

Residents' Satisfaction with Security in Public Housing in Lagos, Nigeria: The Gender Perspective

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Abstract: Public housing is a form of housing delivery that depends on the use of public resources. However, the nature of such housing schemes, in terms of design, planning and locations could create security challenges within and around the neighbourhoods where they are located. In such a situation, women are presumed to be more vulnerable to security challenges than their men counterparts. Therefore, the key research question this study sought to address was: How does the satisfaction with the level of security within public housing environment vary amongst female and male residents? To address this question, a questionnaire survey of residents of 1036 residents in 14 mass housing estates developed in Lagos Metropolis, Nigeria by the Lagos State Development and Property Corporation (LSDPC) was conducted. The data were analysed using simple descriptive statistics and ANOVA, and it was that more female than male residents expressed satisfaction with general security of lives and property in the housing estates. It was also observed that a higher percentage of the male than the female residents were satisfied with security at most of locations within the housing estates. Although the highest proportions of the male and female respondents were satisfied with security within their apartments, the least proportion of the male and female respondents were satisfied with security at refuse dump sites and drinking spots, respectively. Difference in satisfaction with security at drinking spots between the male and female residents was found to be statically significant. This study implies that the sense of security among the male and female population in the same home environment varies, and thus there is a need for public housing developers to understand areas to strengthen to improve the sense of security of both male and female residents.

Keywords: Gender, Public housing, Satisfaction, Security

I. INTRODUCTION

Housing is generally regarded as a basic need of man after food. It is regarded not only as shelter; rather it also plays several socio-economic and cultural roles in the society. In addition, housing is a form of investment that provides shelter, privacy and also enhances one's socio-cultural status in the society [27]. Every person within a community is in need of shelter and this need creates housing deficits within the community.

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Consequently, governments of different countries seek to provide housing for their citizens via the provision of public housing using the tax payers' money to fund the projects. In as much as government participation in the provision of housing, at least for the less privileged in the society, there are yet many problems associated with public housing as explained by [2]; [18]. One of such problems is security of lives and property within public housing. This could be attributed to the nature, types, number and the population of residents of the housing schemes. [18], [33] and [14] identified security as a vital aspect of adequate housing provisions and the absence of security could lead to social problems and political instability in a society. The lack of security in public spaces is presumed to have more effect on the female gender as explained in the study conducted in Delhi, India by [36] where it was found that security amongst women is one of the key problems facing the city today. Moreover, it is argued that the deteriorating housing and living conditions of residents in the urban areas, has partly contributed to security challenges within the home environment, including public housing estates. The inability of authorities as well as residents to curb the growing insecurity challenges within neighbourhoods has the capacity to undermine social and economic activities in the society. According to [30], the fear of crime has the tendency to restrict the movement of people and prevent them from taking part in several community activities. Also, as explained by [18] home environment needs to be planned, designed, constructed, and managed in such a way that it protects the residents from dangerous insects, animals, and human intruders. This explains the need for safe and secured residential neighbourhoods as one of the growing concerns to scholars, researchers and policy makers as noted by various authors [32]; [31] and [21]. It is however noteworthy that having a secured residential environment may not be possible if there is no adequate understanding of the differences in sense of security between male and female residents in the community. Although, there has been several attempts by researchers to investigate how to enhance the security of lives and property within the residential environment where people spend greater part of their lives in, there is scarcity of research on the differences between how the male and female population perceive and understand security issues.

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It was in a bid to bridge this research gap, that this study set out to examine how the residents' satisfaction with security in public housing estates varies by gender using the Lagos State Development and Property Corporation (LSDPC) housing estates in Lagos Metropolis, Nigeria as case studies. This study makes contribution by revealing the variations between the perception of male and female of the security situation of their places of abode. It also identifies aspects of public housing development that requires more attention to improve the sense of security of both gender in mass housing provisioning in Nigeria.

