# **EVALUATING RESIDENTS' DEMOGRAPHICS AND SATISFACTION** WITH PUBLIC HOUSING ESTATES IN BENIN METROPOLIS, EDO STATE, NIGERIA

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## **ABSTRACT**

This study examines the residents' demographics and its impact on satisfaction level in six built and occupied housing estates in Benin City, Edo state, Nigeria. Data were collected in 2018 from six (6) housing estates namely: Oluku Housing Estate, EDPA Housing Estates Ugbowo, Federal Housing Estate, Oregbeni, and Federal Housing Estate on Ikpoba Hill, Iyekogba Housing Estate, Ebo and Andrew -Wilson Housing Estate, Evbuoriaria. Through administration of structure questionnaires, interviews and direct observations. Descriptive statistical tools such as means, standard deviations, and categorical regression analysis were utilized for the data analysis. The result showed that the categorical regression results has an R<sup>2</sup> value of 0.679 which indicates that the model explains about 67.9% of systematic variations in residents satisfaction with an adjusted value of 62.3%. Specifically, the study reveals that Gender is negative though not significant (-0.0016, p=0.9559) which suggest that gender of resident has no significant effect on the level of satisfaction. Age is positive (12.712), though not significant at 5% (p=0.511). However, level of Education is positive (0.0099) and significant (p=0.000) at 5% which implies that the level of education of residents can influence their satisfaction levels. More educated individuals combined with their exposure have higher expectations regarding what estates condition should be. Also, rank/position of the resident has a positive effect (0.0179) and significant at 5% (0.042) and the result implies that residents in the senior officer cadre are less satisfied than those in the junior officer cadre. This suggests that the higher residents climb in their professional status, the lesser their level of satisfaction. In addition, Length of stay is negative (-0.0015), though not significant (0.9449). On the whole, the study fails to accept the hypotheses that demographic characteristics of resident have no significant effect on resident's satisfaction. The study recommends that public housing policy should be innovative and respond to emerging trends in residents taste and preference.

**Keywords:** Resident demographics, Residents' satisfaction, Benin Metropolis.

#### INTRODUCTION

Housing evaluation is relevant to housing developments and developers as it provides the necessary information to improve the design and development of future housing projects (Preiser, 1989 & Preiser, 2008). In order to evaluate the performance of housing, a suitable indicator has to be developed. Amongst the various indicators developed, the concept of satisfaction has become the most widely used indicators to assess the performance of housing (Adriaanse, 2007; Kelleke & Berkoz, 2006; Paris & Kangari, 2005). As defined by (Djebarni & Al-Abed, 2000; Ogu, 2002), housing satisfaction refers to the degree of contentment experienced by a household with reference to the current housing situation. It is a noneconomic and normative quality evaluation approach to assess the quality of housing units. Households judge their housing conditions based on the actual housing situation and housing norms, and they are likely to express a high level of satisfaction with housing if the

households'current housing situation meets the norms. On the other hand, incongruence between housing situation and norms may result in a housing deficit, which in turn gives rise to housing dissatisfaction (Morris & Winter, 1975). According to Dimuna (2017) the concept of residents' satisfaction connotes that the housing needs of residents have been met and that they should be contented with their dwelling units. Dissatisfaction connotes that the residents are not contented. This could result in some residents desire to move out of their current residences; while some may wish to transform the dwelling units. Difficulties to realizing such desired transformation such as paucity of funds and resources or lack of alternatives due to planning restrictions could result in persistent unhappiness and disappointment (Dimuna, 2017).

Olotuah(1997); Ajanlekoko (2001); Mabogunje (2003); Dimuna (2017) had pointed out that the assessment of housing needs by various governments in Nigeria has concentrated on the number of dwelling units needed, while playing down on the importance of quality, users' tastes and satisfaction, of the would-be buyers/would-be residents. This results into failure to meeting the tastes, and satisfaction of buyers/would-be residents (Moughalu, 1986; Dimuna, 2017). In most cases, especially in Nigeria, public housing agencies and housing corporations do not even have a feedback from end-users (residents) of their perceptions of housing satisfaction in different housing estates provided. This is necessary in judging their performance (Ukoha & Beamish, 1997). It will also help improve on their capacity and thus enhance the quality of the public housing sub-sector. Consequently, looking into areas such as the determinants of housing satisfaction often help to explain why some households are more likely to be satisfied compared to others. Many researchers have developed housing satisfaction models and found varying assortment of determinants to be significant to housing satisfaction ranging from housing, demographic, to socio-economic variables. Assessing residents' satisfaction through the lens of residents' demographics opens up public and private housing policy discourse in developing economies. The focus of this study is to examine the impact of residents' demographics on housing satisfaction in public housing estates in Benin City, Edo State, Nigeria.

