

## Residents Perception of Environmental Features and Theft in Calabar South Local Government Area of Cross River State, Nigeria

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### Abstract

*This research aims to explore the perceptions of residents regarding environmental factors and theft in Calabar South Local Government Area of Cross River State, Nigeria. To achieve the purpose of the study two hypotheses was formulated. Relevant literature was reviewed and two theories employed to explain the phenomenon under study. Pearson Product Moment Correlation Analysis statistical tool was utilized to test the hypotheses. The results revealed that, a significant relationship exist between the aforementioned environmental features and theft. Based on the findings, the study recommended among other things to include: the need for homeowners to block unnecessary access points within their premises that are used by pedestrians to reach other streets or houses; government should facilitate the provision of affordable housing in the area to alleviate congestion resulting from the limited availability of buildings, which underscores the significance of addressing crowded and permeable premises as crucial contributors to theft- whence possible to mitigate the prevalence of theft and enhance the safety and well-being of residents in the area.*

**Keywords:** *Accessibility, Crowded, Permeable, Premises, Security, Theft.*

### Introduction

The physical characteristics of residential and commercial areas, known as environmental features, have serious implications for property safety and criminal tendencies. Within the realm of criminology, environmental design reflect a template of Crime Prevention which provides and defines how security details is commonly understood, organized and conceptualized globally to maintain decorum and order. It is a strategy that is increasingly popular and supported by governments all over Europe, North America, Australia, New Zealand, as well as in Asia and South Africa (paul & Terence,2015;Tokey,2023) . It revolves around the concept of defensible space, which entails various mechanisms such as physical barriers, clearly defined areas of influence and enhanced surveillance opportunities. These elements collectively empower residents to exert control over their environment (Innocent, 2023; Umar, 2015; Cozens, 2011; Sungmin etal

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2023). The essential components of physical environments are manifested in the cleanliness level, permeability, the purpose of use (whether for commercial, residential, or mixed purposes), and the population density reflected in housing or premises (Apolitical Group Limited (AGL), 2020). In the same line of thought, the relationship between permeability, crowdedness and theft is a verdict that explains poor planning to address the ever increasing population, thus promoting aggregation of social activities such as crime, which undoubtedly exacerbates the vulnerability of resident security (Yutian & Zhang, 2023).

Incontrovertibly the consequences of social actions and behaviours extend to the physical characteristics of residential and commercial areas which notion of defensible space highlights as an indispensable tool that enable residents to exert control over their environment (Adesola & Adewale, 2022; Adigun, et al 2019). The act of theft involves unlawfully taking someone else's property- its include ; pickpocketing, cutting through window screens, shoplifting, snatching personal belongings and seizing unguarded possessions to deprive others of their ownership rights. The methods employed in theft ranges from the use of force to deceptive tactics, depending on the circumstances faced by the criminals during their unlawful activities (Sara, 2023; Thomas, 2024; Siegel, 2012).

Research have highlighted several social and environmental factors that contribute to the prevalence of theft, particularly in Nigeria, which in recent time has experienced a disturbing spiral rate of crime. Poverty, urbanization, architectural or environmental design, among other factors, has been implicated as causative factors (UKessay, 2017; Nigeria Bureau of Statistics (NBS), 2016). Data from 1999 to 2016 in Nigeria reveals that burglary ranks as the second most committed crime (465,761 cases), following assault (921,694 cases). Felonious wounding ranks third (350,008 cases), while armed robbery comes fourth (44,650 cases) (Oguntunde, Ojo, Okagbue & Oguntade, 2018, as cited by the Nigerian National Bureau of Statistics, 2016). Accordingly, the burglary rate in Nigeria was 1.5 cases per 100,000 populations in 2013, reflecting a 24.93 percent increase from the previous year. Also Nigeria's crime index indicates 63.42 and a safety index of 36.58 Concerns related to home break-ins and theft are rated at 61.89, worries about being mugged or robbed at 67.50, concerns about car theft at 60.48, worries about theft from cars at 65.14, property crime problems such as vandalism and theft at 68.02. In Nigeria, burglary ranks high among the reported crimes, highlighting the need for efforts to address the underlying causes and enhance safety and security measures (Numbeo, 2020; World Data Atlas Nigeria Crime Statistics, retrieved 23-6-24; Pelumi, 2018).

