# **Prefiguring Housing Quality in Urban Communities in Ibadan Nigeria**

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#### **Abstract**

This study focuses on explaining and understanding the physical factors which reinforced housing quality in urban communities in Ibadan Nigeria. It explained the different physical variables which prefigure housing quality. The study used a conceptual model which recognised nineteen building components consisting of special design features, safety features, building types, buildings orientation, buildings ages, wastes disposal methods and building forms among others. For the questionnaire survey, 985 (20%) respondents out of a total of 4,922 respondents in five randomly selected urban communities in Ibadan were systematically sampled. The information obtained from the survey revealed residents levels of perception of housing quality with their urban communities, which were analysed using Correlation and Relative Important Index. The significant levels of association were determined at either 0.05 or 0.01 probability levels. The results showed significant pearson's correlation (r) among pairs of the twenty (20) identified relevant housing variables. The results suggested that these factors are stronger determinant of residents' perception of housing quality. Consequently, closer consideration should be paid to this factor in the design and development of not only existing urban communities but also in the conceptualisation of new ones.

### Keywords

prefiguring, housing quality, urban communities, Ngeria



### I. Introduction

This study centres on explaining the elements which reinforce the perception of housing quality in an urban community in the urban area of Ibadan in Nigeria. The reason is that housing quality determinants are very relevant features of the resident's wellbeing in any neighbourhood. If these elements which influence housing quality are well and clearly understood, it will assist in contributing to the understanding of these factors by both the housing estate designers and policymakers in the development of future urban communities as well as in aiding and sustaining people's wellbeing. Additionally, the physical factors which explained the housing quality had been studied in Western countries; this paper offers the opportunity to study it in a different cultural background.

Studies in the past had concentrated more on general housing quality attributes and did not consider the physical characteristics, which comprised: buildings ages, building types, buildings orientation, building forms, window protection, wall colour, foundation materials, wall materials, flooring materials, roofing materials, ceiling materials, entrance door materials, safety features, window materials, special design features and many others in relation to housing quality in urban communities. The physical characteristics and quality in those neighbourhoods are critical to housing quality study.

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Other studies have explored the area of environmental design in relation to housing quality. For example, Prompayuk and Sahachaisaeree (2012) looked at unity in environmental design and housing quality. This study critically examined the view of residents on their opinions over physical factors by using a set of questionnaire to elicit information from respondents on their perception of design and physical quality in the neighbourhood. Ewing and Handy (2009) measured the immeasurable, by looking at the urban design qualities related to the quality of life. The study attempts to comprehensively and objectively measure the subjective qualities of the urban street environment using ratings from the residents. Black and Street (2014) explored the role of urban design qualities and built environment features that affect cycling. The study examined urban physical features that comprised: special design features, safety features, waste storage, wastes disposal methods, method of evacuating waste among others. These physical qualities are related to the individual's perceptions. Most studies were done in developed countries and did not consider physical and design characteristics of neighbourhood holistically in a developing country such as Nigeria.

Knowledge regarding the relationship between the built environment, physical characteristics and housing quality is limited in Nigeria, especially with regard to urban communities in relation to physical and design characteristics. In view of the limited study on housing quality in residential urban communities, and little attention paid to the residents' perception of housing quality and physical characteristics. This study considered the physical characteristics of the neighbourhood in the context of urban communities holistically in a developing country like Nigeria. Since housing is culture-specific, there is a need to explore and look at these issues in Ibadan. This research attempts to fill the existing gap using qualitative methods to investigate the concept of residential housing Quality in urban communities. This is relevant and important in housing. Finally, understanding housing quality in urban communities in Ibadan is necessary to inform relevant housing development policies aimed at improving the quality of life, hence this study.

### **II. Review of Literatures**

Quality in general means standard and level of acceptability of an area. Housing quality is strictly correlated to housing standards, worth and the quality feature of a residential area, which reflects and shows urban growth, design and spatial planning and circulation instruments between socio-economic and socio-cultural groups and the quality of life of the inhabitants (Coker et al 2008; Izharsyah and Lubis, 2020). This suggests that housing quality have a design, physical, economic, social, cultural and environmental dimensions. Formoso and Jobim (2006) observed that perceived quality denotes concepts to users, which can be associated with the experience. This is a sign that housing quality is a perception that relates to individual attributes and attitude. Housing quality comprises the building design and structure, arrangement and internal adequacy and acceptability of dwelling units (Suprayitno et al, 2020). Others included: occupancy rate, accessibility of facilities, housing characteristics and conditions, and the affordability and habitability of neighbourhood (Skifter, 2004). This indicates that housing quality can be measure as a greatly valued characteristic which housing has that allows it to meet users' requirements. Characteristics such as structural soundness, spatial adequacy, the durability of construction materials, and accessibility of basic amenities and services such as electricity, water, and sewerage, location with upright networks with other areas of the city; where

secured tenure and availability of infrastructure are considered to be factors of upright housing quality (Rapoport 1983).