#### The Study Area

Benin City is the specific study area. Benin City is the capital of Edo State of Nigeria as well as the administrative headquarters of Oredo Local Government Area. It is one of the oldest and the largest cities in Nigeria. It is a pre-colonial city and its urban history dates back to the 7<sup>th</sup> century B.C. (The Columbia Encyclopaedia, 2007).

Geographically, Benin City, lies within the latitude  $6^020^1$  and  $6^031^1$  north and longitude  $5^032^1$  and  $5^041^1$  east of the Greenwich Meridian. The city covers a total land area about 112.5 square kilometres, and lies at about 18.64meters above sea level.

The Benin Metropolis comprises three local government areas – namely, Oredo, Egor and Ikpoba Okha, which make up the Benin Metropolis. Benin City is the most urbanized town in Edo State and seat of the State Government and the Oredo Local Government. These dual roles have attracted large number of people, mostly people employed by government establishments. As a result of these developments, there has been a rapid growth of large scale commercial and service establishments in the city, as well as some modern processing industries (Adegboyega, 2006; Aiworo, 2016). Rapid development has stretched the metropolis towards Oluku in Ovia North East and Eyaen in Uhumwunde Local Government Areas. However, this study is concerned with some public housing estates in Benin City and

covers Ikpoba Hill, Ugbowo, Oregbeni, Oluku, Andrew Wilson (Evboriaria) and Iyekogba Housing Estates as shown in Figure 1.

The Benin metropolis has been growing rapidly in population compared to other Nigerian cities. For example, the population rose from 53,753 as in 1952-1953 censuses to 100,694 in 1963. In the 1991 census, Benin had a population of 780,976 while in 2006 it rose to 1,085,676 with the male and female population put at 542,554 and 543,122 respectively (NPC, 2006). Based on 5.5% growth rate for urban centres (Aiworo, 2016), using the 2006 population census figure projected to 2018, estimated that the population of Benin City will be 2,070,537. As the metropolis continues to grow in population, so are the demands for housing.

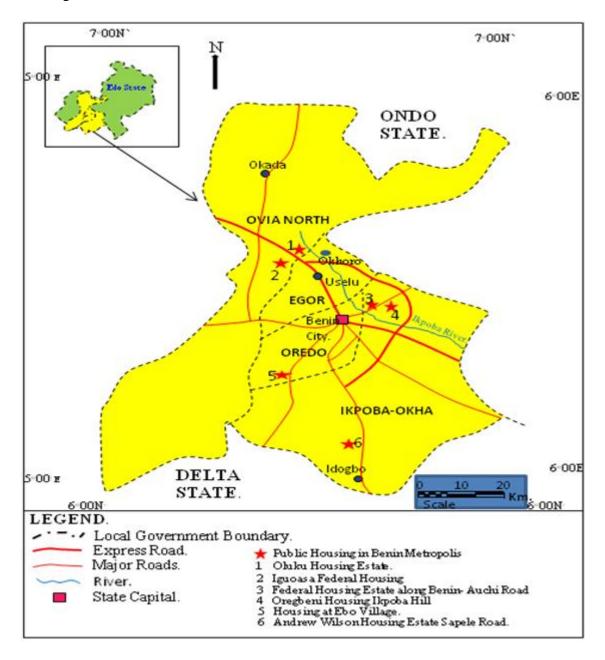


FIG. 1: LOCATION OF PUBLIC HOUSING IN BENIN CITY.

