# Assessment Of Occupiers Satisfaction With Facilities In Housing Estates In Port Harcourt, Rivers State, Nigeria

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Abstract: This study focused on the assessment of occupiers' satisfaction with facilities in housing estates in Port Harcourt, Rivers State, Nigeria. This was achieved by determining the difference in satisfaction levels among these respective estates using the dwelling unit features. Descriptive survey design was used. The population of the study consist of 1061 housing units in total and 400 housing units were sampled using Taro Yamani formula. The data used were primary data collected through well-structured questionnaire. The data obtained were analyzed using ANOVA and simple percentage with the aid of Statistical Package for Social Science (SPSS). The findings from the analysis indicated that the level of occupiers housing satisfaction with the dwelling unit features in the different housing estates varies. Majority of the respondents in the private estates were either "very satisfied" or "satisfied" with dwelling units' factors while those of the public estates had majority dissatisfied. The findings demonstrated that the private estate has the highest mean level of satisfactory facilities based on respondent view, while the public estates has the lowest. The study shows that occupiers' inputs and preferences should be strongly considered by planners and public housing agencies when planning and designing public housing projects. There is need for a generally acceptable plan for estate development to satisfy human preferences. Occupiers' level of satisfaction should be taken into consideration in the process of house planning and processing.

Keywords: Occupiers Satisfaction, Dwelling Units, Housing Estates, Rivers state

### I. INTRODUCTION

The provision of satisfactory housing that meet government prescribed standards of quality and users need, expectations and aspirations has always been the goal of every public and private housing estate in Nigeria. The UN-HABITAT (2006) report however noted that in the past few decades, despite governments' laudable efforts, public and private housing has failed to achieve this goal in the country. In view of this, Fatoye and Odusami (2009) suggested that for housing sector to improve the quality of housing it produces, it must explore and understand users need and expectations as well as the extent to which such needs and expectations are met through regular performance evaluation. Teck-hong (2011) shares similar view by noting that one possible way to meet household's housing needs is to examine factor which account for occupiers' satisfaction or dissatisfaction with their housing conditions. This view no doubt underscore the need for studies on occupier satisfaction in the quest to provide housing that meet the daily needs, expectation and preferences of the occupant.

The importance of infrastructural facilities in the proper functioning of any residential property is essential to the successful utilization of the property. The demand for any of the facilities is not for the brick and mortar only but for all other ancillary installations and fittings that can promote the desired utility of the occupants. In a residential property, such satisfaction includes shelter, protection, comfort, convenience, health, privacy and dignity. Ndubueze (2001) noted that the essences of housing unit are accommodation where occupants will retreat from the stresses brought upon them by the demand of daily living. Therefore a decent housing unit must be able to satisfy the economic, physical and environmental needs of the occupants. The economic satisfaction of getting value for the rent paid period may seem unrealistic if the physical satisfaction, which embraces conveniences such as uninterrupted power supply, water supply and waste disposal means are not well placed or absent whilst the environmental satisfaction in terms of social status and the security consciousness of the neighborhood equally provide the level of utility derived from using residential property. In other words, facility is a major pointer to the desired utility that can be derived by occupiers in any residential property.

When housing is taken as an investment, the initial investment usually highlights, among other things the market prospects for housing products. Enclosed in this appraisal are occupiers' needs and preferences with respect to level of satisfaction. The willingness of occupiers to pay for housing services is a function of the satisfaction they derive from it. This is the basis on which post occupancy evaluation is carried out to assure quality and also provide a benchmark for improvement. Housing is such that its incidence is not only capital intensive, but the rectification of faults therein. The processes of housing adaptation can be very challenging in terms of cost, time, and psychological stress. It is necessary therefore to meet occupiers needs for the investment aims to be realized and for the developer to exude confidence to prospective clients now and for future project. In any production process, the end-user as an entity cannot be ignored. Agbola (2007) explained that many highly personal user values affect housing and distort any purely economic explanation of housing activity. In the hierarchy of human needs, housing ranks next to only food (Chionuma, 2002; Oladapo,2006; Jiboye, 2009). Housing affects the health, productivity and general quality of lives of the user. Occupiers' satisfaction in the housing environment stems from the interactive effects of several social, physical and environmental attributes of the housing environment as well as the psycho-social make up of the users. Housing satisfaction was seen by Morris (1978) as an index of the level of contentment with current housing conditions. The term, he added refers to an entire continuum of satisfaction from "very dissatisfied" to "very satisfied" rather than just a state of being dissatisfied. An increase in dwelling and environmental quality satisfaction improves people's quality of life Kekkekci and Berkoz, (2006).

