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Measuring the influences of opportunity in residential neighbourhood crime

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Abstract
Investment in residential property, especially housing development, is capital-intensive and a unique real estate investment option as it can serve both the purpose of providing living accommodation and investment source. Neighbourhood crimes as street incivility, burglary, robbery and violent crimes have become a permanent scene in our cities as urban residential housing is frequently bedevilled by this nefarious act. The effect of crime on housing investment and sustainability can be devastating. The role of opportunity in committing a crime has also been attributed to be immensely contributing to the soaring trend. The thus paper measure the influence of opportunity in residential neighbourhood crime in the study area to improve housing sustainability and investment. Purposive and snowball sampling techniques were adopted for the study in the administration of Four Hundred (400) sets of questionnaire out of which Two Hundred and Eighty-Eight (288) were considered usable for the analysis after data screening. SPSS and Structural Equation Modeling (SEM)- Analysis of Movement Structures (AMOS) were the critical analytical tools used to conduct the reliability test, normality test, cumulative mean, exploratory factor analysis, confirmatory factor analysis, measurement and structural model. The analysis results revealed P-values of the various forms of opportunity concepts of crime were statistically significant: routine activity- 0.002; situational crime- 0.040; crime pattern- 0.001; rational choice- 0.008 and lifestyle- 0.013. The practical implication of the research work is that careful consideration of the influence of opportunity on residential neighbourhood crime can drastically reduce, if not eliminate the menace, thereby improving housing sustainability and investment.

Keywords: housing, influence, opportunity, residential neighbourhood crime, sem-amos

Introduction

The research work presents the outcome of quantitative research to measure the influence of opportunity in residential neighbourhood crime. In other words, the research is set to test the efficacy of the theoretical beliefs based on opportunity theory within the Nigerian urban residential landscape. The theory centres on the premise that most criminal acts (as they affect residential neighbourhoods) occur basically because the offender(s) are consciously or unconsciously allowed to operate. If such opportunities are consciously blocked, it will prevent the offender from being successful in victimisation. The theory also defines the relationship between place and crime. Hence, a good study of this crime concept has provided a reliable clue to crime control in advanced nations as the USA, UK, and Australia. According to Felson & Clarke (1998), opportunity theory is built on the old saying that "opportunity makes the thief". Hence, they argued that opportunity is the "root cause" of crime and that this theory assists in thinking about crime prevention. From their study, the ten principles of crime opportunity theory are said to include (1) the role opportunities play in causing all crime (2) particular crime opportunities (3) crime opportunities are focused in time and space (4) crime opportunities depends on the everyday movement of activities (5) one crime produces the opportunity for another (6) some products offer more tempting crime opportunities (7) social and technological changes produce new crime opportunities (8) crime can be prevented by blocking opportunities (9) reducing opportunities does not usually displace crime, and (10) focused opportunity reduction can produce a broader decline in crime. Hence, in environments prone to crime, the opportunity becomes the determining limiting factor of crime outcome. The criminals generally have little or no control over the conditions of the environment, and the conditions that permit particular crime are often rare, unlikely or preventable. Nevertheless, it is not all opportunities that are followed by crime, but every criminal act requires opportunity. Similarly, an inspired offender is necessary for a crime's contract but not sufficient (Cohen & Felson, 1979; Cohen, Felson & Land, 1980) [14].

To achieve the objectives of the study, the paper consists of six sections. Section one treats the general introduction to the study, while section two presents a literature review. Section three describes the study's methodology, whereas section four presents the data analysis and results. Section five of the paper discusses the analysis results; Section six concludes the paper and presents the limitation of the study and further research.

Literature Review

From its conception, the opportunity theory has received much analysis, criticisms and reformations. Scholars have conducted research work through research and experimentation to improve the opportunity theory with each of the scholars emphasised their ideas (Dijk, 1994; Felson & Clarke, 1998; Cohen & Felson, 1979) [20, 14]. It is further demonstrated in summary, as presented in Table 1.