SOURCE: Cartography studio, A.A.U. Ekpoma, 2014

#### LITERATURE REVIEW

Generally, there is consensus among authors that satisfaction is the result of an evaluation process in which customers compare the performance of a product or service with their expectations (Parker & Mathews, 2001; Jaafar, Lalp,& Naba 2012). Mowen (1995; 2008) indicated that three main elements are common to most definitions of satisfaction. These are (i) a psychological state (ii) an emotional response after a consumption experience and (iii) the previous experience of the customer. Galster (1987) defined residential satisfaction, as "the perceived gap between a respondent's need and aspirations and reality of the current residential context". Mohit, Ibrahim, & Rashid (2010) on the other hand viewed residential satisfaction as a feeling of contentment when one has or achieves what one needs or desires in a house. Salleh (2008) noted that residential satisfaction has become a major and popular research topic in housing provisioning because it is recognized as important component of individual's quality of life and household's evaluation of residential environment which form the basis for policy and practice feedback for planners, architects, developers and policy makers. Residential housing satisfaction in the views of Olatubara & Fatoye (2006) is a manifestation of the extent to which the inhabitants of a residence believe that their housing facilitates the realization of their aspirations. The authors posit that it is a measure of the extent to which housing (quality) performance is meeting the residents expectation in terms of benefits and desires. The concept entails that the residents' desires and aspirations have been met and that the residents are contented in their residence. Dissatisfaction means that the occupants are not contented and the result of this would be the yearning to move or, possibly, to modify the dwelling unit.

Previous studies have shown that housing satisfaction is influenced by variables such as users' characteristics, dwelling unit characteristics, management, and environmental and location factors (Ajanlekoko, 2001; Nwaka, 2005; Akinmoladun & Oluwoye, 2007). In this particular study, the focus is on demographic factors of residents. In this regards, Parkes, Kearns & Atkinson (2002) found that younger age-groups were more likely to be dissatisfied with their neighbourhood. Among the individual and household characteristics, age shows a positive effect (Baum, Arthurson, & Rickson 2010; Chapman & Lombard, 2006; Pinquart & Burmedi, 2004) as older people tend to be more satisfied with their dwelling than do younger people, ceteris paribus. A study by Mohit et al. (2010), however, argued that age of the households is negatively related to housing satisfaction. Previous works by Adriaanse (2007) indicated that higher income households are generally satisfied with their housing. Frank & Enkawa (2009) explained that higher income enables households to move to a suitable house in an attractive neighborhood, which may result in a relatively higher level of satisfaction. Similarly, the higher the education level of the heads of the household, the more satisfied they are with their housing compared to household heads with lower educational attainment (Vera-Toscano & Ateca-Amestoy, 2008). However, Lu (1999) found that education appears to have insignificant effects on housing satisfaction. In contrast, Li & Wu, (2013). studying housing in China found that demographic characteristics of the respondents were not related to residential satisfaction except income. In Nigeria, Makinde (2015). studying Ikorodu lowcost housing estate in Lagos, showed that demographic factors such as gender, family size, length of stay, family size, religious beliefs and age are significant factors accounting for variations in satisfaction levels amongst respondents though household position and marital status did not show statistical significance.

# Methodology, Analytical Framework and Model Specification Methodology

Data were obtained from both primary and secondary sources. The primary sources of data were from observations, focus group discussions, and oral interviews, administration of structured questionnaires made during visits to the residents of the six Public Housing Estates. The study adopted the multiple case studies strategy in developing an understanding of the differences among the housing estates in the study areas as suggested by Yin (2008). The study examined six completed and occupied housing estates in Benin City, namely: (i) Federal Housing Estate, Ikpoba Hill, (ii) Iguosa Housing Estate, Oluku; (iii) EDPA Housing Estate, Ugbowo; (iv) Oregbeni Housing Estate; (v) Andrew Wilson Housing Estate, Evboriaria; and (iv) Iyekogba Housing Estate, Ebo. The fieldwork data were generated from structured and semi-structured questionnaires administered to the residents and other stakeholders. For this study, comprehensive data on residents' levels of satisfaction with public housing estate were required. Consequently, a field survey was carried out to obtain primary data. The data was obtained from visits to the six estates used as case study for the research. Basically, data collection was done using the random sampling technique. A total of 1200 copies of a questionnaire were administered to heads of households across the six (6) estates covered. However, the administration of the questionnaires was based on the number of housing units in each estate. All housing units in the estates covered were numbered and the housing units falling on the odd numbers were selected. A combination of statistical tools was used in the analysis of the data. A regression analysis was used to examine the determinant of residents' housing satisfaction and test the research hypothesis.