II. CONTEXT OF THE STUDY

Lagos State South-west, Nigeria was created on 27th May, 1967. It has a landmass of 3,475.1/km² (1,341.7/sqm) and a population density of 2,593.7/km² (6,717.8/sqm). It has the smallest landmass of Nigeria's 36 States, but it is the nation's largest urban area, and the 'economic capital' of the West African sub-region [20]. Modernization of Lagos especially in the built environment was greatly influenced by the returnee ex-slaves from Freetown, Sierra Leone, Brazil and the West Indies. This contributed to the diffusion of Portuguese architecture as seen in Lagos Island even up till today[20]. Lagos State is made up of Lagos Island and Lagos Mainland. The Mainland district includes Ebute-Meta, Surulere, Yaba and Ikeja. The Island district comprises Lagos Island (Ikoyi and Iddo inclusive) and Victoria Island. [20] indicated the population of Lagos State to be 17, 552, 94 as at 2013. Lagos State comprises of the Metropolitan and the rural areas. Metropolitan Lagos consists of the 16 Local Government Areas shown in Figure I. Ikorodu, Badagry, Epe and Ibeju-Lekki are within the State but not part of the Metropolitan Lagos. Table 1 also shows all the 16 LGAs of Metropolitan Lagos as at 2013. Some of the existing 16 LGAs were latter divided into Local Council Development Areas (LCDAs) for better administration due to their sizes.

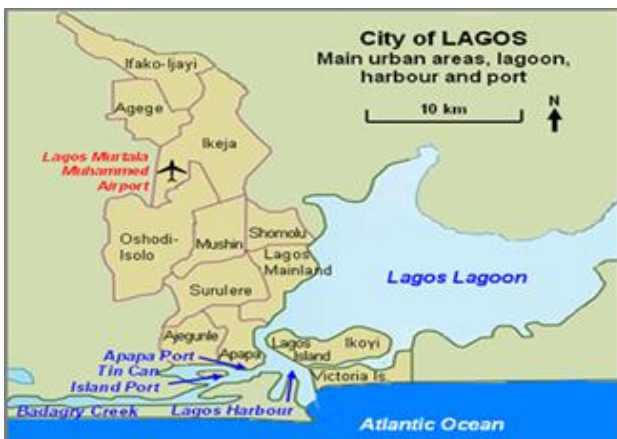


Figure 1: Map of Lagos Metropolis

Source: [20]

Table I shows LGAs by population density as at 2013. It can be seen from the data displayed in Table I that the LGA with the highest population density is Ajeromi-Ifelodun, followed by Agege, Mushin, and Somolu, respectively, while the least is Eti-Osa.

Table I: The 16 Local Government Areas (LGAs) of Metropolitan Lagos by land Areas, Population, and Population Density.

Local Government Area	Land area (in km ²)	Population (2006 Census)	Density (inch. per km ²)
Ajeromi-Ifelodun	12.3	684,105	55,474
Agege	11.2	459,939	41,071
Mushin	17.5	633,009	36,213
Somolu	11.6	402,673	34,862
Lagos Island	8.7	209,437	24,182
Surulere	23.0	503,975	21,912
Lagos Mainland	19.5	317,720	16,322
Ifako-Ijaiye	26.6	427,878	16,078
Oshodi-Isolo	44.8	621,509	13,886
Kosofe	81.4	665,393	8,174
Apapa	26.7	217,362	8,153
Alimosho	185.2	1,277,714	6,899
Ikeja	46.2	313,196	6,785
Ojo	158.2	598,071	3,781
Amuwo-Odofin	134.6	318,166	2,364
Eti-Osa	192.3	287,785	1,496

Source: [20]

The history of housing development by the LSDPC started with the merger of the now defected Lagos Executive Development Board (LEDB), Ikeja Area Planning Authority (IAPA) and Epe Town Planning Authority (ETPA) to form LSDPC in 1972. Giving the responsibility to essentially build prototype multifamily apartments, which are spread across various locations within Lagos State. In addition to this, high rental accommodation for both the medium income and upper medium income groups were also developed (Adebayo and Iweka, 2013).