Although the crime opportunity has been a useful tool for evaluating the criminal environment, like any other theory, there are several criticisms (Wortley, 2010; Sutton, 2012) [46, 43]. First, it is argued that the fortification given to targets by using hands-on measures as locks and alarms displaces crime to some other time or place. Second, opportunity crime theory opposed that no real advances in crime levels can be accomplished without tackling root psychological and social causes. Also, it is being criticised that if opportunities for certain kinds of crime are blocked, offenders may simply resort to more violent or shift their energies to entirely different or perhaps more intractable kinds of crime. In response to these criticisms, Clarke (2005) and Felson & Clarke (1998) summarised the criticisms under the misconception of what the concept of crime opportunity stands for. The key concepts associated with opportunity theory as adopted as variables in this study include routine activity theory, situational crime prevention, crime pattern theory, rational choice theory and lifestyle theory. Clarke (1997) [11] described situational crime prevention as comprising opportunity-reducing measures that make crime more difficult and riskier, or less profitable and excusable as judged by a broad range of offenders; involve the adaptation of the immediate neighbourhood in an as systematic and permanent way as possible and are directed at concrete forms of crime. He added that several features of the definition relevant to the most extended discussion of situational crime prevention should be noted. These include making sure that situational measures be geared towards particular categories of crime; explicit recognition of a broad range of potential criminal attempting to satisfy diverse motives through various methods; ensuring a changed environment designed to disrupt potential offender concerning the costs and benefits attached to committing a particular crime; and that some evaluation of moral costs of offending form part of the judgments made by a prospective offender. The theory asserts that most opportunistic offenders are rational in their decision-making and recognise, evaluate and respond to environmental cues. Cozens (2014) [19] associated it with reward effort relating to the offence and environmental factors and perceived risk that serves as an integral part of the built environment's decision-making process. In other words, Õzkan (2011) [38] opines that in line with the tenets of the theory before an offender decides to victimise, he or she must have analysed the probable costs and benefits. Clarke & Cornish (1985) and Cornish & Clarke, (1986) [17] look at crime as a rational decision to involve criminal activities having considered the reward to other legitimate activities. According to these studies, several factors can influence the decision to commit a specific crime. Background factors include temperament, intelligence, cognitive style, sex, class, education, neighbourhood, and broken home. A previous experience like direct and vicarious learning, moral attitude, self-perception foresight, and planning also contribute to crime's rational choice. Cornish & Clarke (1986) [17] evaluated solutions to include the degree of effort, amount/immediacy of reward, likelihood and severity of punishment and moral costs. Rational choice theory, from the outcome of their studies, borrows concepts from economic theories of crime but seeks to avoid some of the reproaches made of these theories, including that: economic models: (i) frequently overlook rewards of crime that cannot straightforwardly be translated into cash equivalents; (ii) not sensitive to the great diversity of behaviours within the general crime label, with the assortment of costs and benefits, but rather tended to lump all together as one variable in their equations; (iii) the formal mathematical modelling of unlawful choices in economic theories require data that are unattainable or can only be pressed into services by making impracticable assumptions about what they represent; and (iv) self-maximising decision-maker image in economic theory with a self-centred motive of gaining his or her advantage, does not fit the opportunistic and thoughtless nature of much crime (Clarke & Felson, 1993) [12]. According to Õzkan (2011) [38], routine activity theory dwells on the premise that predetermined crime results from a likely offender and a suitable target meeting in time and space without a capable guardianship. In other words, crime cannot occur where there is a capable guardian, even when a likely offender meets a suitable target (something valuable). The theory proved that capable guardianship represents an object, living or non-living, close to the target, of which its/his presence deters the offender. Active guardianship is not necessarily provided by only a police officer or a security guard but by anyone or anything close to the target (Felson & Clarke, 1998). Practically, the routine activities theory was first applied to predatory crime by the criminologists. By definition, predatory (or exploitative) crime means; an illegal act in which "someone undeniably and deliberately steals or damage of the person or property of another" (Cohen & Felson, 1979) [14]. According to Brantingham & Brantingham (1981) [8], the crime pattern theory emphasises the role of location in crime occurred within the space of time. It was observed that using different parameters measuring from an occurrence of crime at the city level to the neighbourhood level and building level. It highlights how specific crimes occur in specific locations and at specific times. Crime pattern theory also places a high premium on the criminal event's location about the offender and target as they assemble in space and time. In the modelling of different types of crimes, activity nodes, paths and edges are considered necessary. Nodes are dominant places in the live people as their abode, workplace, recreational sites, and malls' centres. These are places where people move from and to. On the other hand, paths are the networks as thoroughfares or footpaths, along which people move to get to their place of destinations. People move from and to their various nodes through the paths. The crime pattern theory suggested that individuals become victims and commit a criminal act close to their nodes. It may be that such individuals spend substantial time there (Brantingham & Brantingham, 1995). The scholars further opined that Paths are significant, as determine the people's level of an area awareness. Edges are places where sufficient distinctiveness exists, which is an apparent change between one area and the other, either physical or perceptional. A perfect example for the physical edge is the existence of a river or even a highway. A commercial district, for instance, ends and residential district starts can be an example of a perceptional edge. A zone like that most often attracts criminal activities such as shoplifting, robberies, and racial attacks (Õzkan, 2011) [38]. Lifestyle theory or lifestyle-exposure theory is a theory of victimisation that acknowledges that not everyone has the same lifestyle and that some lifestyles expose people to more risks than do other lifestyles (Fattah, 1993) [26]. Strategies for crime control would then include those to

increase effective guardianship and reduce motivated offenders' availability. The lifestyle-exposure theory was developed to explain the correlates of crime against persons, and Cohen & Felson (1979) have extended the theory to property crime. The theory thus emphasises the lifestyle of individuals –when and where people go, what they engaged in, whom they interact with and whom they meet.

Crime within the Nigeria urban residential landscape is soaring and alarming with little effort made to ameliorate principally due to use of primitive approach of the penal system and dearth of research on crime and its prevention (Olajide & Lizam, 2016) [36]. This research is expected to establish the possibility of drastically reducing crime without necessarily using force (police or/and prison) by adopting preventive measures of blocking crime opportunity within the residential neighbourhoods. Previous studies have shown that property crime (which come in the forms of burglary, street incivility, robbery and violent crime) is most pronounced more than other forms of crime within the urban setting (Gibbon, 2004; Cohen, 1990) [26, 13]. Since residential buildings are used as living accommodation and valuable items are usually kept inside, they attract offenders, especially in developing economies like Nigeria. Furthermore, victimisation is rampant within the residential neighbourhoods as residents may often leave the house vacant to attend to other activities like shopping, workplace, worship centre, recreation and others thereby giving a prospective offender free access to operate (Olajide & Lizam, 2016) [36]. This study is set to determine the causal effects of the various crime opportunity theory (as enumerated earlier) on the residential neighbourhood crime, as shown in the research assessment framework (see Figure 1).