## **Analytical Framework and Model Specification**

Based on the prior literature, the analytical framework of the study is developed as several studies have shown that housing satisfaction is influenced by demographic variables (Ajanlekoko, 2001; Nwaka, 2005; Akinmoladun & Oluwoye, 2007; Parkes et al. 2002),

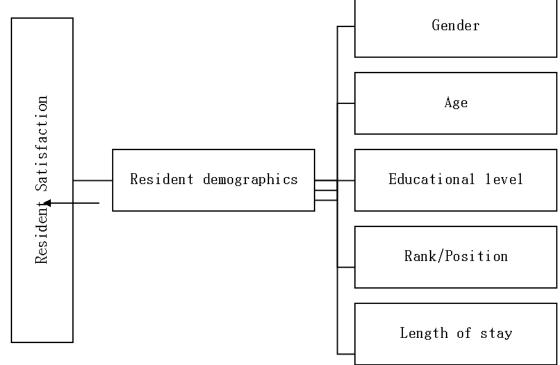


Figure 2: Analytical Framework

Source: Researcher's compilation (2018)

## **Model Specification**

 $RSI = \beta_{0+} \beta_{1} Gender_{ij} + \beta_{2} Age_{ij} + \beta_{3} Educational \ Level_{ij} + \beta_{4} \ Rank_{ij+} \beta_{5} Length \ of \ stay_{ij} + \mu_{ij}.$  Where:

RSI=Relative Satisfaction Index

In computing for the RSI which is the dependent variable for this study, Fatoye and Olatubara (2006) specified the formula as below;

$$RSI = \underbrace{ (5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1)}_{N}$$

The RSI is determined as the sum of the residents' actual score which can be termed as the mean average score.

Where:

RSI represent the Relative Satisfaction Index of a respondent.

n<sub>1</sub> is the number of criteria with very dissatisfied

n<sub>2</sub> is the number of criteria with dissatisfied

n<sub>3</sub> is the number with neither satisfied nor dissatisfied

n<sub>4</sub> is the number with satisfied

n<sub>5</sub> is the number of criteria with very satisfied

N is the number of questionnaires filled and collected in the area

Table .1 Variable Measurements

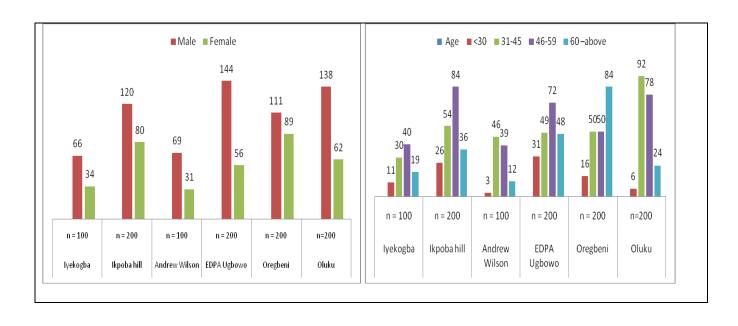
S/N	Variable Name	Code	Value labels/category	Value range	Measurement scale
A.	Demographic Characteristics of the Respondents				
1.	Gender	GEN	1. Male 2. Female	1-2	Nominal
2.	Age	AG	1. Under 30 yrs 2. 30-39 yrs 3. 40-49 yrs 4. 50-59 yrs 5. 60-69 yrs 6. 70 yrs and above		Interval
3.	Education	EDU	<ol> <li>First school leaving cert</li> <li>Secondary school cert</li> <li>Diploma/national cert</li> <li>University degree</li> <li>Post-graduate cert</li> </ol>	1-5	Ordinal
4.	Rank	RNK	<ol> <li>Junior officer</li> <li>Senior officer</li> <li>Director</li> </ol>	1-3	Ordinal
5.	Length of stay	LS	1. Less than 5 yrs 2. 5 – 10 yrs 3. 10 – 15 yrs 4. 15 – 20 yrs 5. 20 – 30 yrs 6. Over 30 yrs	1-6	Interval