This work will explore the occupiers satisfaction level recorded in selected housing estates in Port-Harcourt to build a predictive model for 'housing satisfaction' with a view to assuring housing quality for users and aid viability of future projects.

Occupiers' satisfaction is a concept that is influenced by objective and subjective measures of housing attributes. These attributes includes physical, social/psychological and management attributes. It depends on many variables such as shared nature spaces and density of a residential subdivision. The failure of many housing and dwelling projects stems from lacking of knowledge on the determinants of Residential Satisfaction (RS) concept Seller, (2008). Residential satisfaction reflects the degree to which individuals housing needs are fulfilled. The achievement of housing program does not only depend on development of housing units, but also on factors that influences the needs of residents. However, residential satisfaction is a subjective phenomenon and there is

a strong relationship between other concepts namely residential preferences Ge and Hokao, (2006). Residential satisfaction has always been cited as one of the most significant factors which should be considered in designing and planning process for different nations. Therefore, dwelling is a social issue which embeds not only its construction and environment but also satisfaction in environmental quality. Location characteristics are also important parameters to be considered in determining Residential Satisfaction. Sociodemographic variables and migration are also taken into account by urban planners and designer, where Lu (1999) has observed Residential Satisfaction as a complex construct which is affected by a variety of environmental and socialdemographic variables. These variables include gender, age, family size, educational level, monthly family income, employment status, length of residency, and socio-economic status. Therefore, this study seeks to assess occupiers' satisfaction with residential facilities in housing estates in Port Harcourt, River State, Nigeria.

#### STATEMENT OF THE RESEARCH PROBLEM

Housing in quantitative terms, was not recorded as posing a problem in this part of the world in the pre-colonial era. The colonial housing and administration eroded much of the traditional values and indigenous methods of housing provision NISER, (1982). The continuing urbanization in Africa and the resultant housing needs compounded the problems by placing a lot of stress on the housing delivery machinery. The pressure to deliver as many housing unit as possible is known to have had compromising consequences for quality and sustainability measures in this regard Rosenberger, (2003). The backlog of housing deficit had made the market a sellers' market even when most of the units had not been user compliant or technically habitable. The habitability of housing goes beyond strict engineering elements to include also social, behavioral, cultural and other elements in the entire societal environmental system Onibokun, (1974). Housing delivery is characteristically capital intensive and its achievement goes beyond the capacity of any single sector; private or public. A basic requirement for continuous delivery or project replication is cost recovery; the actual direct cost and its alternative use earnings. This is much hinged on eliciting the cooperation of end users. The extent to which this can be achieved would be affected by the level of acceptability of the housing products experienced by end users.

Therefore one core issue specifically in Estate Management and in the building industry in general, is that of meeting occupiers' satisfaction in the built environment. In the housing environment, one of the major obstacles to achieving this goal is that of identification of current level of the occupier's relative satisfaction as well as the understanding of the factors, or combinations thereof, which accounts for it. As such, financial losses may result and the quality of investment (to developer) may deteriorate just as housing quality assurance (to users) may not be attained if no conscious effort is made at researching into occupiers needs in the housing industry. The study was conducted to assess occupiers' satisfaction with residential facilities in housing estates in Port Harcourt. This can be achieved by determining the different levels of satisfaction among the respective estates in the study area using the dwelling unit features.

This work would be of immense benefit to property developers, real estate management professionals, local government authorities and other researchers. Understanding how individuals form their housing satisfaction can be used to design more effective housing programs and avoid problems that may result if the perceptions of policy makers do not coincide with those of residents. It will further form basis for subsequent enquiries in housing satisfaction towards enhancing real estate management practice and housing investment viability where total quality management is envisaged. The direction and measure of attention to the policy implementation is a function of the extent to which satisfaction is determined whether more by specific aspects of the neighborhood or by the underlying characteristics of the people, dwellings and the area in question. This study will aid the course of policy regarding respective housing estates in particular and, by projection, other existing or conceived housing projects.