III. LITERATURE REVIEW

A. Security and Defensible Space in Public Housing environment

Public housing is described as a type of housing development that depends on the use of public funds in the provision of housing and associated services and facilities to the citizens. The houses are sometimes owned by government authority that constructed it, in form of social housing or are sold to the public out rightly. It could also belong to and managed by the government or a non-profit organization or a combination of both.

[16] referred to public housing as government provided or subsidized housing projects, which presumes the inability of the private sector to fully meet the housing needs of the entire citizenry, especially the low-income group. Public housing is also called “social housing” or “state-housing” in the UK and “welfare housing” in the US [12].

The challenge of security in public housing has been in existence for many years in different countries [38]. This is however more pronounced in the developing country such as Nigeria. [26] specifically noted that the issue with public housing is global, but it is more pronounced in developing countries like Nigeria. There is a perception that crime is part of public housing, and that there is always an association between public housing and crime as presented by [23] in the study of Pruitt-Igoe housing development in St. Louis, USA. Following from this, Newman recommended the clean up the physical environment of public housing with emphasis on the role of social programme for residents of public housing [29].

A common criticism levelled against public housing schemes is the issue of having high concentration poverty, specifically more in inner-city neighbourhoods [22]; [7]; [9]. Also, [11] argued that subsidising rental housing development by governments for Low-Income Housing Tax Credit (LIHTC) programmes has impact on local crime; insisting that low-income housing development and the associated revitalisation programmes in violent crime should be carried out at the country level.

There is also the suggestion that the physical design of low-income housing, such as high-density public housing, may foster criminal activities within the neighbourhood

[23], [11], suggested that the age of houses and the deterioration of the physical environment may directly encourage criminal behaviour, while dilapidated and unkempt structures may either indicate that more serious criminal behaviour is tolerated in an area or suggest that the probability of being apprehended for unlawful acts is low. [37] were of the view that broken windows, trash, unchecked manhandling and other signs of neglect create an environment in which serious crime can and will flourish.

Ensuring security within public housing is very essential for improve quality of housing and sustainable development. It has been argued that the traditional policing methods cannot effectively deal with the issue of security in public housing on their own [29]; [35]. However, [29] had put forward a problem-solving approach to check crime in public housing based on the success recorded in selected housing developments in Philadelphia and Jersey City in the USA, where health codes were aggressively enforced and city ordinances were used to assuage drugs and incivilities. Although previous studies have advocated extending the responsibility for crime control outside the scope of law enforcement agents and relying on people such as citizen groups, property owners and municipal agencies, who are the third parties ([10]; [6] and [29]), the current trend is the use of environmental design and planning strategies to create defensible space, which can help to improve the level of security of lives and property in residential environment.

B. Gender and Security in the Built Environment

Gender, according to [19], is defined as the socially and culturally construction characteristics of women and men.

The relationship between them varies across time and places as the concept is not just a distinct from sex, what men and women are biologically, but an ideological and material relationship between men and women. The [34] defined gender to be the social and cultural interpretations and values that is assigned to being a woman or man. This are sustained by many structures such as the community, the society, family and ethnicity and through tools such as education, culture, media, language and religion. This implies that gender is an analytical concept that describes the social relationships between women and men.

A peculiar attention has been drawn to the issue of gender consideration in security in housing. This is based on the differences in gendered behaviours, bias and learning presumed to have effect on the perception of security of the individual. According to the study by [28], consideration of gender in security management is concerned about gaining insight into the priorities of female and male in carrying out their individual functions. The study explained that gendered approach to security involves reconciling both the internal and external contexts of an individual, the effect of external contexts such as cultural, political, historical on the overall level of security faced by individuals, which impacts on their emotion, level of fear, repression, and sense of insecurity as well as embarrassment and injustices in the society.

Women are face with vast challenges in form of security threats, violence, lack of education and employment opportunities, which are all forms of limitation to their opportunities in life. Gender-based violence compromises women’s accessibilities to having adequate housing and one major global human rights crisis in terms of gender equality is seen in women’s inability to having right to control, own and access housing, property and land on their own terms [34]. In fact, in a study of Afghan rural women’s perception of local conflicts resolution and the main security challenges they face, [19] revealed that women in that country are confronted with security challenges such as treats from armed conflict, cultural challenges, discrimination, terror attacks, violent conflicts, ethnic conflicts, unemployment, kidnapping, oppression, robbery, domestic violence, economic hardship and lack of education.

