

SPATIAL ANALYSIS OF RESIDENTS' FEAR AND FEELING OF INSECURITY IN ILE-IFE, NIGERIA

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Abstract

This study examined spatial pattern of crime and residents' fear and feeling of insecurity in Ile-Ife, Nigeria. To obtain the primary data, Ile-Ife was stratified into four residential zones namely traditional town centre, middle income, high income and post-crisis residential areas. Sample was selected using systematic sampling from each zone. Level of insecurity perceived by residents in the night and day time showed that post crisis residential areas of the town recorded relative insecurity index (RII) of 4.71 in the night. The RII of traditional town centre in the night was put at 3.74. RII of 2.43 and 2.14 were computed for middle income and low income residential areas of the town in the day time. Using stepwise regression analysis, it was discovered that 86.5% of the total variance in residents' fear and feeling of insecurity could be explained by independent variable observed. The study concluded that significant variation exist in the residents' level of insecurity feeling in different residential zones of the study area as rate of occurrence of criminal activities in different residential areas varied significantly.

Key words: Crime, Fear, Insecurity, Spatial, Risk, Victimization.

Introduction

Crime is an inevitable feature of urbanization. Badiora (2012) suggests that a society exempt from crime is absolutely impossible. This is because the very organization of complex societies prevents total conformity to all social rules by all members. Fear, according to Ditton *et al.* (1999), is a term encompassing a confusing variety of feelings, perspectives, risk-estimations. Vanderveen (2006) cites two contrasting definitions. The first defines fear as the sense of personal security in the community. A subsequent proposal suggests it is the emotional response to possible violent crime and physical harm. Ferraro (1995) suggest that fear of crime is an emotional response of dread or anxiety to crime or symbols that a person associates with crime. Therefore, fear can be said to be a merely natural response to crime.

One of the key features of crime surveys has been a geography-related question which is to establish where people feel less safe. Research from Sampson (1991); Ditton and Chadee (2006) and Wynne (2008) have suggested that having residential stability increases the likelihood of social organization, social cohesion and informal surveillance of the neighbourhood, all of which help prevent crime. Vanderveen (2006) considers fear of crime to be a powerful force in decreasing community bonds, yet another example of the negative social impact of fear of crime. Ramsay (1989) suggests that general incivilities in an area, such as public alcohol consumption or drunken

behaviour can have an adverse effect on the inhabitants, thereby contributing to fear. Matthews (1992) reinforces this by suggesting that drunks, beggars, litter and vandalism are all linked more heavily to the fear of crime than one might expect. Hopkins-Burke (2005) suggests that older people may be more affected by street incivilities such as beggars (who deliberately choose to base themselves in an urban environment), while cosmopolitan young professionals might consider it to be just a colourful segment of the rich tapestry of life.

Following research in the USA, Ferraro (1995) found neighbourhood incivility to be the most important predictor of perceived risk. He also discovered that those individuals living in areas of incivility were more likely to have adjusted their daily activities during the last year, providing evidence of constrained behaviour. This mirrors Alison's theory that negative reinforcement of crime causes fear and alters behaviour. The idea of certain areas possessing unattractive and hostile characteristics is consistent with Wilson and Kellings (1982) Broken Windows theory, which suggests that (negative) features of the physical environment are somehow related to deviant behaviour. Doran and Lees (2005) claim that areas characterized by poor natural surveillance provide opportunities for disorder or crime to get a foothold. This explains why people may, for example, be reluctant to walk through an underground subway alone or have reservations about purchasing a house situated next to an alley.

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Increasing the natural surveillance of such areas may reduce the opportunity for crime as well as fear (Doran and Lees, 2005).

To this end, it was evident that the issue of fear and feeling of insecurity has become an increasingly significant concern for criminologists, victimologists, policy-makers, politicians, policing organizations, the media and the general public. The emergence of the fear of crime is suggested by the extraordinary proliferation of research and literature in the field. This proliferation is also highlighted by Newburn (2003) who suggests that since the 1970s, crime and the feeling of insecurity have come to occupy a new salience within everyday life. It has been suggested by Walklate (2007) and Karmen (2004) that the growth in sensitivity to the fear of crime parallels the growth in sensitivity to the victim of crime more generally. Moreover, the considerable attention given to fear of crime by researchers over the last two decades is a result of attempts to identify fear in different towns, cities, countries and regions. However, the central aim of this research is to identify whether or not there is a spatial dimension in the occurrence of crime and feeling of insecurity in different residential areas within a given locality using Ile-Ife, Nigeria as a case study.

