

Determination of the Impact of Residential Neighbourhood Crime

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Abstract:

Studies attest to the fact that residential neighbourhood crime (RNC) which comes in the form of burglary, street incivility, robbery, graffiti and most times violent crime has been adjudged to have devastating consequences on the residents, immediate neighbourhood and government activities but not enough empirical works have been carried out to verify this. Hence, this study is set to quantitatively determine the veracity of the impact of residential neighbourhood crime on the residents, immediate neighbourhood and government activities using structural equation modeling (SEM). The results of the analyses reveal that RNC impacts significantly on the residents, immediate neighbourhood and government activities with the p-values standing at 0.001, 0.008 and 0.005 respectively. With the negative influence of RNC on human activities and existence, it is desirable for researchers, urban planners, realtors and policy makers to address the menace with a view to enhancing sustainable housing, improved housing investment and general economic prosperity.

Keywords: Government activities, residents, residential environment, residential neighbourhood crime, SEM

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I. Introduction

1.1 Background

Residential neighbourhood crime otherwise called Property crime especially within the urban setting has globally become a subject of discussion among urban planners, realtors, policy makers, researchers, international organizations in charge of environmental sustainability and other allied professionals. This is due to the devastating effect it has on almost every sector of the economy. Essentially, the consequences of property crime cut across the residents, neighborhood and government. To the residents, property crime has been found to be capable of having the psychological effect of fear which studies have discovered to cause health impairment on the residents (Cozens, 2015; Adesola, *et.al.* 2019). Research also shows that property crime does unnecessarily increase family budget because of the need to provide security gadget to the building (Gibbon, 2004, Wilson, 1989). Furthermore, property crime, especially in the area of violent crime (e.g. armed robbery) has seldom resulted in loss of lives and less productivity (Olajide, *et. al.*, 2017; Agbabiaka, *et.al* 2021;).

Considering the incidence of property crime to the residential neighborhood, it has been found to have a negative impact on property investment (Lynch & Rasmussen, 2001). This manifests through negative residential mobility, neighborhood decline through stigmatization, negative effect on environmental sustainability and general real estate practice. The effect of property crime on government activities include dwindling revenue from property tax, adverse effect of street crime on governance, avoidable excessive government spending on procurement and maintenance of community policing and its negative effect on the general economy (Anderson, 2006; Pope & Pope, 2012).

The social menace of crime has become a principal component in the discussion of urban issues, and the prevention of crime is now as much an urban policy issue as is housing shortage and poverty (Makinde, 2020; Naroff, Hellman, & Skinner, 1980). It is gradually manifesting that these problems are interrelated. Property crime, especially in homes, is said to be badly affected (Torres & Apkarian, 2018; Gibbon, 2004). Residential neighbourhood is badly affected by different types of crime due to the fact that residents often leave the house empty for recreation, shopping, place of worship, workplace and the likes. In addition to this, valuables are usually kept in the homes thereby making it a target to prospective offenders (Addington, 2019; Olajide & Lizam, 2016).

The unlawful entry into other peoples' residential apartment for the purpose of committing a crime is referred to as 'residential burglary' (Moreto, 2010, Ratcliff, 2001). Offenses that constitute 'break and enter' include violent entry into someone's house possibly with a decision to steal. For the purpose of this research, residential burglary is used to represent both break and enter—dwelling and stealing from dwelling offenses. The fact that homes are usually left vacant during the day accounts for the frequent burglary offending. Many urban dwellers especially the high-income class are mostly victimized due to their massive acquisition of personal effects (valuables) and the fact that a large number of a detached dwelling with many accessible entry points like doors and windows (Krupa, et.al., 2021; Moreto, 2010)

Hence, in line with the objective of the study, this paper consists of five sections. Section one treats general introduction to the study comprising of the background and research assessment framework. The next section (section two) describes the methodology adopted for the study, whereas section three presents the data analysis and results. Section four discusses the results of the analyses. Section five concludes the paper, as well as presenting the limitation of the study and further research.

1.2 Research Assessment Framework

Consequent to the analytical tool adopted for this study (structural equation modelling), Figure 1 is presented to define the research assessment framework. The framework describes the various applicable variables under consideration and their inter-relationship. The independent variable is residential neighbourhood crime (RNC), while the dependent variables are government activities (GMA), residential neighbourhood (RND) and residents (RSD). The framework is also presented to graphically present the three (3) hypotheses adopted for this research. These are:

- H1: Residential neighbourhood crime (RNC) has a significant and direct effect on government activities (GMA).
- H2: There is a significant relationship between residential neighbourhood crime (RNC) and residential neighbourhood (RND)
- H3: Residential neighbourhood crime (RNC) has a significant and direct effect on the residents (RSD).

