

## Research Article

# Consumers' Housing Attributes in the Context of their Socio-Economic Background in Ibadan Urban Centres

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### Abstract

This study investigated the relationship between consumers' housing attributes and their socio-economic background. Explicitly, it identified the influence of consumers' socio-economic status on their affordable houses, how significant the socio-economic status impact on their affordable house and the facilities provided within the houses. The study used data collected from 494 respondents in five local government areas within Ibadan urban centre. Responses to housing attributes items influenced by their socio-economic status are subjected to descriptive analysis. Item variables emerged from the analysis were grouped into housing general conditions, materials and construction methods, Facilities and House rent. These were considered as significant factors under which housing attributes could be best explained. Although the housing attributes are different from localities, different levels of environment and densities, the housing attributes are similar in relation to the consumers' socio-economic status within the urban centre. The policy implications of these results were also highlighted.

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## 1. Introduction

Diversities of fascination and impetus influences ascribed to the endlessly increasing eagerness and aspiration of numerous households to live in urban centre. These influences include prospect for employment, provision of utilities, amenities and facilities within the urban centres. The repercussion was the urban populations' growth at an alarming rate in many developed and developing cities. This subsequently brought about an proliferation in housing demand, housing shortage and problem of housing affordability (Olayiwola, Adeleye, & Ogunshakin, 2005). Ibadan as a developing city became a "consumers' city" and is not left out in these problems. Various factors have led Ibadan urban centre to

become “consumers’ city”, and these factors include attractive cultural amenities and infrastructural facilities. Unrelenting influx of individuals to Ibadan urban centre resulted to increase in housing demand followed by the increase in house rents and problem of housing affordability (Akinyode, 2016). Originally, affordable housing was connected only with monetary influences. Housing research focusing on the consumers, necessities exploration on the significance or impact of cultural, political, social or economic factors that may collectively and likely influence the consumers’ immersion in the housing market (Akinyode, Khan, & Ahmad, 2015). Since affordable housing is not always a benevolent or endowed occurrence, it must look into the possibility to be accepted to the target consumers. Therefore, study on consumers’ housing attributes in the context of their socio-economic background can be considered in determining the influence of consumers’ socio-economic status on their affordable housing as this can give a clue to the efficient housing provision within the housing market. This is mainly to make housing not only affordable but also acceptable that can bring relief especially to the low and middle-income households in making decisions to enter the market of affordable housing. Referring to housing affordability in Ibadan urban centre specifically, the study will provide detailed knowledge on housing typology and environment as this could provide ample information on the physical facilities of the housing in this context. Besides, detail socio-economic data of the consumers can also be used in designing, planning and implementing different housing related policies. Although the study is limited to Ibadan, the capital city of Oyo state, the Nigerian housing policy makers and that of other developing countries can have an insight that would be of relevant assistance and applicable in their housing affordability program through which affordable housing programme would be improved. With this, the study is therefore designed to fill an existing research gap in the field of housing research, contributes and adds to the existing housing research and literatures in Nigeria with particular reference to Ibadan. The remaining of the paper is organized in the following order. This introduction is followed by the review of relevant literatures by different scholars. The third part discusses the methods and materials used in achieving the objectives of the study. Next is the presentation of the empirical analysis, results and discussion for exploring the consumers’ housing attributes in the context of their socio-economic background. This is to determine the influence of consumer’s socio-economic background on their affordable houses. Finally, some of the policy implications emanating from the paper are highlighted to conclude the paper.

## **2. Literature review**

Consumer’s income and sufficient housing provision are seen as the two contributing factors for effective housing demand (Allain, Hartwig, & Hayes, 2013; Ying, Luo, & Chen, 2013). Nevertheless, income is seen as the most significant factor influencing effective housing demand (Davenport, 2003) because it measures the affordability (Chen, Tsai, & Chang, 2007). The effective housing demand fundamentally depends on the