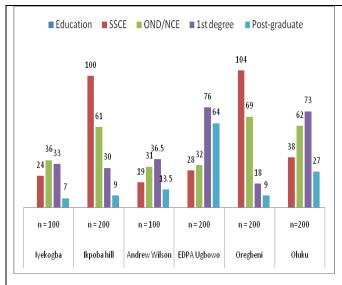
Source: Field Work (2018)

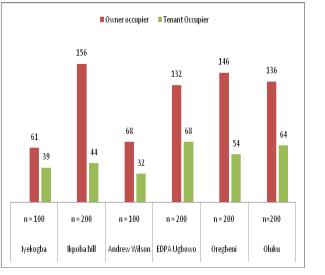
## **Presentation and Analysis of Result**

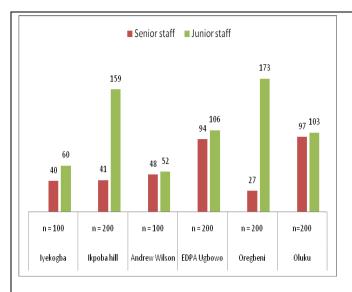
The Figure 2 shows the demographics of residents in the estates. As observed, the number of resident less than 30 years have the lowest representation across the following estates,

Iyekogba (11%), Ikpoba hill (13%), Andrew Wilson (3%), for EDPA (15.50%), Oregbeni (8%) and for Oluku (3%). Those between 31-45 years are more in Oluku estate (46%) and Andrew Wilson (46%). Residents between ages 60- above appear to be more in Oregbeni (42%) and followed by Ugbowo (24%). The educational qualification of resident in the estates, reveals that residents with 1st degree are highest for EDPA (38%). Residents with SSCE appear to be highest for Oregbeni (52%), followed by Ikpoba-hill (50%) incidentally, these estates are also part of the oldest. Residents with post-graduate degree appear to be highest for EDPA (32%). Also, data on the type of occupancy of residents showed that owner-occupier for Iyekogba (61%), Ikpoba hill (78%), Andrew Wilson (68%), for EDPA (66%), Oregbeni (73%) and for Oluku (68%) while for tenant-occupier the statistics are; Iyekogba (39%), Ikpoba hill (22%), Andrew Wilson (32%), for EDPA (34%), Oregbeni (27%) and for Oluku (32%). It is important to note however that though most of the housing units were allotted on an owner-occupier basis, most of the original owners have rented or leased these units to other individuals. Also, data on the type of rank/position of household heads in showed that Oluku (97%) has the highest number of senior staffs followed by EDPA (94%) while Oregbeni (86.5%) has the highest number of junior staffs residing there followed by Ikpoba hill (79.5%). Also, data on length of stay showed that Ikpoba-hill has the highest number of residents who have stayed the longest (56 %,> 15yrs) followed by Oregbeni (45%>15yrs).









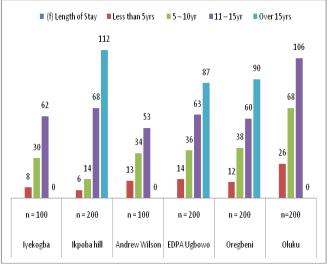


Figure 2: Residents' Demographics Source: Field Work (2018)

Table 2 shows the Relative Satisfaction Index (RSI) and Descriptive Statistics for the items. As observed, the RSI for Proximity to Religious Center (PRC) =2.61, Good Location of Building (GLB)= 2.782, Good Site Layout (GSL) =2.713, Good Access to Building (GAB) = 2.674, Availability of Parking Lots (APL) =2.774, Availability of Public Transport (APT)= 2.736, Play Area for Children (PAC)=2.9503, Closeness of Shopping Facilities (CSF)= 2.852, Landscaping (LSS)=2.15, Nearness to Health Facilities (NHF)=2.715, Good Site layout (GSL)= 2.718. From the statistics, the RSI index for the variables under estate design all fall between the unsatisfied regions [2-2.99]. The relative satisfaction index (RSI) for "Estate Durability" indicates the following; Floor Quality (FQ) =2.273, Roof Quality (RQ) =2.559, Wall Quality (WQ) =2.854 and General Material Quality (GMQ) = 3.079. From the statistics, the RSI index for the variables under estate durability all fall between the unsatisfied regions [2-2.99] except for GMQ. The relative satisfaction index (RSI) for "Estate Design" indicates the following; Toilet Condition (TC) =2.8621, Ventilation (VT) =1.835, Bathroom size (BS) =2.4164, Kitchen Size (KS) =2.657, Adequacy of Room (AR) =2.81,