Poverty for instance, is often cited as a recurring factor contributing to the prevalence of ungated and crowded residences. The shortage of affordable housing is identified as a key driver of overcrowding (Herath & Bentley 2018; World Health Organization, 2018). Overcrowding tends to be strongly associated with socioeconomic disadvantage and harsh conditions. Research indicates that financial constraints limit individuals' ability to move into specific neighbourhoods (Pal & Brag, 2021; Yuriko, 2024; Branic & Kubrin, 2017). Gated communities, which are often considered luxurious, are not accessible to economically disadvantaged individuals. The consequences of crowded and ungated premises encompass various challenges, including unregulated pedestrian movement, theft, opportunistic burglary, limited control over private spaces and an increased risk of disease outbreaks, particularly in crowded environments. While no precise statistics exist regarding the number of ungated and crowded houses in Calabar South Local Government Area, casual observations suggest that a significant number of crowded and permeable residences can be found in the area. Many houses consist of 10 to 30 separate apartments, accommodating families and friends (African cities research consortium, 2023; Palton, 2023). Against this backdrop, the study aims to examine the relationship between environmental features and theft in Calabar South Local Government Area of Cross River State, Nigeria by specifically focusing on crowding and gated access, as associated with the prevalence of theft.

### *Statement of Problem*

From a modern urban perspective, the design of Calabar South Local Government Area falls short as many buildings lack proper fencing and gating structures, which are essential for controlling pedestrian access. Compounds are interconnected in a way that pedestrians pass through others' properties, even if they are located in entirely different streets (Inah, 2018; Inah, Anthony, Otosi, Mark & Faith, 2022). In some cases, gates exist, but they are often left open during the day without the presence of a capable guardian. While

there are a few exceptions, a significant number of commercial residences in Atamunu, Mayne Avenue, Watt and Bayside streets suffer from these design deficiencies (Afolabi & Arikpo, 2020). Most houses in the area are densely populated and this situation can be attributed to scarcity of housing options and the fact that the area is primarily designated for low-income residents. Consequently, there is a prevalence of single-room apartments with shared toilets. The design of Local Government lacks modern urban planning principles, like insufficient fencing and gating structures, as well as interconnected compounds, which contribute to uncontrolled pedestrian access. The area's high population density is primarily driven by a shortage of housing options, leading to an increase in single-room apartments with shared facilities (Ernest & Walter, 2020).

Due to the prevailing culture among struggling Nigerian students, it is uncommon to find them living alone in single-room accommodations. Squatting has become a common practice, primarily aimed at alleviating the burden of high house rents or providing assistance to stranded colleagues. Furthermore, with a transient population due to the concentration of students in the area, incidents of criminal activity and involvement in cults have become commonplace. Moreover, most African cities and towns today are characterized by dual economy of formal and informal sectors, with the vast majority of the urban population operating within the informal economy, outside existing regulatory frameworks. The development, expansion, and proliferation of slums and informal settlements, in which the majority of urban poor households live and work, are the most conspicuous manifestation of this reality (Luisa et al, 2022; El-hadj, Issa & Zekebwelina, 2018). The area is plagued by frequent occurrences of phone and wallet snatching, burglaries breaks-in, targeting both residential and business premises, and theft of clothes from clotheslines. These criminal activities occur regularly, even during daylight hours, and often result in injuries to residents as their homes are raided. The residents and businesses in the area have suffered numerous losses as a consequence. It is challenging to find a resident who hasn't directly or indirectly experienced theft-related crimes in this locality

Over time, some property owners in the area have made efforts to install iron doors and window protectors on individual rooms as a means of crime prevention. However, there are also those who have neglected to adhere or implement any substantial security measures, and in addition to being highly vigilant, some young people in the area have resorted to engaging in acts of jungle justice, whereby criminal offenders are subjected to lynching (Ihechukwu, 2023). Despite these measures, the issue of street crimes in the area remains a significant concern.

