

Spatial Pattern of Crime in Nigerian Traditional City: The Ile-Ife Experience

Adewumi Israel Badiora¹

Abel Omoniyi Afon²

Abstract

This study identified the prevalence and spatial occurrence of criminal activities in Ile-Ife. Data were obtained through the stratification of the study area into the traditional town centre, middle income, high income and post crisis residential areas. Sample was selected using systematic sampling. The study established that residents' socio-economic attributes varied significantly. Rate of occurrence of crime measured through an index tagged Crime Rate of Occurrence Index (CROI) showed that store breaking with CROI of 3.44 was the most prevalent crime in the traditional town centre. House breaking was the most prevalent crime in the middle income (CROI=4.24) as well as the high income (CROI=3.96) residential areas. With an index of 3.34, attempted rape was perceived to be the major challenge in post crisis residential area. Pearson Product Momentum Correlation coefficient revealed that store breaking had high positive correlation with average monthly income ($r=0.765$, $p<.01$), education background ($r=0.643$, $p<.01$) and occupation of the residents ($r=0.665$, $p<.01$). The study concluded that prevalent crime differ significantly in their rate of occurrence in the different residential zones as reflected by the socio-economic characteristics of the residents and that the approach to make residents feel more secured should be guided by those variation.

Introduction

Criminal activities have become more frightening in the World today and it is a major source of social concern. In Nigeria for instance, all daily newspapers devote a significant proportion of column to reports of murder and theft. The announcement concerning murder, rape, burglary and stolen vehicles among others are daily features on the news and national dailies. Lives and property no longer seem safe anywhere in the country and this is not peculiar to a particular socio-economic or cultural group; both the rich and the poor suffer the same fate and the whole society appears helpless in the face of urban crime (Agbola 2004; Alemika and Chukuma 2005; Sanni, Nsiong, Abayomi, Modo and Leonard 2010). Everybody seems to live one day at a time in fear of crime

Over time, as crime has become more epidemic and its effect more pervasive, social and environmental scientists have become interested and involved in the nature, causes and consequence of urban crime (Jayamala 2008). However, studies of urban crime were pioneered sociologists, psychologists, political scientists, criminologists, and penologists. The conclusion reached by these researchers is that criminal activities are the result of economic conditions in any given society no matter the region of the World (Van Dijk 1999; Blumen and Rattner 2002; Wang and William 2002; Alemika and Chukuma 2005). Therefore, what the researchers in sociology and few spatial planners are claiming is that the motive for criminal and delinquent behaviour is to make ends meet. However, these generalizations about the determinants of crime at the global scale fail to take into account

¹ Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria, wumi_zion@yahoo.com

² Department of Urban and Regional Planning Obafemi Awolowo University, Ile-Ife, Nigeria, abel_afon@yahoo.com

important scale differences in the spatial analysis aspect of crime. Regions of the world do not only vary economically, but also ecologically, physically and in term of space.

Jayamala, (2008) however argued that crime has social and space dimension. This was further corroborated by Eke (2004) who posited that crime tends to find explanations in the interaction between environmental (space), economic and social factors. It is not only economic hardship, deprivation or social stress that actually causes criminal activities, rather the influence of space and the opportunity provided within a geographical area. This space aspect of crime had not been given adequate attention. Therefore, the present study examines the distribution patterns of crime in space using Ile-Ife as the study area. The town recently experience communal crisis (Ife-Modakeke crisis) and criminal activities had always been the characteristics of a post crisis town. All these made the study of criminal activities as it relates to physical environment of Ile-Ife inevitable.

Literature Review and Theoretical Framework

The anomie theory addresses the issue of why some social spaces are conducive for crime. Merton (1978) in Durkheim (1966) gives biological explanations of deviance and concludes that biology cannot account for variations from one society to the next in the nature and extent of deviance or criminal activities. His primary interest is not so much why a particular individual deviates, but why the rates of deviance differ so dramatically in different societies and for different subgroups or areas within a single society. This had been referred to in literature as areal ecology of crime, spatial pattern of crime or the geography of crime.

There are several studies on the spatial pattern of crime (Portnov and Rattner 2003). The earliest contribution to the study of crime and urbanization came from Shaw and McKay (1942) after observing that crime and delinquency persisted in certain urban areas even though the population changed. They concluded that three urban conditions promote high crime rates. These are heterogeneity, mobility, and most notably, poverty. Several other studies have reported the persistence of high crime rates in urban slum areas (Schuessler 1962; Quinney 1966; Curtis 1974; Martin 2002). It was argued that there is a direct relationship between urban slum and criminal activities. Delinquency and criminal activities will continue to increase as a geographical area continues to decay.

Brantingham and Brantingham (1975), in their study of Tallahassee, Florida in United State discovered that burglaries occur at high rates on the borders of some natural areas. Thus, for the first time, a spatial distribution of burglary, which was later to prove useful to planners, was uncovered. Furthermore, Harries; Stadler and Zodorowski (1984) postulated that crime is a social problem with a decidedly territorial component. In their study, using the neighbourhood unit as an appropriate area unit of analysis, Harries discovered a strong correlation between neighbourhood socio-economic status and the occurrence of crime. In support of this, Brantingham and Brantingham (1984) showed that the rate of homicide and assault were inversely related to socio-economic status. Other studies confirms this include Harries (1974); Harries and Morris (1986).

Some other studies show that inequality and crime rates are positively related. These include Eberts and Schwirian (1968); Braithwaite (1979); Wang and Minor (2002). In their study of metropolitan structure and violent crime, Blau and Blau (1982) examined whether racial socio-economic inequalities are a major source of criminal violence. Their findings showed socio-economic inequalities between and within races to be positively related to high rates of violent crime in small census areas (SCAs), and socio-economic inequality between blacks and whites to have a direct positive effect on violence.

