

# Urban Residents' Housing Satisfaction In Iponri Housing Estate, Lagos, Nigeria

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Received Date: 19 May 2021

Revised Date: 24 June 2021

Accepted Date: 06 July 2021

## **Abstract**

*The study evaluates residents' satisfaction and experience with Iponri public housing in Surulere Local Government Area, Lagos State, Nigeria. The objectives were to examine the housing conditions in the study area and to evaluate occupants' level of satisfaction in the study area. The research design adopted was the quantitative method. The study used the total number of tenants in the selected public housing estate as the sample frame (2,650). Morris's sample size formula was used, which amounts to 126 residents who were interviewed. The purposive sampling technique was used as the sampling technique. Data collected were analyzed using descriptive statistics. With the analysis of the housing condition, the study revealed that the majority of the respondents agreed that paints (3.7), walls (3.7), windows (3.6), and toilets (3.6) were in good condition. Conversely, ceiling (3.0), lighting (3.0), doors (3.0), and roofs (2.2) were in poor and unsatisfactory condition. The topmost four facilities residents were satisfied with are; the privacy in the dwelling (3.7), water supply (3.7), building ventilation (3.5), and housing environment (3.4). However, the top three facilities residents were dissatisfied with are interior design (3.0), electricity supply (3.0), ornaments (2.8), and pollution (2.8). The top three factors affecting occupants' level of satisfaction were: availability of recreational facilities, location, and accessibility, having a weighted index of (3.7) each. The study made the following recommendations; rehabilitation/renovation of basic infrastructure such as roads and housing; provision of basic urban services; improving the quality of roofing; improving garbage collection and power supply in the estate, among others.*

**Keywords:** Housing, Condition, Urban, Quality, Resident's satisfaction

## **INTRODUCTION**

The world became urban in the year 2009 as it was the year the number of people living in cities was more than those living in rural or country areas (Florida et al., 2009). It has been projected that by the year 2030, more than two-thirds of the world population will be living in urban areas (UNFPA, 2007), and this is expected to grow to 75 percent by 2050 (Laundry and Burke, 2014). As more of the world population

is becoming urban dwellers, the subject of urban housing is becoming more crucial as housing is very fundamental to the welfare, survival, and health of individuals urban dwellers (Paul, 2019). Housing is widely acknowledged as the second most essential human need (Afolayan and Etoniru, 2016), and one of the most serious problems of urban housing provision in Nigeria is the issue of poor housing quality (Ekpo and Nwokoro, 2012). 30% of the world's urban population resides in slums characterized by deplorable conditions, poor sanitation facilities, overcrowded conditions, living in structurally unsound buildings, and absence of land tenure. Also, 35% of the world's rural population lives in conditions that are unacceptable. More than two billion people in total are badly in need of better accommodation (United Nations, 2010).

One of the basic needs of every person, family, and society, in general, is decent housing. According to Turunen *et al.* (2010), a wide range of housing characteristics have been reported to affect the physical, social, economic, and mental well-being of occupants. Housing conditions play a major role in an individual's mental health. Uncontrolled urbanization is already a problem in Nigeria, and it is present in all of our cities. Towns in Nigeria are expanding without proper planning. Slums, squalor, and grossly inadequate social amenities afflict millions of Nigerians. The built environment is rapidly deteriorating. Rapid urbanization, rural-urban migration, decades of consistent economic decline, degradation of urban infrastructure, and low housing quality, and increase in home overcrowding have occasioned pressure on infrastructural facilities and rapidly deteriorate the environment (Amao, 2012).

Public housing has to do with the provision of avoidable low-cost by the government the civil servants. Based on this responsibility, the policies on housing are targeted at satisfying the housing occupants. However, it has been noted that most often, the opinion and experience of building users are unconsidered in the public sector's real estate development process. The reason being that public housing policy structure tends to favor architects' preferences with the overall target of low costing, while there is a need for buildings to serve the needs of people who use them (



Watson,1999; Kasim, Ahmed & Eni,2006). This brings to light the inadequate opportunity given in public housing development where design and construction teams can share knowledge with occupants (Kartz et al., 2005). The occupant opinion is gotten through Post Occupancy Evaluation methods, which is an avenue of communication between the project team and occupants. Post Occupancy Evaluation (POE) refers to the evaluation of building performance after occupancy with the objective of understanding interaction between the property and occupants so that improvement can be made where necessary (Nawawi & Khalil,2008). POE uses elements such as satisfaction and perception to evaluate physical, environmental, and management factors that influence the actual performance of buildings (Wheeler et al., 201!).