Therefore, housing quality can be said to include elements of housing that enabled it to accomplish the important functions of upholding healthy neighbourhood, enhanced living environments, and contributing to social, physical and mental welfare and supporting the improvement and social connection of people and the community. The assessment of housing quality is centre on thinking and conceptions. According to Rapoport (1977), individuals assessed their environment alongside an image of what they would prefer it to be. Such assessment method was inclined and influenced by peoples' earlier experiences, cultural values, adaptation level, religion, gender, age, social role, and ethnicity (Filfil, 1999). An individual's assessment of housing is a multifaceted, multidimensional, worldwide evaluation arrangement that combines perceptive, emotional, and interactive facets, along with a collection of both objective and subjective variables (Amerigo and Aragones 1990). In other words, publics' subjective perceptions of reality influence their opinion of a specific household and its environs (Domanski, Ostrowska, Przybysz, Romanluk and Krieger, 2006).

Housing has to be quantitatively and qualitatively acceptable so as to achieve this significant purpose. The quality of a dwelling and its surroundings is obvious in the friendliness and landscaping of neighbours, physical condition, available facilities, symbolic characteristics and racial or economic composition (Aderamo and Ayobolu, 2010). According to Jiboye (2011) and Coker et al. (2008), the quality of housing being basically an essential element of quality of life, that influences the productivity, manner of living, the well-being of the occupants, and the decencies of residents' lives. In essence, acceptable housing quality offers the basis for social inclusion and steady communities. Amao (2012) and Neilson, (2004) specified five rudimentary principles that would ensure housing quality, these are, that the houses in the housing essentially should be free from severe bad condition and compliance with tolerable standard and that it must be healthy. It should be provided with modern facilities and services, energy efficiency must be secured and safe. These factors consist of indicators for instance; the quality of infrastructural amenities, access to community facilities and basic housing and spatial adequacy, fixtures and fittings, quality of design, building design, landscaping and layout, pollution and noise control in addition to privacy and safety (Muhammed, et al 2015).

The study of Aderamo and Ayobolu (2010), evaluated the spatial structure of housing quality in Ilorin. It recognized quality of energy and ownership, basic facilities, material quality, utility and water quality as a determining factor influencing the physical structural pattern of acceptable housing quality in the city. Onibokun and Faniran (1995) and Awotona (1987) studied identified absence of access to basic facilities (social services, electricity, sanitation and clean water), unhygienic housing environment, high occupancy rate and structural inadequacy of housing units as the important factors militating and affecting the quality of housing in Nigeria (Ilesanmi, 2012; Jiboye, 2004; Coker et al. 2008; Mallo and Anigbogu, 2009).

### III. Research Methods

Data for this study was obtained from both primary and secondary sources. Questionnaire survey and direct observations were used to acquire the primary data. Such data provided information and explanation on variables of perception of housing quality and physical characteristics in the study area. The preliminary survey revealed that there are 30 residential housing estates in urban areas in Ibadan. Five (5) of these residential

areas that comprise: Old Bodija Scheme, Agodi GRA, New Bodija Scheme, Kolapo Ishola Scheme and Alalubosa GRA consisting of forty-two (42) neighbourhoods were randomly selected. Twenty-one neighbourhoods representing 50% of the forty-two (42) neighbourhoods was sampled. From the preliminary survey, there are a total of four thousand, nine hundred and twenty-two (4,922) residential buildings in the selected areas. Nine hundred and eighty-five (985) representing 20% of the residential buildings were sampled. Systematic sampling technique was used to select one of every 5th buildings after the first house had been selected randomly. Data collected were analysed using percentages, Relative Importance Indices and Multiple Regression.