Martin (2002) while testing the significance of several socioeconomic and location factors such as family composition, population welfare, and percent of owner-occupied housing among others as predictors of neighborhood burglary rates using spatial autocorrelation and multivariate spatial lag models, it was concluded that the presence of 'community' helps to maintain order in neighborhoods even if strong 'criminogenic conditions' (such as the concentration of poverty) are present. Portnov

and Rattner (2003) ascertained that inequality and urban crime are interlinked. Localities with high rates of property crime are scattered throughout the country and are, most often, surrounded by localities with relatively low crime rates. The findings of the study indicated that the aerial proximity of poor and wealthy towns tends to increase crime rates (particularly against property) in wealthy localities.

In Nigeria, the study of Mukoro (1994) on the spatial distribution of crime in Metropolitan Lagos revealed that the highest concentration of violent crime was recorded in Ikoyi. Next in importance was Apapa and Victoria Island. Other areas are relatively peaceful. The survey concluded that severity of crime in Lagos tends to increase as the socio-economic status increases. Aguda (1994) while analyzing area ecology of crime analysis using two major crime; burglaries and robbery corroborate Mukoro's findings. Alemika and Chukuma (2005) on criminal victimization in Lagos State revealed that, criminal victimization varied across the Local Government Areas (LGAs) in Lagos metropolis, with murder higher in Lagos Island, Mushin and Kosofe while other Local Government Areas were relatively peaceful with minimal form of crime. All these gave an indication that even within the same geographical area; criminal activities may vary depending on various factors.

The study Area: An overview

Ile-Ife is predominantly a Yoruba speaking city. The city is situated in the south western part of Nigeria (*see Figure 1 and 2*). It lies between Latitude $7^{\circ}15^{\circ}N$, $7^{\circ}31^{\circ}N$ and Longitude $4^{\circ}43^{\circ}E$, $4^{\circ}45^{\circ}E$. There has been an incremental growth in the population of Ile-Ife. A town of 92862 people in 1963 (Population Censure Figure) and 178 409 in 1991 (Population Censure Figure) grew to over 480,000 people in 2006 (Population Censure Figure). With the population growth, physical and political expansion, development possibilities as well as urban problems of various form and in varied complexities started. One of these urban problems is crime. A town with crime rate of 1.2% (Police Statistics) in 2000 increased to 2.5% in 2010 (Police Statistics)

Ile-Ife like other traditional urban centres in Yoruba land is known to have been in existence before the advent of colonialism. The town was built with security wall surrounding it in the early part of the origin. However, developmental activities in Ile-Ife brought about growth outside the city wall and the growth outside the town wall then produced two cities in one: the traditional and the modern city.

Onibokun (1985) submitted that the combination of these two parts in such Nigerian city revealed three contrasting residential zones linked to three historical periods. These are the pre-colonial development, the zone between pre-colonial and post independent residential development and the post independent development. The pre-colonial development in any African city with long historical origin is the traditional town centre of the city. It could also be referred to as the core while the second is the intermediate or transition zone and the third is sub-urban (Afon 2005).

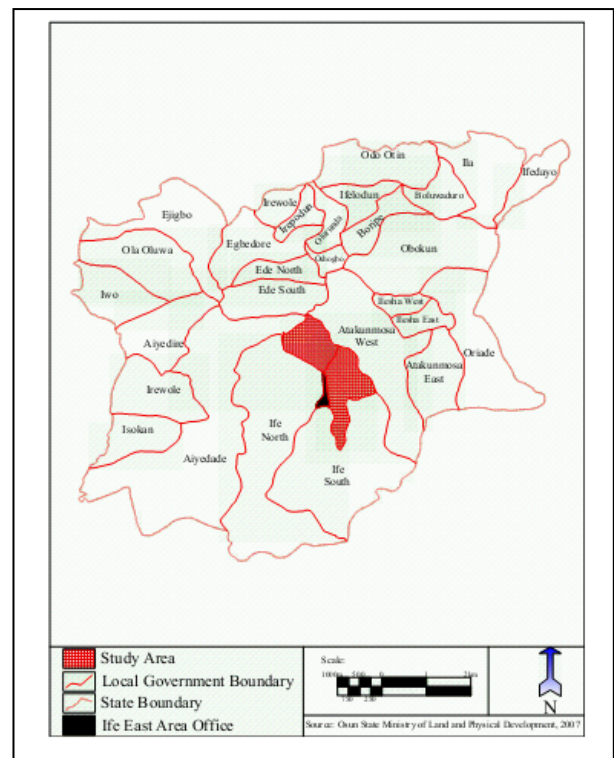
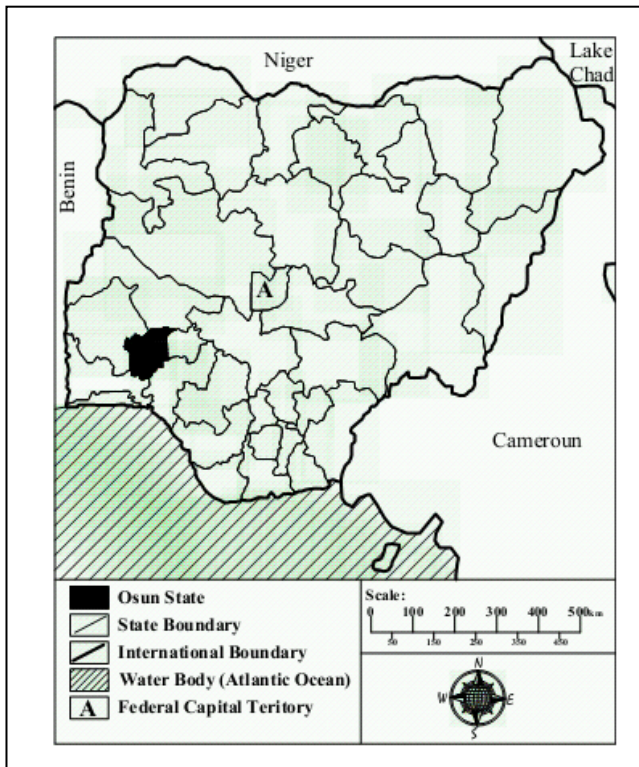