consumer's income due to insufficient provision of housing units. Consumers with far less income to cover housing costs are not capable to meet housing demand among those with higher income (Andrews, 1998) and consequently led to the problem of housing affordability. Thus, consumer must be ready to sacrifice income to other necessities to secure housing unit. Davenport (2003) suggested increase in consumers' income and reduction of income discrepancy to have optimistic influence to improve effective housing demand and affordability amongst low-income household. The prices of house and the rate of housing growth are the two measures identified by Todd (2007) that limit urban effective housing demand. According to him, housing is in inelastic supply in some cities because of limited land and restriction on development by regulations. McQuinn and O'Reilly (2008) supported this view and opined that, house price is the determinant factors of effective housing demand and supply. Housing supply is the quantity of housing units that the suppliers are willing and ready to supply depends upon the profit making at that particular time period (Quigley, 2002, 2007; Wong, 2002). Gregory and Linlin (2009) saw the commercialisation of residential housing via housing speculation in urban areas as the factor that is responsible to rapid increase in house price. Government's intervention in regulating housing market through regulation could not be effective in controlling the house price due to upward shift in housing demand. The forces of demand and supply are more powerful than government intervention. Therefore, difference between housing demand and supply rate resulted from slow response of supply to demand necessitates urgent attention in housing policy (Wendy, 2010). However, the involvement of government in solving problems on affordable housing, improving housing provision and designing housing policies to eliminate the problems and housing shortages remains unfruitful in most part of developing countries especially in Nigeria (Aribigbola, 2011). Between 1960 and 1990, individuals bugged to cities and the growth rate of household's movement into the city increased while the growth rate within the suburbs areas fell Glaeser, Kolko, and Saiz (2001). The continued growth and expansion of the city led to wide gap between housing supply and demand (UN-Habitat, 2011). The rate of housing provision falls short of the rate of urban growth and housing need in Nigeria (Jiboye, 2011; Oladunjoye, 2005; Olotuah, 2000) thereby resulted to increase in housing price. Consequently, lower income individuals are the most affected. Due to the demand, housing units are still produced, but their quality gradually decreases in order to meet the level of their affordability. Therefore, affordability often synchronises with lower quality of housing. Problems of housing affordability especially among low and middle income households gave rise to slums and uncomfortable environments within urban centres and outskirts of the city as a result of ill-working housing markets (UN-Habitat, 2011). Such environments are seldom healthy, comfortable and dignified places to live. Though, government at all levels and private sectors have made several efforts to improve the housing provision and affordability in Nigeria urban centre but the problem of housing affordability remains the same. Ineffective method of public housing delivery scheme coupled with non-taking into consideration the

socio-economic status of the housing consumer has been a major problem that leads to problems of housing affordability in Nigeria context. Hills (2001) in his study opined the combination of social inclusion that focused on setting minimum housing standard and distributional aim that focused on supporting low-income households as a strategy for housing affordability. The increased in housing demand resulted from rapid rate of urbanization which cannot be merged with housing supply in both urban and semi-urban centres in Nigeria subsequently led to prevalent problems of housing affordability whereby most Nigerian cannot afford decent housing. This has however been of tremendous concern especially to all professionals in human settlements and housing policy makers. Thus, urgent attention is imperative in order to solve the problem of housing affordability in Nigeria with particular reference to Ibadan urban centres.

### **3. Methods and Materials**

The study made use of quantitative research approach to achieve the objective of this study. The data were collected through questionnaire survey. The study started with direct observation that led to identifying problems. The questionnaires were administered among 500 respondents within the five local government areas in Ibadan urban centre. There were 113 respondents in Ibadan North local government area, 119 respondents in North-East local government area, 59 respondents in North-West local government area, 101 respondents in South-East local government area and 108 respondents in South-West local government area. Through verification of the questionnaires, six questionnaires were incomplete and then discarded. The remaining 494 questionnaires representing 494 respondents were used in this study. This study employed means t-test and descriptive analysis such frequency tables, percentage and histograms. All the item variables passed through means t-test to confirm that all the item variables are eligible for analysis. The employment of descriptive analysis was to explain the consumers' housing attributes and the significant impact of their socio-economic status on affordable houses and the facilities provided within the houses.