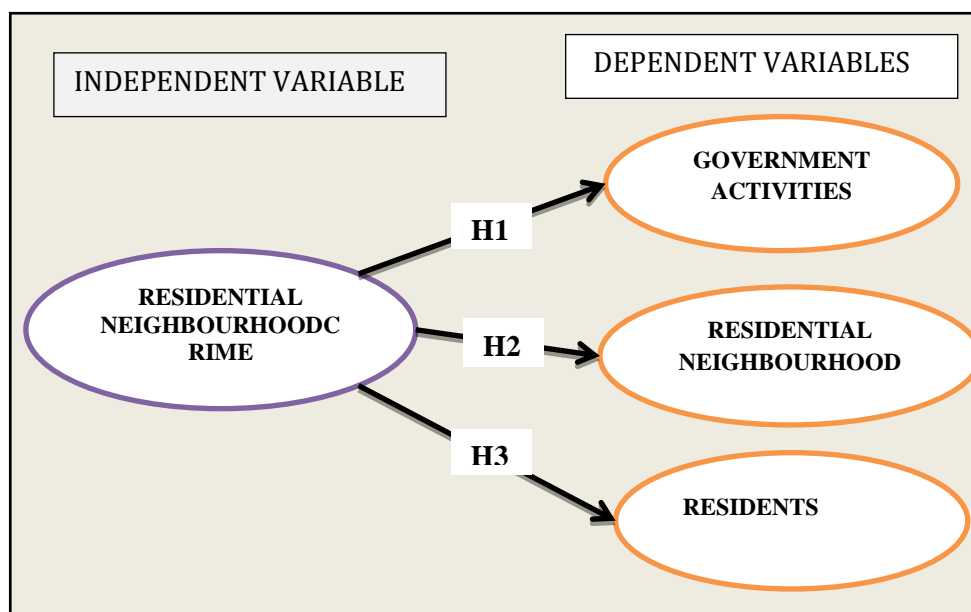


Figure 1: Research assessment framework

II. Methodology

The survey was carried out between March and June, 2021 in South-Western Nigeria. The research involved data collection with the use of structured questionnaire administered on students and staff (environmental studies) of tertiary institutions in Nigeria to assess peoples' perception on the consequences of residential neighbourhood crime.

The aim of the research is to measure the impact of residential neighbourhood crime (independent variable) on the residents, residential neighbourhood and government activities (dependent variables). It must be noted that studies on the measurement of the impact of residential neighbourhood crime on the residents, residential neighbourhood and government activities have been rather limited. Therefore, devising a more

reliable valid and contextual measure is an important issue (Dunstan, *et. al.* 2005). The present study also employed similar assessment criteria to create a more reliable and valid construct to answer the research hypotheses.

The purposive and snow-ball sampling techniques were employed in this research. Purposive in the sense that environmental study' professionals were targeted due to the technicality involved in the research and snow-ball in the sense that all that is required to respond to the questionnaire was to be a student or staff within the tertiary institutions. Two hundred (200) questionnaires were produced and administered, 186 were retrieved out of which 163 were finally used for the analysis after data screening. The survey response rate stood at about 81.50% which was considered adequate (Saunders, *et al.*, 2009).

In the course of this research, the instrument was measured on a Likert Scale. Likert scale was "developed with the principle of measuring attitudes by asking people to respond to a series of statements about a topic, in terms of the extent to which they agree with them, and so tapping into the cognitive and affective components of attitudes" (Likert, 1932; McLeod, 2008). The scores were based on a five Likert-scale format ranging from 'strongly disagree' to 'strongly agree'. This scale allows for freedom of opinion and relative ease of data analysis with the assumption that strength/intensity of experience is linear (McLeod, 2008). Lorenzo *et al.* (2008) recommended a minimum scale of 4 to 11. However, Dawes (2008) argued that the increase in number of response option has no significant effect on the scale reliability or validity. In addition to this, Johns (2010) posited that when response scale is below 5 points, the response becomes significantly inaccurate because it will be measuring only direction instead of the magnitude. Similarly, according to him, scales above five (5) points usually pose difficulty of making distinction between the scales to respondents. Hence, this instrument was measured on a scale of 1-5 from strongly disagree (1) to strongly agree (5). The questions relating to each constructed were adapted, adopted and formulated through the related literature while the reliability test was conducted to measure the internal consistence of the research instruments.

The data acquired through questionnaires to test the research hypotheses were summarized and analyzed using MS Excel 2013, SPSS v22 and AMOS v20. The respondents' comments from the open-ended questions in the questionnaire were equally quantified and used in the analyses

III. Data Analysis Process

3.1 Introduction

Prior to the process of data analysis, the data collected from the respondents were coded and entered into statistical package for social science (SPSS) version 22 in order to prepare the data for analysis process. Also, the missing data were considered as missing values. Established codes were employed to assign numbers for each respondent answer, thus, enable the transference of the data from the usable questionnaire collected to SPSS.

In summary, after data were entered into the SPSS data file, data screening processes were conducted. These were to identify errors such as out of range values and omitted entries in the process of data entering. Therefore, original questionnaire were used to correct all the identified errors before the commencement of the appropriate data analysis process for this research. Next were the assessment of normality and reliability of the data collected.