#### IV. Results and Discussion

### 4.1 Residents' Perception of the Physical Characteristics in Old Bodija Scheme

The results from the study show that 19 variables out of 31 identified had the PCI above the average of 4.12, which were considered as major physical characteristics prefiguring housing quality in positive ways as contained in Table 1. These include quality of buildings setback with 4.93 PCI, how well defined individual compound/house / flat with 4.81 PCI, quality of natural surveillance and overall housing environment with 4.77 PCI. Also, included are pollution level (noise and air) with 4.63 PCI, the layout of the neighbourhood (the design in relation to daily life) with 4.56 PCI, safety measures in the neighbourhood with 4.55 PCI, parking space/parking lots with 4.51 PCI. In addition, others are impressions of the overall design of neighbourhood with 4.47 PCI, access control in the neighbourhood with 4.46 PCI, building ratio to green areas with 4.43 PCI and quality of streets design with 4.40 PCI. Also, ventilation in building or apartment with 4.39 PCI, size of spaces in building with 4.36 PCI, safety features in building with 4.30 PCI, quality of materials used for wall, ceilings and roof with 4.22 PCI. Furthermore, the study shows that the functionality of spaces in building with 4.16 PCI, the aesthetic appearance of the neighbourhood with 4.30 PCI and colour quality of paint in the neighbourhood with 4.13 PCI.

**Table 1.** Residents' Perception of the Physical Characteristics in Old Bodija Scheme

S/N	Some Identified Variables on residents		Level	of Re	sidents		-		
	perception of physical characteristics		P	ercept	ion	N	$TWV_{(b)}$	TWV/n=	
		5	4	3	2	1			$PCI_{(Y)}$
1	Quality of buildings setback	390	5	5	2	2	404	1991	4.93
2	How well defined individual	381	05	09	02	07	404		
	compound/house / flat.							1963	4.86
3	Natural surveillance	371	10	11	02	10	404	1942	4.81
4	Overall housing environment	361	15	16	02	10	404	1927	4.77
5	Pollution level (noise and air)	320	40	31	05	08	404	1871	4.63
6	The layout of the neighbourhood (the	320	31	21	22	10	404	1841	4.56
	design in relation to daily life)								
7	Safety measures in neighbourhood	300	60	21	12	11	404	1838	4.55
8	Parking space/parking lots	314	31	20	30	09	404	1823	4.51
9	impressions of the overall design of the	290	60	23	14	17	404	1804	4.47
	neighbourhood								
10	Access control in the neighbourhood	283	67	26	12	16	404	1801	4.46
11	building ratio to green areas	300	41	21	22	20	404	1791	4.43
12	Quality of streets design	284	45	33	37	05	404	1778	4.40
13	Ventilation in your building or apartment	300	26	29	35	14	404	1775	4.39
14	Size of spaces in your building	294	30	23	47	10	404	1763	4.36
15	Safety features in your building	284	30	33	37	20	404	1733	4.30
16	quality of materials used for wall, ceilings	283	21	35	35	30	404	1704	4.22

and roof								_
17 The functionality of spaces in your	250	46	49	40	19	404	1680	4.16
building								
18 The aesthetic appearance of the	256	46	43	20	39	404	1672	4.14
neighbourhood	• • •					40.4		
19 Colour quality of paint in the	260	21	64	35	24	404	1670	4.13
neighbourhood								
20 Emergency/escape route	254	35	43	47	25	404	1658	4.10
21 Water system	120	221	38	21	04	404	1644	4.07
22 Design of building	230	51	54	45	24	404	1630	4.04
23 General cleanliness of the environment	244	31	44	43	42	404	1604	3.97
24 Quality of drainage system	210	51	54	45	44	404	1550	3.84
25 quality of dwellings in the neighbourhood	130	121	28	121	04	404	1464	3.62
26 Waste disposal	120	121	38	71	54	404	1394	3.45
27 The general state of primary schools	31	135	181	42	15	404	1337	3.31
28 The general state of health facilities	21	131	200	39	13	404	1320	3.27
29 The general state of recreational facilities	131	31	29	210	03	404	1289	3.19
30 The level of lighting on the streets	120	21	38	221	04	404	1244	3.08
31 The general state of secondary schools	15	42	181	135	31	404	1087	2.69
								127.71/31
Average								4.12