Figure 1: Map of Nigeria indicating Osun State **Figure 2: Map of Osun indicating the study area**

Each of these zones is observed to be internally homogenous in terms of physical layout, socio-economic status and environmental amenities available among others and respectively associated with low, medium and high quality residential areas (Afon 2005). Traditional Yoruba cities in Nigeria where these zones are identifiable include: Ilorin (Akorede 1974); Ibadan (Onokerhoraye 1977); and Ogbomosho (Afon 2005). Similarly, this particular pattern was also observed in Ile-Ife. They were respectively referred to in this study as the traditional town centre, areas with layout development (middle income residential area) and high income area (*see Figure 3*). Another physical setting observed in Ile-Ife for the purpose of this study was the post crisis residential area (*see Figure 3*). This is the area affected by the communal crisis (Ife-Modakeke crisis).



Figure 3 Map indicating residential pattern in Ile-Ife

The traditional town centre is mainly occupied by first migrants or the indigenes of Ile-Ife. In the centre of the town is the palace (Afin) of the Ooni who is the traditional head of the town. Surrounding the palace are the important shrines and the main traditional market. This area consists of small streets and row houses shaping enclosed blocks. Mostly everyone knows each other in these neighbourhoods. The houses in this zone are closely built together and connected to one another with foot paths. This made majority of the building to lack accessibility to road. Houses in this zone are mainly of traditional system. House type commonly feature in this area are traditional courtyard system and face-me-I-face-you which were made from indigenous materials. Residents engage in primary and traditional occupation such as farming and petty trading activities. Traditional town centre of Ile-Ife developed organically and therefore, most of the areas in this place did not enjoy modern physical planning regulations. The physical environment is low in standard as depicted in housing construction techniques and materials as well as layout and the facilities available.

With the growth of population and development, expansions become inevitable and there was pressure of the need to accommodate growing middle income age. People therefore, began to move out of the traditional town centre to new areas within the town. The most important physical feature is that this new areas were developed through a layout plan and modern day planning regulations. The local streets inside the area have a distributed structure with few possibilities for through traffic.

This area is regarded in this study as middle income residential area. Thus expansion of middle income residential area was noticed in Ile-Ife along Ibadan, Ede and Ilesha roads. Middle income residential area features house types such as flat, bungalow and few face-me-I-face-you and duplexes made from foreign and modern materials. Walls are made with cement block and housing density is less than that of the traditional town centre. Ethnic composition of this area is varies as this area is being occupied majorly by indigenes and non-indigene employed in the formal sector of the town. There is also more accessibility to government and social amenities in this area.

High income residential area developed through a well layout plan. The ethnic composition is heterogeneous and so also are the building types. Majority of residents in this area engaged in white

collar jobs such as professionals, business men and top civil service and government functionaries. The supply of urban environmental services is favourably bias towards this area. It has high quality of landscape architecture, streets layout with planned distributed structure and possibilities for through traffic. In the area, various facilities can be found. It features house types such as flat and duplexes. In general, it is a quiet housing area, where its spatial layout supports the inhabitants' lifestyles. The area consists of row houses, some with a small front garden and most of the homes have small private open space.

Post crisis residential area was originally partly traditional town centre and middle income residential area. This is because some part of this area developed as transition zone through a layout plan while other organically developed and mainly occupied by the indigenes of Ile-Ife. However, its present social and physical conditions emerged as a result of the last Ife-Modakeke crisis. During the period of caring out this study, the area's reputation was generally low. This area consists of freestanding row houses and dilapidated buildings, many vacant space, unoccupied buildings with some dump sites, low trees and bushes between the buildings. The local streets inside the area have a distributed structure but frequently disserted particularly in the night. The social compositions of the dwellers consist of mostly immigrants, unemployed and low-income families and the areas' spatial layout tend to be spatial segregated with few possibilities for social control and natural surveillance.

Methodology: data collection and analysis

Data for this study were obtained from both primary and secondary sources. Primary data were obtained through the stratification of the town into four residential areas. These are the traditional town centre, middle income and high income. The forth is the post crisis residential area that emerged through the last communal Ife-Modakeke crisis. A total of 343 streets were identified from the identified residential areas comprising 83, 147, 41 and 72 respectively. One out of every five street (20%) in each residential stratum was purposively selected. From the selected streets, a total of 3097 buildings were identified comprising 873, 1386, 294 and 544 respectively in the four areas. Every tenth building (10%) where a household per floor was selected using systematic sampling. of 357 questionnaires administered, 334 were retrieved for analyses. Data collected included the residents' socio-economic characteristics, residents' perception of the types and frequency of occurrence of crime activities in the study area.

To determine residents' perception of the types and frequency of occurrence of crime activities in the study area, residents were provided with a list of crime identified in the literature. They were further instructed to indicate the rate of occurrence of each of the identified crime type. Residents were to express their opinion using one of five Likert scales of 'very frequent' (VF), 'frequent' (F), 'just frequent' (JF), 'not frequent' (NF) and 'not at all frequent' (NAF).

The analyses of the ratings indicated by the residents from the Likert's scales adopted evolved into an index called "Crime Rate of Occurrence Index" (CROI). To arrive at CROI, weight value of 5,4,3,2 and 1 were respectively attached to 'very frequent' (VF), 'frequent' (F), 'just frequent' (JF), 'not frequent' (NF) and 'not at all frequent' (NAF). The index for each type of crime was arrived by dividing the Summation of Weight Value (SWV) by the total number of responses.