#### STUDY AREA

Rivers State is one of the 36 states of Nigeria. According to census data released in 2006, the state has a population of 5,185,400, making it the sixth-most populous state in the country. Its capital, Port Harcourt is the largest city and is economically significant as the center of Nigeria's oil industry. Port Harcourt is the capital and the largest city of Rivers State in Nigeria, set in the Niger Delta Region. According to the 2006 census, Port Harcourt has a population of 541,115.As of 2015, it has an extended urban area of well over 2 million people. The area that became Port Harcourt in 1912 was before that part of the farmlands of the Diobu village group of the Ikwerre, an Igbo sub-group. The colonial administration of Nigeria created the port to export coal from the collieries of Enugu located 243 kilometres (151 mi) north of Port Harcourt, to which it was linked by a railway called the Eastern Line, also built by the British. The main city of Port Harcourt is the Port Harcourt city in the Port Harcourt local government area, consisting of the former European quarters now called Old Government Reserved Area (Old GRA) and New Layout areas. The estates under study cut across three local government areas in Rivers State. Golf Estate and Federal Housing Estate (FHE) are located in Port Harcourt, Vintage Garden Estate is located in Obio Akpor Local Government Area while NNPC Estate is in Eleme Local Government Area of Rivers State.

#### II. LITERATURE REVIEW

Not many studies exist on users' satisfaction with residential facilities in Nigeria. This may be due to the behavior of people showing indifference and adapting to the general poor performance of social services. Hence, literature for this current attempt was drawn from users' satisfaction and factors that determine or predict this satisfaction with housing facilities in general. Consumer satisfaction in housing transcends the technical quality of the constituent components of a house. It is an overall concept, so much that certain price related aspects of the developers decision could skew the overall rating from very satisfied to very dissatisfied. Satisfaction in the residential environment reflects people's responses to the area they live in Kellekci and Berkoz, (2006). In many developed nations of the world, enquiries into the citizens' housing satisfaction and welfare constitute a strong socio-political tool for public policy direction. Therefore, satisfaction surveys have been a regular exercise in these communities. For instance local governments in the UK and USA carry out regular surveys aimed at ensuring housing satisfaction for resident households.

In Abeokuta the capital of Ogun State, Ibem and Amole (2012) revealed that 59 percent of the residents of public core housing were satisfied with their housing conditions, and that satisfaction levels were higher for housing unit characteristics and management of the estate compared to access to neighbourhood facilities and service. It can be concluded from these studies that the residents of public housing in the different countries have been satisfied or dissatisfied with the different aspects of their housing environment. Indeed, these studies show that residential satisfaction is a highly contextual construct, which partly depends on the manner in which the objective characteristics of the residential environment are perceived by the residents who are the evaluators. Djebarni and Al-Abed (2000) reported on the occupants' satisfaction of the three housing schemes with their neighborhood factors. It was found that the most determinant factor of the three housing environment variables (dwelling unit. the neighborhood, and community service) affecting overall housing satisfaction was the neighborhood. In fact, occupants attached greater importance to the level of satisfaction with their neighborhoods than with the other two variables. The most important factors affecting the level of satisfaction were: privacy, distance to work, location of schools and provision of amenities.

Hong Kong, Hui and Zheng (2010) identified and analyzed crucial variables of customer satisfaction towards residential facility management (FM) service; this is to enable FM companies to deliver high quality services. The research surveyed customer's satisfaction of one residential property and the findings revealed that: both service and management quality have significant positive effect on customer satisfaction, and the effect of service quality is larger than that of management quality when the indirect effect is taken into account. It further showed that service quality is a crucial latent variable influencing customer satisfaction and it has a significant direct effect on management quality; how the individual observed variables work together to characterize the corresponding latent variables from an empirical point of view, and some key variables that should be focused on by facility managers in the housing sector.

