

Crime Management Strategies and Residents' Safety Survey in Developing Countries: The Case of Oshogbo, Nigeria

BADIORA Adewumi Israel

Department of Urban and Regional Planning, Joseph Ayo Babalola University, Ikeji-Arakeji, Nigeria
wumi_zion@yahoo.com; wumibadiora@gmail.com

FADYOIN Olaoluwa Paul

Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria

Abstract

This study examined crime management strategies and residents' feeling of safety in developing countries using Oshogbo, Nigeria. The survey was conducted through interview of 202 systematically selected residents of the town and their responses were subjected to descriptive analysis and correlation. Four (4) crime prevention and management approaches identified in the study area were strategies to improve safety and security, increasing social development, community-government interaction and environmental development. Social development was considered as the most effective crime management strategy in Oshogbo (27.5%) while the least considered in term of effectiveness was safety and security measures (20.8%). Residents' perception of safety measured through an index of 5 and tagged safety perception index (PSI) revealed that the overall safety index for Oshogbo during the day (SPI_{day}) was put at 4.43 while that of night time (SPI_{night}) was 4.25. PSI at home was put at 4.57 during the day and 4.45 ($SD=0.20$) in the night. The PSI for work place during the day and in the night were 4.41 and 4.23 while that of public places were 4.30 and 4.08 respectively. Safety and Security measures had a strong positive correlation with safety at home ($r=0.743$) and safety in public places ($r=0.709$). The correlation between social development and feeling of safety at home was 0.833 while that of public places and work places were 0.821 and 0.789 respectively. The correlation coefficient (r) between crime prevention through environmental design (CPTED) and residents feeling of safety at home was 0.935 while that of public places was 0.878. The study concluded significant relationship existed between residents' feeling of safety and crime management and prevention strategies observed and that residents of Oshogbo have a good feeling of safety at home, work place and in public places.

Keywords: Crime, Victimization, Management, Prevention, Safety

1.0 INTRODUCTION

Crime is a major source of social concern not only in developing countries but in the World today. Nations of the World are faced with unacceptable levels of delinquency and crime. Findings in the last decade revealed that more than half of the urban residents are reported being victimized at least once regardless of what part of the world they inhabit (Ackerman and Murray 2004; Alemika and Chukwuma, 2005; Fajemirokun et al. 2006; Jayamala 2009). Among the conclusions drawn from the International Crime and Victim Survey (ICVS, 2010) is that high crime rates are not unique features of a few nations, rather a statistically normal feature of life all over the world. Specifically, "no matter what part of the world, over a five year period, two out of three inhabitants of big cities are victimized by crime at least once", and "the chances globally to be victimized by serious contact crimes are one in five". Thus, studies such as Agbola (1997), Agbola (2004), Alemika and Chukwuma (2005), Fajemirokun et al. (2006) and Sanni et al (2010) argued that a community with a high rate of criminal and delinquency activities is unattractive or less attractive to both local and foreign investment. This present situation prevails in developing countries many parts of Nigeria today.

Criminal activities have become more frightening in Nigeria today. All daily newspapers devote a significant proportion of column inches to report incidence of murder and theft and accounts of sensational trials. The announcement concerning murder, rape, burglary, house and store breaking and stolen vehicles among others are daily features on the news and national dailies. The nation is being crippled by insecurity problem posed by criminals and not only is the incidence of violence becoming more frequent, the nature of the crime especially armed robbery, burglary and murder, have become more heinous, bolder and sophisticated (Agbola 2004; Alemika and Chukwuma, 2005; Fajemirokun et al 2006; Ekoja and Odole 2008). 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; young and old suffer the same fate and the whole society appears helpless in the face of urban crime.

Crime occurrence has grown sharply to nearly epidemic proportions in urbanized areas due to population explosion by stark economic inequality and deprivation, social disorganization, inadequate government service and law enforcement incapability, unemployment, socio-political conditions among others (Murray 2001). The widening societal gap and economy inequality as well as the risen wave of unemployment,

especially among young school leavers, have greatly accentuated the wave of urban crime in recent times (Agbola (2004) and Sanni et al (2010) and Oshogbo is not left out in this wave of urban phenomenon.