Room size (RM) =2.817, Suitability of Foundation (SF) =2.9257, Size of the living room and (SLR) = 2.8515. Again from the statistics, the RSI index for the variables under estate design all fall between the fairly satisfied regions [2-2.99] except for VT. The relative satisfaction index (RSI) and MAS for "Estate building features" indicates the following; Ceiling Condition (CC) ={2.87}, Storage Facilities Condition (SFC) = {2.6472}, Water Closet Condition(WCC)={2.8037}, Exit Door Condition(EDC)= {2.8037}, Finishing of Building(GFB) = {2.6578}, Painting of Building (PTB)={2.872}, Visual Aesthetic (VA) ={2.6472}, Ceiling Condition (CEL)={2.8037}, Door Condition (DC)={2.8037} and Windows Condition(WC) = {2.6578}. Again from the statistics, the RSI index for the variables under estate design all fall between the fairly satisfied regions [2-2.99].

The Relative Satisfaction Index (RSI) for "Estate environment" indicates the following; Allocation for Recreation Centre (RCT) = {2.8037}, Condition of Overcrowding (CO)={2.8037, 2.891) Refuse Disposal (RD) = {2.6578}, Level of Noise Pollution (NNP)= {2.8037}, Clean Kept Surrounding (CKS)={2.8037}, No Air Pollution (NAP)= {2.6578}, Cleanness of Building (CLB)= {2.8037}, Erosion Effect (EE) = {2.8037} and Quality of Water (QW)= {2.6578}. Just as is the case for the others the statistics from the RSI index for the variables under estate design all fall between the fairly satisfied region [2-2.99] except for VT which falls under the fairly satisfied region. Thus, RSI average suggests that the estate occupants are unsatisfied with the Estate building features. The value of Cronbach's alpha ranges between 0 and 1 and the higher the value the higher the internal consistency between the scale items. Nunnally (1979) and Nunnally and Bernstein (1994) have recommended 0.7 as a satisfactory measure of internal consistency. As observed the Cronbach alpha for all the variables are above 0.70 and this confirms the reliability of the concepts and that they indeed measure what was intended in the study.

Table 2: Aggregate Relative satisfaction index scores and Descriptive statistics

RSI	MS Mean Score	Standard Error	Standard deviaton	Normality Test	Cronbach Alpha
					0.986
2.61	3.39	0.02232	0.70597	33.77	
2.782	3.218	0.03267	1.03322	53.07	
2.713	3.287	0.03098	0.97959	69.28	
2.674	3.326	0.03047	0.96367	83.63	
2.774	3.213	0.03697	1.16919	93.47	
2.736	3.226	0.03347	1.05832	100	
2.950	3.264	0.03045	0.96293	38.353	
2.852	3.285	0.0307	0.97094	55.924	
2.15	3.85	0.01969	0.62281	70.188	
2.715	3.148	0.02951	0.93326	81.126	
2.718	3.05	0.03673	1.1614	91.488	
					0.963
2.273	3.451	0.03073	0.97188	33.77	
2.559	2.15	0.03859	1.22024	53.07	
	2.61 2.782 2.713 2.674 2.774 2.736 2.950 2.852 2.15 2.715 2.718	2.61     3.39       2.782     3.218       2.713     3.287       2.674     3.326       2.774     3.213       2.736     3.226       2.950     3.264       2.852     3.285       2.15     3.85       2.715     3.148       2.718     3.05       2.273     3.451	2.61     3.39     0.02232       2.782     3.218     0.03267       2.713     3.287     0.03098       2.674     3.326     0.03047       2.774     3.213     0.03697       2.736     3.226     0.03347       2.950     3.264     0.03045       2.852     3.285     0.0307       2.15     3.85     0.01969       2.715     3.148     0.02951       2.718     3.05     0.03673       2.273     3.451     0.03073	Error       deviaton         2.61       3.39       0.02232       0.70597         2.782       3.218       0.03267       1.03322         2.713       3.287       0.03098       0.97959         2.674       3.326       0.03047       0.96367         2.774       3.213       0.03697       1.16919         2.736       3.226       0.03347       1.05832         2.950       3.264       0.03045       0.96293         2.852       3.285       0.0307       0.97094         2.15       3.85       0.01969       0.62281         2.715       3.148       0.02951       0.93326         2.718       3.05       0.03673       1.1614         2.273       3.451       0.03073       0.97188	Error deviaton Test  2.61 3.39 0.02232 0.70597 33.77  2.782 3.218 0.03267 1.03322 53.07  2.713 3.287 0.03098 0.97959 69.28  2.674 3.326 0.03047 0.96367 83.63  2.774 3.213 0.03697 1.16919 93.47  2.736 3.226 0.03347 1.05832 100  2.950 3.264 0.03045 0.96293 38.353  2.852 3.285 0.0307 0.97094 55.924  2.15 3.85 0.01969 0.62281 70.188  2.715 3.148 0.02951 0.93326 81.126  2.718 3.05 0.03673 1.1614 91.488  2.273 3.451 0.03073 0.97188 33.77