There is an increasing need for gender sensitive development initiatives as explained by [13], especially in regard to housing adequacy and adequate housing, including security in housing, which is a fundamental human right [34]. However, housing satisfaction varies by gender, age and economic status as explained by [13]. The authors explained that housing needs of individuals should be specific and based on individuals, in line with their age, sex, economic status, culture, religion and most importantly, their gender. Therefore, there is need to have gender sensitive development policies and programmes that would encourage and promote gender equality and equal opportunities for men and women. In order to achieve this, studies on how women are affected and satisfied with security within their environment is necessary.

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C. Housing and Crime Records in Lagos State

The National Crime and Safety Survey of 2012 by [18] and [5] revealed that about 67% of Lagos residents claimed that they were afraid of becoming a victim of crime, while 23% indicated that they have experienced crime in the last one year. The general perception is that crime has increased in Lagos State from 12% in 2012 to 21% in 2015, with robbery and theft of property accounting for around 28% and 21%, respectively. Also, about 47% of the residents think that crime in the Lagos State are more likely to be committed by people born and living in Lagos, while 33% think criminal activities are committed by people born outside but live in this State. Lagos recorded the highest (38%) in assaults compared to other States in Southwest geopolitical zone of Nigeria. This shows an increase of between 11% and 38% from 2011 to 2012. The study by [5] revealed that most crimes are committed within residential neighbourhoods of the State. Table 2 shows people's perception of crime rate in Lagos as reported by [24]. It can be seen from Table 2 a high proportion (82.69%). Top on the list of issues of concern are the problem of corruption and bribery (90.52%) followed by issues of violent crimes such as assault and armed robbery of residents (81.03%) and worries about being mugged or robbed (78.7%) and the least being concerns of being subject to a physical attack because of your skin colour, ethnic origin or religion (62.5%).

Table II: Fear of Crime Rating in Lagos 2013-2015

Crime related concerns among residents of Lagos	Percentage	Rating
The problem of corruption and bribery	90.52	Very High
Level of crime	82.69	Very High
The problem of violent crimes such as assault and armed robbery	81.03	Very High
Worries about being mugged or robbed	78.70	High rate
The problem of property crimes such as vandalism and theft	75.89	High rate
Worries about things from car stolen	75.00	High rate
Worries about home broken and things stolen	74.14	High rate
The problem of people using or dealing drugs	73.21	High rate
Worries about car stolen	72.41	High rate
Worries about being attacked	70.83	High rate
Crime increasing in the past 3 years	70.69	High rate
Worries about being insulted	68.75	High rate
Worries about being subject to a physical attack because of your skin colour, ethnic origin or religion	62.50	High rate

Source: [24]

Table III is display of Crime Index and Safety Rates in Lagos from 2013 to 2015 as reported by[24]. He data in Table III shows that the crime index and safety index of Lagos between 2013 and 2015, where put at 75% and 25% respectively. These figures suggest there is a high perception of insecurity amongst residents of Lagos State. This is well expected because according to [25], Lagos State has the highest crime rate in Southern Nigeria.

Table III: Crime Index and Safety Rates in Lagos 2013-2015

Index	
Crime Index:	75.0
	0
Safety Index:	25.0
	0
Safety walking alone during daylight	39.2 9
	Low
Safety walking alone during night	19.8 3
	Very Low

Source: [24]

In a survey of residents' perception and fear of crime and policing in public housing environment, carried out by [4], it was reported that Lagos State ranked high as one of the states with the highest crime rates in Nigeria. Specifically, it is found that, of the one percent of Lagos residents who possess firearms, 74.2% of them gave personal protection as their rational for its possession. Based on this, the authors suggested that to reduce the increasing fear of becoming a victim of crime in Lagos State, there was a need to strengthen community partnership with the police to facilitate cooperation and communication between local police and the community.