Oshogbo is rapidly becoming more and more urbanized and because of this, its traditional structures have given way to western patterns of relationships. Because of this development, crime and delinquency of the types recorded in the more industrialized societies in Nigeria such as Lagos are now characteristic of Oshogbo. Criminal activity continues to be a major concern in this traditional society. In response to these concerns, the government decided to intensify a number of existing crime management and prevention strategies in the state and introduced some new approaches. This paper therefore assess the effectiveness of the crime prevention strategies put in place by the State government and evaluate the residents' feeling of safety in relation with these strategies Oshogbo.

2.0 CRIME MANAGEMENT AND PREVENTION STRATEGIES

In the literature, three approaches to crime management and prevention are identified. These include crime Justice System, Crime Prevention through Social Development and Crime Prevention through Environmental Design. Criminal Justice System is as old as man himself. It is the first crime prevention strategy that was introduced by man. Criminal justice system is the conventional and most pervasive approach to crime prevention (Yongcho, 1974; Bowker, 1980). This approach represents the entire array of governmental institutions that function as the instrument of a society, to enforce its standards of conduct necessary for the protection of the safety and freedom of individual citizens, and for the maintenance of order (Yongcho, 1974). This task is performed by means of detecting, apprehending, prosecuting, adjudicating and sanctioning those members of the society who violate the established rules and laws of society.

Crime prevention through social development is a relatively new approach to crime prevention. It is pioneered by sociologists and victimologists. Abodunrin, (1981); Aguda, (1994); Obateru, (1994) and Audy, (1995) all agreed that there is a group of people in the society who bear the brunt of social injustice. They are the downtrodden and poverty-vulnerable groups and having come to the end of their wits; these people resort to crime in order to correct societal imbalances. This approach relies on the premise that there is a well established body of research that can identify factors contributory to crime. It is the effects of these contributing factors that crime prevention through social development strives to alleviate. The efforts of this approach include initiatives to reduce poverty and to increase the availability of proper housing, employment, education and adequate recreational facilities (Agbola, 1997).

The approach (CPTED) was originally coined and formulated by criminologist C. Ray Jeffery. Crime prevention through environmental design (CPTED) is a multi-disciplinary approach to deterring criminal behavior through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts. CPTED is basically concerned with the manipulation of the physical environment in order to deter crime; it is not intended to create an impregnable fortress, but merely to make penetration more difficult and time consuming (Agbola, 1997). At the forefront of this approach is Jacobs (1961), who put forward the notion that the physical environment and criminal behaviour were related in an architectural context. Jacobs noted that streets with higher accessibility to the public could attract more eyes from the buildings to the street and this mechanism of natural surveillance can work effectively against crime (Jacobs 1961). Jacobs believes that the development of activity areas within the city, such as commercial, industrial, financial, educational among others have led to the reduction of surveillance of streets and other public areas and consequently, the reduction of community cohesion and the feeling of territoriality. This brought about the classic statement "Streets with eyes are safe streets". Thus, the various strategies used in the study area were categorized into these approaches as identified from the literature.

3.0 OSHOGBO: THE CONTEXTUAL PROFILE

Oshogbo assumed the capital of Osun-State following the creation of a new state out of the old Oyo State in 1991. It is located at about 95km North East of Ibadan precisely on latitude $7^{\circ}47^{\circ}$ north of the equator and longitude $4^{\circ}33^{\circ}$ of the Greenwich Meridian. It covers area of about 140 square km and lies at a height of 366 meters above sea level. The city has been experiencing dramatic development since the creation of the state. The population of the city has increased tremendously over the last decades because of rapid influx of population and economic development. Oshogbo occupies a central position with respect to towns around it. The town has been an important economic centre dating back to the colonial days. The railway line linking the northern and southern parts of the country went through Oshogbo. This had seriously geared up the town and added to its social and economic growth. These dual advantages of being a former provincial headquarters and a railway transportation route countered on Oshogbo to distribution centre for both finished and agricultural products.