SEM-AMOS which incorporates the factor analyses was adopted being a relatively modern multivariate analytical tool which has been recommended to measure relationships among variables (Awang, 2015). Its diverse means of reaching research conclusions make it preferable. SEM-AMOS is software encompasses such diverse statistical techniques as path analysis, confirmatory factor analysis, causal modeling with latent variables, analysis of variance and multiple linear regressions. AMOS could be accessed through various ways but for the purpose of this study it was accessed through licensing a copy from Statistical Package for Social Sciences (SPSS), Version 22 which was meant for personal computer.

Essentially, SEM is an extension of the general linear model (GLM) that enables a researcher to test a set of regression equations simultaneously. The basic approach to performing a SEM analysis includes establishing relevant theory, model construction, instrument construction, data collection, model testing, result and interpretation. The model consists of a set of relationships among the measured variables. These relationships are then expressed as restrictions on the total set of possible relationships. The results feature overall indices of model fit as well as parameter estimates, standard errors and test statistics for each free parameter in the model.

The choice of SEM-AMOS software for this study was considered desirable as a result of a number of attractive virtues it enjoys like clear and testable assumptions underlying the statistical analyses which gives investigator full control and potentially furthering understanding of the analyses; a graphical interface which boosts creativity and facilitates rapid model debugging; possibility of comparing regression coefficients, mean and variances simultaneously; provision of overall tests of model fit and individual parameter estimate test at the

same time; possibility of purging errors through measurement and confirmatory factor analysis and its most attractive quality among others.

3.2 Assessment of normality

Awang (2015) asserted that assessment of a scale data is commonly assessed to determine normality of the data distribution. The reason is that both factor analysis and structural equation modeling require variables to be normally distributed. More so, distributions of data that is highly skewed or with high kurtosis suggest non-normality and this implies that there may be presence of outlier cases which resultantly affects the estimation. Pallant (2011) stated that distribution of variables needs to be checked before using them in the analysis process.

Pallant (2011) recommends that the skewness and kurtosis values of -2 to +2 are considered a symmetry distribution which are suitable for parametric tests and presume a normal distribution. In this regard, the absolute value of skewness and kurtosis for the entire constructs in this research were presented in Tables 1-4 to establish that they are within the recommended ranges. This implied that data distribution for this research satisfied univariate normality. Therefore, additional modification of the data was not needed.

Table 1: Descriptive statistics for the respondents' perception of the impact of RNC on government activities (GMA)

Code	Item' Description	Mean	Skewness	Kurtosis
		Statistics	Statistics	Statistics
GMA1	RNC increases government expenditure	4.23	-.789	-1.819
GMA2	RNC can reduce government revenue	4.25	-.115	-.457
GMA3	Street incivility can hinder good governance	4.23	-.483	1.238
GMA4	RNC can have negative impact on the economy	4.24	-.337	.320

In Table 1, the mean, skewness and kurtosis values of the entire items for the respondents' understanding of the impact of RNC on government activities (GMA) were presented. The cumulative mean value for the construct on a 5-Likert scale was 4.24 and this indicated that respondents have good perceptions of the impact of RNC on government activities.

Table2: Descriptive statistics for the respondents' perception of the impact of RNC on residents (RSD).

Code	Item' Description	Mean	Skewness	Kurtosis
		Statistics	Statistics	Statistics
RSD1	RNC is capable of causing fear among residents	3.94	-.189	-.014
RSD2	RNC can cause health impairment/sudden death	4.01	-.005	-.547
RSD3	Residents incurs extra expenditure for RNC	4.13	-.255	.108
RSD4	Fear of RNC reduces productivity of residents	4.07	-.495	-.308

In Table 2, the mean, skewness, kurtosis and values of all the items of measurement for the impact of RNC on residents(RSD) as scored by the respondents from within the relevant professions were presented. The cumulative mean value for the RSD construct was 4.04 on a 5-Likert scale and this indicated that the respondents strongly agree that RNC impacts on the residents. However, from the respondents' point of view extra expenditure being incurred by residents as a result of RNC had the highest mean value of 4.13 while the possibility of RNC to cause fear among resident has the lowest mean value of 3.94.

Table 3: Descriptive statistics for the respondents' perception of the impact of RNC on the residential neighbourhood(RND).

Code	Item' Description	Mean	Skewness	Kurtosis
		Statistics	Statistics	Statistics
RND1	RNC can lead to neighbourhood decline	3.30	-.211	-.863
RND2	RNC negatively impacts on property investment	3.04	.329	-1.029
RND3	RNC can aggravate residential mobility	2.96	.484	-.953
RND4	Uncontrolled RNC stigmatizes neighbourhood	2.93	.349	-1.163

In Table 3, the mean, skewness and kurtosis values of the entire items for the respondents' understanding of the influence of RNC on the immediate environment (RND) were presented. The cumulative mean value for the construct on a 5-Likert scale was 3.06 and this indicated that respondents have better perceptions of the relationship between RNC and its impact on immediate neighbourhood.