The SWV for each type was obtained through the addition of the product of the number of responses to each type and the respective weight value attached to each rating.

This is mathematically express as
$$SWV = \sum_{i=1}^5 x_i y_i \dots \dots \dots (1)$$

Where:

SWV= Summation of Weight value;

x_i = number of respondents to rating i;

y_i =the weight assigned to a value ($i=1, 2, 3, 4, 5$).

The index for each identified crime type thus takes a value of between 5 and 1. The nearer the value to 5, the higher is the occurrence that residents attached to such crime type under consideration.

$$CROI = \frac{SWY}{\sum x_i} \dots \dots \dots (2)$$

The mean index for each of the residential area and that of Ile-Ife were computed. This was obtained by summing the indices of all crime types and dividing by the number of the identified crime types ($n=32$). The mean index of traditional town centre, middle income residential areas, high income residential areas and post crisis residential areas were denoted respectively by $CROI_a$, $CROI_b$, $CROI_c$ and $CROI_d$ while that of Ile-Ife was denoted by $CROI_e$. Findings are as presented in the Table 2.

Research Findings

The research findings are discoursed under the various headings below. Unless otherwise stated, the tables through which information are summarized are the products of the survey carried out by the author in 2011.

a. Residents socio-economic characteristics

Variation in residents' socio-economic and demographic characteristics in different residential zones was investigated. The socio-economic characteristics include educational attainment, income, occupation and household size. These socio-economic profiles were considered important for this study as similar works on crime studies such as Eke (2004); Alemika and Chuckwuma (2004) and Jayamala (2008) argued that crime occurrence within a given geographical area can be explained on the bases of the socio-economic characteristics of the residents in the area. The frequency distribution of these variables with respects to the different residential zones is summarized in Table 1.

It was deductible that residents with no former education accounted for 18.3% and 1.6% in traditional town centre and post crisis residential area respectively. It was further established that 51.9% and 21% of the residents in middle income and high income residential areas respectively had post secondary school education. The study established that residents with no formal education were more concentrated in the traditional town centre when compared with other three residential areas. It was thus, deducible that the educational status of residents was on the increase as distance increases from the traditional town centre towards the high income residential area. it has been argued that educated people are bound to constitute an infertile environment for social maladies and vices to thrive and triumph (Okoko 2008). The implication of this is that crime may abound where there is low level of education. The study confirmed that the differences in education status of residents in different residential areas was significant at 0.05 levels through the chi-square test computed for the study area ($\chi^2=137.324$ and $p=0.000$).

Income of residents is another important socio-economic variable considered in this study. In order to present this, income group for federal tax rating is adopted to illustrate the income distribution in Ile-Ife. The summary of how residents were distributed into income groups in different residential zones is also available in table 1. Residents with income below 20000 were the largest in proportion (27.3%) of the residents. However, it was deducible that income increases as distance increases from the traditional town centre to low density residential area of the town. The average monthly income for the traditional town centre was ₦32000 (S.D= ₦ 19500) while that of middle income residential area was ₦59000 (S.D= ₦ 45000). High income residential area and post crisis residential area had average monthly income of ₦94000 and ₦29000 with standard deviation of ₦63400 and ₦14000 respectively. The average monthly income for the study area was ₦51000.00k with a standard deviation of ₦43000.00k. Therefore, the income range was high. This indicated that residents' income was not evenly distributed within and between the localities under consideration. In

a situation like this, two things can result; lower income class can both accept their condition and live socially responsible or they can choose an alternative mean of achieving success such as thefts, stealing and violence. This also gave an indication why different residential zones experienced different types of crime. The result of the analysis of variance ($F=38.005$ and $p=0.000$) confirmed the variation in the income of residents in the four identified residential areas in Ile-Ife.

Adopted from Afon (2005), household size was categorized into three. These are household with 6 members and below, household that contains 7 to 10 members and household with more than 10 members. These were respectively regarded as the small sized, medium and large size household sized. The average household size for the study area was 6 while it was 9 in the traditional town centre, 5 in the middle income residential area, 5 as well in the high income residential area and 7 in the post crisis residential area. The average household sizes in traditional town centre and post crisis residential area were found to be above that of the study area. The implication is that the higher the household, the higher the number of people exposed to victimization. The result of the analysis of variance ($F=2.824$ and $p=0.000$) confirmed the variation on this demographic attribute of residents in the study area.

Table 1: Residents' Socio-economic background

Socio-Economic Variables	Residential Zones				Ile-Ife Township
	Traditional Town Center	Middle Income Area	High Income Area	Post-Crisis Area	
Education Background					
None	15 (18.29%)	- (0.00%)	- (0.00%)	01 (1.56%)	16 (4.79%)
Primary School	26 (31.71%)	03 (2.14%)	- (0.00%)	04 (6.25%)	33 (9.88%)
Secondary Sch.	20 (24.39%)	26 (18.57%)	03 (6.25%)	22 (34.38%)	71 (21.26%)
Post Sec. Sch.	21 (25.61%)	111 (79.29%)	45 (93.75%)	37 (57.81%)	214 (64.07%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64 (100.0)	334
Income Group					
Below 20000	32 (39.02%)	26 (18.57%)	02 (4.17%)	31 (48.44%)	91 (27.25%)
20000-40000	26 (31.71%)	30 (21.43%)	09 (18.75%)	19 (29.69%)	84 (25.15%)
41000-60000	15 (18.29%)	29 (20.71%)	04 (8.33%)	12 (18.75%)	60 (17.96%)
61000-80000	7 (8.54%)	23 (16.43%)	07 (14.58%)	1 (1.56%)	38 (11.38%)
81000-100000	1 (1.22%)	20 (14.29%)	11 (22.92%)	1 (1.56%)	33 (9.88%)
101000 and above	1 (1.22%)	12 (8.57%)	15 (31.25%)	- (0.00%)	28 (8.38%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64 (100.0)	334
Household Group					
Small	25 (30.5%)	110 (78.6%)	33 (68.8%)	39 (60.9%)	207 (61.98%)
Medium	24 (29.3%)	24 (17.1%)	13 (27.1%)	13 (20.3%)	74 (22.16%)
Large	33 (40.2%)	6 (4.3%)	02 (4.2%)	12 (18.8%)	53 (15.87%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64 (100.0)	334 (100.0)
Occupation					
Civil Servant	16 (19.51%)	68 (48.57%)	28 (58.33%)	11 (17.19%)	123 (36.83%)
Artisans	23 (28.05%)	13 (9.29%)	2 (4.17%)	19 (26.56%)	55 (16.47%)
Farmers	12 (14.63%)	01 (0.71%)	2 (4.17%)	05 (4.69%)	18 (5.39%)
Trader	27 (34.38%)	37 (26.43%)	10 (20.83%)	23 (32.83%)	96 (28.74%)
Others	4 (4.87%)	21 (15.00%)	6 (12.5%)	06 (9.38%)	42 (12.56%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64 (100.0)	334 (100.0)