The Nigeria Population Commission in 2006 put Oshogbo at about 800,000 population with an annual growth rate of 3.5%. Therefore, as Osun State capital, Oshogbo can be described as Osun center of Urbanization with financial, commercial and industrial capital concentration. As capital city with a growing and

diversifying population, Oshogbo faces many management and insecurity challenges. These stems from the concentration of commercial activities and uncontrolled population growth through immigration from rural areas because of economic presence and there are unplanned settlements with diverse social and economic challenges. In relation to public order, the security agencies face issues of violent crime. For indigenes, the Criminal Investigation Department (CID Oshogbo) reported that house breaking, store breaking, stealing, burglaries, robberies, car-hijacking, car theft, false pretence and cheating, sexual harassment and victimizations as well as breach of public peace have all been concerns frequently reported at the various police stations in the town. The authority further reported that level of crime is not high in Oshogbo when compare with some other state capitals in the country but it is the weakness of governance and agencies as well as the subsequent impunity of the offenders that has helped to create a climate of fear and caution.

4.0 METHODOLOGY

The survey covered Oshogbo; the capital city of Osun-State. 202 respondents were interviewed in the town. Systematic sampling procedures were used to reduce any bias that might affect the findings. Considering the homogeneity of the population in the different areas under survey, one out of every five road/ street was selected and one out of every 50 building along the selected major, access and closed roads/streets was interviewed. Respondents include male and female aged 22years and above who has been residing in the town at least in the last 3 years. The interviews were conducted for a period of one week and responses were analyzed using simple descriptive statistics. The outcomes were also compared with the official crime statistics between the year 2007 and 2010.

5.0 DISCUSSION OF FINDINGS

The result of the analysis of the available data is discussed under various sub-headings as follows. Except where otherwise stated, all the tables emanated from the survey conducted by the researcher in 2011.

(a). Crime management and Prevention Strategies: Osun State Approach

This survey discovered that in response to the concern of crime in Oshogbo, the government decided to implement a number of crime management and prevention strategies. These include the strategies to improve safety and security, increasing social development, community-government interaction and environmental development. The summary of those strategies is presented in Table 1. The effectiveness of these four basic approaches were further investigated from residents' perception. The summary of their responses is presented in Table 2. It was evident that social development was considered as the most effective crime management strategy in Osogbo. This proportion of this strategy effectiveness out of all the crime management approaches in the state was 27.5%. Approaches employed in this strategy included Job creation and Youth empowerment, Small and Medium Scale Business Support through Grants, Loans, Designing Policies to stem rural-urban migration (Agricultural and Rural Development Policies) and Community Mobilizations as well as sensitization on security issues.

Next in effectiveness to social development was Crime Prevention through Environmental Design (CPTED) having accounted for 26.81% . This approach included strategies such as environmental Development and Design through territoriality, surveillances strategy, security barriers, street lighting, active support, maintenance and green area and landscaping. Consistent engagement between government and indigenes as well as government and various community associations (Landlord Association, Women Association, Market Women, Religion Bodies) constituted government-community dialogue approach. The proportion of the effectiveness of this approach in crime management in Osogbo from residents' perception was 24.90%.

Table 1 Crime Management and Prevention Strategies in Osun State

| S/N | Strategy | Management Approaches |
|-----|---|--|
| 1 | Safety and Security | Closer cooperation between the police command and other security agencies and Osun-State government Equipping and empowering law enforcement agencies to tackle crime (e.g. enactment of laws, patrol vehicles and so on). Developing physical and urban planning policies that take account policing and security concerns Establishing of effective communication and emergency response system Creation of conflict management resolution and community integration bodies in smaller communities |
| 2 | Social Development | Job creation and Youth empowerment Small and Medium Scale Business Support through Grants, Loans Designing Policies to stem rural-urban migration (Agricultural and Rural Development Policies) Community Mobilizations and sensitization on security issues |
| 3 | Government-Community dialogue | Through consistent engagement between government and indigenes as well as government and various community associations (Landlord Association, Women Association, Market Women, Religion Bodies). |
| 4 | Crime Prevention through Environmental Design (CPTED) | Environmental Development and Design through territoriality, surveillances strategy, security barriers, street lighting, active support, maintenance and green area and landscaping. |

Source: State Ministry of Information and Authors' Survey (2011)

The least considered was safety and security measure. The proportion of this strategy effectiveness was 20.79%. Included in this approach were closer cooperation between the police command and other security agencies, equipping and empowering law enforcement agencies to tackle crime (e.g. enactment of laws, patrol vehicles and so on), developing physical and urban planning policies that take account policing and security concerns. Others were establishment of effective communication and emergency response system and creation of conflict management resolution and community integration bodies in smaller communities.