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 fourth 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 were analyzed using descriptive and inferential statistics.

Results and Discussion

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.

Fear and Feeling of Insecurity in Ile-Ife

Residents' perception of the time of occurrence of most of the identified prevalent criminal in the study area is presented in Table 1. The feeling of fear and insecurity is directly related to the time residents perceived that crime mostly occur (Potnov and Rattner 2003; Jayamala 2008). This is presented in Table 1.

Table 1 Time of crime occurrence in different residential Areas of Ile-Ife from resident's perception

Time of the week	Traditional Town Centre	Middle Income Residential Area	High Income Residential Area	Post Crisis Residential Area	Total for the Town
Weekdays	38 (46.34%)	72 (51.43%)	26 (54.17%)	19 (29.69%)	151 (45.21%)
Weekend	44 (53.66%)	68 (48.57%)	22 (45.83%)	45 (70.31%)	183 (54.79%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64 (100.0)	334 (100.0)
Time of the day	Traditional Town Centre	Middle Income Residential Area	High Income Residential Area	Post Crisis Residential Area	Total for the Town
Daytime	27 (32.93%)	56 (40%)	18 (37.5%)	6 (9.38%)	107 (32.04%)
Night time	55 (60.07%)	84 (60%)	30 (62.5%)	58 (90.62%)	227(67.96%)
Total	82 (100.0)	140 (100.0)	48 (100.0)	64(100.0)	334 (100.0)

From the summary presented in Table 1, it was evident that 54.7% of the residents perceived that most of the criminal activities in the town occurred in the weekend. Similarly, 45.3% of the

residents were of the opinion that most of the crime occurred during weekdays. It was also observed that 67.96% of the residents perceived that criminal activities occurred during the night time while 32.04% of the residents surveyed

perceived that most of the crime identified as likely challenges in Ile-Ife occurred in the daytime. It was established that 51.43% and 54.17% of the residents in the middle income residential and high income residential areas respectively perceived their risk of being victimized in the weekdays. Similarly, 46.34% and 29.69% of the residents perceived that most of the identified conduct disorder in Ile-Ife occurred in weekday in traditional town centre and post crisis residential areas respectively.

The results also show that 40% and 37.5% of the residents in the middle income residential and high income residential areas respectively perceived their risk of being victimized during the daytime. Furthermore, 32.93% of the residents in traditional town centre perceived heighten risk of victimization in the daytime. It was also established that 9.38% of residents in post crisis residential areas also perceived their risk of being victimized in day time period. Significant variations exist in the time of occurrence of criminal activities in different residential zones of the town. The Chi-square value of $\chi^2=101.841$ and $\chi^2=123.511$ significant at $p=0.013$ and $p=0.006$ were respectively computed for both time of the week (weekdays and weekend) and time of the days (daytime and night time). Thus, different types of crime occur at different time in the identified residential areas of Ile-Ife.

With these findings, feeling of insecurity was documented in relation to the perceived time of occurrence of conduct disorder in Ile-Ife. From the summary presented in the Table 3 it was evident that feeling of insecurity in the night was recorded in all the four residential areas of the town. It was established that 6.9% felt unsafe and 1.4% felt very unsafe in Ile-Ife in the night. This may be due to the fact that most of the criminal activities occurred in the night as confirmed by previous analysis. Time distribution of the occurrence of crime in Ile-Ife is therefore directly related with the residents feeling of safety. This implied that the higher the residence perception of likely risks at a particular time, the higher the feeling of insecurity. This is similar to the submissions of Potnov and Rattner (2003) and Jayamala (2008) who had argued that feeling of fear and insecurity is directly related to the time residents perceived that criminal activities mostly occur. From the summary in Table 2, it was evident that 1.5% of the residents in the town felt very unsafe during the night time. It was further established that 2.4%

of residents who lived in the traditional town centre felt very unsafe during the night time. Residents in the post crisis residential area who felt very unsafe during the night time amounted to 3.1%. None was recorded in medium and high income residential areas of the town. This might be accrued to the fact that lower rate of crime were recorded in these areas when compared to the traditional town centre and post crisis residential areas of the town.