Amole (2009) reported the results of a study of residential satisfaction in students' housing in Nigeria. The study examined how satisfied students were and the factors which predicted residential satisfaction. Specifically, it examined whether the morphological configurations of the halls of

residence would predict residential satisfaction. Data were obtained from questionnaires distributed to a sample of 1124 respondents from all the halls of residences in four residential universities in southwestern Nigeria. More than half (53%) of the respondents were dissatisfied with their residences and the variables which explained satisfaction were the social qualities of the residences, especially, the social densities; the kitchenette, bathroom and storage facilities and some demographic characteristics the of students. The morphological configuration of the halls of residence was also found to be a predictor of satisfaction and the characteristics which appeared most significant were the plan form and the length of the corridor. The regression model explained 65% of the variance in R2. An instructive finding was that satisfaction appeared most critical in the bedroom. Another research by Najib et al. (2011) investigated the level of student satisfaction with campus Student Housing Facilities (SHF) at Malaysian research universities (RUs) and the relationship between satisfaction and loyalty behavior. The Student Residential Satisfaction (SRS) framework was proposed to investigate residential satisfaction from the students' viewpoint. Questionnaires were administered to respondents in three RUs. In general, students were satisfied with the provided SHF with the SRS index of 2.96 or 74 per cent satisfaction level and there is a significant relationship between overall satisfaction and loyalty behavior. The results also confirmed that the proposed model was not adequate instrument to measure SRS. The study of Adewunmi et al. (2011) adopted an investigative approach to post-occupancy evaluation using major technical and functional criteria of performance on the facilities of a postgraduate hostel at the campus of the University of Lagos, Akoka, Yaba, Lagos, Nigeria. Data collection was based on a survey through self-administered questionnaires in which users of the building were asked to report on their perceptions and experience of the facility. The user satisfaction survey was developed based on the students' feedback on their experience with 29 identified performance criteria obtained from a review of the literature and an interview with a member of the university's hall management committee. The user satisfaction survey identified areas of deficiency, particularly in maintenance and facilitated the assessment of the overall performance of the building. The use of this information on housing has been negligible in most third world countries such as Nigeria. Therefore it should be the purpose of research to identify various concepts contributing to satisfactory and acceptable housing. This would provide all stakeholders in housing development with valuable data on which an ideal tenant, dwelling, environment, management interaction could be based.

#### **III. METHODOLOGY**

Both qualitative and quantitative methods of data collection were implemented. Data that were used for this study were collected from two categories of sources; primary and secondary sources.

A proportionate quota technique was adopted to administer 400 questionnaires among the respondents from the four housing estates, so that each estate will be represented based of the number of housing units in them.

Four hundred (400) household leaders (fathers and their representatives) were interviewed which is equivalent to 37.7% of the total number of 1061 housing units in the four selected estates using proportionate quota technique, questionnaires for each estate were distributed based on the number of housing unit in them. In all, a random sample of 400 occupiers of the four housing estates constituted the sample size of this study. This was calculated by Taro Yamani Sample Size formula which states

Sample size (n) =  $\frac{N}{1 + N(b)^2}$ 

Where

Ν = Population

= Sample size n

b = Error margin which in this study is 0.5 or 0.05thus we determine the sample size as

$$n = 1061$$

 $1+1061(0.5)^2$ 

n = 399.62 or 400 (approximately)

Therefore, Four Hundred (400) housing units which is equivalent to 37.7% of the number of 1061 housing units was used for this study.

The data for this research were generated through wellstructured questionnaires administered to the household leaders and their representative. Four hundred (400) questionnaire were administered to the four housing estate in total, each estate got questionnaires based on the number of housing units in them. Three hundred and ninety seven (397) questionnaires were returned which is 99% of the total questionnaire administered while three (3) were not returned which constitutes 1% of the total that was administered.

The data were presented and analyzed using simple percentages. In the testing of the hypotheses, ANOVA and Ztest were applied with the aid of statistical Package for Social Sciences (SPSS). These statistical tools were used to verify the level and degree of relationship between the occupiers satisfaction in relation to the available facilities.