The outcome of lack of consideration to occupants' views in public housing developments will keep manifesting in the residential building performance. It is evident from the literature that little attention has been given to residential building evaluation (Leaman, Stevenson & Bordass,2010). Rather, more attention is being given to offices and education buildings, while residential building performance evaluation was supposed to be a key instrument of collecting data that can show the importance of collective participation and improve the performance of housing developers and public housing policies (Mohit & Azim,2012). Failure to give attention to the evaluation of existing building stock and resident's satisfaction often results in a failure to avoid avoidable errors. Therefore, occupant's response in reporting their experience or satisfaction is an important step toward improving housing delivery, policies, and maintenance to a sustainable stage (Djebami & Al-Abed, 2000). POE provides a focus for identification of factors responsible for variation in housing performance in respect to operation and maintenance has to be monitor, and the practice is where monitoring and collected feedbacks were effectively utilized in improvement (Way & Bordass,2005). It is in the light of this that this study aimed at evaluating the occupants' satisfaction and experience with Iponri public housing estate, Surulere Local Government Area, Lagos, Nigeria.

## LITERATURE

In terms of accessibility, sustainable development directly applies to discussions of affordability, housing quality, and questions of social equality and justice. This viewpoint necessitates a count of housing provisions over the course of its life cycle. As a result, three fundamental principles must be explained and extended in order to assess the complexities of affordable housing in relation to sustainable urban growth. There is housing affordability, housing quality, and housing equity in terms of housing accessibility (Aribigbola, 2011).

Qualitative studies have identified some criteria as relevant indicators for quality evaluation in housing development when assessing the quality or suitability of housing. Ebong (1983), for example, identified aesthetics, ornamentation,

sanitation, drainage, building age, access to basic housing services, burglary, spatial adequacy, noise level within the community, sewage and waste disposal, air pollution, and ease of movement as significant quality determinants in housing. Quality housing, on the other hand, according to Hanmer *et al.* (2000), requires the provision of infrastructural services that can contribute to long-term growth and development through improved environmental conditions and improved livelihood. Neilson (2004) defines five specific requirements for assessing the quality of house development, including that housing must meet a tolerable standard, be free of serious disrepair, be energy efficient, have modern amenities and services, and be healthy clean, and stable.

Access to basic housing and community services, the standard of infrastructural amenities, spatial adequacy and quality of design, fixtures, and fittings, building layout and landscaping, noise and pollution control, and protection are some of the variables included in these indicators. However, these various studies indicate that a single variable may not be sufficient to determine the qualitative nature of housing condition; therefore, housing acceptability and qualitative assessment should consider, among other things, the form of constructions, materials used, utilities, spatial arrangement, and facilities inside dwellings, work, and aesthetics (Jiboye , 2004).

## Housing Concepts, Attributes of Tenants and Satisfaction

Several definitions have been advanced in literature to explain the concept of housing. The World Health Organization (WHO) in 1961 described housing as the provision of any physical structure used for shelter. This includes all facilities, equipment services, and devices needed for healthful living. In another contribution, a United Nations' report in 1976 defined the concept of housing as that which encompasses all the ancillary services and community facilities which are necessary to human well-being (Jiboye 2008).

Housing is not limited to shelter; the habitability of a house depends on the physical attributes of the dwelling and the social, cultural, and behavioral features of the occupants. Moreover, housing has been conceived as a unit of the environment that has a profound influence on the health, efficiency, social behavior, satisfaction, and general welfare of the occupants. It reflects the cultural, social, and economic beliefs of a society as it is the best physical and historical expression of civilization in a country (Onibokun cited in Jiboye 2008 and 2010d). Adequate housing, therefore, relates positively with the attainment of the physical and moral health of a nation and stimulates the social stability, work efficiency, and the development of the individuals (Adeniyi cited in Jiboye 2008). It has been argued that the concept of habitable and ideal housing is related not only to the physical, architectural, and engineering components of the home but also to the social, behavioral, cultural, and personal

characteristics of the inhabitants, the components of the environment (of which the home is a part) and the nature of the institutional arrangements under which the house is managed. In this regard, Onibokun had argued further that the issues involved in housing are more than the availability of physical and structural efficiency of the dwelling. Therefore, a dwelling that is adequate from the physical or design point of view may not be adequate or satisfactory from the inhabitant's point of view. In other words, the house in itself is only one link in a chain of factors that determines people's satisfaction with their accommodation (Onibokun cited in Oladapo 2006 and Jiboye 2008).

The significance of tenants' socioeconomic characteristics in the actualization of adequate dwellings appears self-evident in the light of the preceding remarks. This essentially is predicated on the need to make housing responsive to user wants (Jiboye 2010c). In other words, housing must satisfy the social values and personal needs of its occupants, and it must be suitable, accessible, and affordable. It is also noteworthy that a dwelling is an important investment that has become a status symbol. Therefore, people's positions in society, occupational status, and other resources also affect the type of house that is built (Jiboye 2004; Jiboye and Ogunshakin 2010).