Post crisis residential areas of the town recorded relative insecurity index (RII) of 4.71 in the night. The RII of traditional town centre in the night was put at 3.74. Furthermore, while the insecurity index computed for the study was 4.08, the RII values of 3.26 and 2.69 were computed for middle income and low income residential areas of the town. It was therefore established by the study that as income increases, feeling of insecurity reduces. This may be due to the fact that increases in income empowered individual to provide security measures around his household.

Significant variation also exists in the residents feeling of insecurity in different residential areas of the town. In case of safety during the night, there is a significant difference in the level of insecurity at $\chi^2=109.715$ significant at $p=0.000$. As the rate of crime occurrence index decreases from traditional town centre through the medium to low density, feeling of insecurity in the night also decreases as distances increases from traditional town centre through the medium to low density. This study established a direct relationship between the rate of occurrence of crime and residents' feeling of insecurity in Ile-Ife. This submission is similar to the studies of Hillier (1989) in London City Estate; Potnov and Rattner (2003) in Spatial Pattern of Crime in Israel, Alemika and Chukwuman (2005) in Crime Victimization Survey in Lagos and Jayamala (2008) in his study of Spatial Pattern of Crime in India cities.

While 32% of the residents perceived their risk of being victimized during the day, a corresponding fear of insecurity was also recorded at this particular period of time. From the summary in Table 3, it was evident that 2.8% of the residents in the town felt unsafe during the day time. It was established further that 1.2% of the residents in the traditional town centre and 1.6% in the post crisis residential area felt unsafe during the day time. None was recorded in medium and high income residential areas of the town. This

might be accrued to the fact that lower rate of crime were recorded in day time in these areas when compared to the traditional town centre and post crisis residential areas of the town.

Table 2 Feeling of insecurity during the Day and Night in different Residential Areas

Feeling of Insecurity during the Day										
Degree of safety	Traditional Town Centre		Middle Income Residential Area		High Income Residential Area		Post Crisis Residential Area		Ile-Ife	% of Total
	freq	%	freq	%	freq	%	freq	%		
Very much safer	32	39.0	41	29.3	15	31.3	3	4.7	091	27.25
Very safe	36	43.9	55	39.3	26	54.2	37	57.8	154	46.10
Fairly safe	13	15.9	44	31.4	7	14.6	23	35.9	087	26.05
Unsafe	1	1.2	00	00	00	00	1	1.6	002	02.80
Very unsafe	00	00	00	00	00	00	00	00	000	00.00
Total	82	100.0	140	100.0	48	100.0	64	100.0	334	100.0
Relative Insecurity Index (RII)	3.66		2.43		2.14		3.97		3.45	

Feeling of Insecurity in the Night										
Degree of safety	Traditional Town Centre		Middle Income Residential Area		High Income Residential Area		Post Crisis Residential Area		Ile-Ife	% of Total
	freq	%	freq	%	freq	%	freq	%		
Very much safer	28	34.1	16	11.4	00	00	1	1.6	45	13.5
Very safe	12	14.6	57	40.7	15	31.3	10	15.6	94	28.1
Fairly safe	37	45.1	62	44.3	26	54.2	43	67.2	167	50.0
Unsafe	3	3.7	5	3.6	7	14.6	8	12.5	23	6.9
Very unsafe	2	2.4	00	00	00	00	2	3.1	4	1.5
Total	82	100.0	140	100.0	48	100.0	64	100.0	334	100.0
Relative Insecurity Index (RII)	3.74		3.26		2.69		4.71		4.08	

The RII in the day time for the entire Ile-Ife was 3.45. That of post crisis residential area was 3.97 while traditional town centre had RII=3.66. Furthermore, RII of 2.43 and 2.14 were computed for middle income and low income residential areas of the town in the day time. Similarly, the level of insecurity in the day time was also the highest in the post crisis residential area (3.97). Furthermore, as obtained in feeling of insecurity in the night, significant variation exists also in the time of occurrence during the day in all the residential zones in the study area at $\chi^2=88.715$. This was also significant at $p=0.003$. Therefore, fear and feeling of insecurity were recorded in all the residential zones during the day and night time and that significant variation exist in the residents' level of insecurity feeling in different residential zones.

Multivariate Analysis of Factors Influencing Residents' Fear and Feeling of Insecurity

This section examines the importance of some range of factors in explaining fear and feeling of insecurity in an area. The technique used is the stepwise regression analysis which

explains the effects of each factor on the dependent variable (in this case fear and feeling of insecurity). It also provides the net effect of variation of the independent variables on the dependent variable. This is presented in Table 3.