Name of Estate	Sampling Size (Housing Units)
Golf Estate	264
Vintage Garden Estate	34
NNPC Estate	26
Federal Housing Estate	76
Overall Sample Size	400

Table 1: Sampling Technique

#### IV. DATA PRESENTATION AND ANALYSIS

This shows the total number of questionnaires administered, the number returned, the number not returned and their percentages.

and men percentages		
QUESTIONNAIRE	NO. Of Respondent	Percentages
Administered	400	-
Returned	397	99
Questionnaire		
Unreturned	3	1
Questionnaire		

Total			100		
Table 2: Analys	sis of Adn	ninisterea	l Qu	estio	nnaire
able 1 shows	that 99	nercent	of	the	adminis

Table 1 shows that 99 percent of the administered questionnaires which amount to 397 were returned while 1 percent of the questionnaires which amount to 3 questionnaires were not returned. This shows that there were a high percentage of returned questionnaires.

			es and nu		esponde			RII	Rank
		VS	S	U	D	VD			ing
a.	General	270	113	10	4		1840/39	4.6	1
	size of	(1350	(452)	(30)	(8)		7	3	
	house	)	. ,	Ì, í	. /				
b.	Outdoor	205	177	2	13		1765/39	4.4	2
	spaces	(1025	(708)	(6)	(26)		7	5	
	-	)							
с.	Plot size	196	186	8	7		1762/39	4.4	3
		(980)	(744)	(24)	(14)		7	4	
d.	Room	177	205	2	13		1737/39	4.3	4
	sizes	(885)	(820)	(6)	(26)		7	8	
e.	Size of	216	132	23	8	18	1711/39	4.3	5
	wardrobes	(1080	(528)	(69)	(16)	(18)	7	1	
	if any	)							
f.	Size of	132	216	23	7	19	1711/39	4.3	6
	kitchen	(528)	(1080	(69)	(14)	(19)	7	0	
			)						
g.	Sitting	204	89	88	12	4	1668/39	4.2	7
	room	(1020	(356)	(264	(24)	(4)	7	0	
		)		)					
h.	Lighting	89	204	88	14	2	1668/39	4.2	8
	(in the	(356)	(1020	(264	(28)	(2)	7	0	
	house)		)	)					
i.	Water	189	112	44	49	3	1626/39	4.1	9
	pressure	(945)	(448)	(132	(98)	(3)	7	1	
	(in house)	100		)	20	2	1.500/00	2.0	10
j.	Internal	122	141	93	38	3	1532/39	3.8	10
	finishing	(610)	(564)	(279	(76)	(3)	7	6	
1-	Quality of	78	201	) 99	17	2	1527/39	3.8	11
k.	windows	(390)	(804)	(297	(34)	(2)	1327/39	5.8 5	11
	windows	(390)	(804)	(297	(34)	(2)	/	3	
1.	Quality of	152	126	11	95	13	1500/39	3.7	12
1.	doors	(760)	(504)	(33)	(190	(13)	7	8	12
	00013	(700)	(504)	(33)	)	(15)	/		
m	Overall	126	152	11	95	13	1464/39	3.6	13
	satisfactio	(630)	(608)	(33)	(190	(13)	7	9	15
	n with	(000)	(000)	(00)	)	(10)	•		
	dwelling				,			× 1	
	unit								
n.	External	38	141	122	3	93	1219/39	3.1	14
	finishing	(190)	(564)	(366	(6)	(93)	7	6	
	5	` ´	, í	)	Ì,	Ì			
о.	Ground	78	17	2	99	201	863/397	2.2	15
	water and	(390)	(68)	(6)	(198	(201		6	
	dampness				)	)			

Rank: (Very Satisfy -5, Satisfy -4, Undecided-3, Dissatisfy -2, Very Dissatisfy -1)

 Table 3: Satisfaction with dwelling unit (house objective features) in Golf Estate

This table shows the general satisfaction with dwelling unit in golf estate

From the analysis in table 2, it shows that the house have generally satisfying outdoor spaces, plot size, room sizes, size of wardrobes, size of kitchen, sitting room, lighting (in the house), water pressure (in house), internal finishing, quality of windows, quality of doors, overall satisfaction with dwelling unit, external finishing, and lastly ground water and dampness