The conception of housing or residential satisfaction has been defined from different perspectives. Fransescato *et al.* (1989) defined satisfaction as the measure of people's attitudes towards their residential environment. Similarly, Amerigo (2002) defines it as a function of the pleasure derived from an encounter with the dwelling, the neighborhood, and the neighbors. Hur and Morrow Jones (2008) also defined it as the evaluation of features of the physical and social environment that determine people's mobility and quality of life. In measuring residential satisfaction, different approaches have been developed. However, two basic approaches have been identified for empirical research. One approach is to view residential satisfaction as a criterion of quality of life, while the other is to view it as a predictor of a variety of behaviors. Considering these approaches, the model of residential satisfaction proposed by Francesca *toet al.* described six-domain nomenclature of predictor variables for resident's satisfaction. These include objective environmental attributes and individual characteristics, behavioral and normative beliefs, perceptions, emotions, and behavioral intentions. These variables include the physical environment, management, community, and health (Potter and Cantarero, 2006).

While explaining the notion of satisfaction, Onibokun (1974) referred to it as a human concept that involves four interacting and interrelated variables – the tenant, the dwelling, the environment, and the management. In this concept, the tenant's subset is at the center and acts as the recipient of all the feedback from the other subsets. The

dwelling subset is the housing unit that forms part of the environment where the unit is located. There is also the management subsystem or component of satisfaction. This subsystem comprises the entire institutional arrangement under which public housing is administered. Furthermore, the tenant's view of a dwelling is influenced by socio-cultural characteristics, lifestyle, economic status, and the behavioral patterns of the housing inhabitant. It is on this basis that a systematic approach for evaluating tenants' satisfaction was developed. Thus, according to Fleury-Bahi *et al.* (2008), residential satisfaction is indeed strongly associated with one's attachment to the living space and is generally related to the quality of the space.

Measuring housing satisfaction is important because an understanding of the factors that make a tenant satisfied or dissatisfied can play a critical role in formulating successful housing policies. Certain variables have also been identified in the literature as indicators of evaluating housing satisfaction. By adopting Onibokun's systems approach, the tenant subsystem as the recipient of all the feedback from other housing components could be influenced by three major domains as identified by Potter and Cantarero (2006). These consist of the physical environment, socioeconomic and cultural aspects of life, and public services domains. Under the physical environment are variables such as quality of residence or housing conditions, neighborhood, and community. Under the socio-economic and cultural aspects of life are family structure and relations, race, culture, job or employment, and religious affiliation. In measuring the socioeconomic domain, variables such as sex/ gender, age, marital status, religion, length of residence, occupation, education, income, and household size have also been identified as indicators that could influence the judgment of tenants of their residence (Kearney 2006; Hur and Morrow-Jones 2008; Jiboye 2010b; Aigbabo and Thwala 2011). Under the public services, the domain is management and maintenance, security, provision of basic amenities, and other utilities. Other relevant indicators such as the adequacy of a dwelling as determined by the internal spaces, the structural quality, the amenities, and facilities within the dwelling have also been established as determinants of users' residential satisfaction (Jiboye 2008, 2010b). Considering the comprehensiveness and appropriateness of the concept of residential satisfaction highlighted above, tenants' residential satisfaction is measured using the basic framework and approach suggested by Onibokun, and also adopted by Oladapo (2006) and Jiboye (2008, 2010a).

It has, however, been observed that the nature and determinants of residential attitudes and choices vary among different groups of people, and this variation is influenced by their social and personal values and lifestyles. A study by Hartman in 1963 concluded that residential satisfaction is not discrete but may be related to an entire living pattern and a larger set of social and personal values (Jiboye 2008, 2010a).

Evaluating housing satisfaction using these criteria, which are related to the factors of the environment, dwelling, and management components, permits a comprehensive survey of the satisfaction of tenants with their housing. In essence, the relevance of socioeconomic parameters in the determination of tenants' housing needs and preferences cannot be overemphasized. However, housing studies (in Nigeria and other developing nations alike) consider the inputs from human values are negligible and grossly inadequate. This study intends to examine the resident's housing satisfaction in Lagos state, Nigeria using iponri housing estate as a case study.

#### Determinants of Satisfaction

Satisfaction, according to Rai (2013:104), "is dependent on both psychological and physical variables. Satisfaction is viewed as a latent construct that is not observed directly and can only be estimated through indicators" (Geise and Cote, 2000). It then implies that satisfaction has determinants and implications. As previously observed, satisfaction does not have one universal meaning: its determinants are also varied and diverse. For instance, satisfaction may be based on individual or group criteria and the extent to which the criteria can be met. It could be about the condition of mind or an attitude that has a powerful influence on the thought pattern of a person. It could as well be conceptualized as stepping away from experience and evaluating it (Clinton and Wellington, 2013). Satisfaction can manifest in different perspectives, such as attainment of life goals, outstanding performance, job satisfaction, basic body functions, and so on. Satisfaction is a state of happiness, contentment, or fulfillment: therefore, it is possible for a person to lack satisfaction. There may be a tendency to have negative feelings, such as discontent, boredom, or sadness. Such is known as dissatisfaction.

