

SPATIO-TEMPORAL VARIATIONS IN URBAN CRIME IN OGBOMOSO, NIGERIA

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ABSTRACT

Against the background of the increasing frequency, scope and sophistication of crime as well as the insurmountable problems associated with its seemingly uncontrollable tendencies in cities of the world generally and Nigerian urban centers in particular, this paper examines the rates, forms and spatio-temporal variations in urban crime in Ogbomosho, Nigeria. The paper utilizes a nine-year (1995-2003) police crime record obtained from the Divisional Police Headquarters of the two local governments whose areas of jurisdiction cover the metropolis. A total of 4767 reviewed crime cases were reclassified into ten categories and examined by location within the existing urban spatial structure of high, medium and low density residential densities.

All the ten categories of crime identified were encountered. However, the most prevalent were crime of acquisition (48.8%) and aggression (28.3%), with the high density area having the greatest concentration of cases. The temporal analysis shows that crime trend decreased in Ogbomosho within the period of study, a feat attributed to more gainful employment for the urban youths, particularly the increase in the use of motor cycle popularly known as "Okada" as a mode of intra-city transportation. The causal factors of crime are examined within structuralism and individualism paradigms. On planning implications, it is suggested that principles guiding land use zoning (or allocation), infrastructural planning, and building design be reviewed so as to prevent the creation of danger zone within the urban landscape.

KEYWORDS: Urban crime; spatio-temporal variations, Ogbomosho

INTRODUCTION

The widening scope of, and, increasing sophistication in criminal activities coupled with its seemingly uncontrollable tendencies are some of the nerve-racking social phenomena of concern to social workers and policy makers (Adeboyejo et al 2003). Over a decade ago, reports revealed that one out of every four American households experienced violent crime of theft every year (U.S. News and World Report, 1996). The city of Chicago records seven hundred murders in one year resulting from the use of crack cocaine (The Watch Tower, 1994). The state of security in South Africa is so pathetic that Osaghae, (1994) concluded that the country is "structurally violent". In Nigeria, many urban areas have become sites of very raucous and violent crimes featuring different kinds of vices that threaten the security of the people and the liveability of the cities (Ayeni-Akeke, 2001). The past months in the country in particular have witnessed unprecedented upsurge in cases of assassinations, ritual killings, armed robbery and banditry. However, the type or form and, rate of occurrence of crime vary from city to city and also over time. It has been argued that, we can perhaps not find a city where there is no appreciable number of people who are frustrated, impoverished or dissatisfied and ready to vent off their grievances through organized criminality, either individually or collectively (Ayeni-Akeke 2001). It is argued that, no city, Ogbomosho inclusive, is totally rid of crime, though the level may differ.

To many observers, crime is integrally linked with social developments. Bottoms et al, (1997) however argued that there are nations, for example, Japan where comparative studies of recent developments in crime showed that in spite of rapid industrialization and urbanization, there is a less rapid growth in crime rate compared to other economies. This is not to undermine the universal conception that urban crime rates are higher than those in the rural areas in a given nation at a particular point in time. This suggests that urbanism, as a way of life though occupies a significant position in the study of criminal activities, urban social life with respect to structure and functioning differ within and among countries

Although the literature on the incidence, types and spatial variation in crime is fast growing (Aguda, 1994; Agbola, 1997; Afon, 2001; Agbola, 2002), there are very few studies on the spatio-temporal aspects of crime (Omisakin, 1998; Agbola and Sobanjo, 2002). Even when available, the tradition follows the study of total crime cases reported by categories over the period of study as contained in police records (Agbola, 1997; Omisakin, 1998). More importantly, the city is treated as a monolithic entity, without consideration of different residential neighbourhoods, which may have influence on the types, frequency, and sophistication of crime. It is argued here that, spatio-temporal analysis should provide insight into the aetiology of crime, facilitate identification of underlying mechanisms, particularly those associated with political and economic vicissitudes of the nation at large. The identification of causal factors of crime makes possible formulation of appropriate city-specific policies and programmes. Furthermore, analysis of crime trend would make possible simple extrapolation of the future pattern which could enable the fashioning of policies to pre-empt occurrences.

It is argued here that there are intricate connection and complex interrelationships between the environment in which urban dwellers live and incidence of crime. Residential density patterns are characterized by different socio-economic, socio-cultural and physical environmental factors, which have various implications for, and impacts on, the type as well as the rate of occurrence of crime.

