Out of the 825 questionnaires successfully administered, 825 questionnaires representing 100 percent of the questionnaire administered were retrieved. Data collected were presented and discussed descriptively using frequency Tables and Pie charts.

IV.   FINDINGS

Variables such as residential building type occupied by respondents, household size of the respondents, designation of residential building occupied by the respondents, present state of respondents' residential building, respondents' satisfaction on functional quality, aesthetic quality, structural quality,etcetera at the study area wereanalyzed below.

Table 1: Residential Building type occupied by Respondents

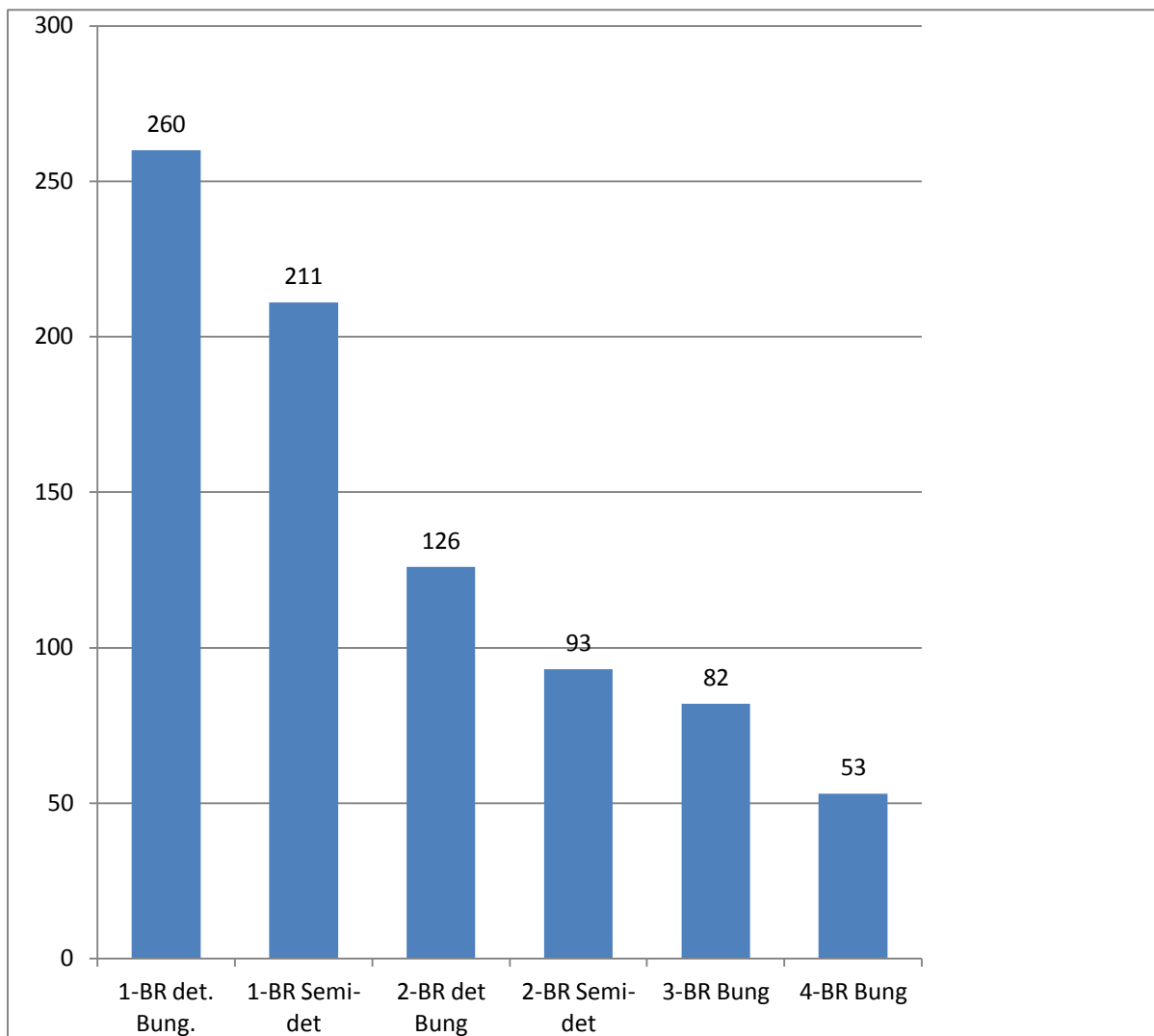| S/N	Which type of building do you occupy		
		Frequency	Percentage
1	One bedroom detached bungalow	260	31.5
2	One bedroom semi-detached	211	25.6
3	Two bedroom detached bungalow	126	15.3
4	Two bedroom Semi-detached	93	11.3
5	Three bedroom bungalow	82	9.9
6	Four bedroom bungalow	53	6.4
	Total	825	100