### **4. Results and discussion**

#### **4.1 Validity and reliability of data**

Some statistical validity and reliability test were done in order to make sure the statistical data were significant. The validity in this study was based on scores, instruments, or research designs through Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. Cronbach's Alpha was used to access the internal consistent reliability of the survey instrument. In this study, both the Reliability and Adequacy Test were performed and the result of the Cronbach's coefficient alpha of Reliability test indicated greater reliability while Kaiser-Meyer-Olkin (KMO) of Validity test also showed that the instrument truly measured what it supposed to measure. The Cronbach's alpha coefficient value of 0.753

was considered sufficiently reliable and good internal consistency. This followed the recommendation of some scholars that claimed the Cronbach's Alpha coefficient ranges between scale of 0.50 and 0.80 should be considered sufficiently reliable and good internal consistency for an exploratory study such as this (Foubert, Tepper, & Morrison, 1998; Hair, Black, Babin, & Anderson, 2010; Khozaei, Ayub, Hassan, & Khozaei, 2010; Newton & Meyer, 2010; Toyin Sawyerr & Yusof, 2013). The study also recorded higher respondents of 494 administered questionnaires with KMO value of 0.835. This signifies reliable, adequate and valid survey sampling (Field, 2009).

#### **4.2 Housing qualities of available affordable houses**

It is important to look at the physical qualities of the affordable houses within the context of consumer's socio-economic status. This is to determine the influence of consumer's socio-economic background on their affordable houses. This follows the hypothesis, which stated that consumers' socio-economic status is related to their affordable houses. Apparently, the services provided by any particular housing depend upon a great variety of physical features of the house and the location in which it is situated (Atterhög & Song, 2009). The socio-economic data of the consumers is believed to have relationship to the housing quality and the choice of housing unit. The quality, utilities and amenities that are available in the house are of important to consumers in housing acceptability and choice preferences. There is a wide variety of features in this aspect and these include house type, house age, house construction materials, toilet type, cooking place, cooking materials, road accessibility type, source of water supply, distance to the source of water supply, water supply frequency, water supply monthly payment, source of lighting, house rents, refuse waste disposal method and so on. All the item variables passed means t-test as shown in Table 1 indicating that they are eligible for analysis. Nonetheless, not all of the variables were considered necessary to be discussed in this paper. The variables were further grouped into four under which housing attributes could be best explained. The groups are as followed:

- i. General conditions of the houses
- ii. Materials and Construction methods of the house
- iii. Facilities within the house
- iv. House rent.

These were considered as significant factors to describe housing attributes during literature review and were enlightened through descriptive statistics.

#### 4.2.1 General Condition of the Houses

The type of house occupied by an individual is as a result of market oriented economy housing situation. As a large number of consumers in Ibadan urban centre struggle to find a minimum space that can be called a shelter, few consumers live in more than enough residential areas that is highly serviced and well planned. This differential situation to compete for space and shelter remains unresolved problem. Housing provides more than space and shelter; often used by others to judge consumers and to classify them in the society. Every type of house is being attached with a specific value (Adair, Berry, & McGreal, 1996; Robst, Deitz, & McGoldrick, 1999).

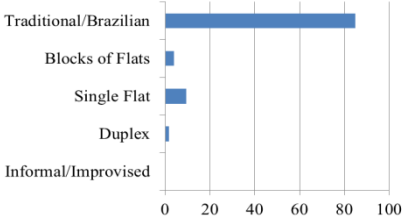
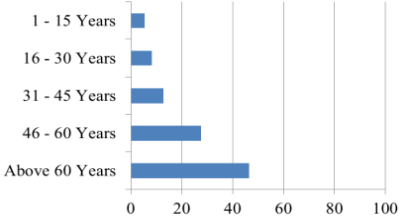
Table 1: Mean's t-test for Housing Attribute related Item Variables

<b>One-Sample Test</b>						
Item Variables	Test Value = 0					
Item Variables	t	df	Sig. (2- tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Type of House	40.632	493	.000	1.279	1.22	1.34
Estimate age of the House	75.680	493	.000	4.016	3.91	4.12
Materials used for the construction of the House Wall	118.866	493	.000	2.733	2.69	2.78
House Flooring Materials	102.676	493	.000	2.085	2.05	2.12
House Roofing Materials	72.710	493	.000	2.164	2.11	2.22
Toilet type	117.204	493	.000	4.302	4.23	4.37
Where do you cook	103.355	493	.000	4.411	4.33	4.49
What do you frequently use for cooking in your household	115.693	493	.000	3.140	3.09	3.19
Type of accessibility to the House	58.550	493	.000	1.856	1.79	1.92
What is the frequent source of water supply	135.806	493	.000	3.158	3.11	3.20
What is the distance of the frequent source of water to the house	53.651	493	.000	1.065	1.03	1.10
How regular do you pay for the water supply	74.929	493	.000	1.034	1.01	1.06
How much do you pay for the	60.068	493	.000	1.047	1.01	1.08