<sup>\*</sup> TWV: Total Weight Value

### 4.2 Residents' Perception of the Neighbourhood Physical Characteristics in Agodi GRA

The study showed that 16 variables out of 31 identified had PCI above the average of 3.42 in this area. These were considered as major neighbourhood physical characteristics influencing housing quality in positive ways. These included: Safety features in the building with 4.10 PCI, Ventilation in the building or apartment with 4.03 PCI, Quality of buildings setback with 4.01 PCI. Also, included were: building ratio to green areas with 4.00 PCI, Size of spaces in your building with 4.00 PCI, Functionality of spaces in your building with 4.00 PCI, General cleanliness of the environment with 3.97 PCI. How well defined individual compound/house / flat with 3.95 PCI; Layout of the neighbourhood (the design in relation to daily life) with 3.95 PCI, quality of dwellings in the neighbourhood with 3.89 PCI and Colour quality of paint in the neighbourhood with 3.85 PCI among others. The inference of the finding is that the study area required social services basic amenities and infrastructure essential for a decent living. Therefore, policymakers and housing developers obligatorily must take cognisance of the significance and vital role of neighbourhood services and social infrastructure in the provision of adequate and conducive housing development in the study area.

# 4.3 Residents' Perception of the Neighbourhood Physical Characteristics in New Bodija Scheme

The study revealed the level of acceptability and adequacy of physical characteristics in the New Bodija Scheme, 18 variables out of 31 identified had PCI above the average of 3.64. These variables were considered as acceptable and adequate by the residents as the major neighbourhood physical characteristics prefiguring housing quality in a positive way. These include Overall housing environment with PCI 4.48, Natural surveillance with PCI 4.48, access control in the neighbourhood with PCI 4.39, quality of materials used for wall, ceilings and roof with PCI 4.39. The study revealed that among all the factors, water system, the general state of secondary schools, the general state of primary schools, the general state of recreational facilities, and these facilities had PCI value that was far below

<sup>\*</sup> PCI: Physical Characteristics Index

the average PCI of 3.64. These were considered as one of the major factors that may have far-reaching effects on the housing quality in the study area and require considerable improvement for housing quality development. Urgent attention is required on the policy framework that encourages the provision of social infrastructure and basic amenities in future gated communities programme.

# 4.4 Residents' Perception of the Neighbourhood Physical Characteristics in Kolapo Ishola Scheme

The average mean on the perceived level of adequacy of the physical characteristics in this area was 4.21 PCI. This implied that the physical characteristics in the study area were in good situation and qualities of available conveniences and expediencies are upright as the index of 4.21 PCI was close to very good. It can be observed that 20 variables out of 31 identified had PCI above 4.21. These were measured as acceptable and adequate by the residents as the major neighbourhood physical characteristics prefiguring housing quality in positive ways. These comprised: how well defined individual compound/house and flat with PCI 4.83, the layout of the neighbourhood (the design in relation to daily life) with PCI 4.83, parking space/parking lots with PCI 4.79 and quality of materials used for wall, ceilings and roof with PCI 4.79.

In contrast, elements with PCI below the average of 4.21 PCI included: safety measures in the neighbourhood with PCI 4.04, quality of buildings setback with PCI 4.04, impressions of the overall design of neighbourhoods with PCI 4.04 and functionality of spaces in your building with PCI 4.00 among others. These were among the physical characteristics with a negative deviation that suggested that the level of adequacy these neighbourhood physical characteristics are low.

The study further revealed that quality of drainage system, the general state of primary, secondary schools and recreational facilities, had PCI value that was far below the average PCI of 4.21 which were considered as major factors that affect the housing quality and require considerable improvement for housing quality development. Nevertheless, it may also be that some of these neighbourhood physical characteristics were provided, but due to the rising change of status of residents and family need, the amenities are not adequate. This might have negative and far-reaching implications on housing quality in the study area.

### **4.5** Residents' Perception of the Neighbourhood Physical Characteristics in Alalubosa GRA

The average PCI on the perceived level of adequacy of the physical characteristics in this area was 4.23. This implied that the physical characteristics in the study area were in good situation and qualities of available conveniences and expediencies are upright as the index of 4.23 was close to very good. From Table 2, it can be observed that 17 variables out of 31 identified had PCI above the average which was measured as acceptable and adequate by the residents as the major neighbourhood physical characteristics prefiguring housing quality in positive ways. These comprised: quality of dwellings in the neighbourhood with PCI 4.95, overall housing environment with PCI 4.95, safety measures in the neighbourhood with PCI 4.94 and safety features in your building with PCI 4.88. The implication of this is that the perception of physical characteristics by the residents is very good. In contrast, however, elements with PCI below the average include the size of spaces in your building with PCI 4.16, colour quality of paint in the neighbourhood with PCI 4.13, emergency/escape route with PCI 4.12 and quality of streets design with PCI 4.02 among others. The above result shows that many of the respondents want improvements in these areas some of which were not originally provided.