Source: Author's fieldwork.

Fig. 1. Building type occupied by respondents.

Table 2: Household size of the respondents

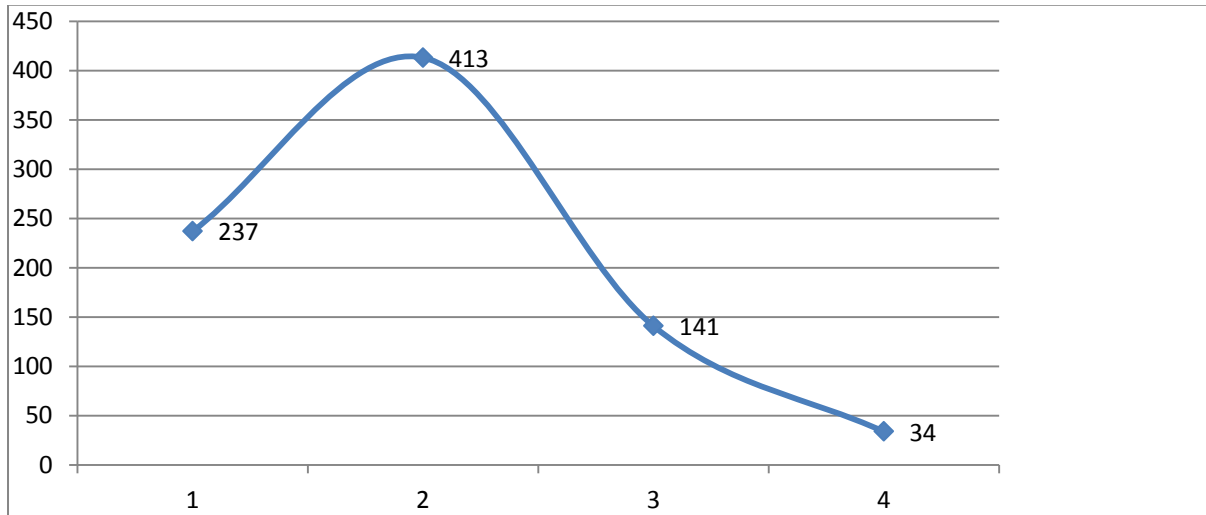| S/N	What size of household do you have	Owerri	
		Frequency	Percentage
1	1-3 persons	237	28.7
2	4-6 persons	413	50.1
3	7-10 persons	141	17.1
4	10-above	34	4.1
	Total	825	100

Source: Author's fieldwork.

Fig. 2. Household sizes of respondents.