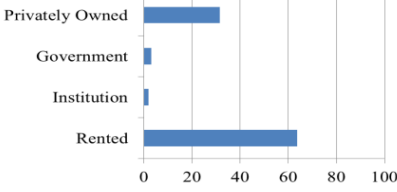
<b>One-Sample Test</b>						
water supply monthly						
How much have you spent for the water for the past 6 months	87.545	493	<b>.000</b>	1.028	1.01	1.05
What is the frequent source of lighting	104.744	493	<b>.000</b>	3.532	3.47	3.60
How much do you spend on electricity monthly	45.565	493	<b>.000</b>	1.231	1.18	1.28
Refuse waste Disposal Method	51.609	493	<b>.000</b>	3.202	3.08	3.32
How much do you pay monthly on refuse waste collection	82.521	493	<b>.000</b>	1.045	1.02	1.07

In this study, five classification systems were adopted. Informal, traditional/Brazilian house predominated among the sampled respondents by accounting for 84.82% of the sampled survey. This type of house was profoundly concentrated commonly within the slum areas of each of the five local government areas. Only 9.50% of the total houses are categorised as single flat while block of flats and duplex accounted for 04% and 1.60% respectively as presented in Table 2. The presence of single flats, duplex and block of flats are only found in the Government Reservation Areas (GRAs) and other low-density areas. The implication of concentration of Informal, traditional/Brazilian houses within the study area indicates that, majority of the residents are living in slum and congested areas of Ibadan urban centre.

Table 2: House ownership and physical quality

Item Variables	Frequency	Percentage	Histogram
Types of House within the study area			
Traditional/Brazilian	419	84.82	
Blocks of Flats	20	04.04	
Single Flat	47	09.51	
Duplex	08	01.61	
Informal/Improvised	01	00.20	
Total	494	100.00	
Estimated Age of the House			
1 - 15 Years	26	5.30	
16 - 30 Years	40	08.10	
31 - 45 Years	63	12.80	
46 - 60 Years	136	27.50	



Item Variables	Frequency	Percentage	Histogram
Above 60 Years	229	46.40	
Total	494	100.00	
Ownership of the House/House Tenure			
Privately Owned	156	31.60	
Government	15	03.00	
Institution	09	01.80	
Rented	314	63.60	
Total	494	100.00	

Ordinarily, the physical structure is being depreciated when a house is getting older. However, the qualities of the house depend upon some numbers of other factors. These include the income of the owner, available facilities within the house, conformity with physical planning regulations and so on (Fisher, Pollakowski, & Zabel, 2009; Seelig & Phibbs, 2006). All these may exert some impact on the house rent within the study area. The survey carried out tried to find out from the respondents what they thought could be the estimated age of the house they are occupying. Only those who know the history of the house they are residing were able to give reasonable answers while majority tried to guess what could be the estimated age of the house. Nevertheless, since majority of the respondents claimed to have known the age by either estimation or guess, it is possible that the average age for the house will be representative enough. The respondents' estimation of house age that was built above 60 years is 46.40% while 27.50% of the houses were built within 46 and 60 years as shown in Table 2. The implication of this is that, majority of the houses are relatively old and becoming deteriorated as shown in Figure 1 indicating the typical affordable houses consumers are occupying within the study area.