Table 1: Components of Crime Opportunity Theory

S/N	Type Name	Thrust of The Theory	Author(S) & Year	Usefulness	Criticism
1.	Situational Crime Preventions	Situational prevention is an opportunity-reducing measure that is directed at exact forms of crime, involve the organisation, design or operation of the immediate environment systematically and permanently as imaginable, and make crime more difficult and risky, or less satisfying and excusable as judged by a wide range of offenders	Clarke, 1980	Existing studies revealed that this theory had been proved to be useful in residential neighbourhood crime prevention.	It is exceedingly simplistic hypothetical, the problem of crime displacement, diversion of attention from fundamental causes of crime, restriction of personal freedom, conventional and managerial approach to crime
2.	Lifestyle Theory	Fattah's study confirms that activities of person's work and leisure engender exposure to latent offenders (such as alcohol consumption in public places, late-night use of public transport or the kind of car or quality of wears) tend to surge the risks of victimisation.	Fattah, 1993; Hindelang, *et al.* (1978).	It is quite relevant to residential neighbourhood security	It modifies people's lifestyle, thereby restraining their freedom.
3.	Rational Choice Theory	The theory maintains that crime results from rational choices based on the evaluation of anticipated costs and benefits. The supposed risk, reward and effort connected with the offence and environmental variables within the built-up areas are an integral part of the decision-making process.	Clarke and Cornish, 1985; Cornish and Clarke, 1986	It is relevant to offenders' behaviour to housing crime	The advancement of the 'bounded rationality model' tends to perforate the theory's tenet and secondly, better-protected areas will simply displace crime.
4	Routine Activities Theory	The theory focuses on the premise that predatory crime is a probable offender's product, a suitable target's junction in time and space with the absence of qualified supervision.	Cohen and Felson, 1979	There are practical studies to support its relevance in a residential burglary.	RAT tells who is more likely to be victimised. However, who are the offenders? There is an association between crime victims and offenders. Also, crime rates are generally proportionate to the number of inspired criminals.
5.	Crime Pattern Theory	The theory highlights how particular crimes occur in precise locations and at exact times. Crime pattern theory examines differing scales, from patterns of crime at a micro-level (city) to macro-level (neighbourhood) to the micro-level (building envelop). It also emphasises the criminal and target as they converge in space and time with a specific emphasis on the place of the unlawful event. Activity nodes, paths and edges are also significant in the modelling of different types of crimes.	Brantingham and Brantingham, 1981	There are practical studies to substantiate its importance in residential burglary and other ferocious crimes.	As an offshoot of situational crime deterrence, the study was criticised by social crime prevention for being 'anti-social' since has done little to help individuals prone to committing the crime. It has also been criticised to be individual-focused while statistics prove a large amount of crime is committed in groups.