Consequently, satisfaction can be greatly affected by several factors- environmental, socio-cultural, psychological, and individual's personality, to mention a few. Specific determinants of satisfaction will be influenced to a large extent by the type of satisfaction under review and participant's judgment of satisfaction (Arnold et al., 1995; Evans et al., 2006; Olusegun, 2011; Rai, 2013).

#### Satisfaction model and theory

Satisfaction is a process of evaluation between what was received and what was expected (Parker and Mathews, 2001). Satisfaction can be precisely defined as the perceived discrepancy between aspiration and achievement, ranging from the perception of fulfillment to that of deprivation (Campbell et al., 1976). Satisfaction is a subjective response to an objective environment (Potter and Cantarero, 2006). Ogu (2002) reported that the concept of housing or residential satisfaction is often employed to evaluate resident's perceptions of and feelings for their housing units and the environment. The concept of residential satisfaction

has become the preeminent social indicator employed by housing developers, analysts, and policymakers alike during the last decade. Housing satisfaction is influenced by a broad array of objective and subjectively perceived conditions (Theodori, 2001). The habitability of a house is influenced not only by the engineering elements but also by social, behavioral, cultural, and other elements in the entire societal-environmental system. The house is only one link in a chain of factors that determine people's relative satisfaction with their accommodation. Satisfaction with housing and neighborhood conditions are important indicators that reflect the quality of life. These indicators are also important in the process of evaluating housing policy with the objective to increase the quality of housing and neighborhood. For instance, Bechtel (1997) observed that residential satisfaction is determined by a mix of factors that include not only the house and its physical qualities but also the surrounding neighborhood and social quality of the surrounding. Mohit, M.A., Ibrahim, M. and Rashid, Y.R. (2010) concluded that Customer's Residential Satisfaction is a feeling of contentment or fulfillment when the customer has ultimately achieved what he has expected in a house; residential satisfaction has been used as a key predictor of an individual's perception of general "quality of life"; residential satisfaction is an ad hoc evaluative measure for judging the success of developments constructed by private and public sectors, and an assessment tool of residents' perceptions of inadequacies in their current housing environment.

#### STUDY AREA

Lagos is located on the south-western coast of Nigeria. The city has a total area of 1,090 square kilometers, with about 208 square kilometers covered by water and mangrove swamps. Lagos became the first federal capital following the attainment of Nigerian independence in 1960. The metropolitan area is an urban complex consisting of millions of people from different ethnic, socio-cultural, and economic backgrounds.

Since the shift of administrative seats to Abuja, Lagos has remained the major seaport and commercial nerve center of Nigeria, thereby attracting migrants of diverse socioeconomic and cultural backgrounds from all over the regions and the nations of the world. Consequently, the city has witnessed considerable expansion (both spatially and demographically) over the years. The most recent official population figure for Lagos released by the national population commission of Nigeria is nine million (NPC 2006).

Official intervention in housing provision in Nigeria began when the Lagos Executive Development Board (LEDB) was created in 1928 to tackle the housing-related bubonic plague at the time. This was done to get rid of the filth as well as the unhealthy living and housing conditions. Since then, the government's direct involvement in housing development and delivery has been on the increase. In 1972, the Lagos

Executive Development Board (LEDB), Ikeja Area Planning Authority (IAPA), and Epe Town Planning Authority (ETPA) metamorphosed into what is now known as the Lagos State Development and Property Corporation (LSDPC). Since its inception, it has been entrusted with the execution of several housing programs to cater to the different categories of Nigerians (Mbali and Okoli 2002; LSDPC 2005). As part of its efforts to reduce the problem of housing shortages in Lagos, the Federal Government also embarked on housing development for different categories of Nigerians residing within the Lagos Metropolitan Area. To achieve this, the Federal Ministry of Housing Urban Development and Environment was established (FHA 1985; UNCHS 2001). Today, public housing schemes developed by both the Federal and State governments exist in virtually every major location within the Lagos Metropolitan

**METHODOLOGY**

The sampling technique adopted for this study is the purposive sampling technique. The primary data source for this study was collected using a well-designed questionnaire which certified the creation of significant and mixed data collections in an official set and a comprehensive investigation of the capabilities and ideas of the respondents during the survey. The secondary data source of collection for this research work was obtained from the review of past kinds of literature from various sources and designs, which includes journal articles, seminar papers, the internet, textbooks, maps, and other published and unpublished materials which are germane to the aim and objectives of this study. The sample frame consisted of Tenants of Public Housing in Surulere Local Government and Staffs of the relevant Agencies concerned with Housing Provision. The relevant Agencies include the Federal Housing Authority and Ministry of physical planning and urban development (Lands department). To get information on Tenants in Public Houses in Surulere Local Government, the department of Lagos state Planning and information center (LASPIC) was visited. It was found out that there were 1650 Tenants in Iponri public housing estate, Surulere Local Government