Figure 1: The typical affordable houses being occupied by the consumers

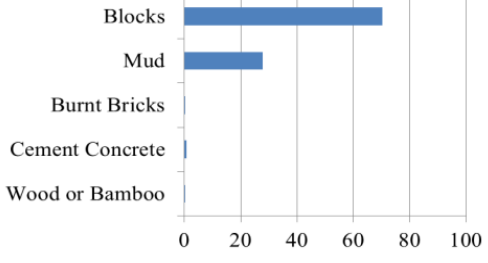
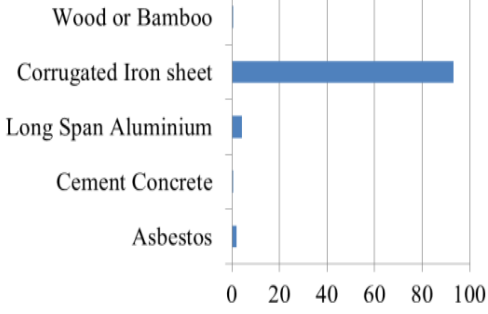
The effect of age on the value of house and its consequent rental charges is not a straight-line progression. The rental charges depend on the population of consumers that are competing for the available houses. This supports the findings of some other scholars (Arayela, 2003; Onu & Onu, 2012; Otubu, 2009) that

stipulated that unprecedented increase in population results to high demand in housing and consequently affects house rent. Most consumers got the house for rent through either the estate agent, assistance from the family members or assistance from the co-staff/friends. The majority of respondents are occupying a rented house because they cannot afford to get their personal house due to their financial capability. This study sought to know the house tenure in order to determine the house ownership. This provided an estimation of total number of respondents that fall within the tenancy occupation. Out of the 494 respondents that were sampled, only 31.60% of the total respondents claimed to occupy their private house while majority of the respondents live in a rented house as shown in Table 2. Besides, 63.60% of the total respondents occupy rented house while 3.00% and 1.80% of the sampled respondents occupy government and institution house respectively. This confirms that respondents are occupying the house they got through either the estate agent, assistance from the family members or through the assistance of co-staff.

#### **4.2.2 Materials for the Construction of the House**

The materials used for the house construction can judge the social status of the house occupants either as owner or as the tenants. The survey reveals that 70.40% of respondents occupied the houses constructed of blocks followed by 27.90% respondents that occupied houses being constructed of mud (see Table 3). 27.90% respondents occupied houses being constructed of mud is in line with the discovery of Binici, Aksogan, Bakbak, Kaplan, and Isik (2009) and Binici, Aksogan, Bodur, Akca, and Kapur (2007) that approximately 30% of the world's present population live in mud structures because of its cheapness. It is realised that majority of those respondents occupying mud houses are aged and native of Ibadan. This study believes that a relatively good house that is constructed with good and quality material may attract high rental values and high class of consumers compared with house that is constructed with poor and low quality material. In spite of the fact that majority of the consumers' desire to live in a house that is constructed with good and quality material, not every consumer can afford to live in such house due to their socio-economics background especially among low and middle income earners. 90.30% of the houses surveyed used cement concrete for the flooring. This is followed by 5.1% houses are with ceramics tiles while 2.2% with laterite that are being occupied by aged and Ibadan native consumers. Few consumers with marble and terrazzo flooring are mostly found in GRAs being occupied by the high-income earners with high socio-economic status.

Table 3: Materials for the construction of the House

Item Variables	Frequency	Percentage	Histogram
<b>Wall materials for the construction of the House</b>			
Blocks	348	70.40	
Mud	138	27.90	
Burnt Bricks	02	00.40	
Cement Concrete	04	00.80	
Wood or Bamboo	02	00.40	
Total	494	100.00	
<b>Flooring materials for the construction of the House</b>			
Literate	11	02.20	
Cement Concrete	446	90.30	
Ceramics Tiles	25	05.10	
Marble Tiles	08	01.60	
Terrazzo	04	00.80	
Total	494	100.00	
<b>Roofing materials for the construction of the House</b>			
Wood or Bamboo	02	00.40	
Corrugated Iron sheet	460	93.10	
Long Span Aluminium	21	04.30	
Cement Concrete	02	00.40	
Asbestos	09	01.80	
Total	494	100.00	