Table 4: Descriptive statistics for the respondents’ perception of the consequences of residential neighbourhood crime (RNC)

Code	Item’ Description	Mean	Skewness	Kurtosis
		Statistics	Statistics	Statistics
RNC1	There is correlation between RNC and human activities	3.88	-.711	-.179
RNC2	RNC needs to be urgently curtailed	4.29	-.286	-.626
RNC3	RNC impacts negatively on government activities	4.04	-.950	-1.302
RNC4	Residents receive the burden of RNC	3.60	-.452	-.506

In Table 4, the mean, skewness, kurtosis and values of all the items of measurement for the respondents’ perception of the consequences of RNC were presented. The cumulative mean value for the residential neighbourhood crime was 3.95 on a 5-Likert scale and this indicated that the respondents believed in the consequences of RNC. However, research finding made known that ‘RNC needs to be urgently curtailed’ scored highest mean (4.29) while ‘Residents receive the burden of RNC’ scored least mean value (3.60). Nonetheless, it is obvious that this research outcome infers that respondents agree that RNC burdens on the residents, immediate neighbourhood, government activities and the need to checkmate its soaring trend which corresponded with Cohen (1990); Gibbons (2004) and Anderson, (2006) research findings.

3.3 Reliability assessment

Reliability is the degree to which research measurement are free from random error and the extent to which a scale used produces consistent results if repeated measurements were made on the variable concern (Pallant, 2011; David & Sutton, 2011). This implies that reliability and error are related and that the larger the error, the smaller the reliability of the research measurement or vice-versa. As a result, the reliability of the total scale of every construct in this research was examined to ascertain their internal consistency. Pallant (2011) recommended that Cronbach’s alpha values above 0.7 are considered appropriate and acceptable, even though, above 0.8 are preferable.

Table 5 presents the reliability analysis result for Government Activities (GMA), Residents (RSD), Residential Neighbourhood (RND); and Residential neighbourhood crime (RNC). The Cronbach alpha for GMA, RSD, RND and RNC are 0.838, 0.847, 0.869 and 0.697 respectively. These values are approximately up to the benchmark of 0.70 indicating that the items are reliable for measuring the respective constructs (Pallant, 2011).

Table 5: Reliability Analysis

Factors/Constructs	Items	Cronbach alpha
Government Activities (GMA)	GMA1, GMA2, GMA3, GMA4	0.838
Residents (RSD)	RSD1, RSD2, RSD3, RSD4	0.847
Residential Neighbourhood (RND)	RND1, RND2, RND3, RND4	0.869
Residential neighbourhood crime (RNC)	RNC1, RNC2, RNC3, RNC4	0.697

Table 6: KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.711
Bartlett's Test of Sphericity	Approx. Chi-Square	1312.501
	df	120
	Sig.	.000

Table 7: Exploratory factor analysis for the research constructs

	Component			
	1	2	3	4
GMA2	.919			
GMA3	.820			
GMA1	.762			
GMA4	.749			
RND2		.872		
RND3		.862		
RND4		.856		
RND1		.770		
RSD2			.861	
RSD4			.807	
RSD1			.794	
RSD3			.787	
RNC3				.877
RNC2				.524
RNC1				.809
RNC4				.649

3.4 Exploratory Factor Analysis (EFA)

Exploratory factor analysis (EFA) is generally employed in the multivariate statistical analysis to select set of items from a large pool of group into a manageable form. This is simply termed data reduction process in the statistical analysis. The purpose is to examine the relationships among the variables prior the application of the confirmatory factor analysis (Pallant, 2011; Nor, 2009). However, Awang (2014) argued that exploratory factor analysis cannot assess unidimensionality directly, in fact, EFA is commonly used to assess the factor structure of a scale. However, Hair *et. al* (2011) reported that confirmatory factor analysis (CFA) is a more reliable method for use in a research model where hypotheses about relatively new constructs of variables exist such as the case of this research's verifying the consequences of residential neighbourhood crime. In this regards, the EFA for this research and EFA final result is presented in Table 7.

The 16 items of the four constructs measuring the consequences of residential neighbourhood crime scales were subjected to exploratory factor analysis using SPSS version 22 out of which the 16 items passed the data reduction process. Prior to performing EFA, the suitability of data for factor analysis was assessed and satisfactory. In addition, Kaiser-Meyer-Olkin value score was 0.711 which exceeded the recommended value of 0.6 (Kaiser, 1970 cited in Pallant, 2011) reached statistical significance, supporting the factorability of the correlation matrix ((see Table 6).

3.5 Measurement Model

The use of structural equation modeling (SEM) in analyzing the data through AMOS 21.0 software required a two-step approach which was employed as a pre-requisite for the use of SEM (Awang, 2015). The first step required the preparation of the measurement model estimated for the purpose of confirmatory factor analysis (CFA) with the principal aim of checking the model fit and validity. The goodness of fit is in agreement with the laid down principles. Findings as presented in Figure 1 show that the factor loadings after necessary deleting were found to be significant. That is, not less than 0.5 (Hair, *et. al.*, 2011; Awang, 2014); the chi-square/df stood at 1.183 which is less than the benchmark of < 5.0 (March and Hocevar, 1985); CFI is 0.956 (Bentler, 1990). TLI is 0.947 (Bentler and Bonett, 1980); RMSEA (root mean square error of approximation is 0.055 which is less than the benchmark of ≤ 0.080 (Browne, Cudeck and Bollen, 1983). In summary, these result figures meet all the recommended criteria for the good model fit (Hair, *et. al.*, 2011; Babin, *et. al.*, 1994; Awang, 2015).