### *Statement of Hypotheses*

The following hypotheses are stated and tested for the study.

There is no significant relationship between Permeable premises and theft in Calabar South Local Government Area of Cross River State.

There is no significant relationship between crowded premises and theft in Calabar South Local Government Area of Cross River State.

### **Literature Review**

Permeable Premises and Theft Consistently, research has shown that the level of permeability in an environment has a direct impact on crime rates. For instance, areas with high volumes of pedestrian and vehicular traffic tend to experience higher rates of victimization. Furthermore, the shape of intersections also plays a role in crime patterns, with grid-like intersections being more vulnerable to criminal activities. In contrast, isolated cul-de-sacs are generally less accessible to crime (Adriana, Barron, Randy & Nader, 2017; Ruby, Osbert, Jean & Kevin, 2017; Cozens, 2011). Studies have shown that houses located at bends, which are more prevalent in grid layouts, are significantly more susceptible to burglary (Taylor & Nee, 1988; Hakim et al. 2001). In a review of literature, it was observed that, in a suburb of Vancouver Canada, the introduction of pedestrian pathways connecting the ends of cul-de-sacs witnessed an increase in crime rates (Sheard, 1991). These newly created pathways as opined, enhances permeability, allowing residents

and other individuals to traverse through the area, subsequently leading to an upsurge in criminal incidences. The degree of permeability as argued, can be intentionally manipulated at specific locations to either increase or decrease local accessibility, thereby promoting community safety; hence shows that the level of permeability in an environment directly influences crime rates. Higher levels of pedestrian and vehicular traffic, as well as the shape and layout of intersections, can contribute to increased vulnerability to criminal activities. By understanding and manipulating permeability in specific locations, communities can enhance safety and reduce the risk of crime (He et al., 2023; Kimhiro, Jung & Yasushi, 2021).

Furthermore, studies have supported this viewpoint, specifically focusing on a development in Bradford, UK, which incorporated principles of new urbanism. The findings of this study revealed that burglary rates in the area were 20 times higher than the national average, highlighting the negative impact of connectivity on crime rates. This highlights various studies, including the report for the US Department of Justice which consistently indicate that reducing connectivity has a positive effect on reducing crime rates. Additionally, illustrates the significantly higher burglary rates associated with a development in Bradford that adhered to new urbanism principles (Han & Xinyan, 2019; Lucas, et al 2024; Sarah, Billie, Julian & Gavin, 2023; Brooke, 2004; Yang, 2006; Armitage, 2007; Clarke, 2002).

Yang's research analysed over 3,000 residential burglaries across various street configurations, revealing lower burglary rates for properties located in less permeable layouts. Similarly, Armitage's study investigated crime on 50 housing estates in the UK and found that properties in more permeable areas were significantly more susceptible to burglary. Additionally, a large-scale research study involving 118,000 homes and 12,806 burglaries, utilizing multi-level models and controlling for socio-demographic variables; shows also that higher permeability and connectedness are associated with a greater risk of burglary. In terms of policy implications, suggested that permeability should be limited to what is necessary for facilitating local journeys and sustainable transportation (Rasheed, Aminu & Jamiu, 2024; Johnson & Bowers 2010;).

One key factor when assessing permeability in an environment is whether the area is gated. The growing popularity of gated communities has posed a challenge to traditional neighborhood structures and provides a buffer against crime, making ungated dwellings less common. The distinction between public and private spaces is a significant consideration that arises from the presence of gated communities (Branic & Kubrin, 2017). Typically, neighborhoods are considered public spaces with open access for everyone. In these settings, residents can easily enter neighboring areas to socialize or engage in various activities, including criminal acts. However, gated communities feature privatized spaces that create breaks and gaps within the social landscape. The private nature of these spaces restricts the movement of non-residents and influences the social relationships and connections among both gated and non-gated residents (Qie, Suvodeep & Ana, 2023; Lago, 2021; Ivana, Petar & Ljiljana, 2020; Daniel, 2021).