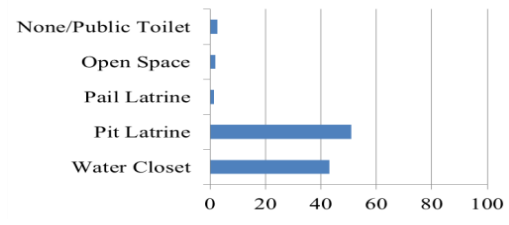
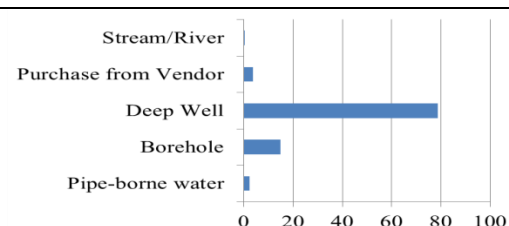
The housing market then becomes a powerful instrument in segregating or separating the low and middle-income earners from the high-income earners within Ibadan urban centre. This result from the materials used for the construction especially the roofing materials. For this study, five types of roofing material were identified. Corrugated iron sheet takes the lion share of the type of roofing material that is being used for house construction. Table 3 designates that, 93.10% of the total respondents' house used corrugated iron sheet and 4.3% used long span aluminium for the roofing. Few houses used aluminium and asbestos roofing sheet because of high cost of purchase. The high cost of these materials cannot be affordable by majority of the consumers and will also add to the rental cost. It can therefore be inferred that the commonest material being used for house construction within Ibadan urban centre are cement concrete and corrugated iron sheet for flooring and roofing respectively. This is because majority of the consumers are low and middle-income

earners with low socio-economic background which cannot afford to use very expensive material for house construction. Besides this, the private housing sectors that are making housing provision for commercial purpose always consider the affordable rent to the populace and the house location in the material to be used.

#### **4.2.3 Facilities within the House**

Housing often contains some basic facilities such as toilet, kitchen, water supply, lighting facilities and so on. The provision of these basic facilities often reflects in the house rents. In this study, investigation was made on the provision of these basic facilities within the house. This aimed at comparing the consumers' housing attributes with their socio-economic background. It also helped in determining housing attributes influence on consumers' housing affordability. Investigation on the provision of toilet facilities within the study area indicates that majority of the house are being provided with pit latrine with total number of 51.00% of the total sampled survey as shown in Table 4. This is followed by the houses that are being provided with water closet (WC) with total number of 43.10%. About 2.60% of the houses either do not have any toilet facility at all or depend solely on public toilet. It could be deduced that majority of the houses that are being provided with none or any other toilet facilities rather than water closet are majorly found within the location where low and middle-income earners reside. These categories of the consumer do not count this facility as so importance where they are living. This is because of their financial capability and socio-economic background. This negate the findings of Cooper, Law, Malthus, and Wood (2010) who were of opinion that an hygienic toilet facility is a pre-requisite for a housing unit, and it cannot be compensated for in order to make the housing unit cheaper. Cooking facility is another facility that was investigated by this study. This is to ascertain the location respondents and members of the household are using for their daily cooking. Majority of the respondents are cooking in the kitchen with total numbers of 61.30% respondents followed by those cooking in the passage with total number of 28.10% respondents which is equivalent to as specified in Table 4 whereas 03.60% respondents are cooking in the veranda. Majority of the consumers takes proper cooking facility as a pre-requisite within the housing unit and this confirms the result of Fehérváry (2002). Out of the 494 respondents, 78.70% of the respondents depend on the deep well as the frequent source of their water supply within the study area. 15.00% depend on borehole while 03.60% respondents claim to be buying water daily from the water vendors as presented in Table 4. The use of borehole as the source of water supply can only be found in few houses within the housing estate and some areas of low and middle-income earners residents where government provided.

Table 4: Facilities within the House

Item Variables	Frequency	Percent	Histogram
<b>Toilet Facilities of the House</b>			
None/Public Toilet	13	02.60	
Open Space	09	01.80	
Pail Latrine	07	01.40	
Pit Latrine	252	51.00	
Water Closet	213	43.10	
Total	494	100.00	
<b>Cooking Facilities of the House</b>			
Outside	14	02.80	
Room	20	04.00	
Veranda	18	03.60	
Passage	139	28.10	
Kitchen	303	61.30	
Total	494	100.00	
<b>Frequent Sources of water supply in the House</b>			
Stream/River	01	00.20	
Purchase from Vendor	18	03.60	
Deep Well	389	78.70	
Borehole	74	15.00	
Pipe-borne water	12	02.40	
Total	494	100.00	
<b>Frequent Sources of lighting in the House</b>			
Candles	03	00.60	
Kerosene	54	10.90	
Generator	128	25.90	
Electricity	295	59.70	
Others (Local Lamp)	14	02.80	
Total	494	100.00	

In investigating frequent sources of lighting in the house within the study area, five options were given, electricity as the frequent source of lighting takes the lion share with 59.70% followed by those using generator as shown in Table 4. The 25.90% of the respondents claim to be using generator as the source of their light and complained that, their electricity is faulty and the government refused to come into their aid.