Apart from being a socio-economic problem, crime is a serious impediment to development, an undeniable stigma to national image and a significant source of threat to people's safety and well being (Omisakin, 1998). Criminals attack people of diverse social status, destroying lives and looting valuables. The effects of these operations on the society and its institutions are evident in a new wave of social behaviour characterized by isolation, anxiety, individualism, hostility, mistrust, aggressiveness, feelings of hopelessness and helplessness etc. (Madden, 1996). Consequent upon all these crime-associated problems, the residents' realization of how vulnerable their lives are and the apparent inability of the criminal justice system to cope with the current crime wave,

there have emerged various individual and community efforts at safeguarding their lives and properties. The main goal of this study therefore is the analysis of intra-city and temporal variations in crime in a pre-colonial but rapidly urbanizing city. The study seeks among other things to identify and classify crime types, examine the trend in crime incidence within different urban milieu. The study proposes a theoretical framework for the evaluation of underlying mechanisms of crime in a developing economy like Nigeria.

METHODOLOGY

Method of Data collection

The bulk of the information used for this research was obtained from police crime record at The Divisional Police

Head Quarters of Ogbomoso North and South Local Government Areas for a period of nine years (1995-2003). The periods were those for which data was available. The two Divisional Police Headquarters, each with a Divisional Crime Unit, takes responsibility for all reported crime cases. For the period covered, a total of 4767 cases were reviewed. The cases were rearranged using places of occurrence, within the existing urban spatial structure of high, medium and low density residential areas. More than one hundred types (as identified by Nigerian Police Criminal Code) of crime were identified in the study area. However, for a concise and clear presentation these were re-classified into ten groups as summarized in table 1.

Table 1: Crime categories and Types

SIN	Crime Category	Crime Types
1	Aggression	Suicide, attempt to commit suicide, attempt to commit felony, assault, assault occasioning harm, wounding, kidnapping, forcible entry, unlawful homicide, murder, threatening life with violence, assault and stealing, grievous harm, suspected murder, shooting incidence.
2	Acquisition	Deprivation of property, auto theft, unlawful possession of arm, obtaining money under false pretence, store breaking, conspiracy and stealing, stealing, house breaking and stealing, suspected stolen goods, unlawful possession, armed robbery/robbery and attempted robbery. Others include entering and stealing, shop breaking and stealing, factory breaking and stealing, stolen vehicle\motorcycle, office breaking and stealing, receiving stolen goods suspected armed robbery.
3	White collar	Corrupt gift to agent, counterfeit stamps, falsification of register, forgery, personification with intent to commit felony, personification, cheating, issuing bounced cheques, fraud, exam malpractices and election malpractices.
4	Against property (damage)	Damage to crops, arson, malicious damage, cruelty to animals, fire incidence.
5	Against morality and custom	Indecent assault, defilement, attempt to procure abortion, abduction of a girl less than 18 years, abandoning and exposing child, abortion, attempted rape and rape.
6	Against government officials on duty	Serious assault
7	Public disorderliness	Breaking into place of worship, affray, negligent acts causing harm, idle and disorderly person, conduct likely to cause breach of peace, failure to suppress riot, rouses and vagabond, student unrest and going armed to cause fear.
8	Against public law/regulation	Contempt of court, escape from lawful custody, resisting arrest, giving police false information, assessing after fact, screening of offender, unlawful detention, weed suspected to be Indian hemp, hoarding and harbouring of offender.
9	Cultic\witchcraft practices	Suspected secret cult, offense in relation to witchcraft and trial by ordeal
10	Others	Missing person, suspected person, demanding and occurring, sudden and unnatural death.

Source: Authors' Field Survey

Data Analysis

A descriptive analysis of the data extracted from police record was carried out using Statistical Package for Social Sciences (SPSS). This enabled a further identification of variables to be recoded/recomputed for subsequent analysis. A cross tabulation of crime categories by residential density was carried out and differences in observations were tested with Chi-square statistic, wherever applicable.

For further analysis on the temporal variation in the incidence of crime, the trend analysis was carried out, while Spearman rank correlation analysis was used in verifying relationship between years of reporting and frequency of occurrence of crime. The spatio-temporal patterns in occurrence of crime were illustrated.

RESULTS AND DISCUSSION

The scope of urban crime in Ogbomoso

All the ten categories of crime identified were encountered at varying degrees. The result of analysis as illustrated in figure 1 reveals that the highest occurring crime in Ogbomoso were; crime of acquisition (48.8%) followed by crime of aggression (28.3%), crime against morality and custom (6.5%) and crime of public disorderliness (5.1%). Others include: crime against property (4.5%), white collar crime (1.7%) and crime against government officials on duty (1.6%).