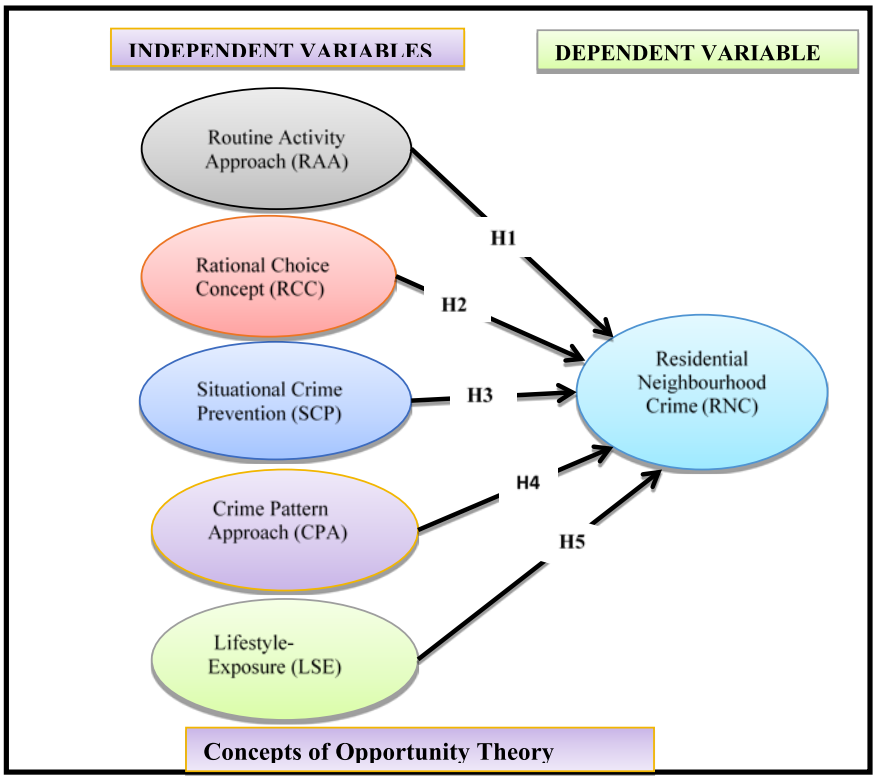

Fig 1: Research Assessment Framework

Methodology

The study conducted between January and March 2019 within Ado-Ekiti, the State Capital of Ekiti State, Nigeria. The research involved data collection using a structured questionnaire administered on the city's inhabitants made up of the working class derived from the tertiary institutions and government establishments located within the urban centre. The aim of the research is to measure the influence of opportunity on residential neighbourhood crime. The opportunity (independent variable) was derived from the various theories associated with crime opportunity. These include rational choice, crime pattern, routine activity, situational crime prevention and lifestyle. Residential neighbourhood crime represents the various offences that are perpetuated within the residential neighbourhood. These include burglary, theft and street incivility, robbery, graffiti and violent crime, among others. Several studies have examined the relevance of opportunity in crime prevention, including Felson & Clarke (1998), Clarke & Cornish (1985), Brantingham & Brantingham (1995), Cornish & Clarke (2003) [16] and Fattah (1993) [23]. However, studies on measuring the influence of opportunity on residential neighbourhood crime have been somewhat 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 study however adopted purposive and snowball sampling techniques in the administration of the questionnaire. Purposive in the sense that the working class (educated) was targeted due to the technicality involved in the research and snowball in the sense that workers in the tertiary institutions and government offices within the State capital of Ekiti State were the target respondents. Four hundred (400) questionnaires were produced and administered, 317 were retrieved out which 288 were finally used for the analysis after data screening. The survey response rate stood at about 77.63%, considered adequate (Saunders, *et al.*, 2009) [42]. To determine the sample frame and sample size, an estimate of the total number of staff capable of responding to the questionnaire stood at 6,000 (through staff payrolls) and using the sample size calculator; the sample size is roughly 382; hence 400 was adopted through simple approximation (Bartlett, *et al.*, 2001). In the course of this research, the instrument was measured on a Likert Scale. Likert scale to determine the respondents' perception of the matter under investigation 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, assuming that experience's strength/intensity is linear (McLeod, 2008). Lorenzo *et al.* (2008) recommended a minimum scale of 4 to 11. However, Dawes (2008) also argued that the increase in response option has no significant effect on scale reliability or validity. In addition to this, Johns (2010) [29] posited that when the response scale is below 5 points, the response becomes significantly inaccurate because it will measure the only direction instead of the magnitude. Similarly, according to him, scales above five (5) points usually pose difficulty distinguishing between the scales to respondents. Hence, this instrument was measured on a scale of 1-5 from strongly disagree (1) 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 research instruments' internal consistency. The data acquired through questionnaires to answer the research questions were summarised and analysed using MS Excel 2013, SPSS v22 and AMOS v20. The respondents' comments from the questionnaire's open-ended questions were equally quantified and used in the analyses.

Data Analysis

Reliability Analysis

The essence of each construct's reliability analysis is to assess the measurement instrument's internal consistency through the Cronbach alpha. Table 2 presents the reliability analysis result for Residential Neighborhood Crime (RNC), Routine Activity Approach (RAA), Rational Choice Concept (RCC), Situational Crime Prevention (SCP), Crime Pattern Approach (CPA) and Life Style-Exposure (LSE). The Cronbach alpha for RNC, RAA, RCC, SCP, CPA and LSE are 0.688, 0.907, 0.879, 0.885, 0.871 and 0.825 respectively. These values exceeded 0.60, indicating that they are reliable for measuring the respective constructs (Pallant, 2011).

Table 2: Reliability Analysis

Factors/Constructs	Code	No. of Question	Cronbach Alpha
Residential Neighborhood Crime (RNC)	2	3	0.688
Routine Activity Approach (RAA)	3	8	0.907
Rational Choice Concept (RCC)	4	6	0.879
Situational Crime Prevention (SCP)	5	8	0.885
Crime Pattern Approach (CPA)	6	6	0.871
Life Style -Exposure (LSE)	7	5	0.825

Data Normality

In applying structural equation modelling, it is required that data should be normally distributed. Hence, this necessitates that data normality should be confirmed (Hair, *et al*., 2011) [27]. In this particular study, all skewness and kurtosis values for the six (6) constructs have below +1and -1, indicating the distributed data's multivariate normality (Pallant, 2011) [40].

Structural Equation Modeling (SEM) Using Analysis of Moment Structures (AMOS)

SEM-AMOS is software encompasses such diverse statistical techniques as path analysis, confirmatory factor analysis, Causal modelling with analysis of variance, latent variables and multiple linear regressions. AMOS could be accessed through various ways, but for this study, it was accessed through licensing a copy from Statistical Package for Social Sciences (SPSS), Version 22, which was meant for the 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 usually adopted in performing SEM analysis includes establishing relevant theory, model construction, instrument construction, data collection, model testing, result and interpretation. The model involves a set of relationships between the measured variables. These relationships are then expressed as restrictions on the entire set of possible relationships. The outcomes feature the model fit of the overall indices and parameter estimates, standard errors, and test statistics for each model's free parameter (Awang 2015) [2]. The choice of using SEM-AMOS software for this study was considered desirable due to several attractive virtues it enjoys. These among others include clear and testable assumptions underlying the statistical analyses that give investigator full control and potentially through furthering understanding of the analyses, the graphical interface of the model boosts creativity and facilitates rapid model correcting. Also, the model possibility of comparing regression coefficients, mean and variances simultaneously is an added advantage. While the provision of comprehensive tests of model fit and individual parameter estimate test simultaneously and the possibility of purging errors through measurement and confirmatory factor analysis and its most attractive quality (Awang, 2015) [2].