Gated communities typically exhibit higher levels of informal social control than non-gated communities, leading to reduced criminal activities within these enclaves. Additionally, the financial resources available in wealthier gated communities often enable homeowners' associations to hire private security guards to monitor entrances and patrol the area (Charles, Lanfear, Ross, Mutsueda, & Lindsey, 2020). These security personnel regulate and monitor access by non-residents, acting as a deterrent to illicit activities and intervening when necessary. Also, homogeneity and consensus among neighborhood residents regarding important norms and values can enhance informal social control. This is exemplified by the creation of neighborhood watch associations, where volunteer residents actively patrol and monitor the area (David, Clair, Joshua & Kiseong, 2023; Charlotte, Denise, David, Heather & Claudia, 2024; Laura, 2023). While strong social cohesiveness may not be present in all gated communities, a significant number of gated dwellings demonstrate harmony and shared investment, which strengthens informal social control. Consequently, residents in these communities are more likely to bind together to enforce rules and maintain community standards, thus deterring crime (Gearhart, 2022).

As posited, situational crime prevention, outlines various strategies that reduces opportunities for crime. These strategies include target hardening, controlled access and surveillance. The role of guardianship therefore, within gated communities in this instance, impact security positively in these neighbourhoods on local crime rates. Gated communities typically have multiple layers of security, such as gates, walls and

private security personnel, which can deter potential offenders from accessing the community to commit crimes (Heemeng , Ryan , Lorraine, 2022; Felson & Boba, 2010; M. Lyn, Joseph, Brad & Chuck, 2010; Stephen & Stephen,2020). However, the effectiveness of guardianship in gated communities is dependent on the level of security measures implemented Which varies within gated facilities. Also postulated, facilities may have a 24-hour guarded gate or an unguarded electronic gate, which affects the level of controlled access. Additionally, it has been observed that more extensive community walls contribute to perimeter impermeability, enhances the overall security of the community. Consequently, inferred that higher perceived security leads to stronger and more effective guardianship against crime(Shrimathi & Chandramathy ,2022).

National Crime Victimization Survey (NCVS) data for the years 2010 and 2011, reveals that homes located in gated communities experience relatively fewer incidents of burglary. Their research indicated a 33% lower likelihood of burglary victimization for households in gated communities compared to similar households in non-gated communities. Conversely, an examination of the relationship between gated communities and burglary in the context of South Africa shows opposite conclusion,indicating that gated neighbourhoods had higher risks of both daytime and nigh time burglaries(Addington & Rennison ,2013)

Another national-level study on gated communities in the United States revealed that these communities might hinder the response times of first responders, such as the police, due to restricted access through gates. This suggests that gated facilities could be counterproductive. Similarly, another study found no significant difference in crime levels between gated and non-gated facilities. A random survey involving residents from four neighborhoods in California—two gated and two non-gated—further explored this issue. Each pair of communities was divided based on income levels, with one being affluent and the other lower-income. Accounting for socioeconomic status, it was discovered that crime rates did not significantly vary between the gated and non-gated communities in the sample (Xiaolin & Xiaoqin, 2022; Real Estate,2021; Henar, , Jose & Joaquín,2024).Several individuals believe there are significant advantages to raising a family within a gated community. Residents of a gated community in San Antonio expressed their opinions, stating, “I feel safe here, both personally and for my children. I wouldn't feel the same sense of security in a non-gated community” (Real Estate,2021;Palton,2023; Drew & McGuigan, 2020). This sentiment seems to be widely shared among many residents of these exclusive neighborhoods. They experience a heightened sense of physical security that was absent when they lived outside the confines of the gated community.