Table 2. Residents' Perception of the Neighbourhood Physical Characteristics in Alalubosa GRA

S/N	Some Identified Variables on residents	]	Level of	Resi	dents				
	perception of neighbourhood physical			eptio			N	$TWV_{(b)}$	TWV/n=
	characteristics	5	4	3	2	1			$PCI_{(Y)}$
1	quality of dwellings in the neighbourhood	128	6	-	-	-	134	664	4.95
2	Overall housing environment	126	8	-	-	-	134	664	4.95
3	Safety measures in neighbourhood	110	20	-	-	4	134	662	4.94
4	Safety features in your building	112	22	2	-	-	134	654	4.88
5	Quality of buildings setback	124	8	2	-	-	134	650	4.85
6	The functionality of spaces in your building	113	20	1	-	-	134	648	4.84
7	Ventilation in your building or apartment	110	24	-	-	-	134	646	4.82
8	impressions of the overall design of the neighbourhood	110	22	2	-	-	134	644	4.81
9	Natural surveillance	110	20	4	-	-	134	642	4.79
10	The aesthetic appearance of the neighbourhood	110	20	-	4	-	134	638	4.76
11	Design of building	100	34	-	-	-	134	636	4.75
12	General cleanliness of the environment	122	12	-	-	-	134	630	4.70
13	Access control in the neighbourhood	62	66	6	-	-	134	592	4.42
14	The layout of the neighbourhood (the design in relation to daily life)	48	80	6	-	-	134	578	4.31
15	quality of materials used for wall, ceilings and roof	60	62	6	6	-	134	578	4.31
16	How well defined individual compound/house / flat.	40	88	6	-	-	134	570	4.25
17	Parking space/parking lots	42	84	8	_	_	134	570	4.25
	Size of spaces in your building	40	86	12	_	_	134	558	4.16
	Colour quality of paint in the neighbourhood	34	88	08	4	-	134	554	4.13
20	Emergency/escape route	24	102	8	_	-	134	552	4.12
	Quality of streets design	34	88	6	6	-	134	538	4.02
	Water system	70	24	20	10	10	134	530	3.96
	Pollution level (noise and air)	54	34	26	12	8	134	516	3.85
24	The general state of secondary schools	42	46	30	14	2	134	514	3.84
25	The general state of health facilities	40	86	30	14	2	34	500	3.73
26	<del>.</del>	50	28	22	20	14	134	482	3.60
27	The general state of recreational facilities	54	24	20	18	18	134	480	3.58
28	The level of lighting on the streets	44	20	50	10	10	134	480	3.58
29	The general state of primary schools	50	30	16	22	16	134	478	3.57
30	Quality of drainage system	30	20	28	26	30	134	396	2.95
31	Waste disposal	124	8	02	-	-	134	329	2.46
									131.13/31
	Average								4.23

# **4.6 Summary of the Perception of the Neighbourhood Physical Characteristics in Indices in the Study Area**

To summarize the residents' perception of the neighbourhood physical quality in all the study areas as shown in Table 3, and Figure 1 shows the comparative means of the Physical quality Indices in the five study areas. It revealed that Alalubosa GRA had the highest value of perception of the physical characteristics index at 4.23 PCI closely followed by Kolapo Ishola Scheme having 4.21, while old Bodija Scheme and New Bodija Scheme were having 4.12 and 3.64 respectively. Agodi GRA had the least value at 3.42. This shows that based on residents perception on quality of physical characteristics, Alalubosa GRA scheme had better organised and quality neighbourhoods, which were reflected with the strong neighbourhoods profile exhibited. Based on the aggregate average of 3.92 PCI, the study area exhibited a good level of perception of physical characteristics.