Measurement Model

The structural equation modelling (SEM) adaptation in analysing the data through AMOS 21.0 software required a two-step approach employed as a pre-requisite for SEM use (Awang, 2015) [2]. The initial step necessary for the measurement model's preparation is estimated for confirmatory factor analysis (CFA) was adopted to check the model fit and validity. The goodness of fit is in line with the laid down principles. Findings, as presented in Figure 2, show that the factor loadings after necessary deleting were significant. That is, not less than 0.6 (Hair, *et al*., 2011; Awang, 2014) [27, 3]; the chi-square/df stood at 1.787 which is less than the benchmark 0f < 5.0 (March & Hocevar, 1985); the CFI is 0.920 (Bentler, 1990). TLI is 0.912 (Bentler & Bonett, 1980) [5]; RMSEA (root mean square error of approximation is 0.053, which is less than the benchmark of ≤ 0.080 (Browne, Cudeck & Bollen, 1993). In summary, these result figures me*et al*l the recommended criteria for the suitable model fit (Hair, *et al*., 2011; Babin, *et al.*, 1994; Awang, 2015).

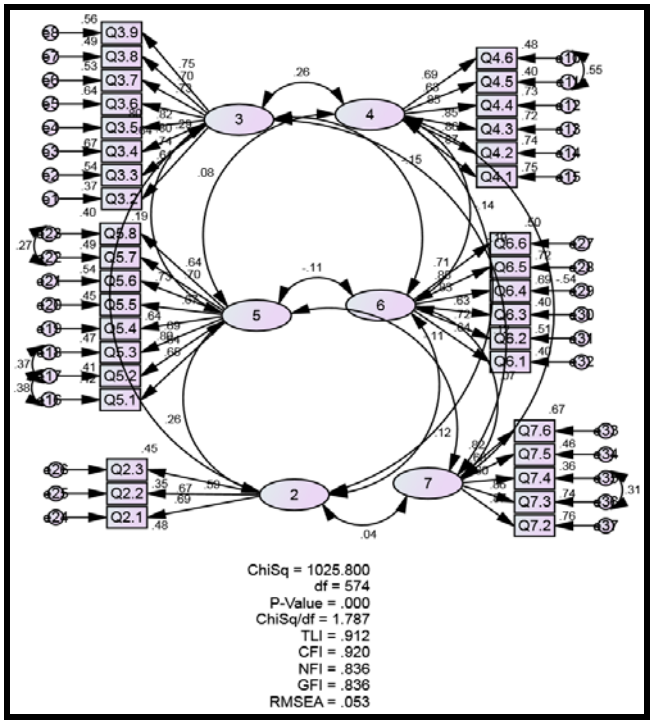

Fig 2: The Measurement Model

The data were also tested for construct validity to ensure that the model is appropriately fit, which involved the discriminant and convergent validity and the correlation matrix for the entire research constructs (Hair, *et al*., 2011; Awang, 2014) [27, 3]. Whenever the Average Variance Extracted (AVE) square root is greater than the correlation with other constructs, discriminant validity is achieved (Hair, *et al.*, 2011) [27]. All reflective indicators' loadings are

above 0.6 after the data had been refined through reliability test (Cronbach alpha) and expository factor analysis (EFA). The values of composite reliability for all reflective constructs are above 0.7 (Hair, *et al.* 2011; Awang, 2015) [27, 2] and the AVE for each construct is above 0.50 (Fornell & Larcker, 1981) confirming a convergent validity as shown in Tables 3 and 4.

Table 3: Factor Loadings, Composite Reliability (CR) and Average Variance Extracted (AVE)

Code Items	Factor Loadings	CR	AVEs
2. Residential Neighborhood Crime (RNC)			
2.1 There is a correlation between opportunity and criminal tendencies	0.69		
2.2 Provision of preventive gadgets can deter offenders	0.59		
2.3 Burglary usually occurs in neighbourhoods when the residents are not around	0.67		
3. Routine Activity Approach (RAA)			
3.1 Exposed accommodation is a target of burglary	0.75		
3.2 Accommodation left untidy can attract victimisation	0.73		
3.3 The number of adults in a household could influence criminal attack	0.72	0.771	0.459
3.4 The period a house is left empty can influence burglary	0.80		
3.5 Presence of neighbourhood watch, dogs or CCTV can scare offenders	0.81		
3.6 Accommodation with more women than men can be a target of victimisation	0.82	0.911	0.563
3.7 Married couples are less victimised compared to singles	0.74		
3.8 Accommodation proximity to bus-stop and highways can influence offending	0.61		
4. Rational Choice Concept (RCC)			
4.1 Orientation and re-orientation of people against crime can curb crime	0.87		
4.2 Increase in punishment should ordinarily decrease offending	0.86		
The expected outcome benefits influence 4.3 People's preference for offending	0.86		
4.4 Loss of legitimate income influences offending	0.85	0.910	0.599
4.5 The decision to is influenced by people's preference	0.86		
4.6 The choice to offend is using the same principles of cost-benefit analysis	0.62		
4.7 People offend when the expected return is higher than what legal work will bring	0.69		
5. Situational Crime Prevention (SCP)			
5.1 Target hardening (like lock and key) can discourage offenders	0.54		
5.2 A well-maintained residential neighbourhood can reduce victimisation	0.64	0.880	0.482
5.3 Activity support within the residential neighbourhood can reduce crime	0.65		
5.4 There is a positive relationship between residential design and victimisation	0.66		
5.5 Rioting can encourage looting	0.78		
5.6 Poverty can trigger a criminal tendency	0.75		
5.7 Homelessness can encourage victimisation	0.72		
5.8 Incessant incivility within the neighbourhood can cause offending.	0.78		
6. Crime Pattern Approach (CPA)		0.874	0.540
6.1 When activities are repeated frequently, it can aid the decision to commit a crime	0.71		
6.2 Networks of family, friends and acquaintances can influence crime	0.85		
6.3 Individuals have a range of routine daily activities that can give rise to offending	0.83		
6.4 Crime attractors are created when targets are located at the nodal point of a potential offender	0.63		
6.5 There is a relationship between property crime and the environment they occur	0.72	0.898	0.598
6.6 GIS is a powerful practical tool in the presentation of crime data	0.64		
7. LifeStyle Exposure (LSE)			
7.1 Design, height and type of property fence can attract offender	0.81		
7.2 Number of cars owned by a household can attract victimisation	0.70		
7.3 Employment status of a householder can make one a target of victimisation	0.67		
7.4 The dichotomy between the rich and the poor can contribute to property crime	0.89		
7.5 Household annual income and mode of dressing can influence victimisation	0.85		