-			0,				-		
		Scale	es and nun	nber of 1	espond	ents		RII	Rank
		VS	S	U	D	VD			ing
a.	General	185	197	2	10	3	1742/397	4.39	1
	size of	(925)	(788)	(6)	(20)	(3)			
	house								
b.	Outdoor	180	195	4	13	5	1723/397	4.34	2
	spaces	(900)	(780)	(12)	(26)	(5)			
с.	Plot size	157	225	2	12	1	1716/397	4.32	3
		(785)	900	6	24	1			

d.	Room	196	152	23	8	18	1691/397	4.26	4
	sizes	(980)	(608)	(69)	(16)	(18)			
e.	Size of	190	155	24	10	18	1680/397	4.23	5
	wardrob	(950)	(620)	(72)	(20)	(18)			
	es if any								
f.	External	201	99	10	70	15	1671/397	4.21	6
	finishing	(101	(396)	(30)	(14	(15)			
		5)			0)				
g.	Sitting	188	152	25	13	19	1668/397	4.20	7
	room	(940)	(608)	(75)	(26)	(19)			
h.	Size of	184	109	88	12	4	1648/397	4.15	8
	kitchen	(920)	(436)	(264	(24)	(4)			
				)					
i.	Overall	203	99	10	70	15	1596/397	4.02	9
	satisfacti	(101	(396)	(30)	(14	(15)			
	on with	5)			0)				
	dwelling								
	unit								
j.	Quality	141	122	93	38	3	1551/397	3.91	10
-	of doors	(705)	(488)	(279	(76)	(3)			
				)					
k.	Lighting	69	224	88	12	4	1533/397	3.86	11
	(in the	(345)	(896)	(264	(24)	(4)			
	house)			)					
1.	Water	132	146	11	95	13	1480/397	3.73	12
	pressure	(660)	(584)	(33)	(19	(13)			
	(in				0)				
	house)								
m.	Internal	106	172	31	70	18	1469/397	3.70	13
	finishing	(530)	(688)	(93)	(14	(18)			
	-				0)				
n.	Quality	122	100	79	93	3	1436/397	3.62	14
	of	(610)	(400)	(237	(18	(3)			
	window			)	6)				
	S								
0.	Ground	78	17	2	99	201	863/397	2.17	15
	water	(390)	(68)	(6)	(19	(201			
$\mathbf{N}$	and				8)	)			
X	dampnes								
	s								

Rank: (Very Satisfy	-5, Satisfy	-4, Undecided-3,	Dissatisfy -2,
Very Dissatisfy -1)			

 Table 4: Satisfaction with dwelling unit (house objective features) in Vintage Garden Estate

This table shows the general satisfaction with dwelling unit in vintage garden estate

From the analysis in table 3 it shows that the house have generally satisfying outdoor spaces, plot size, room sizes, size of wardrobes, sitting room, size of kitchen, overall satisfaction with dwelling unit, quality of doors, lighting (in the house), water pressure (in house), internal finishing, quality of windows, external finishing, and lastly ground water and dampness.

	1	Scale	es and nun	nber of 1	espond	ents		RII	Rank
		VS	S	U	D	VD			ing
a.	General	205	165	14	10	3	1798/397	4.53	1
	size of	(102	(708)	(42)	(20)	(3)			
	house	5)							
b.	Outdoor	186	190	9	8	4	1737/397	4.38	2
	spaces	(930)	(760)	(27)	(16)	(4)			
с.	Sitting	224	99	48	22	4	1708/397	4.30	3
	room	(112	(396)	(144	(44)	(4)			
		0)		)					
d.	Room	206	142	23	8	18	1701/397	4.28	4
	sizes	(103	(568)	(69)	(16)	(18)			
		0)							
e.	Size of	210	135	24	10	18	1700/397	4.28	5
	wardrob	(105	(540)	(72)	(20)	(18)			
	es if any	0)							
f.	Size of	113	270	10	4		1683/397	4.24	6
	kitchen	(565)	(1080)	(30)	(8)				
g.	Lighting	208	132	25	13	19	1643/397	4.13	7
	(in the	(104	(528)	(50)	(26)	(19)			
	house)	0)							