**Table 3.** Summary of the Perception of the Neighbourhood Physical Quality in the study area

Indicator	Physical Characteristics Indices (GCs)									
	Old Bodija	Agodi	New Bodija	Kolapo Ishola	Alalubosa					
	Scheme	GRA	Scheme	Scheme	GRA					
Perception of	4.12	3.42	3.64	4.21	4.23	3.92				
Physical										
Characteristics										

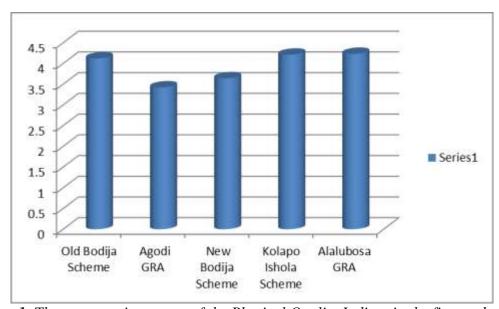


Figure 1. The comparative means of the Physical Quality Indices in the five study areas.

## 4.7 Relationship between Physical Characteristics and Housing Quality Using Pearson's Correlation Co-efficient (r) in all the Study Area

Table 4 shows that the computed Pearson's correlation (r) among pairs of the twenty (20) identified relevant housing variables in the study area. The result of finding in column (A) reveals that variable housing quality with correlation coefficient of 0.809 has a positive and significant correlations with variables that comprised: buildings ages (PCC = 0.744), building forms (PCC = 0.684), foundation materials (PCC = 0.808), wall materials (PCC = 0.931), roofing materials (PCC = 0.423) and ceiling materials (PCC = 0.446). Others include: special design features (PCC = 0.999), safety features (PCC = 0.419), waste storage (PCC = 0.656), wastes disposal methods (PCC = 0.470), method of evacuating waste (PCC = 0.632) and time interval in disposing waste (PCC = 0.747) that are significant at either 0.05 and 0.01 levels.

Column (B) shows that housing quality with correlation coefficient of 0.871 which has positive and significant correlations with variables that comprised: buildings orientation (PCC = 0.641), building form (PCC = 0.566), window protection (PCC = 0.612) foundation materials (PCC = 0.586), wall materials (PCC = 0.799) and roofing materials (PCC = 0.618). Others included: flooring materials (PCC = 0.375), special design features (PCC = 0.741), waste storage (PCC = 0.587), wastes disposal methods (PCC = 0.592), method of evacuating waste (PCC = 0.681) and time interval in disposing waste (PCC = 0.744) that are significant at both 0.05 and 0.01 levels. Column (E) shows that housing quality with correlation coefficient of -0.134 that is negative and is not significant, but has significant correlations with variables that comprised: roofing materials (PCC = -0.480), ceiling materials (PCC = 0.537), window materials (PCC = -0.425), safety features

(PCC = 0.363), waste storage (PCC = 0.538) that are significant at either 0.05 or 0.01 levels. Column (F) shows that housing quality with correlation coefficient of 0.681 that has positive and significant correlations with variables that included: wall materials (PCC = 0.448), roofing materials (PCC = 0.809) and flooring materials 0.708. Others included: window materials (PCC = 0.725), entrance door materials (PCC = 0.696), wastes disposal methods (PCC = 0.708), method of evacuating waste (PCC = 0.814), time interval in disposing waste (PCC = 0.418) that are significant at either 0.05 or 0.01 levels. The study revealed a strong and significant correlation between housing quality and physical characteristics that comprised: building types, buildings ages, buildings orientation, building forms, wall colour, window protection, foundation materials, and wall materials among others features.

**Table 4.** Aggregate of Pearson's Correlation Co-efficient (r) for Physical characteristics and Housing Quality Variables