Table 4: The Constructs Correlation matrix

	2	3	5	5	6	7
2	0.68					
3	0.29	0.75				
4	0.14	0.26	0.77			
5	0.26	0.19	0.08	0.69		
6	0.12	0.15	0.14	0.11	0.74	
7	0.04	0.19	0.54	0.11	0.07	0.77

Structural Model

The structural model was developed to test the proposed hypotheses 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 5 and 6 show the standardised regression weight and its significance for the entire path in the model and the summary of the tested hypotheses in this research.

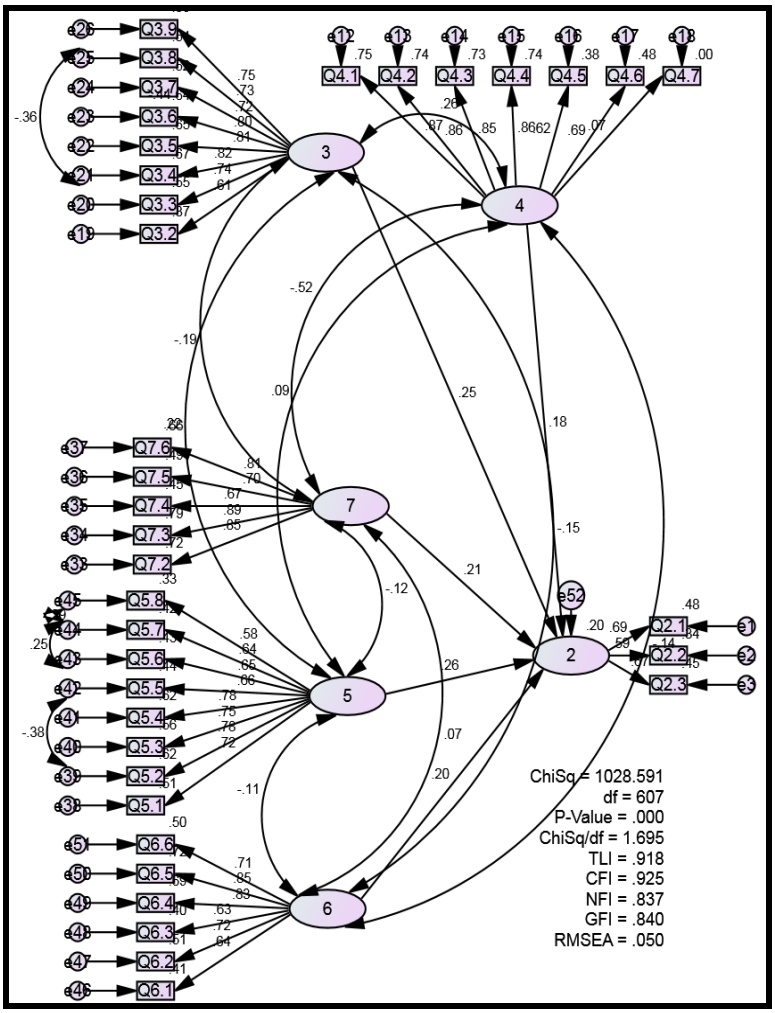

Fig 3: The Structural Model

Table 5: The standardised regression weight and its significance for the entire path in the model.

Construct	Path	Construct	Estimate	S.E	C.R	P-Value	Result
RNC	<---	RAA	0.26	0.083	3.134	0.002	Significant
RNC	<---	RCC	0.12	0.058	2.050	0.040	Significant
RNC	<---	SCP	0.26	0.074	3.406	***	Significant
RNC	<---	CPA	0.24	0.089	2.646	0.008	Significant
RNC	<---	LSE	0.16	0.058	2.474	0.013	Significant

Table 6: The summary of the tested hypotheses in this research

S/N		The central hypothesis statement in the research	Estimate	P-value	Result
1.	H1	There is a direct relationship between the routine activity approach and neighbourhood crime	0.26	0.002	Supported
2.	H2	There is a significant relationship between rational choice concept and neighbourhood crime	0.12	0.040	Supported
3.	H3	Situational crime prevention (SCP) has a direct impact on residential neighbourhood crime.	0.26	***	Supported
4.	H4	There is a direct relationship between crime pattern approach and Neighbourhood crime	0.24	0.008	Supported
5.	H5	Lifestyle exposure has a direct impact on residential neighbourhood crime	0.16	0.013	Supported

