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Urban Crime Prevention and Adaptation Measures in Ilorin, Nigeria

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Abstract

The current high rate of crime in Nigeria, which is attributed largely to high population growth, rapid rate of urbanization and a correspondingly high rate of impoverishment among the population owing to the disproportionate growth of the national economy, is fast making urban centers in Nigeria unsafe. With a police force that is short in capacity, urban residents have adopted safety measures to prevent and adapt to the increase in crimes in their residential neighbourhoods. Using a combination of primary and secondary data from a medium-sized city that reflects the attributes of the typical Nigerian urban centers, this study appraised the effectiveness of these prevention and adaptation measures. Among several identified measures, the use of fences and gates around buildings proved to be the most effective measure against the eight commonly identified crimes in the study area. The study concludes that the usage of this measure should form part of the building approval process by the relevant physical planning authorities in Nigeria.

Key Words: Crime, Residential Neighbourhoods, Spatial Pattern, Crime Prevention, Nigeria

Introduction

The twin issues of the unprecedented rate of urbanization and high population growth rates in developing countries in the last few decades have become sources of concerns to governments, development planners and urban residents. Urban growth rate in Nigeria, for instance, is estimated at about 4.4% (World Bank, 2015), and this level of urbanization has been accompanied by myriads of social and economic challenges including increasing hunger, poverty, unemployment, and squalid human settlements (Cohen, 2006). These challenges have further given birth to several other social problems such as increased drug abuse among youths, prostitution, general restiveness and

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increasing incidence of crime and general insecurity (Ahmed, 2012; Ayoola *et al.*, 2015; Fajemirokun *et al.*, 2006). Violent crimes are now being described as endemic to the African continent and actually worsening in many countries, including in Nigeria, where armed robbery, kidnapping, assassination and acts of terrorism dot many urban landscapes (Baker, 2010). The current high crime rates and general pervasive sense of insecurity in Nigeria, typified by daily threats to lives and property of many urban residents (Ayoola *et. al.*, 2015), have been largely responsible for the country's perpetual low ranking on the Global Peace Index (GPI, 2014). Apart from the general pervasive fear of crime and sense of insecurity among the citizenry, the various residential neighborhoods of Nigerian urban centers are also threatened by an increasing trend of sundry neighborhood crimes such as petty theft, automobile theft, armed robbery, house-breaking, kidnapping, and assault of various kinds, including rape and battery. In the midst of all these crimes, police coverage in Nigeria is poor and inadequate.

Nigeria operates a three-tiered system of government: federal, state, and local. Policing is the exclusive preserve of the federal tier of government in Nigeria, and its command structure is also federal in nature with lower order commands spread across the states. Local governments have divisional police commands reporting to the states. The current staff strength of the Nigerian Police Force is about 370,000 (www.npf.gov.ng) in a country of about 200 million people. This translates to one police force member to nearly 550 people; a hundred more people than recommended by the United Nations (Kimani, 2009). With this inadequacy and other operational problems associated with policing in Nigeria, as elsewhere, urban residents in Nigeria are forced to devise crime prevention and adaptation measures to complement police efforts in the safeguard of their lives and properties (Sanni, 2017; Agbola, 1997). What these measures are and how well they have been effective in urban Nigeria is the main preoccupation of this article. In attaining such a quest, types of crimes, their spatial incidence, and pattern of policing in the study area are described.

This study becomes important for several reasons. In the first instance, crime, described as an infraction against law and order and norms which

regulate civilized behavior (Eme, 2012) and a violation of rules that guide and regulate societal conducts (Siegel, 1995; World Bank, 1998; UN-Habitat, 2007; Oxford Dictionary of Sociology, 2009), has a spatial dimension (Agbola, 1997; Doran & Lees, 2005; Bernasco & Elffers, 2010; Jinadu *et. al.*, 2012; Sanni, 2017). Urban criminality enclaves and crime hotspots are rarely evenly distributed in space as some areas of the cities are known to experience more crimes than others, while some areas are also notorious for specific kinds of crimes (Ackerman, 2000; UN-Habitat, 2007; Jinadu *et al.*, 2012; International Association of Crime Analysts, 2013; Sanni, 2017). Chinwokwu (2014) particularly posited that crime tends to be able to be explained in terms of the nature of the interaction between environmental (space), economic and social factors. The spatial variation in crime is usually associated with population and housing density, socio-economic characteristics of residents, aggregate housing types and conditions, level of infrastructural facilities provision and the nature of the general physical development of the environment (Taylor, 2002; Brown *et al.*, 2004; Jinadu *et al.*, Marzbali *et al.*, 2012; Sanni, 2017). More importantly, the spatial variation of crime has parallel implications for its prevention and control, and for urban policing. An understanding of the related patterns as attempted in this study will be beneficial in this regard.