10.90% of the respondents using kerosene for lighting are using this because they do not have regular supply of the electricity. Only 02.80% respondents are the aged people living within the slum areas of the study area are using the local lamp. One of the facilities influencing housing environments is the provision of well-defined and maintained refuse disposal systems. These promote cleanliness and improve the beauty of housing environment. Where this facility is lacking, poorly provided or improper maintained, the housing environment becomes filthy, susceptible to mosquito and smell. These impair the health and well-being of those living in such environment. Refuse disposal management is one of the challenges facing Ibadan urban centre. In the study, collection of refuse by the government takes the larger percentage 66% as indicated in Table 5. Those that involve in burning their refuse are 20.60% of the total respondents. This shows the involvement of the state government towards the neatness of the city.

Table 5: Utilities within the House

Item Variables	Frequency	Percentage	Histogram
<b>Refuse Disposal Method in the House</b>			
Open Space/Burning	135	27.30	
Stream	02	00.40	
Communal Collection	07	01.40	
Government Collection	328	66.40	
Private Firm	22	04.50	
Total	494	100.00	
<b>Accessibility to the House</b>			
Not Accessible	163	33.00	
Untarred Road	239	48.40	
Tarred Road	92	18.60	
Total	494	100.00	

Every housing unit needs and suppose to seek for a location that will give maximum accessibility to other land uses and services such as places of work, recreation, shopping and so on. Moreover, housing proximity to other physical, social and economic environment that is compatible to one another is also very important to take into consideration (Djebarni & Al-Abed, 2000). This is in examination of various consumers' housing attributes in the context of their socio-economic background. This will enhance the value of the house within the locality where it is situated. If all the housing developers are rational and being conscious within the context of efficient physical planning development in order to create an environment that is well conducive, comfortable and safe to the consumers, every housing unit will be situated within the area where it can receive maximum secured accessibility. In this study, only 18.60% the respondents claim that, their

house is being accessible by tarred road while 48.40% respondents' house are accessible by untarred road and the remaining 33.00% respondents' house are not accessible at all as shown in Table 5. The implication of this poor accessibility to the houses within the study area is that, consumers will be deprived of the proximity to some basic facilities within the city. Besides, lack of accessibility may affect consumers' satisfaction as some scholars (Akinyode et al., 2015; Gutiérrez, Condeço-Melhorado, & Martín, 2010; Ipoh, 2011) confirmed accessibility to have significant influence on housing satisfaction and choice of residential neighbourhood.

#### 4.2.4 House Rents

Majority of the consumers within the study area are tenants while only few have their own personal house as discussed previously. Out of 494 respondents, 47.40% of the total respondents pay their house rent directly to the house owners and 19.00% of the respondents, pay house rent through the estate agent. Only 04.30% respondents are living in the house provided by their employers and their rent is being deducted from their salary as reflected in Table 6. The remaining 29.40% of the respondents that are not applicable indicates the respondents that are not paying rent. This category of consumers is living in non-rented house, either in their personal or family house. The implication of this is that, the housing demand will be greater than the supply (Jiboye, 2011; Oladunjoye, 2005; Olotuah, 2000) and may invariably increase the house rent, affect housing quality and cause housing affordability problems. There are in existence different types of housing unit within Ibadan urban centre broadly categorised as flat and Brazilian types. The structuring of the responses and range of values were specified in accordance to these broad categories. The respondents were required to specify the class of values that best represents their rent. The respondents that pay below ₦20,000.00 per room constitute the highest percentage which is 50.80% of the total sampled survey while the respondents that pay above ₦80,000.00 per room are the least respondents which is 0.40% as revealed in Table 6. The respondents that pay between ₦91, 000.00 and ₦120, 000.00 per flat are the highest.