From the review of literature it is shown that crime and the fear of crime are one of the major issue of concern amongst residents of Lagos States. This is probably because Lagos State is the most populated metropolitan area in Nigeria and the West African sub-Region. Although studies as reviewed here have attempted to investigate the perception of Lagos residents of crime, most of these studies did not segregate the views of men from those of women folks. As a result, there is little understanding of how men and women perceive crime within their environment differs. This is the gap this study attempt to fill using public housing environment in Metropolitan Lagos as case study.

IV RESEARCH METHODS

The data presented in this paper were drawn from a bigger research project designed to assess defensible space and security in public housing in Lagos State, Nigeria. The research design was a cross-sectional survey involving residents of selected Lagos State Development and Property Cooperation (LSDPC) constructed housing estates developed between 1979 and 1992 in Lagos metropolis.



The participants were household heads or their adult representatives in the selected estates. This study surveyed 14 housing estates in 12 different locations in the study area. As at the time the survey was conducted, the total number of housing units was 14,560 comprising 13,644 units in low-cost housing estates and 916 housing units in the medium income estates [17]; [18]. The sample size for the survey was estimated using the [39]

$$\text{formula for finite population, given as } n = \frac{N}{1+N(e^2)}$$

Where n= the sample size, e = the level precision of ±3% at confidence level 97%, the sample size obtained was 1036 housing units. Several authors[15]; [18]; [3] have used this formula to determine the sample sizes in their respective surveys. The sample size obtained was 1036 housing units and the distribution of the sample size across the 14 housing estates sampled is shown in Table 4.

The data gathering instrument used for this study was structured questionnaire designed by the researchers. Although the instrument had several sections, the data presented here were collected using two sections of the questionnaire. The first section was used to collect data that included the socio-economic and demographic characteristics of the residents, who were the respondents.

Table IV: The Number of Housing Units and Sample size in each Housing Estate

S/N	Location of estates	No of Housing Units and Households (N=14,560)	Percentage of the total population sampled	Sample size for each estate (housing units)
1	Abesan	4,272	29.3	299
2	Amuwo-Odofin	2,068	14.2	144
3	Dairy farm/Ijaiye	708	4.8	52
4	Dolphin/Ikoyi	576	3.9	40
5	Iponri	1,026	7.0	72
6	Isolo	3664	25.1	257
7	Ojokoro	534	3.6	41
8	Ijaiye / Ogba Phase II	824	5.6	65
9	Opebi/Mary land	120	0.8	8
10	Ebute-Meta	528	3.6	41
11	Alapere	140	0.9	10
12	Omole	100	0.6	7
Total		14,560	100	1036

Data were collected on the following variables, age, gender, income level, marital and employment status, level of education, length of stay in the estate and reason for staying in the estate. The second section of the questionnaire contains questions on the respondents' satisfaction with security of lives and property in the different parts of the estates based on 5- point Likert type scale beginning from 1 for "Very Dissatisfied" to 5 for "Very Satisfied" and None Response was coded '0' However in interpreting the result, 3-point Likert scale framework ranging from 1 for Dissatisfied, '2' for Uncertain to '3' for Satisfied was adopted as shown in Table 6. In gathering data the level of satisfaction, the residents were asked to rate their levels of satisfaction with security within the apartment; building and surrounding space; streets and walkways; at social gathering and events; religious gatherings; shopping, recreation and

educational facilities. Others are satisfaction with security at drinking spots, refuse dump sites, parking lots and public water supply points within the estates. The survey, which took place between April and July 2016 in the study area, involved the administration of the questionnaire to and retrieval of same from the respondents. A sample random sampling method was used in selecting household heads or their adult respondents in each of the dwelling units in the estates. A copy of the questionnaire was administered to and retrieved from the household by hand. All the 1,036 copies of questionnaires administered by the researchers and trained field assistants were retrieved and found useful. The data were analysed using the Statistical Package for Social Sciences (SPSS) software. Descriptive statistics were the principle type of analysis the data were subjected to. These were used in the computation of frequencies and percentages of the distribution of the respondents across the different socio-economic and demographic characteristics and their levels of satisfaction with security at the different points in the housing estates. In addition, the analysis of variance (ANOVA) was used to investigate the level at which the difference in satisfaction with security of lives and property in the estates amongst the male and female respondents are statistically significance. The results are presented using tables as shown in the next section of this paper.