Igbo (2015) and Jinadu *et al.*, (2012) categorized crimes as personal crimes, property crimes and crimes against public order. Crimes against persons or personal crimes are of different kinds and are mostly those that are targeted at individuals and sometimes groups. These types of crimes usually are those that threaten or cause bodily harm, injuries and sometimes deaths. They include assault, rape, armed robbery, kidnapping, suicide, manslaughter or murder amongst others. However, suicide, in some circumstances, may be counted among the next category of crimes, i.e. crimes against public order. These are those targeted at the public and/or seen to border on moral infractions (UN-Habitat, 2007). Other examples of crimes in this category are fraud, public corruption, conspiracy, perjury, disruption of public tranquility, and cultism, amongst others. Cultism in contemporary Nigeria (Nnam, 2014) refers to secret societies whose major stocks in trade are violence, kidnapping and murder perpetrated against members of rival groups or members of the general public who are perceived or reported to have encroached on or violated the freedom, choices and codes of conducts of the secret societies or any of their members. Cult groups are mostly found in universities in Nigeria while some are based in the communities (Amaele, 2013).

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The third type of crimes are property crimes, which are often considered less serious and violent but nonetheless have severe negative impacts on the people as well as the quality of life generally. These types of crimes include trespass, petty theft, burglary or housebreaking, automobile theft or snatching and arson. Victims of property crimes are also usually traumatized. An identification of the types of crimes associated with different residential neighbourhoods within the urban centers is therefore useful in planning the pattern and frequency of police patrol within the urban centers.

Methods

The study was carried out in Ilorin, the capital of Kwara State in North Central Nigeria. The choice of Ilorin is predicated on its centrality, size, cosmopolitanism, and cultural heritage. The city is located approximately between longitudes 4 degrees, 20 minutes and 4 degrees, 35 minutes East of the Greenwich Meridian and between latitudes 8 degrees, 30 minutes and 8 degrees, 50 minutes North of the Equator (Figure 1).

Figure 1: Map of Ilorin in its Regional and National Settings
Source: Kwara State Ministry of Lands and Survey, Ilorin (2015).

Ilorin is located about 350 kilometers from Lagos, Nigeria's largest commercial hub and economic capital, and about 500 kilometers from Abuja, the country's political capital. The city lies at the borders of northern and southern Nigeria. It is generally regarded as the northernmost city of southern Nigeria and the southernmost city of northern Nigeria. Ilorin has an estimated population of 1.1 million people who hail from all tribes and cultural backgrounds in Nigeria and from outside the country. The city also typifies the average Nigerian urban center with its spatial structure and neighbourhood differentiation along residential density lines and patterns of physical development.

It was from the residential neighbourhoods in the study area that the primary data employed for the study were collected using a structured questionnaire. A total of 960 copies of the questionnaire were administered on randomly selected household heads in the identified 35 neighbourhoods of the study area. The primary data collected included types of crime, major types of crime prevention and adaptation measures adopted by various households and neighbourhoods, and police patrols of the various neighbourhoods. The neighbourhoods are Adewole Estate, Fate, Federal Housing Estate, GaaAkanbi, Gaa Imam, Oloje, Olorunshogo, GRA, Pakata, Sabo Oke and Irewolede Estate. Others are Idi Ape, Maraba, New Yidi Road, Agbabiaka, Offa Garage, OjaGboro, Oja Oba, Okelele and Okesuna. Olorunshogo Estate, Agbo Oba, Sango, Saw Mill, Surulere, Taiwo Road, Tanke, Unity Road, BalogunGambari, Post Office Area, Alagba Estate, Amilegbe, Asa Dam Road and River Basin Estate complete the list of study neighbourhoods. The secondary data employed for the study were sourced from existing literature and previous studies on crime in the study area, particularly Sanni (2017) who worked on the spatial analysis of neighbourhoods' crime vulnerability and victimization patterns in the study area. A chi-square test was used to analyze the data obtained regarding the pattern of police patrol among the neighbourhoods, while frequency and cross-tabulation were used to analyze data on identified crime prevention and adaptation measures. The results of the analysis were presented in the form of frequency tables and bar graphs.