Table 2 Crime Management and Prevention Strategies effectiveness from Residents' Perception

| Approaches | Frequency | Percentage(%) |
|---|--------------|---------------|
| Safety and Security | 152 | 20.79 |
| Social Development | 201 | 27.50 |
| Government-Community dialogue | 182 | 24.90 |
| Crime Prevention through Environmental Design (CPTED) | 196 | 26.81 |
| Total | 731** | 100.0% |

Note **Higher than total respondents because of multiple response.

(b). Residents Feeling of Safety

With these findings above, residents' safety survey was documented. The summary presented in the Table 3 using percentages and safety perception index (SPI). To arrive at the PSI, residents were to express their feeling of safety using one of five Likert scales of 'very safe' (VS), 'Safe' (S), 'just safe' (JS), 'not safe' (NS) and 'not at all safe' (NAS). The analyses of the ratings indicated by the residents from the Likert's scales adopted evolved into an index called "Safety Perception Index" (SPI). To arrive at SPI, weight value of 5,4,3,2 and 1 were respectively attached to 'very safe' (VS), 'Safe' (S), 'just safe' (JS), 'not safe' (NS) and 'not at all safe' (NAS). 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
$$SWV = \sum_{i=1}^5 x_i y_i$$

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 feeling of safety.

$$PSI = \frac{SWV}{\sum x_i}$$

The mean index for the town was computed. This was obtained by summing the indices of all the areas in the town and dividing by the number of the identified area (n=3). This was denoted by SPI_{day} and SPI_{night}

Table 3 Residents' Feeling of Safety in Osogbo

| Place | Day | | | | | Night | | | | | Day | | | Night | | |
|--------------|----------------|---------------|-------------|--------------|-------------|----------------|---------------|---------------|--------------|--------------|-----|------|------|-------|------|-------|
| | V S | S | J S | NS | N S A | V S | S | J S | NS | N S A | SWV | SPI | MD | SWV | SPI | MD |
| Home | 132 (65.3%) | 50 (24.8%) | 10 (5%) | 8 (4%) | 2 (0.5%) | 122 (60.4%) | 52 (25.7%) | 21 (10.4%) | 6 (3%) | 01 (0.5%) | 918 | 4.57 | 0.14 | 894 | 4.45 | 0.20 |
| Work place | 120 (59.4%) | 53 (26.2%) | 20 (10%) | 05 (2.5%) | 04 (1%) | 113 (55.9%) | 43 (21.3%) | 24 (11.9%) | 20 (10%) | 02 (0.9%) | 886 | 4.41 | 0.02 | 851 | 4.23 | -0.02 |
| Public place | 110 (54.5%) | 62 (30.7%) | 10 (5%) | 16 (7.9%) | 04 (2%) | 101 (50%) | 46 (22%) | 30 (14.9%) | 15 (7.4%) | 10 (5%) | 864 | 4.30 | 0.13 | 819 | 4.07 | -0.18 |

$$SPI_{day} = \sum PSI = 13.29, SPI_{day} = \frac{\sum PSI}{(N = 3)} = \frac{13.29}{3} = 4.43$$

Thus, $SPI_{day} = 4.43$

$$SPI_{night} = \sum PSI = 12.75, SPI_{night} = \frac{\sum PSI}{(N = 3)} = \frac{12.75}{3} = 4.25$$

Thus, $SPI_{night} = 4.25$

It was evident from Table 3 that 65.3% of the residents felt 'very safe' at home during the day as 59.4% and 54.5% has the same level of feeling in their respective work place and public place respectively. The study further revealed that the proportion of residents who felt 'safe' during the day at public places, work place and home were 30.7%, 26.2% and 24.8% respectively. While 4% were 'not safe' at home during the day, corresponding 2.5% and 7.9% had the same feeling at workplaces and public places respectively in Oshogbo. The proportion of those who were 'not safe at all' during the day were 0.5%, 1.0% and 2.0% respectively at home, work places and public places. In the night time, 60.4% of the residents of Osogbo felt 'very safe' at home while 55.9% and 50% had the same feeling in the night at work place and public places respectively. The proportion of those who felt they were 'safe' during the night time at home, work places and public places were 25.7%, 21.3% and 22% respectively. Furthermore, it was revealed from the summary in Table 3 that those residents who felt 'not safe' at their homes accounted to just 3%. While, 10% of the residents reported they were not safe at work place, it was also revealed that 7.4% had the same feeling in the night at public places. The proportion of residents who were 'not safe at all' at home, work places and in public place were 0.5%, 0.9% and 5% respectively.