The Sample size was calculated using Evans Morris's (2005) formula, which was selected in the determination of sample size for the research project. It used the population as a basis for determining the sample size needed for this research using this formula.

$$n = Nz^2Pq$$

$$e^2 (N-1) + Z^2Pq$$

Where n = the required sample size

N= Finite population

e= the accuracy of your sample proportion level of significance (15%) 0.05

I= unity

Pq= are the population proportions (50%), 0.5

Z= the value that specifies the level of confidence you want when you realize your data 95%, 0.95

$$n = 2650 (0.95)^2 (0.5)$$

$$0.05^2 (2,650-1) + (0.95)^2 (0.5)$$

$$n = 1195.8125 = 155$$

$$7.074$$

“n” which is the sample size is 155

The sample size for the Tenants is 155, the sample size for the staff of the relevant agencies was based on who was met on the day of questionnaire Administration, and nonetheless, the interviewer did not interview more than a total of 25 respondents at the relevant agency

Statistical Package for Social Science (SPSS) was used to analyze data gathered through the well-constructed questionnaire, whereby percentage, frequencies, Likert scale, and charts was used to analyze the descriptive statistics

To determine the mean distribution of user’s perception, a five-point scale with (“Very Bad” equals 1, “Bad” equals 2, “Fair” equals 3, “Good” equals 4, and “Very Good” equals 5) & (“very dissatisfied” equals 1, “dissatisfied” equals 2, “Just satisfied” equals 3, “Satisfied” equals 4, and “Very Satisfied” equals 5) was used in the rating. Adding all ratings together amounts to 15 points for overall user perception. Thus,

$$Q = \sum fx$$

$$N$$

Where, Q= Mean, Σ= Summation, Fx= Frequency of x and N= Number of occurrences

In order to obtain the perception aggregate index (I) of each service, a weight value of **5,4,3,2**, and **1** was assigned to the ratings above. The summation of value (SWV) for each service was obtained from the addition of the product of the weight value of each rating and the number of responses of each rating. The perception aggregate index (I) for each section was obtained from the division of each summation of value (SWV) by the total number of respondents interviewed, which is represented as “n.”

$$\text{Thus, Index (I) = } \frac{\text{SWV}}{N}$$

$$N$$

By summing the nominal values and dividing them by the total number of scaling variables, the cut-off point is determined. Dividing the total ratings of each variable gives us a mean of 3. Thus, any mean above 3 indicates Positive

respondents' perception and below 3 indicates negative respondents' perception, while a mean of exactly 3 shows neutral (undecided) on user perception by a respondent.

**DISCUSSION OF FINDINGS**

The result of the findings in Table 1 expresses the state of the building elements, which is examined with the Likert scale and ranked in accordance with most significant to less significant using the weighted index method. Results show that the building elements with the most positive responses

are Paints, Walls, Windows, and Toilets with the weighted index of 3.7, 3.7, 3.6, and 3.6 respectively, these responses are way over the neutral index of 3.0, which signifies positivity. Also notable is the roof being the less significant response with an index of 2.2, and this falls below the 3.0 neutral indexes, thus signifying a negative response. In summary, the building elements in good state are Paints, Walls, Windows, and Toilets, while the element in the worst state is said to be roofing.

**Table 1: Housing Conditions**

S/n	Building element	Very bad (1)	Bad (2)	Fair (3)	Good (4)	Very good (5)	SWV Index
1	Paints	6	9	36	43	32	3.7
2.	Walls	5	10	35	42	34	3.7
3	Windows	4	8	59	22	33	3.6
4	Toilet	8	12	34	45	27	3.6
5	Floors	5	31	23	37	30	3.4
6	Staircase	12	14	54	40	6	3.1
7	Bathrooms	3	24	62	23	14	3.2
8	Ventilation	7	21	69	16	13	3.1
9	Ceilings	14	6	74	24	8	3.0
10	Lighting	5	46	21	46	8	3.0
11	Doors	6	18	73	26	3	3.0
12	Roof	10	17	41	28	0	2.2

Source: Researcher's field survey, 2018

The analysis in Table 2 shows the availability and functionality of infrastructures in the study area. The data was analyzed using the Likert scale and further ranked using the weighted index method. The results received show that majority of the infrastructures listed are readily available and functional, but for the aim of raking, the major 3 infrastructures that were highlighted to be available and functional are Public transport, Clubhouses, and Access Roads. These were selected and analyzed, which resulted in them having weighted indexes of 4.7, 4.6, and 4.6,

respectively. Also notable are Police stations/posts, Shopping centers, Religious Center, Nursery/Primary schools, Central sewage system, Central water supply system, Drainages, Health Center, and Recreational facilities, all with a weighted index from 4.0 above, which is way above the neutral index of 3.0. In addition, the most dysfunctional and unavailable infrastructures are said to be Public toilets and libraries with the weighted index of 2.9 and 3.0, thus putting them in the bottom ranks