h.	Water	189	112	44	49	3	1626/397	4.10	8
	pressure	(945)	(448)	(132	(98)	(3)			
	(in			)					
	house)								
i.	Plot size	180	145	24	20	18	1610/397	4.05	9
		(900)	(580)	(72)	(40)	(18)			
j.	Internal	122	141	93	38	3	1532/397	3.86	10
	finishing	(610)	(564)	(279	(76)	(3)			
				)					
k.	Quality	78	201	99	17	2	1527/397	3.85	11
	of	(390)	(804)	(297	(34)	(2)			
	window			)					
	s								
1.	Quality	152	126	11	95	13	1500/397	3.78	12
	of doors	(760)	(504)	(33)	(19	(13)			
					0)				
m.	External	126	152	11	90	18	1469/397	3.70	13
	finishing	(630)	(608)	(33)	(18	(18)			
					0)				
n.	Ground	38	141	122	3	93	1219/397	3.07	14
	water	(190)	(564)	(361	(6)	(93)			
	and			)					
	dampnes								
	s								
0.	Overall	78	17	2	201	99	965/397	2.43	15
	satisfacti	(390)	(68)	(6)	(40	(99)			
	on with				2)				
	dwelling								
	unit								

Rank: (Very Satisfy -5, Satisfy -4, Undecided-3, Dissatisfy -2, Very Dissatisfy -1)

# Table 5: Satisfaction with dwelling unit (house objective features) in NNPC Estate

This table shows the general satisfaction with dwelling unit in NNPC estate

From the analysis in table 4, it shows that the house have generally satisfying outdoor spaces, sitting room, room sizes, size of wardrobes, size of kitchen, lighting (in the house), water pressure (in house), plot size, internal finishing, quality of windows, quality of doors, external finishing, ground water and dampness and lastly overall satisfaction with dwelling unit

	1	Scale	ii wittii uv	RII	Rank				
		VS	S	U	D	VD			ing
a.	General	260	123	10	4		1830/397	4.61	1
	size of	(130	(492)	(30)	(8)				
	house	0)							
b.	Sitting	195	187	2	13		1755/397	4.42	2
	room	(975)	(748)	(6)	(26)				
с.	Plot size	190	185	4	13	5	1733/397	4.37	3
		(950)	(740)	(12)	(26)	(5)			
d.	Room	167	215	2	13		1727/397	4.35	4
	sizes	(835)	(860)	(6)	(26)				
e.	Size of	206	142	23	8	18	1701/397	4.28	5
	wardrob	(103	(568)	(69)	(16)	(18)			
	es if any	0)							
f.	Size of	103	280	10	4		1673/397	4.21	6
	kitchen	(515)	(1120)	(30)	(8)				
g.	Outdoor	122	226	23	8	18	1617/397	4.07	7
	spaces	(610)	(904)	(69)	(16)	(18)			
h.	Quality	88	99	32	174	4	1284/397	3.23	8
	of doors	(440)	(396)	(96)	(34	(4)			
					8)				
i.	Water	92	106	11	155	33	1260/397	3.17	9
	pressure	(460)	(424)	(33)	(31	(33)			
	(in				0)				
	house)	10							
j.	Internal	48	131	3	122	93	1110/397	2.78	10
	finishing	(240)	(524)	(9)	(24	(93)			
1-	0	38	122	3	4) 141	93	1062/397	2.67	11
k.	Quality of	(190)	(488)	(9)	(28	(93)	1062/397	2.67	11
	window	(190)	(488)	(9)	(28	(93)			
					2)				
1.	s Lighting	34	75	10	154	124	932/397	2.35	12
1.	(in the	(170)	(300)	(30)	(30	(124	2341371	2.55	12
	(in the house)	(170)	(300)	(50)	(30	(124			
m.	Ground	17	78	2	201	99	904/397	2.28	13
	water	(85)	(312)	(6)	(40	(99)	JU <del>1</del> /391	2.20	15
	and	(05)	(312)	(0)	2)				
L	unu	l				I			

	dampnes								
	s								
n.	External	78	17	2	99	201	863/397	2.17	14
	finishing	(390)	(68)	(6)	(19	(201			
					8)	)			
0.	Overall	70	15	(3)	100	209	825/397	2.08	15
	satisfacti	(350)	(60)	(6)	(20	(209			
	on with				0)	)			
	dwelling								
	unit								

Rank: (Very Satisfy -5, Satisfy -4, Undecided-3, Dissatisfy -2, Very Dissatisfy -1)

# Table 6: Satisfaction with dwelling unit (house objective features) in Federal Housing Estate

This table shows the general satisfaction with dwelling unit in federal housing estate

From the analysis in table 5, it shows that the house are generally satisfying sitting room, plot size, room sizes, size of wardrobes, size of kitchen, outdoor spaces, quality of doors, water pressure (in house), internal finishing, quality of windows, lighting (in the house), ground water and dampness, external finishing and lastly overall satisfaction with dwelling unit.