The analysis of safety perception index(PSI) revealed that the overall safety index for Osogbo during the day (SPI_{day}) was put at 4.43 while that of night time (SPI_{night}) was 4.25. Thus, it can be concluded that residents of Osogbo had a good feeling of safety. However, it was noted that the PSI at home during the day and in the night were higher than SPI_{day} and SPI_{night} . Therefore, it was evident that residents felt most secured at home during the day and in the night time. This was evident as the PSI at home was put at 4.57 during the day with a standard deviation of 0.14 and 4.45 (SD= 0.20) in the night. Furthermore, residents felt more secured at workplace when compare with their feeling of safety in public places. The PSI for work place during the day and in the night were respectively put at 4.41 and 4.23 while that of public places were 4.30 and 4.08 respectively. It was also noted that the PSI computed for workplace and public places were lower lesser than SPI_{day} and SPI_{night} .

(c) Relationship between Safety Strategy and Residents' Feeling of Safety

Residents' feeling of safety and crime management strategies 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.

It was revealed that high and middle up positive correlation existed between residents' feeling of safety and crime management and prevention strategies observed. This indicated generally that the more the provisions of these crime management approaches, the higher the feeling of safety of the residents. However, the effects of each of the approach on residents' feeling of safety vary as this was evident from the correlation coefficients(r) computed. Safety and Security measures had a strong positive correlation with safety at home (r= 0.743) and

safety in public places ($r=0.709$). However, in the case of work place, it was middle-up positive correlation ($r=0.627$). In the case of social development, a very strong positive correlation existed in all the three areas observed. It was evidence from the summary in Table 4 that the correlation between social development and residents feeling of safety at home was 0.833 while that of public places was 0.821. the correlation coefficient (r) of safety at workplace in respect of social development was 0.789.

Table 4: Pearson Product Moment Correlations of Safety Strategies and Residents' Feeling of Safety

| Variables | Safety and Security | Social Development | Community-Government Dialogue | Prevention Env. Design(CPTED) | Safety at home | Safety at Work Place | Safety at Public Places |
|--------------------------------|---------------------|--------------------|-------------------------------|-------------------------------|----------------|----------------------|-------------------------|
| Safety and Security | 1 | | | | | | |
| Social Development | 0.424 | 1 | | | | | |
| Government-Community dialogue | 0.421 | 0.435 | 1 | | | | |
| Prevention Env. Design (CPTED) | 0.486 | 0.597 | 0.507 | 1 | | | |
| Safety at Home | 0.743 | 0.833 | 0.721 | 0.935 | 1 | | |
| Safety at Workplace | 0.627 | 0.789 | 0.698 | 0.868 | 0.543 | 1 | |
| Safety in Public Places | 0.709 | 0.821 | 0.705 | 0.878 | 0.671 | 0.456 | 1 |

N=201, $p<.01$ (Correlation is significant at the 0.01 level)

Community-Government dialogue had a strong positive correlation with safety at home ($r= 0.721$) and safety in public places ($r=0.702$). It was middle-up positive correlation ($r= 0.698$) in the case of safety at workplace. A very strong positive correlation existed in all the three areas observed in the case of crime prevention through environmental design. The correlation between crime prevention through environmental design(CPTED) and residents feeling of safety at home was 0.935 while that of public places was 0.878. The correlation coefficient (r) of safety at workplace in respect of this measure was 0.868.