**Table 2: Availability of Infrastructures**

S/n	Infrastructure	Available		Not Available	SWV Index
		Functional	Dysfunctional		
1	Public transportation	117	9	0	4.7
2	Club houses/relaxation spots	113	13	0	4.6
3	Access roads	113	10	3	4.6
4	Bank(s)	111	10	5	4.6
5	Police station/posts	109	17	0	4.5
6	Shopping centre	105	16	5	4.3
7	Religious Centre	105	17	4	4.3
8	Nursery/Primary School	99	17	10	4.1
9	Central sewage system	100	16	10	4.1
10	Central water supply system	101	13	12	4.1
11	Drainages	102	12	12	4.1
12	Health Centre	96	20	10	4.0
13	Recreational facilities	98	16	12	4.0
14	Secondary School	93	24	9	3.9
15	Telecommunication office(s)	94	18	14	3.9
16	Playgrounds, parks, gardens	94	25	7	3.9
17	Civic Centre	89	26	11	3.7
18	Fire Service	90	20	16	3.7
19	Car parks, parking spaces/lay-bys	82	41	3	3.6
20.	Traditional Market	82	25	19	3.5
21	Electricity (Power supply)	80	41	5	3.5
22	Post Office	83	19	24	3.4
23	Pedestrian walkways	78	19	29	3.2
24	Public toilet/bathroom	65	55	6	3.0
25	Library(s)	70	16	40	2.9

Source: Researcher's field survey, 2018

The conditions of infrastructures were examined in Table 3. The analysis was done using the Likert scale and weighted index method for ranking the condition of the identified infrastructures from very good to the poor state. The result, however, shows that Private health facilities, Recreational facilities, Shopping centers/shops, Public transportation, Private primary schools, and Private secondary schools are in a good state following the perception of the respondents as represent in the table above has a weighted index of 3.7, 3.7, 3.4, 3.4, 3.4, and 3.4 respectively, this indexes, therefore, indicates that they above the neutral index of 3.0 which is supposed to be the fair state, thus signifying a positive response.

Further analysis reveals that environmental refuse waste management, national electric power supply, and public secondary school facilities are in a fair state which weight index is presented in the table above as 3.0, a grade level that represents a fair state. Thus, the only public toilet is perceived to be in a bad state, having a weighted index of 2.4. The above result is closely associated with the urbanized nature of Surulere Local Government Area, where basic infrastructures are needed to enhance the human development and productivity of organizations and individuals managing the heightened facilities as well.

**Table 3: Conditions of Infrastructure**

S/n	Infrastructure	Very bad (1)	Bad (2)	Fair (3)	Good (4)	Very good (5)	SWV Index	Rank
i.	Private health facilities	3	9	37	57	20	3.7	1 <sup>st</sup>
ii.	Recreational facilities	0	12	43	37	34	3.7	2 <sup>nd</sup>
iii.	Shopping centres/shops	0	23	56	19	28	3.4	3 <sup>rd</sup>
iv.	Public transportation	8	11	46	46	15	3.4	4 <sup>th</sup>
v.	Private primary schools	4	18	39	49	16	3.4	5 <sup>th</sup>
vi.	Private secondary schools	4	18	39	49	16	3.4	6 <sup>th</sup>
vii..	Public health facilities	2	19	59	34	12	3.3	7 <sup>th</sup>
viii.	Roads	8	11	57	40	10	3.3	8 <sup>th</sup>
ix.	Public primary schools	3	31	43	39	10	3.2	9 <sup>th</sup>
x.	Traditional markets	3	24	56	34	9	3.2	10 <sup>th</sup>
xi.	Housing unit	10	21	49	42	4	3.1	11 <sup>th</sup>
xii.	Drainages	12	14	54	40	6	3.1	12 <sup>th</sup>
xiii.	Sewage management	16	25	44	41	0	2.9	13 <sup>th</sup>
xiv.	Public water supply	11	32	47	34	2	2.9	14 <sup>th</sup>
xv.	Security	16	18	69	18	5	2.8	15 <sup>th</sup>
xvi.	Refuse management	6	22	71	20	7	3.0	16 <sup>th</sup>
xvii.	Public secondary schools	2	38	56	23	7	3.0	17 <sup>th</sup>
xviii.	Power supply (PHCN)	2	38	56	23	7	3.0	18 <sup>th</sup>
xix.	Public toilet	16	57	41	6	6	2.4	19 <sup>th</sup>

Source: Researcher's field survey, 2018

The condition of the housing dwelling shows that majority of the respondents agreed that their Paints are in good condition with a weighted index result of 3.7. This is above the neutral point of measurement; hence it is said to be in a 'good' state. This is closely followed by walls, windows, and toilets, with a weighted index of 3.7, 3.7, 3.6, and 3.6,

respectively. The table also shows the order in which the condition of each unit is perceived, and it is noteworthy that the Housing unit with the worst condition was said to be the Roofs with a weighted index of 2.2, which represents a negative perception, and this can be linked to the visible poor states of roofs in most areas. From the analysis, the top



3 facilities selected averagely by respondents to be in a good state are Paints, Walls, and Windows.