Closely related to educational background is the occupational distribution. It was established that the proportion of residents engaging in occupation requiring higher educational qualification increases as distance increases from traditional town centre to high income residential area. This assertion was corroborated as middle income residential area accommodated 48.6% of civil servants while 58.3% of the same category was accommodated in the high income residential area of the town. In addition, 19.5% and 17.2% of the civil servants resided in traditional town centre and post crisis residential area of the town respectively. The proportion of residents engaging in the occupation classified as others were also on the increase from the traditional town centre towards the high income residential area. Included in this occupational class are legal, medical and engineering professions in private practices. All these require higher educational qualification.

The survey of the socio-economic characteristics of residents showed that significant variation exist in the residential areas in Ile-Ife. We can indeed conclude that residents of the traditional town centre were highly in the low educational status, engaging in occupation requiring low educational status; mostly in the low income group and residing in face-me-face-you. To this end, this first part of the study established that statistically significant variation exist in the socio-economic attributes of residents in different residential zones. It is therefore expected that variation will exist in the prevalent crime and delinquency in different residential areas. The next section of this study is focused on this.

b. Types and rate of occurrence of criminal activities in Ile- Ife

This study investigated the rate of occurrence of criminal activities in Ile-Ife from the perception of the residents. It was evident from the Table 2 that those crime types perceived to have higher rate of occurrence in the traditional town centre included store breaking, house breaking, stealing and pilfering, breach of public peace, child abuse and vehicle theft. Other included sexual harassment, false pretences cheating, child abandonment, burglary, attempted rape, pick pocketing, impersonation, vehicle hijacking, robbery, prostitution robbery and receiving stolen properties. All these crime types had their rate of occurrence index higher than $CROI_a$. The average crime rate occurrence index ($CROI_a$) for traditional town centre was 2.41. The five most occurring crime types in the traditional town centre included store breaking, house breaking, stealing, and breach of public peace as well as child abuse. The $CROI$ of each of these crimes were 3.44 for store breaking, 3.27 each for both house breaking and stealing. Breach of public peace had $CROI=2.96$ while the index for both child abuse and vehicle theft was 2.91 each. Sexual harassment had $CROI=2.81$. Hence, store breaking was the major challenge in this part of the town. This is accrued to the fact that most of the residents in this part of the town engage in trading activities. A cursory look into the occupation of the residents in this part of the town revealed that about 34.4% (see table 1) engaged in trading/business activities. These were being operated in commercial shops and stores on small and medium scale bases. Therefore, there are more commercial shops in this part of the town. Slave dealing was perceived as the least occurring types of crime identified in this area. The $CROI$ of this crime type was put at 1.56.

Those crimes perceived to have higher magnitude of occurrence in the middle income residential areas included house breaking, burglary, store breaking, vehicle theft, stealing and pilfering, robbery and internet scam. Others were drug offences, breach of public peace, sexual harassment, attempted rape, unlawful possession, rape, false pretences cheating, prostitution and pick pocketing. All these crime types had their $CROI$ above the average ($CROI_b$) for this area. The $CROI_b$ was 2.40. Residents were of the opinion that house breaking, burglary, store breaking, vehicle theft as well as stealing and pilfering were the five most challenging criminal activities in the middle income residential areas of the town. It was noted that all these crime types were crime against properties. The rate of occurrence indices computed for these crimes were 4.24, 4.09, 3.81, 3.74 and 3.45 respectively. The findings revealed house breaking as the major challenge in this part of the town. Residents perceived that manslaughter was the least occurring types of crime identified in the study area. The index of this crime type was 1.35.

The average crime rate of occurrence index (CROI_c) was 2.35. Crime types such as house breaking, store breaking, burglary, vehicle theft robbery, rape, false pretences cheating and sexual harassment all had their CROI above CROI_c. Other included vehicle hijacking, stealing and pilfering, attempted rape, internet scam, prostitution, child abuse, impersonation and pick pocketing. All these are likely to have higher magnitude of treat in the high income residential areas. Residents perceived that the five frequently occurring crime in this part of the town included house breaking, store breaking, burglary, vehicle theft and robbery. An index of 3.96 was computed for house breaking while store breaking had index of 3.88. While the occurrence index of burglary was put at 3.85, vehicle theft and robbery had rate of occurrence indices of 3.79 and 3.38 respectively.