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

Discussion

The all-inclusive review of literature facilitated the earlier presented hypothesised research model in Table 6. The hypothesised results in Table 5 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 (H_1): *Routine activity approach (RAA) has a significant and direct effect on residential Neighbourhood crime (RNC).* The result shows that routine activity approach ($\beta = 0.26$, $z = 3.134$ and $p = 0.002$) are strongly significant to residential neighborhood crime. Therefore, hypothesis H1 is supported and held. The research outcome confirms that routine activity is considered a critical determinant factor of residential neighbourhood crime. It implies that day–to–day movement and activities within the neighbourhood could be a magnet to different offences within the residential neighbourhood, especially burglary from the respondents' perspective. Besides, this research finding is consistent with the empirical findings by Cohen & Felson (1979) [14]; Wooldredge & Cullen & Latessa (1992); Wittebrood & Nieuwbeerta (2000); and Eck (1994) [47] in which they variously supported that routine activity could

create a path for various forms of offences within a residential neighbourhood.

Hypothesis (H_2): *There is a significant relationship between Rational Choice Concept (RCC) and Residential Neighborhood Crime (RNC).* In the same vein, the research's result found that *Rational Choice Concept* ($\beta = 0.12$, $z = 2.050$ and $p = 0.040 < 0.05$) has a significant impact on residential neighborhood crime in Nigerian housing neighborhoods. Therefore, the hypothesis is accepted and empirically supported by this research.

With Cornish & Clarke (1986) [17], rational choice theories of crime emerged to explain criminal behaviour as a function of expected reward and punishment, weighted by the subjective probability of detention (Piliaving, *et al.*, 1986). Considering the application of RCC, Jacobs (1996) interviews with 40 active crack dealers show that their behaviour and their interpersonal strategies are jointly determined by their desire to maximise profit from their sales and maximise the possibility of arrest undercover narcotics officers. The dealers, who mostly interact with anonymous clientele, employ perceptual shorthand on unfamiliar clients; these were observational and testing techniques to detect deception on the clients' part. Also in Horney & Marshall's (1992) analysis of data collected from incarcerated adult offenders of major felonies confirmed that criminals' subjective perception of risk of detention is realistically updated by their own experience; while those who committed the crime often without getting caught, lower their expectation of detection. Others who are caught most of the time subsequently increase their perception of risk. The application and empirical proofs of rational choice theory in property crime are explicitly mentioned in the works of Eck & Weisburd (2015) [21], Cornish & Clarke (1986) [17], and Wikstrom (1995).

Hypothesis (H_3): *Situational crime prevention (SCP) has a direct impact on residential neighbourhood crime (RNC).* As presented in the Table 6, research outcome shows that situational crime prevention ($\beta = 0.26$, $Z = 3.406$ and $p = 0.000 < 0.001$) is significant and have direct effect on residential neighborhood crime. The outcome of this research showed strong support for 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 public (respondents) is concerned, any effort made to block every victimisation opportunity is a step towards reducing crime. Thus, in other words, translate to the fact the situational crime prevention influences property crime. Therefore, the above research hypothesis is supported. This research finding supports previous studies that notwithstanding criminologists' criticisms against SCP, practical and empirical proofs abound that SCP is a potent tool for property crime (Crawford & Evans, 2016). To some UK commentators, SCP measures have been a critical driving force behind the historic 'crime drop' – notably declining property crime - since the early to mid-1990s both in the UK and other countries (Farrell, *et al.* 2014; Van Dijk, *et al.* 2012) [45]. This 'security hypothesis' contends that crime fell because of a reduction in crime opportunities caused by improvements in the level and quality of security, which includes, most prominently, improved vehicle security, particularly electronic immobilisers and central deadlocking systems, and enhanced household security via burglar alarms and security design standards (given the erstwhile volume of car theft and burglary). Some suggestions falling property crime may have reduced violence as an indirect effect of the same processes (Farrell, *et al*. 2016) [22]. The explanatory link is made via criminal career research, which finds that most criminal careers are dominated by property crime and that property crimes are often the debut crimes that begin a criminal career.

Consequently, if security improvements have reduced the volume of property crimes, it is suggested that this may have caused the less prevalent violent crimes to decline because much violence would likely be linked with an acquisitive crime in some way. These research findings suggest limited displacement effects at a macro–level, which for long had been the Achilles heel of situational approaches. To this end, they appear to reinforce the findings of others (Guerette & Bowers 2009). Nevertheless, there have been some significant critiques of the 'security Hypothesis'. The most prominent is the displacement to new forms of online, electronic and cyber-enabled crime (Office for National Statistics, 2016).

Hypothesis (H_4): *Crime Pattern Approach (CPA) has a direct impact on Residential Neighbourhood Crime (RNC).* As presented in the Table 6, research outcome shows that crime pattern approach ($\beta = 0.24$, $Z = 2.646$ and $p = 0.008 < 0.05$) is significant and have direct effect on residential neighborhood crime. The outcome of this research showed strong support for hypothesis H4, as demonstrated in the final structural measurement model (see Figure 3). Therefore, the research finding shows that place and situation positively influence victimisation opportunity within a residential neighbourhood in a Nigerian urban setting. Thus, in other words, translate to the fact that the crime pattern approach influences property crime. Therefore, the above research hypothesis is supported.