**Residents’ Housing Satisfaction**

An insight into respondent’s perception level on the state of satisfaction to infrastructures provided in the study area following a series of heightened necessary infrastructures was analyzed as presented in Table 4 using the Likert scale and weighted index method. Thus, results from the analysis show that the respondents in Iponri public housing estate have a satisfactory take on Building ventilation, water

supply, housing environment, privacy in dwelling and lighting, having a weighted index of 3.7, 3.7, 3.5, 3.4, 3.3 respectively; since the weight index is above the average level of 3.0, the satisfactory level is justified. Another result within the ‘just satisfied’ state is waste disposal; which is associated with a change in management of Lagos waste management instability in Lagos, sewage system, electricity supply, building interior design, and management attitudes towards housing, as indicated in Table 4 below, having a weighted index 3.0 respectively. However, housing ornament and pollution remain a situation the respondent are not satisfied with.

**Table 4: Housing Satisfaction Analysis**

S/n	Housing Elements	Very Dissatisfied (1)	Dissatisfied (2)	Just Satisfied (3)	Satisfied (4)	Very Satisfied (5)	SWV Index
1	Privacy in Dwelling	0	17	38	37	34	3.7
2	Water supply	0	9	36	64	17	3.7
3	Building Ventilation	2	19	24	72	9	3.5
4	Housing Environment	1	26	26	63	10	3.4
5	Lighting	4	27	27	61	7	3.3
6	Overall Dwelling	4	20	36	64	2	3.3
7	Management Involvement and response rate	3	24	62	23	14	3.2
8	Waste Disposal	3	33	52	24	14	3.1
9	Sewage	7	26	54	31	8	3.1
10	Cost of housing maintenance	1	25	64	31	5	3.1
11	Building size and spaces	0	14	25	53	14	3.1
12	Management attitude on rules	0	25	79	20	2	3.0
13	Building Interior Design	8	37	26	54	1	3.0
14	Electricity supply	7	43	29	41	6	3.0
15	Housing ornaments	12	50	22	37	5	2.8
16	Pollution	14	31	65	8	8	2.7

Source: Researcher’s field survey, 2018

**Factors Affecting Residents Housing Satisfaction**

The analysis in Table 5 represents the factors that affect housing satisfaction in the study area; these variables were analyzed using the Likert scale and further ranked using the weighted index method; thus, the results received show that

majority of the respondents agree that the Availability of Recreational facilities, Location and Accessibility are the three most important factors that affect housing satisfaction positively in the study area; these were selected and analyzed with results indicating the weighted index of 3.7, 3.7 and 3.7 respectively. The result shows that majority of

the respondents are very satisfied with these facilities in the study area, which resulted in an active weighted index as presented. Other factors contributing to the satisfactory level of the respondents include; safety and security, availability of market, the functional police state, ease to public transport, and others. Thus, the dominant factors

affecting housing satisfaction unsatisfactorily or at a low level; are the proximity of the study area to the workplace. Aesthetics in terms of serene and greenery designs of the environment and access to public health service respectively having a weighted index of 3.1, 3.2, 3.2, respectively, which is within the 'Just Satisfied' level as presented in Table 5

**Table 5: Factors Affecting Housing Satisfaction**

S/n	Factors	Very Dissatisfied (1)	Dissatisfied (2)	Just Satisfied (3)	Satisfied (4)	Very Satisfied (5)	SWV Index
1	Availability of Recreational facilities	4	16	22	52	32	3.7
2	Location	9	10	11	77	19	3.7
3	Accessibility	1	13	17	84	11	3.7
4.	Safety and security of lives and property	3	22	29	45	27	3.6
5	Sense of community	5	21	15	67	18	3.6
6	Accessibility to place of worship	4	12	24	76	10	3.6
7	Availability of police service	3	17	22	68	16	3.6
8	Availability of market		17	31	71	7	3.5
9	Business opportunity	9	15	20	66	16	3.5
10	Ease of access to public transport	0	9	58	49	10	3.5
11	Availability of basic facilities	5	13	41	55	12	3.4
12	Serenity of the neighbourhood	12	20	35	54	5	3.2
13	Access to health care services	3	34	28	51	10	3.2
14	Aesthetics	3	28	36	53	6	3.2
15	Access to school	11	17	49	34	15	3.2
16	Closeness to relatives	4	34	31	45	12	3.2
17	Proximity to place of work	6	42	16	58	4	3.1

Source: Researcher’s field survey, 2018

The study found that most of the residents are slightly satisfied, though satisfactions levels varied with the provision of services and public facilities, physical features of the housing unit, and the social environment within the housing area. A low level of residential satisfaction was recorded for roofs, pollution, housing ornaments, and electricity supply within the housing area. The study also found that satisfaction levels were lower among housing units occupied by tenants than those occupied by the owners

Based on the major findings in the study, the following recommendations are put toward as policy guidelines toward sustainable management of the area of study. The first recommendation is the need for upgrading programs through a rehabilitation/renovation approach as well as the provision of basic urban services. This simply involves rejuvenation of affected parts of the area by retaining the structures that are retainable, rehabilitate old buildings and structures, upgrading the roads that are not tarred, and introducing of more roads with a view to open up the blighted areas. It also involves improving the existing housing infrastructures as well as providing new ones. These are to improving the structural quality and aesthetic of the areas. The study also recommends re-assessment of those features of the public housing development, which registered low levels of satisfaction by the residents.