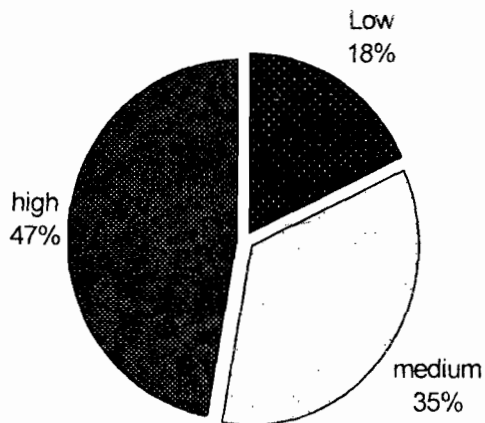


Fig.2: Intra-urban variations in Crime rate

3.2 Intra-Urban variations in crime categories

The occurrence of total crime cases as well as different categories of crime differed from one residential area to the other. The analysis of the total number of crime reported in the period under consideration showed that the high density residential area with 47.2 per cent had the highest number of cases, followed by the medium and low density areas each with 34.7 percent and 18.1 percent respectively (figure 2). The

observed variation is significant where $P < 0.05$. This implies the existence of positive relationship between occurrence of criminal activities and density of development. This is in line with the results of some earlier studies e.g. (Afon, 2001) in Ilorin and (Agbola, 1997) in Lagos which found out that all categories of crime occurred more in the high density residential areas.

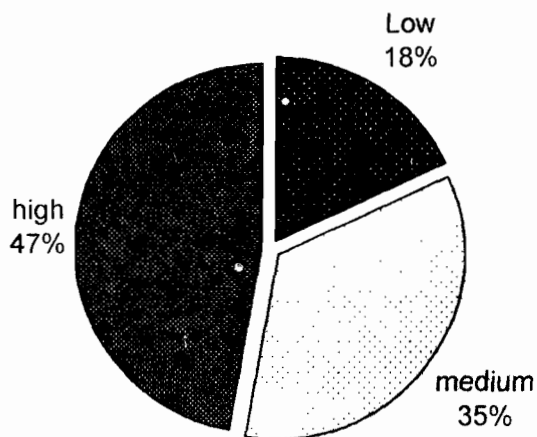


Fig.2: Intra-urban variations in Crime rate

Further analysis as summarized in table 2 reveals that, the occurrence of crime of aggression, crime of acquisition and crime against property each with 56.9, 40.6 and 49.8 percent respectively is higher in the high density residential area, compared with corresponding figures of 30.3, 38.1 and 31.2 percent and, 12.8, 21.3 and 19.1 percent in the medium and

low density areas respectively. The above pattern was also observed for: crime against morality and custom; crime of public disorderliness and other crimes. This is perhaps as a result of the fact that majority of the residents in high density residential area are of low educational qualification with low paid jobs and income.

Table 2: Intra-city Variation in crime categories

SN	Crime category	High density(%)	Medium density (%)	Low density(%)
1	Aggression	56.9	30.3	12.8
2	Acquisition	40.6	38.1	21.3
3	White collar	30.4	40.5	29.1
4	Against property (damage)	49.8	31.2	19.1
5	Against morality and custom	62.9	27.4	9.7
6	Against government officers on duty	32.4	37.8	29.7
7	Against public law	29.4	35.3	35.3
8	Public disorderliness	47.7	36.5	15.8
9	Cultic\witchcraft practices	0.0	62.5	37.5
10	Others	47.9	31.4	20.7

Source: Authors' computation

TEMPORAL VARIATION IN THE INCIDENCE OF CRIME

The results of analysis as illustrated in figure 3 shows a fluctuation that tends more towards decrease. This is confirmed by a negative correlation ($r = -0.594$) between year and frequency of crime occurrence. Major decreases were for instance noted in 1996 (582 or 12.2%), 1998 (322 or 6.8%) and 2002 (285 or 6.0%). However a P-value of 0.070 shows

that the observed decrease is not statistically significant. This implies that, crime occur in a wave like manner, with the peak of the wave corresponding to the periods of low policing and low societal vigilance. The need for sustained effective policing and citywide vigilance on a constant basis would perhaps ensure downward trend of crime rate.