Table 3: Designation of Residential Building occupied by the respondent

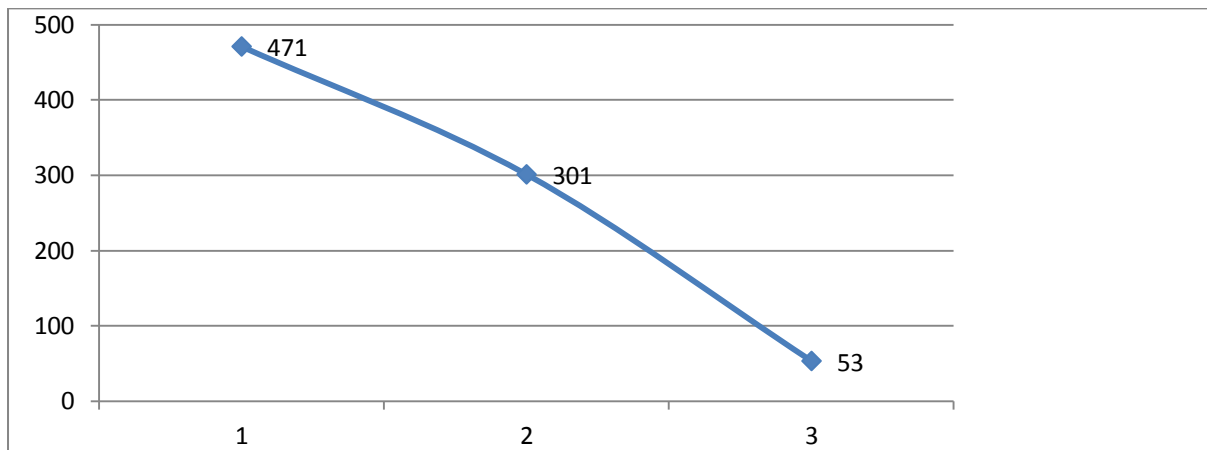| S/N	Income level	Owerri	
		Frequency	Percentage
1	Low income	471	57.1
2	Middle Income	301	36.5
3	High income	53	6.4
	Total	825	100

Source: Author's fieldwork.

Fig. 3. Designation of residential buildings occupied by respondents.

Table 4: Present state of respondent's residential building

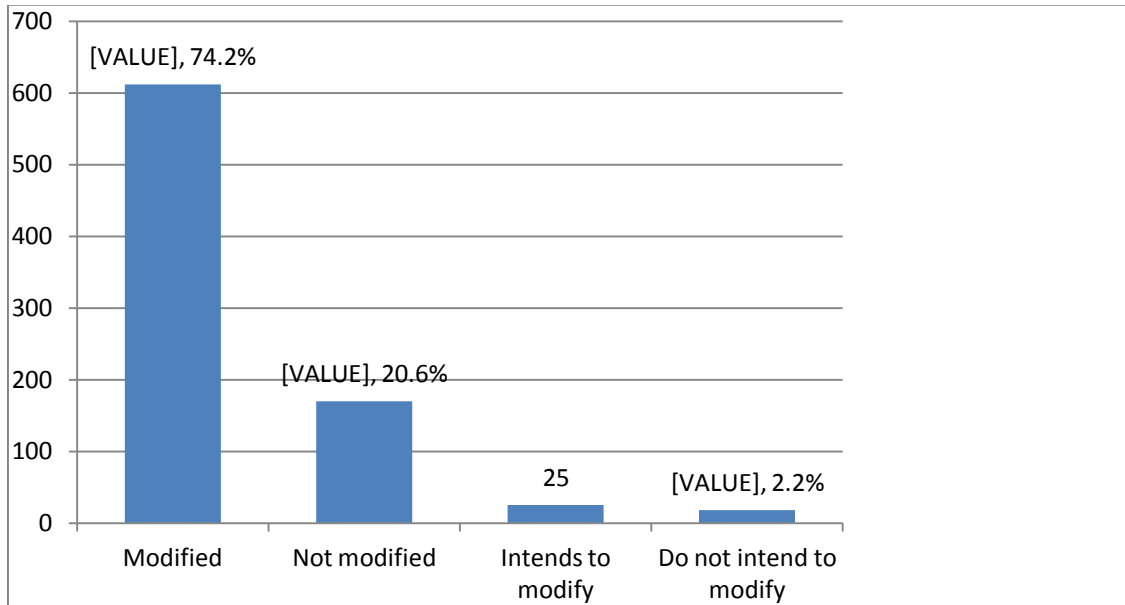| S/N	State of building	Owerri	
		Frequency	Percentage
1	I have modified my building	612	74.2
2	I have not modified my building	170	20.6
3	I have intention of modifying	25	3.0
4	I have no intention of modifying	18	2.2
	Total	825	100

Source: Author's fieldwork.