### *Crowded Premises and Theft*

Household crowding refers to a situation in which the number of occupants surpasses the available capacity of living space, whether measured in terms of rooms, bedrooms or floor area. Poverty is often the underlying cause of crowded households. Crowding occurs when there is a mismatch between the size of the dwelling and the needs of the household. Another aspect of crowding pertains to the size of rooms and how well they accommodate the household, including any long-term visitors(Kyle ,2022;). The consequences of crowding can be broadly defined as hazards arising from inadequate space within the dwelling for activities such as living, sleeping and household tasks (World Health Organization, 2018;Emeruwa etal,2022). In Australia, the Canadian National Occupancy Standard is officially recognized as a measure of overcrowding. The CNOS assesses a household's bedroom requirements based on specific criteria, including the following:

- No more than two individuals should share a bedroom.
- Children of different sexes under the age of five may reasonably share a room.
- Children of different sexes should have separate rooms when they reach the age of five or older.
- Children of the same sex under the age of 18 may reasonably share a bedroom.



- Parents, couples, and household members aged 18 or older should have individual bedrooms.

According to this standard, households requiring at least one additional bedroom are classified as overcrowded.

According to a study on reported crime and population densities in Baltimore County, Maryland, USA. Analysing a data set of over 100,000 property crimes and crimes against individuals, it was concluded that, overall, the available evidence increasingly suggests a positive association between population density and the occurrence of most types of crime. However, it also observed that this relationship is influenced by socioeconomic status. For instance, an affluent high-rise apartment block with high density may have a heightened level of guardianship, leading to a reduction in crime. In terms of the crime-density relationship, it implies that crowded environments can create conducive conditions for criminal activities, necessitating additional measures that may not be affordable for economically disadvantaged individuals to prevent crime effectively (Herath & Bentley, 2018).

Interestingly a study comparing a densely populated housing estate with a lower-density estate characterized by cul-de-sacs was conducted. Their findings revealed significantly higher rates of burglaries, auto crime, arson, and public disorder in the higher-density permeable development. However, the research acknowledged that there are multiple factors, beyond density and street layout, that contribute to these patterns. And that crowded environments pose not only health risks but also increase the likelihood of high rates of criminal activities (Schneider & Kitchen, 2007, cited in Cozens, 2011; Johansson, Batty, Hayashi, Al Bar, Marcozzi & Memish, 2012).

Crowded housing conditions are associated with higher crime rates. In a study on areas in New York with densely populated houses, where there is relatively little living space per person within homes. It showed that, such areas tend to exhibit more crime and a higher prevalence of mental illness compared to areas with more spacious housing, even when median income levels are taken into account (The New York Times, 2020). In another study of laboratory research, where participants were placed in either crowded rooms (four square feet per person) or uncrowded rooms (ten to twenty square feet per person) for four hours, it confirmed, there was no overall decline in performance on various tasks for individuals in crowded rooms compared to those in less crowded rooms. However, certain aspects of social behaviour and personal feelings were affected. Notably, men and women responded differently to crowded environments. In all-male groups, displayed increased competitiveness, harsher behaviour and less affinity towards each other when crowded, as opposed to when in uncrowded settings. Although these findings do not directly imply that crowdedness causes crime, it shed light rather on the development of characteristics associated with criminal tendencies (Gottfredson & Hirschi, 1990). This indicates that crowdedness may contribute to less positive interpersonal relationships among males, which opposes the required attachment. Thus, crowdedness may potentially evoke criminal tendencies in individuals and contribute to criminal activities within a community.

As adduced, areas with a high concentration of people can serve as both crime generators and crime attractors. Accordingly, crime generators are specific focal points that attract a large number of people for reasons unrelated to criminal intentions. Examples of crime generators can include office complexes, entertainment centers and sports stadiums. On the other hand, crime attractors are locations or neighbourhoods known for creating favourable conditions for criminal activities, which entice potential offenders due to the perceived opportunities for specific types of crimes. These crime attractors become hotspots for repeat offenders. In the discussed neighbourhoods, the likelihood of criminal opportunities is higher, tempting both residents and individuals from outside the area to engage in criminal behaviour (James & Claire 2023; IwarimieJaja 2013; Lonnie, Lucy & Nuri, 2020).