#### **Housing Types and Condition of Residents in the Study Area**

The condition of housing dwelling shows that the majority of the respondents agree that their Paints are in good conditions with a weighted index result of 3.7, which is way above the neutral point of measurement hence why it is said to be in a 'good' state, this is closely followed by walls, windows, and toilet with the weighted index of 3.7, 3.7, 3.6, 3.6 respectively, the table also shows the order to which the condition of each unit is perceived, It is also noteworthy that the housing unit with the worst condition was said to be the Roofs with a very minute weighted index of 2.2 which represents a negative perception this can be linked to the visible poor states of roofs in most areas. From the analysis, the top 3 facilities selected averagely by respondents to be in a good state are Paints, Walls, and Windows.

#### **Satisfactory level of residents in the Study Area**

Analysis on the satisfactory level of respondents based on infrastructures provided in the study area results shows that respondents are most satisfied with the privacy in dwelling, water supply, and building ventilation. These three infrastructures were ranked based on respondents' preferences. The analysis reveals that pollution and housing ornaments were the two factors respondents were least satisfied with, thus given them a low index than the neutral index, thus occupies the bottom ranking on satisfaction level.

#### **Factors Affecting Housing Infrastructure**

As an effort to get the required factors affecting the satisfaction on housing infrastructures in the study area, the responses gotten were analyzed using the Likert scale and weighted index method. Results obtained reveals that the most significant factors affecting the respondent's satisfaction are the availability of recreational facilities, location, and accessibility; they all have weighted index of 3.7, 3.7, and 3.7, respectively. This shows that they are above the neutral index (3.0) and hence occupied the top of the ranks of responses from the habitants in the study area. Further analysis also shows the least significant factors are closeness to relatives and proximity to work with the weighted index of 3.1 and 3.2, which were still above the neutral index of 3.0; therefore, analysis suggests that all factors are important only that some are relatively more important. The findings are in agreement with Mohit, M.A., Ibrahim, M., and Rashid, Y.R. (2010) studies that concluded that customer's residential satisfaction is a feeling of contentment or fulfillment when the customer has ultimately achieved what he has expected in a house.

#### **RECOMMENDATIONS**

Based on the major findings in the study, the following recommendations are put forward as policy guidelines toward sustainable management of the area of study. The foremost recommendation is the need for upgrading programs through a rehabilitation/renovation approach as well as the provision of basic urban services. This simply involves rejuvenation of affected parts of the area by retaining structures that are retainable, rehabilitate old buildings and structures, upgrading the roads that are not in good condition, and introducing more roads with a view to open up the blighted areas. It also involves improving the existing housing infrastructures as well as providing new ones. These are with the focus of improving the structural quality and aesthetic of the areas.

To also directly address the evident problems found from this research, the following improvements in the residential environment are necessary to enhance residents' satisfaction with Iponri public housing in Surulere Local Government Area

- Improve the quality of roofing by the provision of better materials and soliciting with private contractors.
- Improve garbage collection and enact laws against unnecessary pollution in the environment;
- Improve the provision of housing ornaments;
- Establish a better power supply by making the study area less dependent on the existing source of power supply.

Furthermore, the study infers that merely providing housing does not indicate the success of housing development and policies but meeting the actual housing needs and preferences of the residents will determine whether the government can achieve the goal of providing adequate and affordable housing for all citizens.

### CONCLUSION

This paper has examined the residential satisfaction with Iponri public housing estate in Surulere Local Government Area. This is done by the assessment of satisfaction with the physical features of the housing unit, and services provided within the housing unit, public facilities provided both within and around the housing area, social environment within the housing area, and their contributions to the overall satisfaction with public housing. The study found that most of the residents are slightly satisfied, though satisfactions levels varied with the provision of services and public facilities, physical features of the housing unit, and the social environment within the housing area. A low level of residential satisfaction was recorded for roofs, pollution, housing ornaments, and electricity supply within the housing area. The study also found that satisfaction levels were lower among housing units occupied by tenants than those occupied by the owners. The findings affirmed the assertions of Bechtel (1997) that residential satisfaction is determined by a mix of factors. The study also recommends re-assessing those features of the public housing development, which registered low levels of satisfaction by the residents.

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