Results and Discussion
Types of Crimes in the Neighbourhoods
Eight commonly experienced neighbourhood crimes were identified in Ilorin as shown in Table1.

Table 1: Common Crimes Experienced in Ilorin

Crime Type	Frequency	Percentage (%)
Petty Theft/Stealing	662	72.59
House/shop Breaking	563	61.73
Assault	423	46.38
Armed Robbery	268	29.39
Rape/Indecent assault	179	19.63
Automobile theft	175	19.19
Kidnapping	56	6.14
Assassination	7	0.77

Source: Authors' Analysis, 2017

Further, 72.59% of the sampled households in various neighbourhoods of the city have had at least a member of the households falling victim to petty theft or stealing in a span of five years. Within the same time frame households that have had at least a member experiencing house burglary, assault, armed robbery and rape or indecent assault constitute 61.73%, 46.38%, 29.39% and 19.63%, respectively. Other common crimes that were frequently experienced by household members in the various neighbourhoods are automobile theft (19.19%), kidnapping (6.14%) and murder (0.77%). This shows that the commonly experienced crimes in Ilorin are not different from those experienced in most towns and cities in Nigeria; Minna (Jinadu et al., 2012), Lagos (Alemika & Chukwuma, 2005) and towns in Osun State (Ahmed, 2012), for instance. Despite its documented weaknesses and flaws, the police records of crimes in Ilorin obtained by Sanni (2017) also show that these are among the most frequently reported crimes in the city.

Spatial Classification of Crime Frequency in Study Area

From the analysis of the frequency of occurrence of crimes in the study area, the lowest frequency was 11 while the highest was 117. Using the quartile ranges, the neighbourhoods were grouped into four classes of low, moderate, high and very high crime neighbourhoods, as shown in Table 2.

Table 2: Spatial Classification of Distribution of Crimes in Ilorin

Classification	Neighbourhood	Frequency	Percentage (%)
Low Crime	Adewole Estate	32	1.37
	Federal Housing Estate	15	0.64
	GRA	11	0.47
	Irewolede Estate	35	1.50
	Olorunshogo Estate	26	1.11
	Airport Area	15	0.64
	Alagba Estate	31	1.33
	7	165	7.07
Moderate Crime	Fate	62	2.66
	New Yidi Road	47	2.01
	Okelele	64	2.74
	Oloje	52	2.23
	Olorunshogo	68	2.91
	Sabo Oke	52	2.23
	Saw-Mill	58	2.49
	Surulere	60	2.57
	BalogunGambari	67	2.87
	River Basin Estate	65	2.79
	10	595	25.50
High Crime	Asa Dam Road	89	3.81
	Amilegbe	93	3.99
	Post Office Area	89	3.81
	Unity Road	77	3.30
	Tanke	86	3.69
	Sango	84	3.60
	Pakata	78	3.34
	Okesuna	79	3.39
	Oja Oba	91	3.90
	OjaGboro	87	3.73
	Offa Garage	80	3.43
	Agbabiaka	87	3.73
	Maraba	87	3.73
	Idi-Ape	80	3.43
	Gaa Imam	79	3.39
	GaaAkanbi	75	3.21
	16	1341	57.48
Very High Crime	Agbo Oba	115	4.93
	Taiwo Road	117	5.02
	2	232	9.95
Total	35	2333	100.0

Source: Authors' Analysis, 2017

As shown in Table 2, neighbourhoods that experienced an average of between 11 and 35 crime incidences, irrespective of types of crimes, were Adewole Estate, Federal Housing Estate, GRA and Irewolede Estate. Others in this category were Olorunshogo Estate, Airport Area and Alagba Estate. Another 10 neighbourhoods of the city that experienced an average of 47 to 68 crime incidences were classified as moderate crime neighbourhoods. These are Fate, New Yidi, Okelele, Oloje and Olorunshogo. Others in this category are Sabo Oke, Saw Mill, Surulere, Balogun Gambari and River Basin Estate.