## Methods

### *Theoretical Framework*

#### *Routine Activity Theory (RAT)*

Routine Activity Theory was first introduced by Cohen and Felson in 1979. This theory posits that for predatory crimes to occur, three elements must converge: suitable targets, the absence of capable guardians, and motivated offenders. A fourth element, the presence of an intimate handler who can restrain a motivated offender, was later added. This theory primarily explains predatory crimes, making it highly relevant to this study. Routine Activity Theory is particularly pertinent to this research because it highlights the importance of target availability, which can be mitigated by restricting access to non-residents. If a motivated offender cannot access a facility, they cannot identify suitable targets. In areas like Calabar South Local Government Area, where many houses lack capable guardians and have open access, the likelihood of crime increases. Therefore, this study adopts Routine Activity Theory to understand the dynamics in the context of its research focus.

#### *Rational Choice Theory (RTC)*

The Rational Choice Theory, introduced by Dereck Cornish and Ronald Clarke (1986) in their book titled “The Reasoning Criminal,” takes into account the entire criminal event, encompassing the offender, their motivation and the situational factors. According to this theory, criminals are rational individuals who carefully assess and weigh the potential benefits against the risks of committing a crime. If the perceived benefit outweighs the risks, the potential offender is more likely to engage in criminal behaviour. Conversely, if the expected benefits are outweighed by the potential risks, the potential offender will refrain from committing the crime. The theorists emphasized that the most effective approach to address the problem of crime is through prevention. Cornish and Clarke (2003), cited by Tierney (2013), identified several strategies to deter the occurrence of crime, including the following:

Increasing the effort involved in committing crime

Increasing the risk of apprehension

Reducing the reward of crime

Reducing the provocation to commit crime

Removing any possible excuses.

Although Rational Choice Theory is criticized for its inability to explain crimes committed by individuals with mental illness or minors who lack the capacity for rational decision-making, however it remains relevant to this study due to its crime prevention strategies. One such strategy involves increasing the effort required to commit a crime and reducing the provocation to engage in criminal behavior. In the context of this research, this can be achieved by implementing measures like installing gates to reduce access to a facility. By decreasing permeability, potential criminals are less likely to find targets that might provoke them to commit crimes. For example, preventing non-residents from entering a facility can deter thefts of items like clothes hanging on lines or phones left on verandas. Additionally, the theory suggests that crime rates may decrease when factors that provoke criminal behavior, such as crowding, are reduced. Given the theory's strength in explaining this aspect of the research, it is adopted alongside Routine Activity Theory (RAT) for this study.

## Methodology

This study utilized a survey inferential research design, which enabled the researcher to examine a representative sample and gather responses to draw generalized conclusions that can be applied to the entire

population. This design choice is justified due to the impracticality of surveying the entire population within a reasonable time frame and financial constraints.