Significant variable were selected base on the F-ratio value. It should be noted that F-ratio value of 4.0 or higher indicates a significant relationship in the multivariate context. Therefore, from the summary of F-ratio presented in Table 3, the independent variables which were found to have significant association with the dependent variable (fear and feeling of Insecurity) were gender, house type, level of education and age. Others were length of residency, availability of security, locality and rate of criminal activities. The cumulative R^2 for these entire variables was put at 0.865. Thus, these variables together explain 86.5% of the total variance in residents' fear and feeling of insecurity while the remaining 13.5% error term indicated that there were other important explanatory variables pertaining to residents' fear and feeling of insecurity which could be explored in future analysis.

Table 3 Multivariate Analysis of Factors Influencing Fear and Feeling of Insecurity

S/N	Variables	Beta	Cumm (R ²)	F-Ratio	Sig. level
1	Gender	0.782	0.531	16.44	0.01
2	House Type	0.694	0.624	15.27	0.01
3	Level of Education	0.513	0.726	13.58	0.01
4	Age	-0.641	0.744	11.78	0.02
5	Length of Residency	-0.533	0.757	11.52	0.02
6	Availability of Security	-0.673	0.844	9.52	0.01
7	Locality	-0.874	0.712	7.61	0.01
8	Rate of Criminal Activities	0.923	0.865	6.29	0.01

$N=334$; $Constant= 1.8142$

It was also noted that age, length of residency, availability of security and localities have negative correlation coefficient. This is an inverse relationship. For instance, as age, length of residency and availability of security measures increases, the less the likelihood that residents will exhibit fear and feeling of insecurity in their area. On the contrary, rate of criminal activities had positive correlation such that as the rate of crime increases in an area, the higher the likelihood that residents will exhibit fear and vice-versa. Furthermore, it was revealed that high and middle up positive correlation existed between fear and feeling of insecurity and some socio-economic characteristics variable observed. These were gender ($r=0.782$, $p<.01$), house type ($r=0.694$, $p<.01$) and level of education ($r=0.513$, $p<.01$). Findings in this study are in line with some previous researches. For instance empirical studies have repeatedly found significant association between gender and fear of victimization. It was argued that women are more fearful of crime than men and yet are less likely to become the victims of most categories of serious crime (Allen 2006; Lee 2007; Wayne 2008).

The coefficient of explanation ($R^2 = 0.865$) was used to develop useful model in explaining feeling of insecurity. The model derived is presented thus.

$$Y = 1.8142 + 0.782X_1 + 0.684X_2 + 0.513X_3 - 0.641X_4 - 0.533X_5 - 0.673X_6 - 0.874X_7 + 0.923X_8$$

Where; Y =fear and feeling of safety, X_1 =Gender, X_2 =House Type, X_3 =level of Education, X_4 =Age, X_5 =length of residency, X_6 =availability of security, X_7 =locality and X_8 =rate of criminal activities.

Conclusion and Recommendation

From the major findings summarized above, fear of crime is real in Ile-Ife and it affects people's quality of life. As long as fear persists, the public will continue to call for more measures. Base on this, it is suggested that a number of broad

strategies be put in place to address both crime and fear of crime.

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. Furthermore, landlords' association could engage the services of security agents for their neighbourhood. This will involve regular financial commitment of members of the association.

Strategies to reduce fear of crime 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. Designs that minimize visual obstacles and eliminate places of concealment for potential criminals offer the most protection against crime. Therefore, residents should ensure that features of the landscape, such as, trees, shrubs, flower beds do not block their vision of the immediate environment, and do not create areas of concealment where intruders could hide to perform nefarious activities.

In addition to natural surveillance, artificial surveillance can also be included in addressing the physical planning of Ile-Ife. This refers to the uses of various security devices/personnel to ensure visual control over space. The strategies in this category include the use of fixed guard or human guard posts during the day and in the night, organized security patrols and the use of trained animals such as guard dogs or security dogs. It can also involve the use of electronic monitoring devices. This is the use of electronic gadgets like cameras which are positioned in a concealed environment outside the building to record all

activities that take place within viewing range and send signals into a terminal located within the building. The most sophisticated of these electronic monitoring devices is Closed Circuit television (CCTV). This will help in sending fast signal and alert to the nearest police station.