V. RESULTS AND DISCUSSION

A. Residents socio-economic characteristics

Table V shows the result of the analysis of the socio-economic characteristics of the respondents in the survey.

Table V: Socio-economic Characteristics of the Respondents

Variable	Categories	Male	Female
Age groups of respondents	20-30	161 (30.3)	158 (33.2)
	31-40	140 (26.3)	157 (33.0)
	41-50	90 (16.9)	75 (15.8)
	51-60	55 (10.3)	35 (7.4)
	Above 60	64 (12.0)	38 (8.0)
Marital status of respondents	No response	22 (4.1)	13 (2.7)
	Single	205 (38.5)	152 (31.9)
	Married	286 (53.8)	270 (56.7)
	Widow/widower	19 (3.6)	35 (7.4)
Level of education	Separated	9 (1.7)	11 (2.3)
	No response	13 (2.4)	8 (1.7)
	No education	4 (0.8)	8 (1.7)
	Primary	12 (2.3)	10 (2.1)
Employment status	WASC/GCE/O'LEVEL	81 (51.2)	81 (17.0)
	OND/NCE/A' LEVEL/HND/B.Sc	320 (60.2)	311 (65.3)
	Masters degree/Ph.D	101 (19.0)	58 (12.2)
	No response	14 (2.6)	8 (1.7)
Income level	Unemployed	81 (15.2)	67 (14.1)
	Self employed	199 (37.4)	216 (45.4)
	Public sector/civil servant	54 (10.2)	47 (9.9)
	Private sector	111 (20.9)	76 (16.0)
	Retired	49 (9.2)	34 (7.1)
	Others	13 (2.4)	11 (2.3)
	No response	25 (4.7)	25 (5.3)
Length of stay in the estate in the estate	Below 18,000	73 (13.7)	71 (14.9)
	18,000-62,000	144 (27.1)	156 (32.8)
	63,000-102,000	93 (17.5)	70 (14.7)
	103,000-142,000	34 (6.4)	37 (7.8)
	143,000 above	93 (17.5)	43 (9.0)
	No response	95 (17.9)	99 (20.8)
Reason for staying in the estate	less than 1 year	27 (5.1)	29 (6.1)
	Between 1-5 years	107 (20.1)	119 (25.0)
	Between 6-10 years	92 (17.3)	102 (21.4)
	Between 11-15 years	87 (16.4)	56 (11.8)
	above 15 years	208 (39.1)	164 (34.5)
	No response	11 (2.1)	6 (1.3)
Reason for staying in the estate	Good location	178 (33.5)	150 (31.5)
	Security of estate	98 (18.4)	111 (23.3)
	Nearest to basic amenities	40 (7.5)	45 (9.5)
	Affordable housing	118 (22.2)	97 (20.4)
	Others	53 (10.0)	31 (6.5)
	No response	45 (8.5)	42 (8.8)



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From the results in Table V revealed that 532(51.35%) of the respondents are male while 504(48.65%) are female and majority of them were within the age brackets of 20-40 years and a large number of them are married, having an higher form of degree education (OND/NCE/A' LEVEL/HND/B.Sc.). The results also shows that very few of the respondents were unemployed and many of those employed earned above ₦18, 000.00, which is the minimum wage in Nigeria. From the result, it is also evident a large number of the respondents have lived in the estates for more than fifteen (15) years and their reasons for living in the estates is linked to good location and security in the estates. It is obvious from the result that the number of male household heads is slightly higher that their female counterparts. This is not surprising because Nigeria has hers household head dominated by female.

B. Respondents Satisfaction with the Level of Security

Table VI shows the result of respondents' satisfaction with general security of lives and property in the 14 housing estates investigated segregated between male and female respondents in the survey.