Table 2 **Types and rate of occurrence of criminal activities different residential areas**

Traditional Town Centre		Middle Income Residential Area		High Income Residential Area		Post Crisis Residential Area		Ile-Ife Township	
Crime related activities	CROI	Crime related activities	CROI	Crime related activities	CROI	Crime related activities	CROI	Crime related activities	CROI
Store Breaking	3.44	House Breaking	4.24	House Breaking	3.96	Attempted Rape	3.34	Store Breaking	3.25
House Breaking	3.27	Burglary	4.09	Store Breaking	3.88	Breach of Public Peace	3.33	House Breaking	3.14
Stealing and Pilfering	3.27	Store Breaking	3.81	Burglary	3.85	House Breaking	3.27	Burglary	3.05
Breach of Public Peace	2.96	Vehicle Theft	3.74	Vehicle Theft	3.79	Sexual harassment	3.27	Vehicle Theft	3.03
Child Abuse	2.91	Stealing and Pilfering	3.47	Robbery	3.38	Pick pocketing	3.25	Stealing and Pilfering	2.92
Vehicle Theft	2.91	Robbery	3.42	Rape	2.77	Stealing and Pilfering	3.23	Robbery	2.81
Sexual harassment	2.89	Internet Scam	2.99	False Pretences Cheating	2.67	Child Abuse	3.20	Sexual harassment	2.63
False Pretences Cheating	2.88	Drug offences	2.81	Sexual harassment	2.65	Store Breaking	3.14	Breach of Public Peace	2.61
Child Abandonment	2.88	Breach of Public Peace	2.76	Vehicle hijacking	2.56	Drug offences	3.06	Attempted Rape	2.6
Burglary	2.83	Sexual harassment	2.69	Stealing and Pilfering	2.50	Prostitution	3.05	Internet Scam	2.49
Attempted Rape	2.83	Attempted Rape	2.67	Attempted Rape	2.50	Burglary	3.02	False Pretences Cheating	2.48
Pick pocketing	2.77	Unlawful Possession	2.64	Internet Scam	2.48	Robbery	2.97	Pick pocketing	2.48
Impersonation	2.56	Rape	2.63	Prostitution	2.42	Internet Scam	2.97	Unlawful Possession	2.4
Vehicle hijacking	2.54	False Pretences Cheating	2.57	Child Abuse	2.40	Unlawful Possession	2.95	Prostitution	2.39
Robbery	2.51	Prostitution	2.50	Impersonation	2.40	Child Abandonment	2.92	Rape	2.35
Prostitution	2.49	Pick pocketing	2.41	Pick pocketing	2.31	Receiving Stolen Property	2.89	Drug offences	2.32
Receiving Stolen Property	2.44	Vehicle hijacking	2.39	Breach of Public Peace	2.29	Impersonation	2.88	Vehicle hijacking	2.31
Internet Scam	2.41	Receiving Stolen Property	2.27	Drug offences	2.23	Assassination	2.84	Child Abandonment	2.27
Rape	2.29	Murder	1.24	Kidnapping	2.19	Rape	2.69	Impersonation	2.25
Manslaughter	2.23	Cultic and related harms	2.14	Unlawful Possession	2.19	False Pretences	2.70	Receiving Stolen Property	2.25

						Cheating			
Drug offences	2.09	Child Abuse	2.01	Cultic and related harms	2.15	Vehicle Theft	2.73	Cultic and related harms	2.04
Unlawful Possession	2.02	Impersonation	1.98	Child Abandonment	2.08	Arson	2.73	Kidnapping	1.93
Arson	1.94	Child Abandonment	1.89	Receiving Stolen Property	1.90	Cultic and related harms	2.75	Arson	1.9
Kidnapping	1.93	Arson	1.79	Assassination	1.79	Slave Dealing	1.77	Assassination	1.9
Cultic and related harms	1.90	Child stealing	1.79	Suicide	1.65	Murder	2.03	Child stealing	1.7
Assassination	1.85	Kidnapping	1.70	Slave Dealing	1.58	Kidnapping	2.63	Child Abuse	1.69
Child stealing	1.82	Assassination	1.67	Attempted suicide	1.54	Vehicle hijacking	2.59	Attempted suicide	1.68
Attempted suicide	1.80	Slave Dealing	1.58	Arson	1.54	Attempted suicide	2.39	Suicide	1.58
Murder	1.62	Attempted suicide	1.36	Attempted murder	1.46	Attempted murder	2.25	Attempted murder	1.56
Attempted murder	1.62	Attempted murder	1.28	Child stealing	1.42	Child stealing	2.05	Slave Dealing	1.55
Suicide	1.56	Manslaughter	1.25	Murder	1.42	Manslaughter	1.95	Murder	1.51
Slave Dealing	1.56	Suicide	1.19	Manslaughter	1.35	Suicide	1.92	Manslaughter	1.44

As obtainable in the middle income residential area, the findings also revealed house breaking as the major challenge in this part of the town. House breaking involves the use of physical force to gain access to, and entering, a house with intent to commit a felony inside especially in the day time. This is accrued to the fact that this area is majorly residential with few commercial shops that provide immediate needs for the residents. In addition, most of the residents in these areas are civil servants (49% and 58% of the residents in middle and high income areas were civil servants) who are likely to be at work place during the day. This creates absence of a capable guardian against properties. Guardian here may be anybody whose presence or proximity would either prevent or discourage house breaking from happening. The guardian here was not usually a police officer or security agent but rather anybody whose presence or proximity would either prevent or discourage house breaking from happening.

The average crime rate of occurrence ($CROI_d$) index was 2.77. With an index of 3.34, attempted rape was perceived to be the major challenge in post crisis residential area (see Table 2). This may accrued to the fact that this area has a generally low reputation with large number of youngsters, gangsters and houses a large number of school dropout. It recorded the highest level of drug abuse ($CROI=2.78$) when compared with other residential areas. Drug use and alcohol has been shown to play a disuniting role in sexual assaults (Miczek 1993). Other crime types which constitute major challenge included breach of public peace, house breaking, and sexual harassment, pick pocketing, stealing and pilfering, child abuse, store breaking, drug offences, prostitution and burglary. Others were robbery, internet scam, and unlawful possession, child abandonment, receiving stolen properties, impersonation and assassination. Residents were of the opinion that suicide was the least occurring types of crime in the area. The mean deviation of this crime type was -0.85.