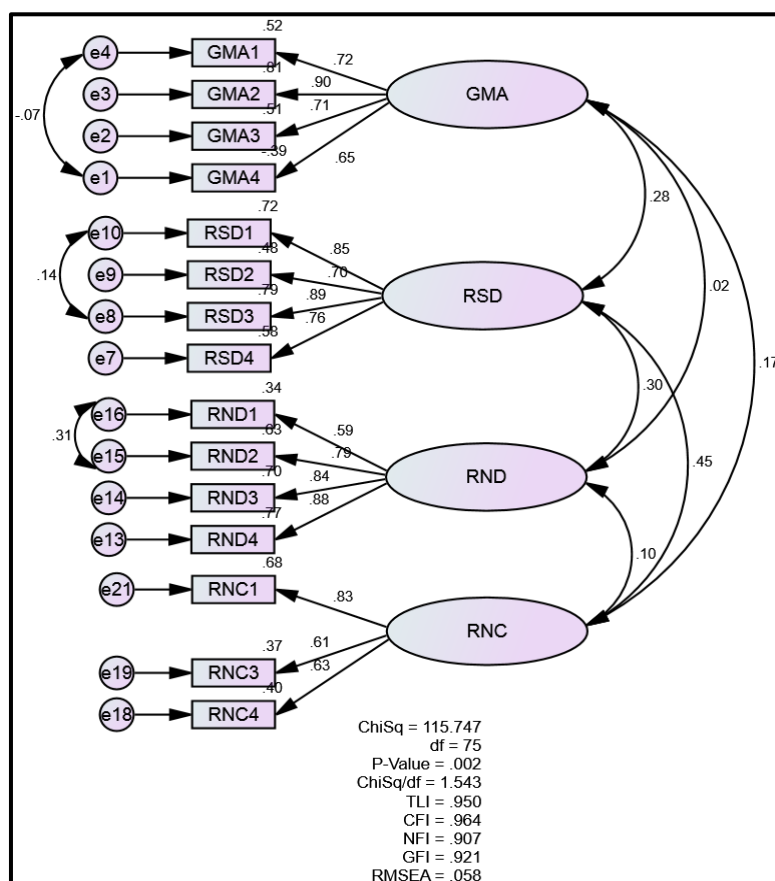


Figure 2: The Measurement Model

Table 8: Factor Loadings, Composite Reliability (CR) and Average Variance Extracted (AVE)

Construct	Items	Loadings	CR ^a	AVE ^b
GMA	GMA1	0.72	0.86	0.56
	GMA2	0.90		
	GMA3	0.71		
	GMA4	0.65		
RND	RND1	0.59	0.88	0.60
	RND2	0.79		
	RND3	0.84		
	RND4	0.88		
RSD	RSD1	0.85	0.89	0.63
	RSD2	0.70		
	RSD3	0.89		
	RSD4	0.76		
RNC	RNC1	0.83	0.86	0.56
	RNC2			
	RNC3	0.60		
	RNC4	0.64		

a. Composite Reliability (CR) = (square of the summation of the factor loadings) / {(square of the summation of the factor loadings) + (square of the summation of the error variances)}.

b Average Variance Extracted (AVE) = (summation of the square of the factor loadings) / {(summation of the square of the factor loadings) + (summation of the error variances)}

Table 9: Correlation matrix for the entire research constructs

	GMA	RSD	RND	RNC
GMA	0.75			
RSD	0.28	0.79		
RND	0.02	0.30	0.78	
RNC	0.17	0.45	0.10	0.75

4.5 STRUCTURAL MODEL

The structural model was developed in order to test the proposed hypotheses as shown in the research assessment framework (path analysis diagram) in Figure 1. The obtained CFA model is perfectly fit as the values of all estimated measures GFI, AGFI, CFI, TLI and RMSEA are up to or greater than the threshold level. Figure 3 gives the graphical presentation of the structural model while Tables 10 and 11 show the standardized regression weight and its significance for the entire path in the model and the summary of the tested hypotheses in this research respectively.