The outcome of this research is in agreement with existing and related studies where it is strongly affirmed that place and the environment play a vital role in determining the immediate causes of frequent victimisation within the residential neighbourhood. Herbert & Hyde (1985) assert that the personally known areas around the home or other routine activity nodes might be remote by the street network structure from main drifts of people and maybe known to moderately few persons. Such zones would fall into fewer possible criminals' awareness spaces and be less prone to attack and other criminal acts. Crimes in such neighbourhood are likely to be committed by insiders - persons who belong to or routinely frequent the neighbourhood. Previous studies on residential burglary revealed more robust support for this: the inner parts of the residential neighbourhood had much lower burglary experience than the border zones known to persons from several residential areas. In Brantingham & Brantingham (1993) [6] work, it was concluded that the criminal has to locate a target or victim in his awareness space in order for a crime to occur. A criminal's awareness space will change with new information and as a result of searching. The expansion of an awareness space will most probably occur in a connected fashion; the borders or edges of currently known areas will be explored, first. In exploring new areas, the potential offender will find it easier to penetrate areas with predictable road networks. Areas with grid street layouts are more predictable than areas with winding roads,

cul-de-sacs, or dead ends. Other related studies in this respect include Taylor & Lee (1988), Sheard (1991), and Cromwell, *et al*., (1991).

Hypothesis (H_5): *Lifestyle-exposure (LSE) has a direct impact on residential neighbourhood crime (RNC).* In the same vein, the research's result found that *lifestyle exposure* ($\beta = 0.16$, $z = 2.474$ and $p = 0.013 < 0.05$) has significant impact on residential neighborhood crime. Therefore, the hypothesis is held true and empirically supported by this research. This result implies that victimisation could occur due to the way residents conduct themselves within the neighbourhood and the type of peers they keep.

Essentially, this finding is consistent with past research studies. There is observed indicating that both property and violent victimisation upsurge with exposure; earlier studies revealed that augmented time spent engaging in leisure activities—especially those located outside one's home—increases the risk of victimisation (Bunch, Clay-Warner & Lei, 2015; Fisher, Daigles & Cullen, 2010 [10, 46]; Gibson, Fagan & Antle, 2014; Maimon & Browning, 2012) [10, 28]. For example, adopting the British Crime Survey, the work of Sampson & Lauritsen (1990) [41] and Miethe & Meier (1994) revealed that those who spent more nights out were more prone to be assaulted. However, research examining specific activities has shown that not all activities are related to victimisation and some protection activities (Henson, Wilcox, Reyns, & Cullen, 2010) [28]. An additional indication of exposure is delinquent or criminal lifestyles, which are especially risky because offending often exposes one to other offenders, thus increasing victimisation risk (Mustaine & Tewksbury, 2002; Tillyer, Fisher, & Wilcox, 2011). Similarly, associating with delinquent peer groups is related to victimisation, as it also increases exposure to potential offenders (Schreck & Fisher, 2004; Schreck, Miller, & Gibson, 2003; Wilcox, Tillyer, & Fisher, 2009).

Conclusion

In line with the key objective, to measure the influence of opportunity in residential neighbourhood crime, the analysed results have upheld the primary hypothesis that opportunity is a critical factor that influences victimisation, especially within the residential neighbourhood. Hence, if the principles inherent in the various crime opportunity theories examined under this study (routine activity, situational crime prevention, crime pattern, rational choice and lifestyle) can be tenaciously followed, the result would be a drastic reduction in the soaring trend of residential neighbourhood crime. The result of this research is in agreement with previous research works. For instance, a study conducted in the USA was completed to investigate the dramatic increase in residential burglary between the 1960s and 1970s. A careful analysis by Cohen & Felson (1979) [14] showed that this increase was a combination of temptation and opportunity. The opportunities to commit burglary were significantly increased due to far more women going out to work, and the use of CCTV was employed. Also, in Germany's 1980s, a study of motorcycle theft identified opportunity as its crucial element. The theft of motorcycles radically declined from about 150,000 in 1980 to about 50,000 in 1986. This unexpected decline resulted from new legislation passed in 1980, making it unlawful to ride a motorbike in the country without a helmet. The enforcement of the law was gradual but More Strict during the period and resulted in the large decline in motorcycle theft (Clarke, 1980; Mayhew, *et al*., 1989). Furthermore, a good understanding and implementation of the influence of opportunity in crime, especially in property, could go a long way in ensuring housing sustainability, increase in government revenue especially property tax, reduction in government expenditure on crime control and more importantly enhancement of the housing values which by extension could lead to a boost in housing investment. This research is expected to serve as a clarion call to researchers to expedite research efforts in this direction, primarily pointing out its relevance within the developing nations' urban setting. The research also serves as an appeal to the Nigerian government's various sector to see residential neighbourhood crime as a social menace calling for urgent attention by sponsoring academic research in this respect and ensuring the research findings/recommendations are worked on and implemented. As part of the government's responsibility, crime prevention departments must promote research in collaboration with the law enforcement agencies. Conclusively, considering the consequences of residential neighbourhood crime to the residents, environment and even government (Olajide, *et al*., 2017; Anderson, 1999) [37, 1] no effort is expected to be spared in combating the menace headlong which further make this research a laudable one. As a result of time, space, and the need for strict compliance with the study's primary objective, the authors could not dig deep into the associated concepts or/and variables' nitty-gritty. It is, however, treated as an opportunity for future research.

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