Wall Quality (WQ)	2.854	1.992	0.03402	1.07568	69.28	
General Material Quality (GMQ)	3.079	3.85	0.01969	0.62281	83.63	
Satisfaction with Estate design						0.970
						0.570
Toilet condition (TC)	2.8621	1.832	0.03116	0.98526	36.63	
Ventilation (VT)	1.8355	3.451	0.03073	0.97188	57.564	
Bathroom size (BS)	2.4164	2.15	0.03859	1.22024	73.324	
Kitchen Size (KS)	2.6578	1.992	0.03402	1.07568	88.306	
Adequacy of room (AR)	2.817	3.85	0.01969	0.62281	100	
Room size (RM)	2.817	1.75	0.03238	1.02399	100	
Suitability of foundation (SF)	2.9257	1.806	0.03349	1.059	25.779	
Size of the living room (SLR)	2.8515	1.924	0.03129	0.98955	55.876	
Satisfaction with Estate Building Features						0.943
Ceiling condition(CC)	2.87	3.325	0.03347	1.05853	73.906	
Storage facilities condition(SFC)	2.6472	2.499	0.02688	0.85013	81.417	
Water closet condition(WCC)	2.8037	2.507	0.02762	0.87333	87.925	
Exit door condition(EDC)	2.8037	3.85	0.01969	0.62281	94.384	
Finishing of building(GFB)	2.6578	2.726	0.02956	0.93477	100	
Painting of building (PTB)	2.87	2.433	0.02829	0.8946	73.906	
Visual aesthetic (VA)	2.6472	2.946	0.03082	0.9747	81.417	
Ceiling/electronic discharge (CEL)	2.8037	3.148	0.03129	0.98948	87.925	
Door condition (DC)	2.8037	2.763	0.02887	0.91305	94.384	
Windows condition(WC)	2.6578	2.656	0.02899	0.91679	100	
Floor easily cleanses resistant and	2.87	2.587	0.02496	0.78934	73.906	
resilient (FL) Satisfaction with Estate environment						0.901
Allocation for Recreation Centre(RCT)	2.8037	2.373	0.02851	0.90149	87.925	
Condition of Overcrowding(CO)	2.8037	2.891	0.03076	0.97266	94.384	
Refuse disposal (ENV)	2.6578	3.144	0.0307	0.97067	92.43	
Condition of noise pollution(NNP)	2.8037	3.085	0.03339	1.05588	87.925	
-						
Clean kept surrounding (CKS)	2.8037	2.856	0.03063	0.96861	94.384	
No air pollution (NAP)	2.6578	3.85	0.01969	0.62281	74.403	
Cleanness of building (CLB)	2.8037	2.946	0.03082	0.9747	87.925	
Erosion effect(EE)	2.8037	2.906	0.0302	0.95503	94.384	
Quality of water (QW)	2.6578	2.476	0.02676	0.84625	64.54	

Source: Field Survey (2018).