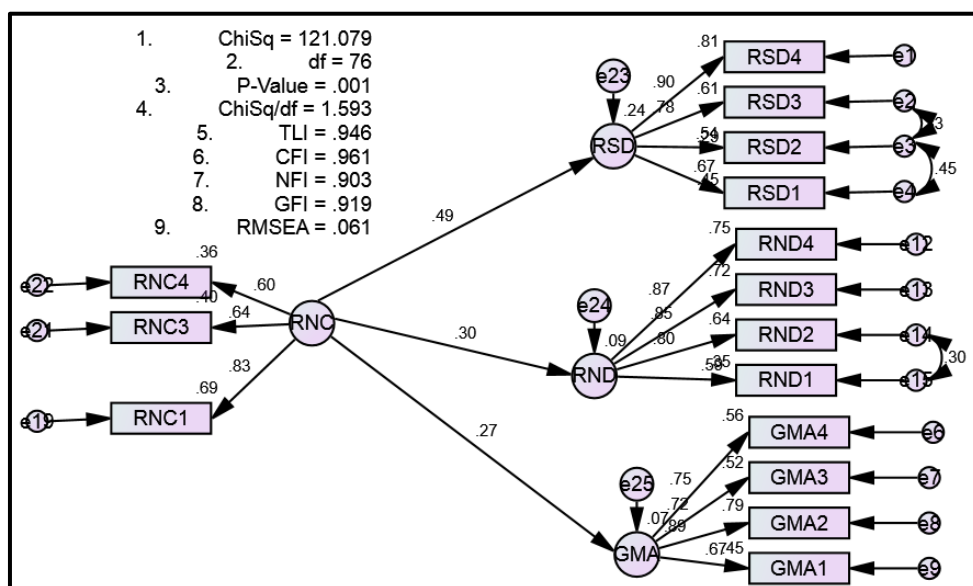


Figure 3: The Structural Model

Table 10: The standardized regression weight and its significance for the entire path in the Model.

Construct	Path	Construct	Estimate	S.E	C.R	P-Value	Result
GMA	<---	NRC	0.27	0.057	2.787	0.005	Significant
RND	<---	NRC	0.30	0.149	2.666	0.008	Significant
RSD	<---	NRC	0.49	0.090	5.063	***	Significant

GMA = Government activities; RND = Residential neighbourhood; RSD = Residents; RNC = Residential neighbourhood crime

Table 11: The summary of the tested hypotheses in this research

S/N	The main hypothesis statement in the research		Estimate	P-value	Result
1.	H1	There is direct relationship between government activities (GMA) and residential neighbourhood crime (RNC)	0.27	0.005	Supported
2.	H2	There is a significant relationship between Residential Neighbourhood(RND) and residential neighbourhood crime (RNC)	0.30	0.008	Supported
3.	H3	Residential neighbourhood crime (RNC) has direct impact on residents (RSD).	0.49	***	Supported

Key: *** represents P-value is less than 0.001

IV. Discussion

The comprehensive review of literature facilitated the earlier presented hypothesised research model in Table 11. The hypothesised results in the Table 10 outlined the outcome of every respected path in the structural measurement model. Therefore, every path's hypothesis in this research is presented accordingly in the next paragraphs.

Hypothesis (H₁): Residential neighbourhood crime (RNC) has a significant and direct effect on government activities (GMA). The result shows that residential neighbourhood crime ($\beta = 0.27$, $z = 2.787$ and $p = 0.005$) is strongly significant to government activities. Therefore hypothesis H1 is supported and held true. The research outcome confirms that residential neighbourhood crime negatively impacts on government activities. The implication of this is that residential neighbourhood crime which comes in the forms of burglary, robbery and street incivility is capable of slowing down the various businesses of government. These include high cost of governance, high cost of controlling crime and decrease in government revenue from real property which by extension is capable of leading to national economic doom.

In addition, this research finding is consistent with the empirical findings by Mayhew (2003); Jaliliyan&Heydari(2014) and McCollister *et. al.*, (2010) in which they variously supported that residential neighbourhood crime is capable of impacting negatively on government activities. For instance, Mayhew (2003) in his research centering on counting the cost of property crime in Australia found out that neighbourhood crime is capable of reducing government revenue as well as increasing government's annual budget on crime. McCollister, *et.al* (2010) in their work based on the cost of crime to the society considered the opportunity cost of crime in that if property crime is tenaciously tackled, lump sum of money spent on crime control could as well be used to provide public infrastructure that would be more beneficial to the society(Hurst, 2020).

Hypothesis (H₂): *There is a significant relationship between immediate neighbourhood (RND) and residential neighbourhood crime (RNC).* In the same vein, the research's result found that *residential neighbourhood crime* ($\beta = 0.30$, $z = 2.666$ and $p = 0.008 < 0.05$) has a significant impact on residential neighbourhood. Therefore, the hypothesis is accepted and empirically supported by this research. Inferably, the result is affirming the position of the literature that presence of violent crime, street incivilities, burglary and robbery within the residential neighbourhood is capable of breeding abnormal residential mobility, neighbourhood stigmatization, low patronage of housing investment and general neighbourhood decline among others.

With Pope & Pope (2012); Lynch & Rasmussen (2001) andTita, *et.al.* (2006), it was variously established that residential neighbourhood crime has been found to have adverse effect on housing values as well as capable of discouraging housing investment. From another perspective, Gibbon (2004) in his study on the costs of urban property crime found that residential neighbourhood crime is capable of causing high residential mobility, neighbourhood stigmatization as well a neighbourhood decline. Crutchfield *et.al.* (1982) in a study premised on determining the impact of property crime on the immediate neighbourhood concluded that property crime could have negative effect on social integration (Rennison& Powers, 2021).