Table VI: Cross Tabulation of Respondents' Satisfaction with General Security in the Housing Estates

Gender	Satisfaction with general security in the Estate					Total n(%)
	Very Dissatisfied n(%)	Dissatisfied n(%)	Not sure n(%)	Satisfied n(%)	Very Satisfied n(%)	
Male	18(3.38)	61(11.47)	181(30.02)	195(36.65)	77(14.47)	532(51.35)
Female	35(6.94)	53(13.09)	181(35.91)	176(43.46)	59(11.71)	504(48.65)
Total	53(5.12)	114(11.00)	362(39.94)	371(39.39)	136(13.13)	1,036(100)

Examination of the result (Table VI) will reveal that around 52.52% of all the respondents expressed satisfaction with the general security of live and property in the estates, about 16.12% were dissatisfied, while 39.94% claimed they were not sure of their level of satisfaction with security in the estates. Segregating the result based on gender, we find that whereas around 51.12% of the male respondents expressed satisfaction, 55.17% of the female respondents were satisfied with the general security of lives and property in the estates. This result suggests that although the female respondents were lower in numbers compared to their male counterparts, a higher proportion of the female expressed satisfaction with the general security of lives and property in the 14 housing estates sampled in the survey. The implication of this is that a higher proportion of female residents who participated in the survey felt more secured than their male counterparts.

The study also investigated the respondents' levels of satisfaction with security at different locations within the housing estates amongst the male and female respondents and the result is as displayed in Table VII.

Table VII: Residents level of satisfaction with security in the estates by Gender

Satisfaction with Security	Variables	Male 532 Frequency (%)	Female 504 Frequency (%)	F ANOVA	p
Within the apartment	Dissatisfied	89 (16.8)	109 (22.9)	3.713	0.054
	Uncertain	67 (12.6)	72 (15.1)		
	Satisfied	323 (60.8)	257 (54.0)		
	No response	53 (10.0)	38 (8.0)		
Building and Surrounding Space	Dissatisfied	112 (21.1)	123 (25.8)	3.765	0.054
	Uncertain	85 (16.0)	91 (19.1)		
	Satisfied	280 (52.6)	215 (45.2)		
	No response	55 (10.3)	47 (9.9)		
Streets and walkways	Dissatisfied	112 (2.1)	67 (24.6)	1.430	0.232
	Uncertain	126 (23.7)	121 (25.4)		
	Satisfied	234 (44.0)	195 (41.0)		
	No response	60 (11.3)	43 (9.0)		
Social gathering and events	Dissatisfied	87 (16.3)	73 (15.3)	0.606	0.437
	Uncertain	116 (21.8)	117 (24.6)		
	Satisfied	268 (50.4)	240 (50.4)		
	No response	61 (11.5)	46 (9.7)		
Religious Events	Dissatisfied	67 (12.6)	63 (13.2)	0.501	0.479
	Uncertain	106 (19.9)	123 (25.8)		
	Satisfied	297 (55.8)	240 (50.4)		
	No response	62 (11.7)	50 (10.5)		
Shopping facilities	Dissatisfied	77 (11.7)	68 (14.3)	0.002	0.966
	Uncertain	137 (25.8)	135 (28.4)		
	Satisfied	256 (48.2)	221 (46.5)		
	No response	62 (11.7)	52 (10.9)		
Medical facilities	Dissatisfied	80 (15.1)	86 (18.1)	3.177	0.075
	Uncertain	150 (28.2)	150 (31.5)		
	Satisfied	241 (45.3)	185 (38.8)		
	No response	61 (11.5)	55 (11.6)		
Recreational Facilities	Dissatisfied	89 (17.1)	105 (22)	0.701	0.403
	Uncertain	160 (30.1)	154 (32.4)		
	Satisfied	215 (40.4)	163 (34.3)		
	No response	66 (12.4)	53 (11.1)		
Drinking spots	Dissatisfied	104 (19.6)	107 (22.4)	5.252	0.022
	Uncertain	134 (25.2)	146 (30.7)		
	Satisfied	227 (42.7)	163 (34.2)		
	No response	67 (12.6)	60 (12.6)		
Refuse dump sites	Dissatisfied	108 (20.3)	117 (24.5)	0.058	0.809
	Uncertain	177 (33.3)	131 (27.5)		
	Satisfied	177 (33.3)	168 (35.3)		
	No response	70 (13.2)	60 (12.6)		
Children schools	Dissatisfied	65 (95)	64 (13.5)	0.751	0.386
	Uncertain	126 (23.7)	128 (26.4)		
	Satisfied	267 (50.2)	229 (48.1)		
	No response	74 (13.9)	55 (11.6)		
Public water supply points	Dissatisfied	77 (14.5)	80 (16.8)	0.712	0.399
	Uncertain	119 (22.4)	106 (22.3)		
	Satisfied	270 (50.8)	231 (48.5)		
	No response	66 (12.4)	87 (21.48)		
Car Parks	Dissatisfied	122 (22.9)	109 (22.9)	0.020	0.888
	Uncertain	119 (22.4)	114 (23.9)		
	Satisfied	229 (43.0)	198 (41.6)		
	No response	62 (11.7)	55 (11.6)		