It was observed that the traditional town centre and post crisis residential area of the town are usually deserted especially in the night. This encompasses an area of Ile-Ife characterized by low socio-economic status, a high concentration of old, run-down buildings, largely minority and small scale businesses, and high vacancy rates. 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 throughout the 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. Where most of the property owners in this area are discouraged because of the thinking of likely future crisis in this area, government can bear part of the cost of renovating or completion of properties in this area so as to encourage owners to occupy their estates with an assurance of lasting solution to Ife-Modakeke communal crisis. Where, owners fail to meet the deadline or not interested in the estate, local or state government can acquire such an estate for public uses or any activities that are of immense benefits to the residents of the area and Ile-Ife at large.

There is also need for Ile-Ife community policing to establish more police posts and patrol teams in carefully selected areas particularly in the post crisis residential area where incidence of sexual harassment and drug dealings were

perceived to be more prevalent. The inclusion of patrol team in this area will help in fishing out drug joints and other illegal activities as well as hide out of gangsters. Educate the public about crime, crime prevention and what works in corrections. There are steps that can be taken to protect oneself and to reduce personal fear, but people need to have a better understanding of their risk and what measures do increase public safety.

References

- Afon, A. O. (2005), Solid waste management in selected cities of Oyo state, Nigeria. Ph.D. Dissertation, Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Akorede, V.E.A. (1974), Ilorin-a study of urban geography. M.sc Thesis, Department of Geography, University of Lagos, Lagos, Nigeria.
- Badiora, A. I (2012), Spatio-Temporal Pattern of Crime and Delinquency in Ile-Ife, Nigeria. M.Sc. Dissertation, Department of Urban and Regional Planning, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Ditton, J., Bannister, J., Gilchrist, E. and Farrall, S. (1999), Afraid or Angry? Recalibrating the Fear of Crime, *International Review of Victimology*, 6, 83-99
- Ditton, J. and Chadee, D. (2006), People's Perceptions of their Likely Future Risk of Criminal Victimization, *The British Journal of Criminology*, 46(3), 505-518
- Doran, B.J. and Lees, B.G. (2005), Investigating the Spatiotemporal Links between Disorder, Crime, and the Fear of Crime, *The Professional Geographer*, 57(1), 1-12
- Ferraro, K.F. (1995), *Fear of Crime: Interpreting Victimization Risk*, Albany: State University of New York Press
- Hopkins-Burke, R.D. (2005), *An Introduction to Criminological Theory*, 2nd Edition, Cullompton: Willan
- Karmen, A. (2004), *Crime Victims: An Introduction to Victimology*, 5th Edition, Belmont, CA: Thomson Wadsworth
- Lee, M. (2007), *Inventing Fear of Crime Criminology and the Politics of Anxiety*, Cullompton: Willan
- Matthews, R. (1992), Replacing Broken Windows : Crime, Incivilities and Urban Change in R. Matthews and J. Young (eds.) *Issues in Realist Criminology*, London: Sage: Pp.19-50

- Newburn, T. (2003), *Handbook of Policing*, Cullompton: Willan
- 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
- Ramsay, M. (1989), *Downtown Drinkers: the perceptions and fears of the public in a city Centre*, Crime Prevention Unit Paper 19, London: HMSO
- Ramos, L.L. and Andrade-Palos, P. (1993), Fear of Victimization in Mexico, *Journal of Community & Applied Social Psychology*, 3, 41-51.
- Smith, W.R. and Torstensson, M. (1997), Fear of Crime: Gender Differences in Risk Perception and Neutralizing Fear of Crime: Towards Resolving the Paradoxes, *The British Journal of Criminology* 37(4), 608-634
- Vanderveen, G. (2006), *Interpreting Fear, Crime, Risk & Unsafety*, The Hague: BJU Legal Publishers
- Walklate, S. (2007), *Imagining the Victim of Crime*, Maidenhead: Open University Press
- Wynne, T. (2008), An Investigation into the Fear of Crime: Is there a Link between the Fear of Crime and the Likelihood of Victimization? www.internetjournalofcriminology.com
- Wilson, J.Q. and Kelling, G.L. (1982), Broken Windows, *Atlantic Monthly* 249: pp.29-38
- Yarwood, R. and Gardner, G. (2000), Fear of Crime, Cultural Threat and the Countryside Area 32(4), 403-411