A total of 16 neighbourhoods of the study area were further classified as high crime areas based on the average frequency of between 75 and 93 crime incidences experienced. These neighbourhoods include Asa Dam Road, Post Office, Amilegbe, Unity Road, Tanke, Sango, Pakata, Okesuna, Oja Oba and OjaGiboro. Others are Offa Garage Road, Agbabiaka, Maraba, Idi Ape, Gaa Imam and GaaAkanbi. Two neighbourhoods of the city were classified as very high crime areas owing to the very high average number of total crime incidences experienced. These were Taiwo Road and Agbo Oba. It was observed from the various crime density clusters that except for GRA, which is regarded as low density neighbourhood, all the other six neighbourhoods classified as low crime areas are regarded as medium density areas. In a similar dimension, except for Asa Dam Road and Tanke, all other neighbourhoods classified as high and very high crime areas are high density areas.

Pattern of Police Patrol and Frequency of Crime

The study also sampled the opinions of respondents in the various neighbourhoods about the pattern of police patrol in their areas as illustrated in Table 3.

Table 3: Frequency of Police Patrol of Neighbourhoods of Ilorin

Pattern	Frequency	Percentage (%)
Daily	213	41.28
2 – 3 times weekly	299	57.94
Weekly	2	0.39
Occasionally	2	0.39
Total	516	100.0

Source: Authors' Analysis, 2017

As shown in Table 3 a total of 41.28% of respondents reported that their areas were patrolled daily by the police, while a little more than half (57.94%) were of the view that they experienced police patrols between two and three times

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weekly in their areas. This pattern of police patrols therefore, shows a relative strong presence of police in the neighbourhoods of Ilorin.

When the data on pattern of police patrols of the various neighbourhoods were subjected to a chi-square test, the result of the analysis indicates that there was no significant association between the pattern of police patrol and frequency of crimes in the neighbourhoods as shown in Table 4.

Table 4: Chi-square Test of Association between Neighbourhood Criminality and
        Police Patrol in Ilorin

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.497	3	0.321
Likelihood Ratio	3.505	3	0.320
N of Valid Cases	912		

Source: Authors' Analysis, 2017

Crime Prevention and Adaptation Measures

Studies, including Agbola (1997) and Alemika (2013) have revealed that, faced with increasing fear or threats of crime, urban households tend to evolve different crime prevention, mitigation or adaptation measures. The study therefore, examined the various crime prevention and adaptation measures adopted by households across the various neighbourhoods of the study area. The study revealed that a large number of households in the study area adopted one or more crime prevention and adaptation measures. These include maintenance of private security guards, erection of high walled fencing with gates around the house, erection of different forms of iron barricades at entrances and at the back of houses, maintenance of guard dogs and formation of vigilante groups. There was also a noticeable minimal use of closed-circuit television among relatively affluent households in the low density areas, although the functionality of the CCT gadgetry could not be ascertained.