The average crime rate of occurrence index ($CROI_e$) for the study area was 2.27 (see Table 2). Residents also perceived that the five most occurring crime types in Ile-Ife were store breaking, house breaking, burglary, vehicle theft and stealing. An index of 3.25 was computed for store breaking, 3.14 for house breaking while 3.05, 3.03 and 2.92 were respectively for burglary, vehicle theft and stealing (see Table 2). The peculiarity of this is that, they are all crime against properties. Store breaking was further established as the most occurring crime in the town while manslaughter was the least occurring types of crime in the study area. This study established therefore that average rate of occurrence index decreases as distance increases from traditional town centre to middle income area and towards the low income residential area.

(c) Relationship between Prevalent Crime and Residents' Socio-Economic Characteristics

The residents' socio-economic characteristics and some important criminal activities were examined in order to determine whether there is relationship between them. The relationship was investigated using Pearson Product Momentum Correlation coefficient. The result is presented in table 3.

Table 3: Pearson Product Moment Correlations of Prevalent Criminal Activities and Residents' Socio-economic Characteristics

Variables	Education Background	Income	Household size	Occupation	Store Breaking	House Breaking	Sexual Harassments
Education Background	1						
Income	0.724	1					
Household size	-0.452	0.435	1				
Occupation	0.786	0.897	0.507	1			
Store Breaking	0.643	0.765	0.421	0.665	1		
House Breaking	0.767	0.789	0.787	0.568	0.543	1	
Sexual Harassments	0.509	0.521	0.785	0.878	0.671	0.456	1

N=334, p<.01(Correlation is significant at the 0.01 level)

It was revealed that high and middle up positive correlation existed between the prevalent criminal activities and socio-economic characteristics variable observed. Store breaking as the most prevalent crime had positive correlation with education background (r=0.643, p<.01) and income ((r=0.765, p<.01). This implies that the higher the income, the more frequent the experience of store breaking. This was supported by occupation (r=0.665, p<.01) with positive correlation with store breaking. Similarly, all the socio-economic variable considered have high positive relationship with house breaking. For instance, income has positive association with house breaking. This implies that increase in income would likely increase house breaking. In the case of sexual harassment, occupation had a very high positive correlation (p=0.878; p<.01). Thus, people may be sexually abuse depending on the types of occupation they engaged in.

Arising from the result of the analysis, there is significant association between prevalent crime and socio-economic characteristics of the community studied particularly income, occupation, education background and household size of the residents. In their study of the relationship between crime and the socio-economic characteristics of urban communities, Fishman, Rattner, and Kraus (1984) reported that communities with high rates of violent crime are characterized by low level of education, high percentage of large families and low income. Similarly, Jayamala (2008) indentified disparity in income status as a determinant of conduct disorder in urban areas.

Conclusion and Recommendations

From the findings above, conduct disorder is increasingly a problem in Ile-Ife. Notable among these disorders were store breaking, house breaking, armed robbery, theft, stealing, burglary and sexual violence as well as drug abuse/dealing. All these were perceived to be widespread and constituted major concern to the residents of Ile-Ife. Base on this, the following recommendations are made to ameliorate crime and delinquency in Ile-Ife.

Neighbourhood association such as landlords' should be encouraged while residents should be more security conscious and organized vigilante groups with proper policy framework that define the roles of these vigilante groups and that of the police in the security delivery system of Ile-Ife. Residents should be more security conscious by installing special security door lock in their individual houses. Strategies to reduce crime and delinquency in Ile-Ife must also be anchored on a policy framework that is tailored to address the physical planning of Ile-Ife. Well-connected streets are important in helping to protect dwellings from the prevalent of burglary, store breaking and house breaking. Door-to-door intervisibility between houses on both sides of roads is an important factor as well. All these will ensure natural surveillance.

It was observed that the traditional town centre and post crisis residential area of the town are usually deserted especially in the night. This has made it possible for burglars to operate particularly in the area of store breaking. Thus, there is need to keep these places alive by enhancing and promoting activities that will keep these parts of the town alive in the day and night. Such activities could involve the establishment of public places such as club houses, cinema and other recreational activities. In addition, there should also be inclusion of adequate and functional streetlight to illuminate these areas in the night.

Post crisis residential areas features high rate of abandoned properties, unoccupied buildings as well as run-down buildings and fewer undeveloped plots of land that has grown trees and bushes. All these could be hideout for criminals and gangsters. Infact, this situation has constituted part of the reasons for the high rate of crime recorded in this area. Therefore, government should call on the owners of these properties to renovate, complete and occupy or make their properties functional within a reasonable given period of time.

Conclusively, the prevalent crime differs and significant variations exist in the rate of occurrence index of crime in different residential zones as socio-economic and demographic characteristics varied along the different residential areas of Ile-Ife. The approach to make residents feel more secured should be guided by those variations. However, the long-term solution to the crime problem must emphasize the reduction of poverty. This will help to minimize the prospects of their becoming attracted to criminal activities. An educated person and employed citizenry are bound to constitute an infertile environment for social maladies and vices to thrive and triumph (Okoko 2008).