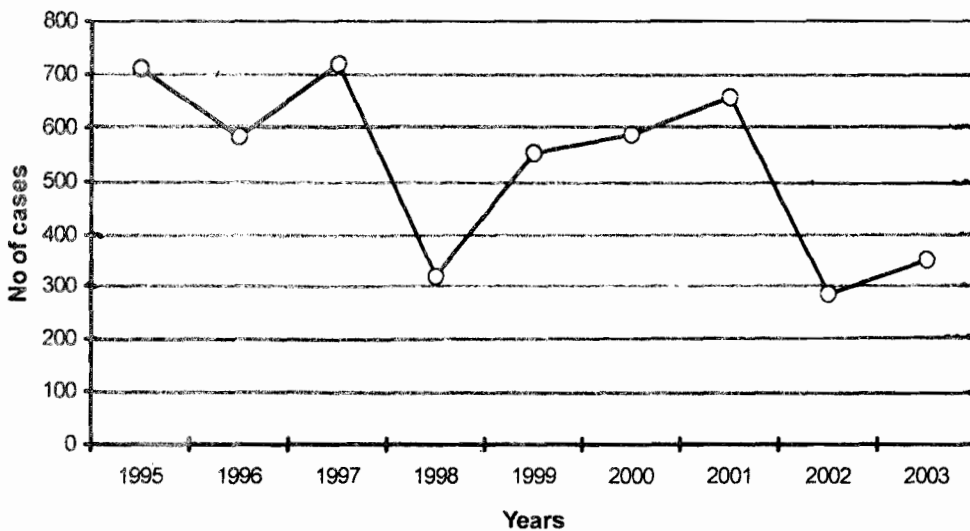


Fig.3 Temporal variations in incidence of crime in Ogbomoso

The trend of crime rate for different urban residential densities as illustrated in Figure 4 emphasizes the prevalence of crime rate in the high density areas in the periods under consideration. That there is increasing crime rate with

increasing residential density is a major conclusion. This pattern is also observed when the trends of four most prevalent crime categories (aggression, acquisition, white collar and crime against property) are examined.

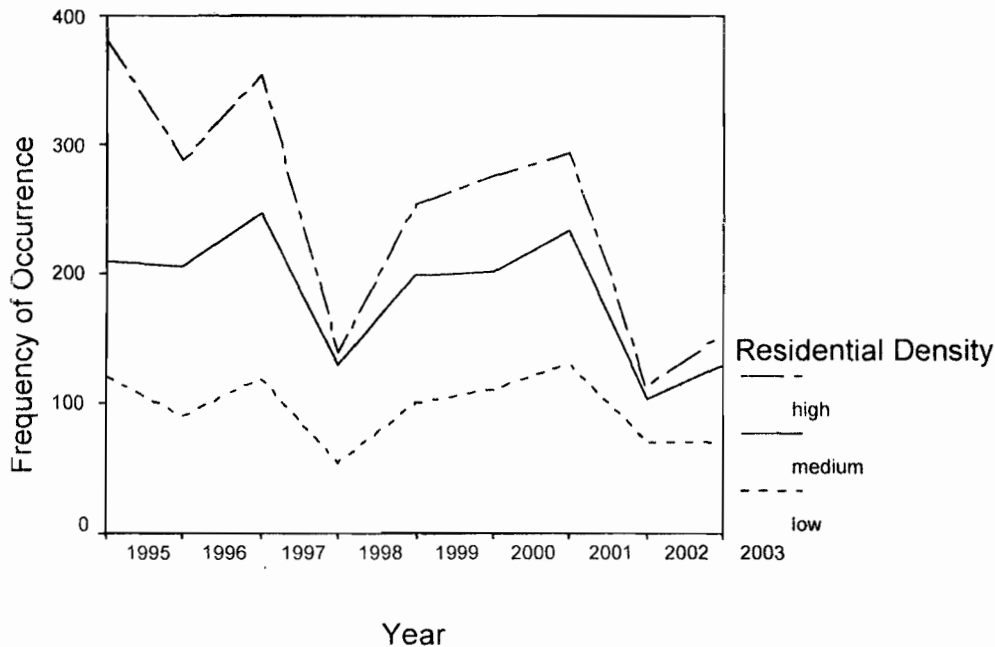


Fig. 4: Temporal variations in crime rate within residential densities

TOWARDS CRIME FREE CITIES

The observation of a fluctuating trend in urban crime in the period under consideration in this paper raises important question of whether there is the possibility of a crime free city. It also provides us the motivation for theoretical explanation of the mechanisms of crime and an exploration of the theoretical relationship between cities and crime. The questions are: What are the causes of crime in cities? , can there be crime free cities? If not, why? what is the acceptable level of crime?. In order words, at what stage (crime level) can we regard the cities as safe for living? Answers to these questions are nevertheless directions for future research as they are beyond the scope of the present study. However, attempt is made here to provide answer to the question of mechanisms of crime within the context of existing social structure and associated individual behaviour.

Considering its nature, character and manifestations, and the various commentaries on the subject, it is argued here that there are at least two basic theoretical frameworks within which urban crime can be understood. These are structuralism and individualism.