6.0 CONCLUSION AND RECOMMENDATIONS

The study concluded that significant relationship existed between residents' feeling of safety and crime management and prevention strategies observed in the state and that residents of Osogbo have a good feeling of safety at home, work place and in public places. However, questions of sustainability of this security remain with good governance, federal input as well as effective and efficient use of the city resources. There is need to pay attention to pro-active or preventive measures such as enhanced social and economic activities, poverty reduction. This will enhance social restructuring as most societal crimes are committed out of frustration and desperation by the poor; and, therefore, to prevent crime, the national economy should be totally restructured so that everybody, especially the low and middle income classes can have access to good food, employment, shelter, clothing, and transportation, and be able to take good care of their children. In addition, planned urban growth promotes urban efficiency and consequently urban productivity, which in turn reduces urban crime and violence through raising the standard of living of urban residents. This will particularly work in Africa where the high rate of urbanization and the increasing rate of modernization and its attendant problems have contributed immensely to the increasing wave of urban violence.

It is also observed that certain factors make people more involved in a whole range of antisocial behavior and criminal acts which tends reduce the feeling of safety of the residents. These factors can be addressed through social planning. Such social planning benefits may include less truancy in schools, fewer health-related problems, increased and better employability, independent living, effective parenting, and the productivity of citizens. Although, this is a strategy that positive impact and cost effectiveness may take a long time to materialize. Environmental design should emphasize the need for surveillance and a community approach to crime prevention. Although, the main thrust of the criminal justice system is directed towards the control of crime after is being committed; a palliative role, rather than a preventive role, there is need for promulgation of relevant and appropriate laws as well as more attention in the area of reactive or enforcement

measures such as enhanced capacity of the police and other law enforcement agencies, improved performance by the prosecutors and the judges. The government needs to institutionalize research-based policy formulation and implementation strategies such as victim and crime surveys to complement official crime statistics as input into decision making and practices in the field of security and safety in developing countries.

Appreciation

The Authors appreciate Superintendent Ayuba (OC Legal, Osun State CID) and Barrister A. A Badiora (Public Prosecution, Osun State Ministry of Justice) for their contributions towards the success of this study

REFERENCES

- Abodunrin Y. (1981). The role of Architectural in the Prevention of Crime: A Suburban Experience. In: *Social Science and Social Policy in Nigeria*. O. Sanda, ed. Nigeria Institute of Social and Economic Research, Ibadan.
- Ackerman W.V. and Murray A.T. (2004). Assessing spatial patterns of crime in Lima, Ohio. *USA Cities*, Vol. 21, No. 5, pp. 423–437. Elsevier Ltd. Great Britain.
- 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 In: *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: *Urban Management and Urban Violence in Africa*. Vol. 1 Pp 1-8. I.O. Albert, J Adisa, T Agbola and G. Herault, eds. IFRA, Ibadan, Nigeria.
- Alemika, E and Chukwuma, C (2005). *Criminal Victimization and Fear of Crime in Lagos Metropolis, Nigeria*. CLEEN Foundation, Lagos, Nigeria.
- Audy, L. (1995). *Dealing with crime*. National Crime Prevention center, United State of America.
- Bowker, L. (1980). *Women, Crime and criminal Justice System*. Lexington Books, Toronto Canada.
- Eke, E. (2004). *Facing New Challenges in Adolescence, Enugu*, E. L. Demark Publishers.
- Ekoja, O. C. and Adole, G. M (2008). Rural Youth Extension programme and Counselling as Means of Eradicating Gang Delinquency in Youths in Nigeria. *The Nigerian Educational Psychologist: Journal of the Nigeria Society for Educational Psychologists (NISEP)* 6; 107 – 113.
- Fajemirokun F; O. Adewale; T. Idowu; A. Oyewusi and B. Maiyegun (2006). A GIS Approach to Crime Mapping and Management in Nigeria: A Case Study of Victoria Island Lagos. *Shaping the Change XXIII FIG Congress Munich, Germany, October 8 – 13, 2006*
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. London: Jonathan Cape.
- 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
- Murray E. T (2001). Exploratory Spatial Data Analysis Techniques for Examining Urban Crime. *British Journal of Criminology*. Vol. 4, pp. 309-329
- Obateru O. I. (1994). Planning the City to Mitigate Urban Violence. In: *Urban Management and Urban Violence in Africa*. O.I Albert, J. Adisa, T. Agbola and G. Herault, eds. IFRA, Ibadan.
- Sanni K.B, Nsisong .U, Abayomi A. O, Modu 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*
- Youngcho, Hyo. (1974). *Public Policy and Urban crime*, Ballinger Publishing Company, USA

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:
<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