Fig. 4. Present state of respondent's residential buildings.

Table 5: Respondents satisfaction on functional quality

S/N	Access arrangements	Owerri	
		Frequency	Percentage
1	Satisfied	201	24.4
2	I don't know	33	4.0
3	Dissatisfied	591	71.6
	Total	825	100

Source: Author's fieldwork.

Table 6: Respondents satisfaction on functional quality

S/N	Natural lighting and ventilation	Owerri	
		Frequency	Percentage
1	Satisfied	122	14.8
2	I don't know	29	3.5
3	Dissatisfied	674	81.7
	Total	825	100

Source: Author's fieldwork.

Table 7: Respondents satisfaction on functional quality

S/N	Sufficient floor area	Owerri	
		Frequency	Percentage
1	Satisfied	78	9.5
2	I don't know	12	1.5
3	Dissatisfied	735	89.1
	Total	825	100

Source: Author's fieldwork.

Table 8: Respondents satisfaction on functional quality

S/N	Indoor air quality	Owerri	
		Frequency	Percentage
1	Satisfied	122	14.8
2	I don't know	46	5.6
3	Dissatisfied	657	79.6
	Total	825	100

Source: Author's fieldwork.

Table 9: Respondents satisfaction on functional quality

S/N	Number of bedrooms	Owerri	
		Frequency	Percentage
1	Satisfied	160	19.4
2	I don't know	11	1.3
3	Dissatisfied	654	79.2
	Total	825	100

Source: Author's fieldwork.

Table 10: Residential satisfaction on aesthetic quality

S/N	Landscaping	Owerri	
		Frequency	Percentage
1	Satisfied	105	12.7
2	I don't know	42	5.1
3	Dissatisfied	678	82.2
	Total	825	100

Source: Author's fieldwork.

Table 11: Residential satisfaction on aesthetic quality

S/N	Finishes for floors, walls and ceilings	Owerri	
		Frequency	Percentage
1	Satisfied	311	37.7
2	I don't know	19	2.3
3	Dissatisfied	495	60.0
	Total	825	100

Source: Author's fieldwork.

Table 12: Residential satisfaction on aesthetic quality

S/N	Building visual quality	Owerri	
		Frequency	Percentage
1	Satisfied	211	25.6
2	I don't know	28	3.4
3	Dissatisfied	586	71.0
	Total	825	100

Source: Author's fieldwork.

Table 13: Respondents satisfaction on structural quality

S/N	Provisions for disabled	Owerri	
		Frequency	Percentage
1	Satisfied	14	1.7
2	I don't know	56	6.8
3	Dissatisfied	755	91.5
	Total	825	100

Source: Author's fieldwork.

V. DISCUSSION OF THE FINDINGS

5.1. Residential building type occupied by the respondents.

According to the research findings as tabulated in Table 1;buildings found in the study area were majorly one bedroom detached and semi-detached bungalow making up 57.1 percent of the total building in the study area while the other types; two bedrooms, three bedrooms and four bedroom make up 42.9 percent of the building in the study area.

5.2. Household size of respondents.

Findings from the field survey showed that the occupancy ratio in the public residential buildings in Owerri is very high. Analysis of Table 2. shows that household size of the majority of the respondents in the public residential buildings in Owerri is between 7-10 persons (50.1 percent) per dwelling, and only 28.7 percent of the respondents live between 1-3 persons per dwelling. This is in line with the finding of Uwadiegwu (2013). This high occupancy ratio is the major factor that leads to modification of structures in the public residential buildings in Owerri to relieve the inhabitants of their accommodation problem. This agrees with the research finding of (Nubi, 2000; Olotuah & Ajenifujah, 2009; and Oladapo, 2006).

5.3. Residents' satisfaction with their housing condition in the study area

Findings from the research generally show that the residents are not satisfied with their present housing condition in the public residential buildings in Owerri and seek housing improvement in their various housing estates. This dissatisfaction is the single significant factor that leads to the housing modification going on haphazardly across the length and breadth of all the public housing estates in Owerri. On access arrangement according to data in Table 5, 71.6 percent of the respondents are dissatisfied with the access to various houses.