Hypothesis (H₃): *Residential neighbourhood crime (RNC) has direct impact on the residents (RSD).* As presented in the Table 6, research outcome shows that *residential neighbourhood crime* ($\beta = 0.49$, $Z = 5.063$ and $p = 0.000 < 0.001$) is significant and have direct effect on the residents. The outcome of this research showed a strong support for the third hypothesis (H3) as demonstrated in the final structural measurement model (see Figure 3). By implication therefore, the research finding shows that as far as the respondents are concerned residents within the neighbourhood where residential neighbourhood crime is prevalent are bound to suffer both

physical and mental trauma of crime and the fear of it. Hence, going by the pattern of answering the questions, it can be summarized that neighbourhood crime is capable of causing health impairment as well as sudden death. Residents' poor health can reduce their efficiency of labour and this in effect can affect the gross development product (GDP) of the nation. Literature also identifies the implication of this analysis to include avoidable increase in family's annual budget as there may be need to provide additional security gadgets (Wilson, 1989).

This research finding supports previous studies that residential neighbourhood crime is capable of having negative influence on the residents. For instance, Cozens (2015) and Anderson (2006) established a causal effect between residential neighbourhood crime and residents' poor health. Wilson (1989) reiterated that residential neighbourhood crime may cause the residents to spend more of the scarce income on provision of extra security gadgets like CCTV, special locks and electro-fitting doors to mention a few. Cohen (1990) and Green *et.al* (2002) assessed the costs of property crime on the victims to include health hazard, psychological fear of crime and increased family budget.

V. Conclusion

This paper dwelled on the consequences of residential neighborhood crime on the immediate environment, the residents as well as government. The findings have shown that the effect of residential neighborhood crime is completely negative and its soaring trend especially in the developing nations, where the penal system (use of police, court, and prison) is still prevalent gives one a worrisome concern.

Furthermore, the paper has directly or indirectly revealed the benefits inherent in tackling residential neighborhood crime. These include: removal of fear of crime within the neighbourhood, elimination of abnormal residential mobility, cure of residential neighbourhood decline, increase in government revenue through property tax which could transform to the nation's economic prosperity, reduction in government spending on crime control like the procurement of additional police, construction of additional prisons and recruitment of more judges. Also, a meaningful attention paid to the consequences of residential neighborhood crime could translate to a boosted housing investment and general sustainability of the housing environment.

This article is also meant to serve as a clarion call to urban planners, property managers, researchers, policymakers and government agencies to see residential neighborhood crime as a menace that must be severely dealt with for the purpose of enhancing housing and environmental sustainability. However, it is not within the scope of this research to provide solution to the problems of residential neighbourhood crime as readers would have wished, nevertheless, the author treats this limitation as an opportunity for future research.

References

- [1]. Addington, L. A. (2019). NIBRS as the new normal: What fully incident-based crime data mean for researchers. In *Handbook on crime and deviance* (pp. 21-33). Springer, Cham
- [2]. Adesola, F., Misra, S., Omoregbe, N., Damasevicius, R., & Maskeliunas, R. (2019). An IOT-based architecture for crime management in Nigeria. In *Data, engineering and applications* (pp. 245-254). Springer, Singapore.
- [3]. Agbabiaka, H. I., Daramola, O. P., & Adesanya, A. A. (2021). Residents perception of crime characteristic and its causation across residential densities in Mushin, Lagos Nigeria. *Journal of Criminological Research, Policy and Practice*.
- [4]. Alemika, E., & Chukwuma, I. C. (2005). Criminal victimization and fear of crime in Lagos Metropolis, Nigeria. *Cleen Foundation Monograph Series*, 1.
- [5]. Anderson, D. A. (1980). The aggregate burden of crime*. *The Journal of Law and Economics*, 42(2): 611-642.
- [6]. Awang, Z. (2015). *SEM Made Simple*. Selangor: MPWS Rich Publication.
- [7]. Awang, Z. (2014). *A Handbook on Structural Equation Modeling*. Selangor: MPWS Rich Publication.
- [8]. Babin, B. J., Darden, W. R., and Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of consumer research*, 20(4), 644-656.
- [9]. Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological bulletin*, 107(2):238.
- [10]. Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3):588-606.
- [11]. Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sage focus editions*, 154:136-136.
- [12]. Cohen, M. A. (1990). A note on the cost of crime to victims. *Urban Studies*, 27(1):139-146.
- [13]. Cozens, P. (2015). Crime and Community Safety. In (eds.) Barton, Thompson, Burgess and Grant. *The Routledge Handbook of Planning for Health and Well-Being: Shaping a sustainable and healthy future*. Routledge. 162
- [14]. Crutchfield, R. D., Geerken, M. R. & Gove, W. R. (1982). Crime Rate and Social Integration. The Impact of Metropolitan Mobility. *Criminology*, 20(3-4): 467-478.
- [15]. David, M. & Sutton, C. (2011). *Social Research: An Introduction*. London: SAGE Publications.
- [16]. Dawes, J. G. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales. *International journal of market research*, 51(1):61-77
- [17]. Dunstan, F., Weaver, N., Araya, R., Bell, T., Lannon, S., Lewis, G., ... & Palmer, S. (2005). An observation tool to assist with the assessment of urban residential environments. *Journal of Environmental Psychology*, 25(3), 293-305.
- [18]. Gibbons, S. (2004). The Cost of Urban Property Crime*. *The Economic Journal*, 114(499): F441-F463.
- [19]. Green, G., Gilbertson, J. M. & Grimsley, M. F. J. (2002). Fear of Crime and health in residential tower blocks in Liverpool, U.K. *European Journal of Public Health*. 12 :10-15.