However, non-applicable respondents in annual rent per room and annual rent per flat are those that either owns their personal house or inherit the family house. Non-applicable respondents in annual rent per room and annual rent per flat are 37.90% and 91.10% of the respondents respectively as shown in Table 6. Non-applicable respondents are of larger percentage in the annual rent per flat. The majority of the respondents are low-income households that cannot manage to rent high priced house like flat. This implies that, majority of the respondents cannot afford to live in a flat assumed to be expensive compare with their financial capability and socio-economic background. This result confirms that there is significant relationship between consumers' income and house types (Adair et al., 1996; Robst et al., 1999).



Table 6: House Rents payments

Item Variables	Frequency	Percentage	Histogram
<b>Medium of House Rents payment</b>			
Not Applicable	145	29.40	
Directly to the owner	234	47.40	
Agent	94	19.00	
Deduction from the Salary	21	04.30	
Total	494	100.00	
<b>Estimated Annual Rent per Room</b>			
Not Applicable	187	37.90	
Below ₦20,000.00	251	50.80	
₦21,000.00 - ₦40,000.00	51	10.30	
₦41,000.00 - ₦60,000.00	03	00.60	
Above ₦60,000.00	02	00.40	
Total	494	100.00	
<b>Estimated Annual Rent per Flat</b>			
Not Applicable	450	91.10	
Below N90,000.00	20	04.00	
₦91,000.00 - ₦150,000.00	18	03.60	
₦151,000.00 - ₦200,000.00	04	00.80	
Above ₦200,000.00	02	00.40	
Total	494	100.00	
<b>House Rent Subsidy</b>			
No	481	97.40	
Yes	13	02.60	
Total	494	100.00	

The study also determined those that have access to rent subsidy among the respondents. Only 02.60% of the respondents have access to rent subsidy while the remaining 97.40% do not have access to rent subsidy as presented in Table 6. The situation establishes that, the larger percentage of the respondents is not government or company employees that will have access to rent subsidy. This also validates that majority of the respondents are either self-employed or artisans. This implies that, the purpose of housing subsidies in a household bearing less than the full cost of the housing (Agbola & Kassim, 2007; Sinai & Waldfogel, 2005)

to improve housing quality of low-income households and provide decent housing within their financial capability (Gilbert, 2000; Hills, 2001) cannot be achieved among the majority of the consumers.

## 5. Conclusion and Policy Implications

The houses are mostly rented and rent is quite low. As expected from the lower income segment of the society, high rent is not feasible for attracting them. Nevertheless, the physical conditions of these houses, both exterior and interior as well as the construction quality are not of very high quality. That obviously raises the immediate question whether low-income segment of society deserve to stay in low quality houses. It can be concluded that there is a general assumption that affordable houses can be or should be of low quality construction, exterior, and interior as if low rent is synonymous with low quality of houses and as if they do not deserve to live in decent housing conditions. Thus, overall improvement of housing standard irrespective of socio-economic classes is necessary for a nation to move forward. Accessibility to decent but affordable housing provision is the key for countries like Nigeria, where the low-income group occupy the majority of the demographic distribution. Improvement in housing stock along with well-planned acceptable standard of infrastructures and affordable cost becomes strategically important social and economic investment. In view of this, ameliorating housing affordability problems among different consumers in Ibadan should be given urgent attention. In terms of amenities such as electricity or water supply, these houses are good enough. However, certain physical or social issues need to be re-addressed. For example, the construction materials, especially for wall construction with mud which is a popular process need proper maintenance. Though average maintenance cost is still low but the standard of wall construction can be upgraded, so that they do not give a dilapidated image. In terms of interior spaces, the cooking spaces need to be properly designed as cooking is considered as a major activity in the household. These houses do not provide the same way that traditional cooking process demands. Therefore, a less sensible design is evident in these houses. Whether this kind of certain upgrading could cost much, is subject to investigation which is not part of this present study. Conclusively, housing contributes towards consumers' improved health and increase in their productivity. Since government is not yet being able to provide affordable housing directly, it can assist the private owners groups so that they can indirectly contribute to a housing situation where every individual or household, irrespective of affluence, can live in a decent housing environment. Meeting affordable housing need of consumers should be considered as a way of improving their living standard that influence their health, welfare and productivity rather than self-political ambition and financial gains.

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