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S/N o	Variables	A (i)	B (ii)	C (iii)	D iv)	E (v)	F (vi)	G (vii)	H (vii)	I (ix)	J (x)	K (xi)	L (xii)	M (xiii)	N (xiv)	O (xv)	P (xvi)	Q (xvii)	R (xviii)	S (xix)	T (xx)
i	Building Types (A)	1																			
ii	Buildings Ages (B)	.744**	1																		
iii	Buildings Orientation (C)	.244	.641**	1																	
iv	Building Forms (D)	.684**	.566**	.255	1																
v	Wall Colour (E)	.069	.108	.267	086	1															
vi	Window Protection (F)	.319	.612**	.750**	.585**	173	1														
vii	Foundation Materials (G)	.808**	.586**	.280	.257	.323	005	1													
viii	Wall materials (H)	.931**	.799**	.361	.727**	018	$.448^{*}$	.717**	1												
ix	Roofing Materials (I)	.423*	.618**	.399*	.675**	480**	.809**	.020	.597**	1											
X	Flooring Materials (J)	050	.375*	.642**	.448*	139	.708**	254	.204	.653**	1										
xi	Ceiling Materials (K)	.446*	.301	.141	.128	.537**	056	.675**	.357	112	333	1									
xii	Window Materials (L)	.012	.198	.245	.553**	425*	.725**	463*	.193	.786**	.733**	493**	1								
xiii	Entrance Door Materials (M)	240	.023	.293	.381*	351	.696**	653**	069	.605**	.721**	558**	.906**	1							
xiv	Special Design Features (N)	.999**	.741**	.248	.689**	.075	.320	.804**	.932**	.420*	041	.432*	.019	231	1						
xv	Safety Features (O)	$.419^{*}$	.647**	.742**	.183	.363*	.319	.537**	.516**	.157	.439*	.068	026	116	.431*	1					
xvi	Waste Storage (P)	.656**	.587**	.481**	.137	.538**	.152	.869**	.526**	058	252	.772**	474**	549**	.649**	.490**	1				
xvii	Wastes Disposal Methods (Q)	.470**	.592**	.362*	.834**	344	.708**	.103	.569**	.812**	.623**	.017	.634**	.451*	.468**	.159	.026	1			
Xvii i	Method of Evacuating Waste (R)	.632**	.681**	.631**	.667**	.017	.814**	.313	.652**	.630**	.370*	.131	.465**	.418*	.631**	.357	.430*	.535**	1		
xix	Time Interval in Disposing Waste (S)	.747**	.744**	.248	.523**	097	.418*	.526**	.754**	.571**	.068	.338	.193	056	.734**	.265	.465**	.481**	.655**	1	
XX	Housing Quality (T)	.809**	.871**	.545**	.793**	134	.681**	.549**	.904**	.792**	.491**	.248	.398*	.169	.808**	.526**	.416*	.802**	.703**	.715**	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

### V. Conclusion

The role of physical characteristics in the development of urban communities in relation to housing quality cannot be overemphasized. The design and development of urban communities need to be based on the standard design principles and physical characteristics with consideration of housings' location and connectivity, and liveability, safety, privacy and facilities among others. The identified highly important and less important factors prefiguring housing quality in a positive way will provide useful information for various developers and policymakers in their decision making. In general, these factors can be categorised into social interaction, economic, physical facilities, safety, privacy, and design quality. Others were personal, recreational and environmental quality among others. These were the groups of determinants prefiguring housing quality in the study areas as established in this study.

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

### **5.1 Policy Recommendations**

There is certainly no doubt that the outcomes of this research have enormous practice and policy implications that are important. There is the need to make a number of recommendations that would make the issue of housing quality in urban communities more acceptable to both the government as well as the majority of the residents in the study area. The study recommends that the study areas need to be improved on the concepts of physical characteristics that include: buildings ages, building types, building forms, buildings orientation, wall colour, foundation materials, window protection, wall materials, flooring materials, roofing materials, ceiling materials, entrance door materials, window materials, safety features, special design features and many others within the study areas. In addition, advancement in the area of physical condition, environmental design and social interaction among neighbours and an improvement in the important elements of physical characteristics will influence the resident's perception of housing quality.

Housing physical characteristics such as quality of buildings setback, natural surveillance, overall housing environment, pollution level (noise and air), the layout of the housing, the overall design of housing and quality of dwellings among others, in the areas require remodelling. These facilities are no longer adequate in meeting current needs. The housing quality is a reflection of the national condition and comparatively an accumulation of various housings' quality. Interventions, upgrading need to be planned and designed so that they have a significant and positive influence on residents' perceptions. The implication of this is that the professionals engaged in the planning, design, operation and implementation of urban communities' schemes should be engaging and be involve inappropriate design practices, structures and schemes in conceiving housings that satisfy users need for privacy, safety, fire, security, adequate sleeping area and thermal comfort among others.

In addition to the above, other key housing facilities and elements should be upgraded. This will improve the level of quality of housing services, housing facilities and infrastructure. Also, there is a need for proper management and the maintenance of these facilities. The study showed that good management of urban communities contributes to overall housing quality. It is, therefore, recommended that developer of housing estate should develop an effective method for the management and provision of basic services, social infrastructure and amenities in urban communities. Similarly, they should develop bigger housing units that meet the requirement of families with large household size. Another aspect which the study has indicated need attention is locational appropriateness of housing development in relative to proximity to educational, healthcare, shopping facilities and recreational among others.

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