Discussing the effects of demographic factors on residents' satisfaction, the categorical regression results table 3 has an  $R^2$  value of 0.679 which indicates that the model explains

about 67.9% of systematic variations in resident's satisfaction with an adjusted value of 62.3%. The F-stat is significant (p=0.000) at 5% and this supports the existence of a significant linear functional form relationship between the variables. Specifically, the study reveals that Gender is negative though not significant (-0.0016, p=0.9559) which suggest that gender of resident has no significant effect on the level of satisfaction. Age is positive (12.712), though not significant at 5% (p=0.511) and this implies that the residents' age did not show any significant influence on the satisfaction. However, level of Education is positive (0.0099) and significant (p=0.000) at 5% which implies that the level of education of residents can influence their satisfaction levels. More educated individuals combined with their exposure have higher expectations regarding what estates condition should be. Also, rank/position of the resident has a positive effect (0.0179) and significant at 5% (0.042) and the result implies that residents in the senior officer cadre are less satisfied than those in the junior officer cadre. This suggests that the higher residents climb in their professional status, the lesser their level of satisfaction. In addition, Length of stay is negative (-0.0015), though not significant (0.9449). On the whole, the study fails to accept the hypotheses that demographic characteristics of resident have no significant effect on resident's satisfaction. The findings of the study are in tandem with others (Ajanlekoko, 2001; Nwaka, 2005; Akinmoladun & Oluwoye, 2007). In relation to the coefficient sign, the finding is consistent with those that found a positive relationship for age such as Parkes et al. (2002), Baum et al., (2010) Chapman and Lombard, (2006) Pinquart & Burmedi, (2004). This though is in contrast with Mohit et al. (2010). The result for education is also is consistent Vera-Toscano & Ateca-Amestoy, (2008) though in contrast with Lu (1999)

**Table 3: Regression Results** 

Variable	Coefficient		
	Standard error { }		
	p-value ( )		
C	12.712**		
	{6.482}		
	(0.0511)		
Gender	-0.0016		
	{0.029}		
	(0.9559)		
Age	12.712		
	{6.482}		
	(0.511)		
Education	0.0099*		
	{0.0023}		
	(0.000)		
Rank	0.0179*		
	{0.0087}		
	(0.042)		
Length of stay	-0.0015		
	{0.027}		
	(0.9449)		
$\mathbb{R}^2$	0.679		
Adj R <sup>2</sup>	0.623		
F-stat	16.045		
P(f-stat)	0.00		

Source: SPSS, 20.0 \* indicates sig @ 5%. { } standard errors, ( ) p-values

### CONCLUSION AND RECOMMENDATION

This study examines the residents' demographics and its impact on satisfaction level in six built and occupied housing estates in Benin City, Edo state, Nigeria. Data were collected in 2018 from six (6) housing estates namely: Oluku Housing Estate, EDPA Housing Estates Ugbowo, Federal Housing Estate, Oregbeni, and Federal Housing Estate on Ikpoba Hill, Iyekogba Housing Estate, Ebo and Andrew -Wilson Housing Estate, Evbuoriaria.; through administration of structure questionnaires, interviews and direct observations. Descriptive statistical tools such as means, standard deviations, and categorical regression analysis were utilized for the data analysis. The result showed that Gender is negative though not significant (-0.0016, p=0.9559) which suggest that gender of resident has no significant effect on the level of satisfaction. Age is positive (12.712), though not significant at 5% (p=0.511). However, level of Education is positive (0.0099) and significant (p=0.000) at 5% which implies that the level of education of residents can influence their satisfaction levels. More educated individuals combined with their exposure have higher expectations regarding what estates condition should be. Also, rank/position of the resident has a positive effect (0.0179) and significant at 5% (0.042) and the result implies that residents in the senior officer cadre are less satisfied than those in the junior officer cadre. This suggests that the higher residents climb in their professional status, the lesser their level of satisfaction. In addition, Length of stay is negative (-0.0015), though not significant (0.9449). The study concludes that residents' demographics affect the level of their satisfaction. The recommendation is that both public and private housing developers should pay attention to house designs that capture differences in life cycle patterns of housing consumption of households as meeting individuals' and family's needs are critical to households who wish to stay in their houses for a long time.

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