Within the maxim of structuralism, it is posited that, crime is a logical outcome of the structure and functioning of the society. While criminal activity is as old as human society, the creation and metropolitanisation of cities have produced structural artifacts or edifices, which accentuate criminal activities thereby impacting strongly on the prevalence rates, severity and sophistication of crime. Some of the structural contexts of criminal activities include: the quality of living environment; building types and density.

Within urban landscape, such poor features as mixed and most often incompatible landuses and, unguided but elaborate commercial activities commonly associated with high density area are known to create opportunities for criminal activities. Mixed uses are pull factors for anonymous crowd who seize opportunity of patronage of services such as motor parks and commercial areas to commit crime. An empirical

evidence is provided in this study by the observed high profile of high density residential areas on all categories of crime.

The contribution of building types and design is to the effect that, in some places 'zone of defense' are either not defined at all or are poorly demarcated as in overcrowded residential apartment characteristic of the high density areas. In such situation, it is difficult to exercise any appreciable degree of territoriality. Consequently, privacies are invaded with ease where for example, many people in an overcrowded living environment share facilities such as passages, bathrooms, toilets and kitchens.

Furthermore, the functioning or malfunctioning of the society has again ensured social stratification or inequality with respect to income, property ownership and social status among others. The effect of this is the emergence of the poor, sometimes, strikingly poor, usually in the majority and the rich, strikingly rich, commonly in the minority. The former are concentrated in the high density areas while the latter are in the serene low density residential area. Since the rich live in the midst of the poor in the urban landscape, they easily become the target of the poor. Criminality to a large extent, may therefore be an attempt by the poor to achieve some degree of leverage with the rich. In order words, the structural imbalance in the urban areas is a brewing ground for criminal activities. This structural imbalance breeds criminal tendencies. The finding of this paper that the most prevalent crime is crime of acquisition attests to this.

The poor functioning of the urban structure is also seen in the lack of or, inadequate and decaying infrastructural facilities and services. The role of poor infrastructural services such as epileptic power supply, inadequate potable water, deplorable road condition, traffic congestion, energy crisis etc in the initiation and nurturing of aggressive tendencies among urban dwellers cannot be underestimated. The very keen competition for the few available (usually poor quality) services provides momentum for spontaneous expression of anger, leading to confrontation and public disorder. It is in this

context that the observed prevalence of crime of aggression and the dominance of the high density residential areas on this crime type can be understood.

Within the framework of Individualism crime is an outcome of individual perception of processes of instant or accelerated social upward movement and in particular perceptions of channels of material acquisition, the size, variety and quality of which are seen to define power and wealth as well as important measures of success in modern society. To many individuals, since acquisition of property through normal and legitimate channels is a slippery one, property crime remains the available option to satisfy the urge for material acquisition. This is particularly true of youths in the overcrowded high density and medium density residential areas, which are usually the first place of residence of new migrants into the city. The frustration that is consequential upon dashed hope of a better life in the city, coupled with the fear of being seen as failures, when life is devoid of essential things of life, are all compelling factors towards criminality.

Also contributing is the spectacular opulence and ostentatious life style of successful elites, particularly the political class, some of whom are well known in the society to have questionable sources of wealth. Even then the insatiable desire among the successful elites to acquire spiritual power and perpetuate their wealth underlie prevalence of such crime types as cultic practices, crime against public law and white collar crime. The fact that the law seems powerless in curtailing the sumptuousness of this class of people is a subtle invitation and an encouragement to others to engage in crime. The law enforcement agents have not only become so blunt in their attack on crime, they have become the vital instruments of crime and active collaborators of criminals, providing the enabling 'legal' environment for the prevalence and perpetuation of crime.

POLICY/PLANNING IMPLICATIONS

Two fundamental issues must be taken into consideration in formulating any meaningful policy aimed at reducing crime in urban centers. First it should be noted that, crime to a large extent, is a product of inadequacies in the structure and functioning of the urban system. It is largely a reaction to the injustices or inequalities observable in the pattern of distribution of economic opportunities. To the extent that very few urban dwellers have unrestricted access to urban facilities and services while majority wallow in abject poverty, devoid of essential things of life, any policy or measure aimed at tackling crime will be counterproductive. Thus a sustainable policy is that which is aimed at providing fair opportunities for all categories of urban dwellers through the provision of adequate infrastructural facilities and services such as water, electricity etc. In essence good urban governance with progressively improving capacity to provide and manage urban infrastructure, services and shelter is required. Urban political institutions must be improved and equipped to combat social exclusion and promote human development.

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