As shown in Figure 2, the use of the four main crime preventive and adaptation measures among households across neighbourhoods in the different crime density zones indicate that 21.3% of households maintained private security guards, 37.21% erected high walled fences with gates around their houses, while 18.33% installed iron barricades of different forms either at the entrance and around vital areas of their houses or both. Another 23.16% of households across the various established crime density classes-maintained guard dogs.
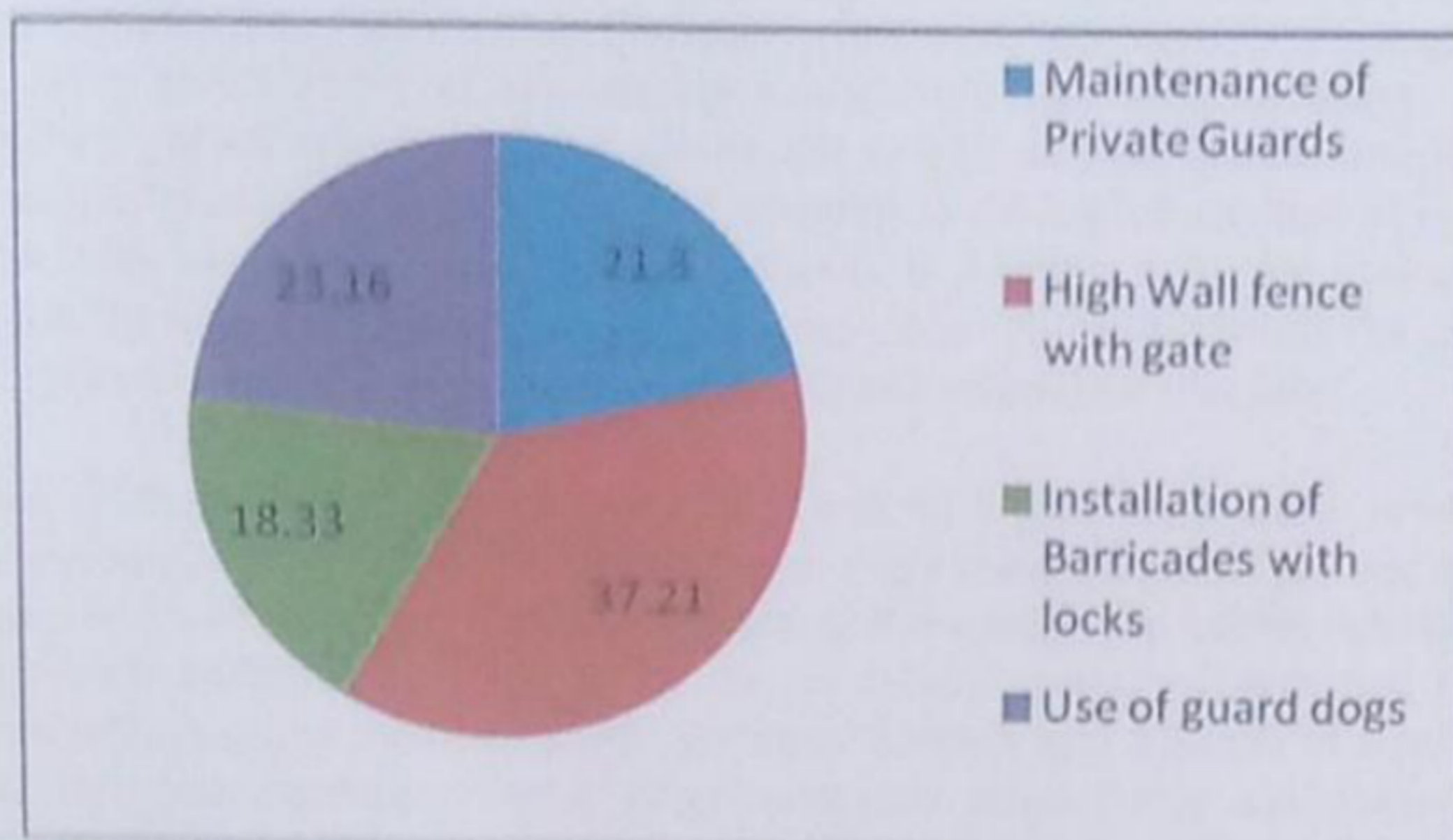
Figure 2: Households Crime Prevention and Adaptation Measures in Ilorin
Source: Authors' Analysis, 2017

Effectiveness of Crime Prevention and Adaptation Measures

To determine the effectiveness or otherwise of the four main prevention and adaptation measures, their usage across the residential neighbourhoods vis-à-vis the frequency of crimes in the neighbourhoods was further analyzed, the results of which are summarized in Table 5.

Table 5: Effectiveness of Adaptation Measures

Crime Density	Frequency	Fence and gate		Total	Crime Density	Frequency	Private security		Total
		YES	NO				YES	NO	
Low Crime	Count	110	70	180	Low Crime	Count	101	81	182
	Percentage	61.11	38.89	100.0		Percentage	55.49	44.51	100.0
Moderate Crime	Count	113	123	236		Count	52	184	236
	Percentage	47.88	52.12	100.0	Moderate Crime	Percentage	22.03	77.97	100.0
	Count	106	321	427	Crime	Count	32	395	427
	Percentage	24.82	75.18	100.0		Percentage	7.49		100.0
High Crime	Count	10	57	67	High Crime	Count	9	92.51	67
	Percentage	14.93	85.07	100.0		Percentage	13.43	58	100.0
								86.57	
Very High Crime					Very High Crime				
Total	Count	339	571	910	Total	Count	211	701	912
	Percentage	37.25	62.75	100.0		Percentage	23.14	76.86	100.0

Source: Authors' Analysis, 2017

As shown in Table 5, while a total of 61.11% of households in low crime neighbourhoods had fenced houses with gates, 38.89% did not. Also, 47.88% of households in moderate crime areas had fences and gates, while the remaining 52.12% did not. However, in the high crime and very high crime areas only 24.82% and 14.93% of households respectively had such facilities. A Chi Square test on this distribution across the neighbourhoods confirmed that the usage of fences and gates is inversely related to the high incidence of crime in the study area ($P < 0.05$). What this means is that the more the facilities are used, the less the incidence of crime are recorded. This implies that the measure is relatively effective as a crime prevention and adaptation measure.