From the result in Table VII, it is obvious that across the 13 aspects investigated, a higher proportion of the male respondents than their female counterparts expressed satisfaction with security within their apartments; building and surrounding space; streets and walkways; religious gatherings; shopping and recreation facilities, children's school,



drinking spots, parking lots and public water supply points. However, a higher proportion of the female than the male respondents were satisfied with security at refuse dump sites and the same proportion (50.4%) of the female and male respondents expressed satisfaction with security at social gathering and events in the housing estates. Further analysis of the result reveals that on the one hand the highest proportion of both the male (60.8%) and female (54%) residents were satisfied with security within their apartments. On the other hand the least proportion (33.3%) of the male respondents were satisfied with security at refuse dump sites, followed by satisfaction at recreational facilities (40.4%), while the least proportion (34.2%) of the female respondents expressed satisfaction with security at drinking spots followed by satisfaction at recreational facilities where around 34.4% of the female respondents indicated that they felt secured in these facilities. This result clearly shows that in spite of the fact that a higher percentage of the female respondents were satisfied with general security of lives and property in the housing estates, the greater percentage of male residents felt secured in various parts of the estates than the female residents.

It was also important to investigate whether the differences in the observed levels of satisfaction with security of lives and property amongst the male and female respondents are statistically significant across the 13 items examined. In order to do this, analysis of variance (ANOVA) was carried out. The results in Table VII also reveals that only the difference in satisfaction with security at drinking spots among the male and female respondents is statically significant ($F= 5.252, p = 0.022$). A closer look at the result in Table VII reveal that a higher percentage of the male respondents were more satisfied with the level of security at drinking spots than the female respondents than the percentage of female respondents who expressed satisfaction with security at drinking spots. This result is to be expected because a larger proportion of those who patronise drinking spots are usually the male folks.

VI. CONCLUSIONS

This study investigated the residents' satisfaction with security of lives and property in public housing estates in Lagos, Nigeria from gender perspective. Based on findings of the study, two conclusions are made. The first conclusion is that more of the female than the male respondents expressed satisfaction with the general security of lives and properties in the housing estates. The second conclusion is that the more of the male than female residents were satisfied with security at different parts of the housing estates except at refuse dump sites. The findings of this study imply that there is a difference on how male and female perceive the security of their home environment. Therefore, to ensure that the security needs of both the female and male residents are meet in public housing environment, it is recommended that public housing developments in the study area pay adequate attention to the location and survey around areas where recreational facilities and drinking spots are located in the estates. These areas are usually designed to promote interactions amongst residents of such estates. In view of the

fact that refuse dump sites and drinking spots were identified as areas with high security concerns for the male and female residents of the housing estates sampled, it is recommended that drinking spots and refuse dump sites should not be located within public housing estates. Above all, it is important that innovative planning strategies be engaged in excluding areas and facilities that are perceived by residents to be of greater security concern in public housing estates in the study area in particular and Nigeria in general.

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