References

- Afon, A. O (2005): Solid waste management in selected cities of Oyo state, Nigeria. Ph.D. Dissertation, submitted to the Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Agbola, T (1997). *Architecture of Fear: Urban Design and Construction Response to Violence in Lagos, Nigeria*, IFRA, Ibadan, Nigeria
- Agbola, T (2004). Urban violence in Nigeria Cities, a case study of Abuja. *Journal of the Nigeria Institute of Town Planners*, Vol. XVII: No. 1, pp 59-77.
- Aguda A.S (1994). Areal Ecological Analysis of Crime: A study of Nigeria city. In: I.O. Albert, J Adisa, T Agbola and G. Herault, (Eds). *Urban Management and Urban Violence in Africa*. Vol. 1. IFRA, Ibadan, Nigeria. pp 1-8
- Alemika, E and Chukwuma, C (2005). *Criminal Victimization and Fear of Crime in Lagos Metropolis, Nigeria*. CLEEN Foundation, Lagos, Nigeria.
- Akorede, V.E.A. (1974): Ilorin-a study of urban geography. M.sc Thesis, Department of Geography, University of Lagos, Lagos, Nigeria.
- Blau, J. R. and Peter B. (1982). The Cost of Inequality: Metropolitan Structure and Violence Crime. *American Sociological Review*, 47: 114-29.
- Braithwaite, John B. (1979). *Inequality, Crime and Public Policy*. London: Routledge.
- Brantingham P.L and P.J Brantingham (1975). Residential Burglary and Urban Form. *Urban Studies*, 12, 273-284.
- Brantingham, P. J., and Brantingham, P. L. (1984). *Patterns in Crime*. New York: Macmillan.

- Burke, Roger Hopkins (2001). An Introduction to Criminological Theory. *Criminal Justice Review*, pp 377-381.
- Curtis, Lynn A. (1974). *Criminal Violence*. Lexington, Mass: D.C. Heath.
- Durkheim E (1966). *The Rules of Sociological Method*, Trans. Sarah Solovay and John H. Mueller New York: Free Press, pp. 64-76.
- Eberts, P. and Kent P. S. (1968). Metropolitan Crime Rates and Relative Deprivation. *Criminology* 5: 43-52.
- Fishman. G, A. Rattner, and V. Kraus. (1984) Urban Community Characteristics and Rates of Violence in Israel.” *Israel Social Science Research* 2(2): pp 33-41.
- Harries K. D. (1974). *The Geography of Crime and Justice*. McGraw Hill, New York.
- Harries K. D and Stadler S. J and T. Zodorkowski (1984). Seasonality and assault explorations in inter neighborhood variation, 1980. *Annals of the association of American Geographers*, 74 (4) pp 5-21
- Harries, K. and Norris, R.E. (1986). *Human Geography: Culture, International and Economy*. Merrill Publishing Company. Columbia, Ohio.
- Jayamala M (2008). Trends and Spatial Patterns of Crime in India: A Case Study of a District in India. A doctoral dissertation in sociology, Annamalai University, Indian
- Martin David. (2002). Spatial Patterns in Residential Burglary: Assessing the Effect of Neighbourhood Social Capital. *Journal of Contemporary Criminal Justice*, 18(2): pp 132-146.
- Miczek K. A (1993). Alcohol, drug abuse, aggression and violence. In: Reiss A. J, Roth J. A (Eds) *Understanding and Prevention of Violence. Vol.3*. Washington DC, National Academic Press, pp 377-570.
- Moser, C.O.N (2004) Urban Violence and Insecurity: An Introductory Roadmap. *Environment and Urbanization* Vol. 16, No, 1 pp 3-16
- Mukoro S.I (1994). Intra-Urban pattern of violent crime in Africa cities: Lagos, Nigeria. In: I.O. Albert; J. Adisa; T. Agbola and G. Herault, (Eds) *Urban Management and Urban Violence in Africa*. Vol. 2. IFRA, Ibadan, Nigeria, pp 65-74
- Okoko E. E (2008). A Time Series Analysis of the Trend of Urban Violence in Akure, Nigeria. *Journal of the Nigeria Institute of Town planners*. Volume XXI, No.1 pp 165-183.
- Onibokun, A.G. (1985): Urbanization in the emerging nations: a challenge for pragmatic comprehensive regional planning. In: Onibokun, A.G. (Ed), *Housing in Nigeria: A book of Readings*. Ibadan, NISER, Nigeria, pp 5-18.
- Onokerhoraye, A.G. (1977): The spatial pattern of residential districts in Benin, Nigeria. *Urban Studies* No. 14, pp 201-302
- Portnov B.A and Rattner A (2003). Spatial Patterns of Crime in Israel: Investigating the Effects of Inter-Urban Inequality and Proximity. *43rd European Congress of the Regional Science Association*, Jyvaskyla, Finland, August 27-30, 2003.
- Quinney, R. (1966). Structural Characteristics, Population Areas, and Crime Rates in the United States. *Journal of Criminal Law, Criminology and Police Sciences*. 57:45-52.
- Sanni K.B, Nsiong .U, Abayomi A. O, Modo F.N and Leonard E.N (2010). Family types and Juvenile Delinquency issues among Secondary School Students in Akwa Ibom State, Nigeria: Counseling Implications. *Journal of social sciences, University of Uyo, Akwa Ibom State, Nigeria. Vol. 23(1): 21-28*.
- Schuessler, Karl. (1962). Components of Variation in City Crime Rates. *Social Problems* 9:314-23.
- Shaw, C.R. and Mckay, H.D. (1942). *Juvenile Delinquency and Urban Areas: A Study of Rates of Delinquencies in Relation to Differential Characteristics of Local Communities in American Cities*, Chicago: University of Chicago Press.
- Van Dijk, J .M (1994) Understanding crime rates: on the interactions between rational choices of victims and offenders. *British Journal of Criminology* 34(2), 105–121.
- Wang F and William W. M. (2002). Where the Jobs Are: Employment Access and Crime Patterns in Cleveland.” *Annals of the Association of American Geographers*, 92(3): pp 435-450.