Data in Table 6 shows that 81.7 percent of the respondents in the study area are dissatisfied with natural lighting and ventilation in their houses. Most of the houses in the study area were design and constructed without proper orientation consideration. Findings from the field survey according to data in Table 7 indicates that not less than 89 percent of the respondents are not satisfied with the floor area of their houses. Physical observation confirms that none of the rooms in the houses surveyed has a floor area that is more than 10.8 square meters even when they exceed the permissible number of persons per room. The information in Table 8 shows that 79.6 percent of the respondents are not satisfied with indoor air quality in the houses. One of the major causes of poor indoor air quality is the unauthorized modification of structures in the study area according to data in Table 4, to reduce the high occupancy rate observed in the study area (Table 2) which was caused primarily by low income earning (Table 3).

Data from the field presented in Table 9shows that 19.4 percent of the respondents are satisfied with the number of bedrooms in their houses while 79.2 percent of the respondents are dissatisfied. This is a situation the majority of the respondent could not change because of their low income earning and only resorted to unauthorized modification of their structures. The field survey as tabulated in Table 10, Table 11 and Table 12 reveal that the greater percentage of the respondents are not satisfied with their building finishes and overall visual quality of their buildings and the environment. The result of this study is in line with previous research by (Iwuagwu, 2017; Ibem, Anosike & Azuh, 2011; and Ademiluyi, 2010).

VI. RECOMMENDATIONS

Literature review shows that since independence in 1960, governments in Nigeria have demonstrated commitment to addressing the housing problem in several ways. But due tocost of imported building materials and political challenges, public housing agencies have so far provided insufficient number of poor quality and unaffordable housing units in the country. The paper notes that despite several efforts towards ensuring adequate and affordable housing to the citizenry, the poor urban dwellers are still deprived access to decent and affordable housing. The paper therefore, recommends that

1.   Government should not be engage on direct housing construction and should allocate land to individuals and allow them construct their own home. Direct housing construction by the government is costly; still the quality of the houses is in doubt, hence the dissatisfaction.

2.   In a situation where government wants to engage in direct housing construction user participation strategy should be adopted to allow the users make input in the design and construction stages to avoid user redesign. The users of the building products should be identified in the programming stage for their meaningful input in the design and construction stages of the buildings meant for them based on their socio-economic and socio-cultural grounds.

3.   Residential housing satisfaction goes beyond considering the technical quality of the components of the house to include how well the building and its environment have met the needs and expectations of its dwellers. This implies that housing policy formulators in Nigeria need to review the old tenement structures and include normative housing needs (infrastructure and amenities such as the quality satisfaction attributes) of the urban poor that have been overlooked over the years to articulate the overall integrated housing development framework in Nigeria.

4.   The urban dwellers don't just require anything building for residential purpose as mostly exemplified by public housing initiators. The public tenement housing providers should endeavor to ensure that infrastructural facilities and amenities are provided and maintained to forestall the development of shacks in the public housing estates.

VII.   CONCLUSION

This paper has examined the users' satisfaction of the public residential buildings in Owerri Nigeria. Findings show that since independence in 1960, governments in Nigeria have demonstrated commitment to addressing the housing problem in several ways. The paper notes that despite several efforts towards ensuring adequate housing to the people, the urban dwellers in the public housing estates are still deprived access to decent and affordable shelter.

Nowadays, human elements perceive their areas of habitation as a shield to protect them from daily economic and social life stress. Thus, urban residential dwellings should be able to meet the socio economic and physiological needs of their residence. This can be achieved when adequate conception of housing moves beyond mere architectural design considerations to include environmental quality perception of surroundings.

It is therefore believed that the findings and recommendations emanating from the study have advanced our understanding on the users' satisfaction of the public residential buildings in Owerri Nigeria. The adoption of the various recommendations made above will be a springboard for quality housing delivery in the study area.

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