- [20]. Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011), PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-152.
- [21]. Hurst, J. N. (2020). Stability in unstable places: property crime in a campus environment. *Crime Prevention and Community Safety*, 22(2), 110-133.
- [22]. Johns, R. (2010), Likert items and scales: Survey Question Bank; Method Fact Sheet 1.
- [23]. Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401-415.
- [24]. Krupa, J. M., Boggess, L. N., Chamberlain, A. W., & Grubestic, T. H. (2021). Noxious housing: The influence of single room occupancy (SRO) facilities on neighborhood crime. *Crime & Delinquency*, 67(9), 1404-1428.
- [25]. Likert, R. (1932), A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140:1-55.
- [26]. Lorenzo, D. E., Schneider, N., Cobb, K. M., Franks, P. J. S., Chhak, K., Miller, A. J., ... and Powell, T. M. (2008), North Pacific Gyre Oscillation links ocean climate and ecosystem change. *Geophysical Research Letters*, 35(8):1-6
- [27]. Lynch, A. K. & Rasmussen, D. W. (2001). Measuring the impact of crime on house prices. *Applied Economics*, 33(15): 1981-1989.
- [28]. Machin, S., & Meghir, C. (2004). Crime and economic incentives. *Journal of Human Resources*, 39(4), 958-979.
- [29]. Makinde, O. O. (2020). The correlates of residents' perception of safety in gated communities in Nigeria. *Social Sciences & Humanities Open*, 2(1), 100018.
- [30]. Marsh, H. W., & Hocevar, D. (1985), Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological bulletin*, 97(3):562.
- [31]. McLeod, S. (2008), Qualitative quantitative. *Simply Psychology*. **Error! Hyperlink reference not valid.**. Accessed on 13th June, 2016.
- [32]. Moreto W. (2010). Risk factors of urban residential burglary. *RTM Insights* 4: 1-3.
- [33]. Naroff, J. L., Hellman, D. & Skinner, D. (1980). Estimates of the impact of crime on property values. *Growth and Change*, 11(4): 24-30.
- [34]. Nor, A. R. M. (2009). *Statistical Methods in Research*. Petaling Jaya: Pearson Malaysia Sdn. Bhd.
- [35]. Olajide, S. E., & Lizam, M. (2016). Gated Communities and Property Fencing: A Response to Residential Neighbourhood Crime. *British Journal of Education, Society and Behavioural Science*, 13(3), 1-9.
- [36]. Olajide, S. E., Lizam, M., & Akinbola, K. B. (2017). Assessment of the burdens of residential neighbourhood crime. *European Journal of Social Sciences Studies*. 2(5):1-12.
- [37]. Pallant, J. (2011), *SPSS Survival Manual*. 4th ed. Crow's Nest: McGraw-Hill.
- [38]. Pope, D. G., & Pope, J. C. (2012) Crime and property values: Evidence from the 1990s crime drop. *Regional Science and Urban Economics*, 42(1): 177-188.
- [39]. Ratcliffe J (2001). Policing urban burglary. *Trends & Issues in Crime and Criminal Justice* no. 213. http://www.aic.gov.au/publications/current%20series/tandi/201-220/tandi_213.aspx.
- [40]. Rennison, C., & Powers, H. (2021). The National Crime Victimization Survey. *The Encyclopedia of Research Methods in Criminology and Criminal Justice*, 2, 796-799.
- [41]. Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*. 5th Edition. London: Pearson Education Limited.
- [42]. Tita, G. E., Petras, T. L. & Greenbaum, R. T. (2006) Crime and residential choice: a neighborhood level analysis of the impact of crime on housing prices. *Journal of Quantitative Criminology*, 22(4):299-317.
- [43]. Torres, J. A., & Apkarian, J. (2018). Banishment: A test of specific deterrence in public housing. *Criminology & Public Policy*, 17(4), 911-937
- [44]. Wilson P. R. (1989) Crime and Crime Prevention. Paper presented at the Designing Out Crime: Crime Prevention Through Environmental Design (CPTED) convened by the Australian Institute of Criminology and NRMA Insurance and held at the Hilton Hotel, Sydney, 16 June.

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