## HYPOTHESIS TESTING

#### HYPOTHESIS I

 $H_0$ : There is no significant difference in the satisfaction level recorded among the estates.

# Descriptives

#### Variable

						onfidence for Mean		
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maxim um
Golf Estate	15	49.040 0	2.21159	.57103	47.8153	50.2647	45.90	52.80
Vintage Garden Estate	15	5.9267	.51474	.13290	5.6416	6.2117	5.00	7.00
NNPC Estate	15	4.8333	.37161	.09595	4.6275	5.0391	4.00	5.20
Federal Housing Estate	15	14.513 3	.42740	.11035	14.2766	14.7500	13.90	15.10
Total	60	18.578 3	18.16967	2.34569	13.8846	23.2721	4.00	52.80

#### Test of Homogeneity of Variances

Variable

Levene Statistic	df1	df2	Sig.
16.666	3	56	.000

# ANOVA

#### Variable

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	19401.406	3	6467.135	4723.246	.001
Within Groups Total	76.676 19478.082	56 59	1.369		

From the analysis, it show that the probability values (0.001) is less than the alpha value (0.05), the researcher therefore reject the null hypothesis and conclude that there is a significant difference in the satisfaction level recorded among the estates.

## V. SUMMARY OF FINDINGS

From the analysis and hypothesis tested, it was discovered that;

- ✓ Housing Satisfaction in the various housing estates were significantly affected by the nature of the dwelling units. There were obvious variations in the satisfaction levels of the respondents in respect to the general housing size, outdoor spaces, plot size, room size, wardrobe size, kitchen size, sitting room, lighting system, water pressure, internal finishing, quality of windows, quality of doors, external finishing and overall satisfaction with the dwelling units.
- ✓ The hypothesis I tested shows that the probability value 0.001 is less than the alpha value 0.05, therefore I concluded that there is a significant difference in the satisfaction levels recorded among the estates.

From the result of the analyses of data gathered from the four housing estates in the course of this research endeavor, the aim of the study which is to assess occupiers' satisfaction with residential facilities in housing estates in Port Harcourt was achieved.

This research comprised four housing estates made up of private and government ownerships. Four hundred (400) housing units out of the total of one thousand and sixty one (1061) were sampled. Most of the housing units examined were of single family bungalows of 2 or 3 bedroom, flat (in a block of flats) and duplexes.

The key findings from the study can be summarized as below:

Majority of the housing units provided by the four housing agencies were single family bungalows of 2 or 3 bedroom category (73%) when compared with those living in duplexes and were constructed mainly with cement blocks, steel protectors, slider windows, and long span aluminum roofing sheets. All the housing units depended on water from boreholes and public power supply for daily electricity supplies respectively.

Majority of the respondents' in the private estates were either "very satisfied" or "satisfied" with the overall dwelling units, while the public estates were "dissatisfied".

In summary, housing satisfaction in the estates is significantly affected by dwelling units. There is significant difference in the satisfaction level recorded among the estates.

However, there were significant difference in the level of users satisfaction within the sampled estate, of which might be attributed to individual difference and economic status of the concerned users. Also the impacts of the housing neighborhood, administration and management cannot be underscored with respect to their influence on the residents.

#### VI. CONCLUSION

This study has examined the correlates of housing satisfaction in some selected housing estates in Port Harcourt, Rivers State, Nigeria by identifying relevant factors which determine tenants' satisfaction levels with housing system in Nigeria. The findings have shown that the variables of the dwelling components of public housing actually affected tenants' satisfaction with their housing in the study area. This is because a good number of the variables examined correlated significantly with tenants' satisfaction. The implication of the findings for housing policy formulation in Nigeria is that the provision of adequate and relevant environmental amenities, qualitative and users' responsive dwellings coupled with an effective and efficient housing management structure are all necessary prerequisites to ensuring adequate and satisfactory housing in our cities.

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