The same pattern of effectiveness of fences with gates as a crime prevention and adaptation measures can be attributed to the maintenance of private security guards by households when viewed along the established crime densities. As also discernible from Table 5, the use of private security guards had relative impacts on crime incidences. For instance, 55.49% and 22.03% of households in low and moderate crime neighbourhoods respectively maintained such measure, while as low as 7.49% households in the high crime neighbourhoods had same.

It is however discernible from Table 6 that the same level of effectiveness of fences with gates and maintenance of private security guards as crime prevention and adaptation measures cannot be attributed to the use of iron barricades in buildings and maintenance of guard dogs as summarized in Table 6.

Table 6: Effectiveness of Adaptation Measures (continued)

Crime Density	Frequency	Iron Barricades and Locks		Total	Crime Density	Frequency	Use of Guard Dogs		Total
		YES	NO				YES	NO	
Low Crime	Count	25	157	182	Low Crime	Count	57	125	182
	Percentage	13.74	86.26	100.0		Percentage	31.32	68.68	100.0
Moderate Crime	Count	38	198	236	Moderate Crime	Count	52	184	236
	Percentage	16.10	83.90	100.0		Percentage	22.03	77.97	100.0
High Crime	Count	93	334	427	High Crime	Count	79	348	427
	Percentage	21.78	78.22	100.0		Percentage	18.50	81.50	100.0
	Count	11	56	67		Count	23	44	67
Very High Crime	Percentage	16.42	83.58	100.0	Very High Crime	Percentage	34.33	65.67	100.0
Total	Count	167	745	912	Total	Count	211	701	912
	Percentage	18.31	81.69	100.0		Percentage	23.14	76.86	100.0

Source: Authors' Analysis, 2017

As shown in the Table a total of 68.68% and 77.97% of households in crime and moderate crime neighbourhoods, respectively, did not maintain guard dogs and crimes were still relatively low in such places. A similar ineffectiveness pattern is observable in the high and very high crime neighbourhoods where 81.50% and 65.67% of households in neighbourhoods considered as high crime and very high crime zones respectively did not maintain guard dogs. Therefore, since the use of this particular prevention measure was generally low in all crime density areas it can thus be regarded as an ineffective prevention measure. In the same Table 6, the same pattern of ineffectiveness of guard dog maintenance as a crime prevention measure is observable in the installation of iron barricades in buildings across the different crime density zones of the study area. For instance, in spite of the relatively high level of the use of this measure in neighbourhoods categorized as high crime (21.78%) and very high crime (16.42%) density areas, the level of crime occurrence was still relatively high, while its usage was also not impactful among households in low crime and moderate crime neighbourhoods as it was poorly used among households in these two neighbourhoods.

Conclusion

The study, having examined both the pattern of police patrol and the use of unconventional crime prevention and adaptation measures among neighbourhoods of Ilorin, concludes that the relative presence of police in neighbourhoods, maintenance of guard dogs and installation of iron barricades in houses are not very effective in preventing crimes in the study area. However, the maintenance of private security guards by households as well as the usage of high fences and gates in buildings proved to be relatively effective in preventing crimes among households in Ilorin. As a result of its effectiveness in minimizing vulnerability to households-level crime, the study recommends that the erection of fences around buildings be encouraged and integrated into the housing construction and development processes. The various physical planning authorities should be encouraged to recognize this measure and approve its construction during the plan approval process as part of the overall housing development processes. Additionally, the study recommends that the structure of policing in Nigeria be reviewed as to allow for the introduction of community policing where policemen are made to serve within the neighbourhoods where they are resident. Such a measure would allow for effective policing as the knowledge of the peculiar security conditions and challenges of the community by policemen who are themselves members of such communities would impact positively on their job of crime prevention.

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