### *Study Area*

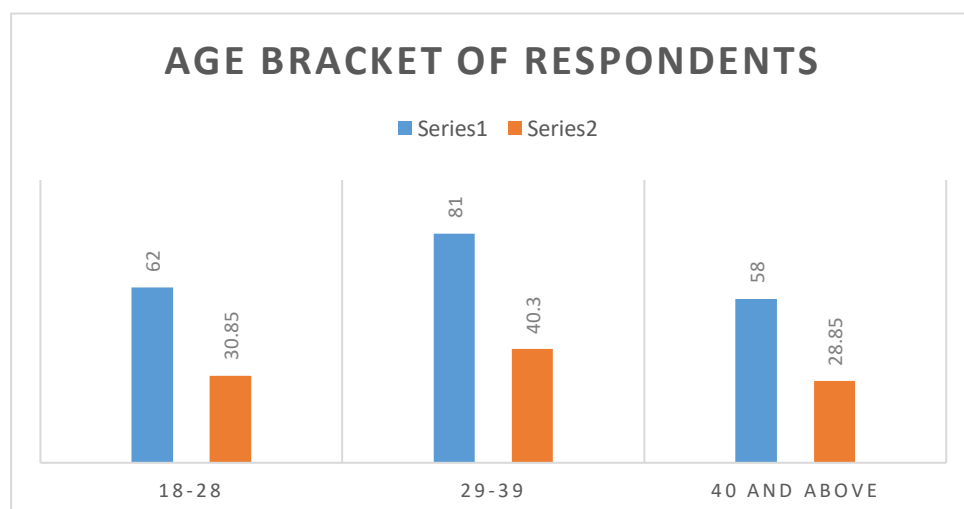
The research took place in Calabar South Local Government Area, located in Cross River State, Nigeria. The headquarters of Calabar South is Anantigha... Covering an area of 264 square kilometres, the area had a population of 191,630 as of the 2006 census (now as projected by Nigeria MetroArea Population, is 657,000). The primary occupation of the residents is farming, particularly in fishing activities. Calabar South is characterized by a significant number of sole proprietorships and small business establishments. The population is largely comprised of students and young individuals, contributing to its overall instability. The area is unfortunately associated with a stigma of high crime rates and poverty, as evidenced by some of the housing structures present.

The study population comprised both males and females selected at random from various localities including Jebes, New Airport, Goldie, Uwanse, Watt, Mbukpa, Aantigha, and Ekpo Abasi streets. Two hundred and twenty respondents were accidentally chosen for the study, but only two hundred and one questionnaires were successfully filled out and retrieved. The sample size was intentionally determined for the study. The study employed both primary and secondary sources of data collection. The primary source involved the use of a questionnaire, while the secondary sources included journals, textbooks, and other relevant library information. The questionnaire utilized a Likert scale and was divided into different sections. Section A collected socio-demographic variables from the respondents, section B focused on the items related to the independent variable, and section C gathered information on the dependent variable. To analyse the collected data, Pearson Product Moment Correlation Analysis was employed. The hypotheses were tested at a significance level of 0.05.

## **Results**

### *Data Presentation*

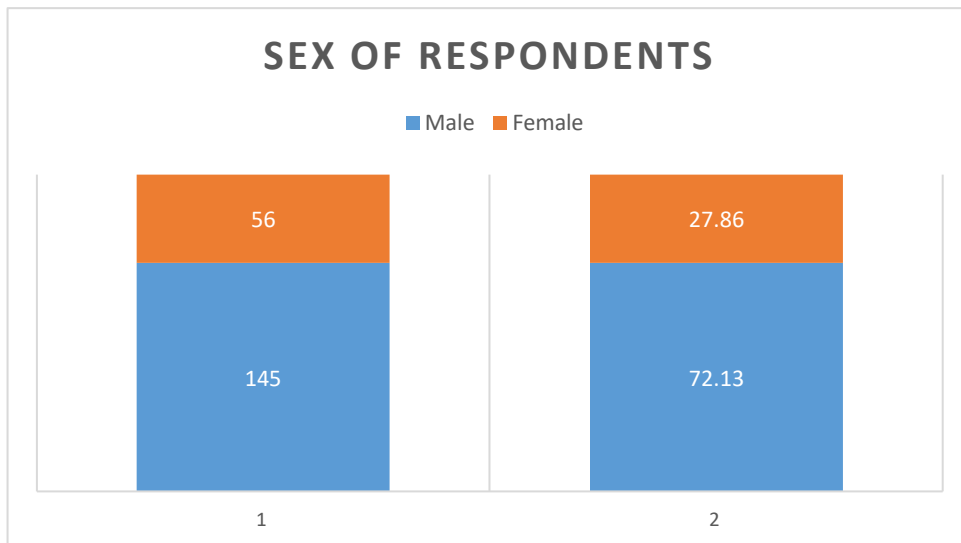
Socio-demographic information of respondents



Source: Fieldwork 2024.

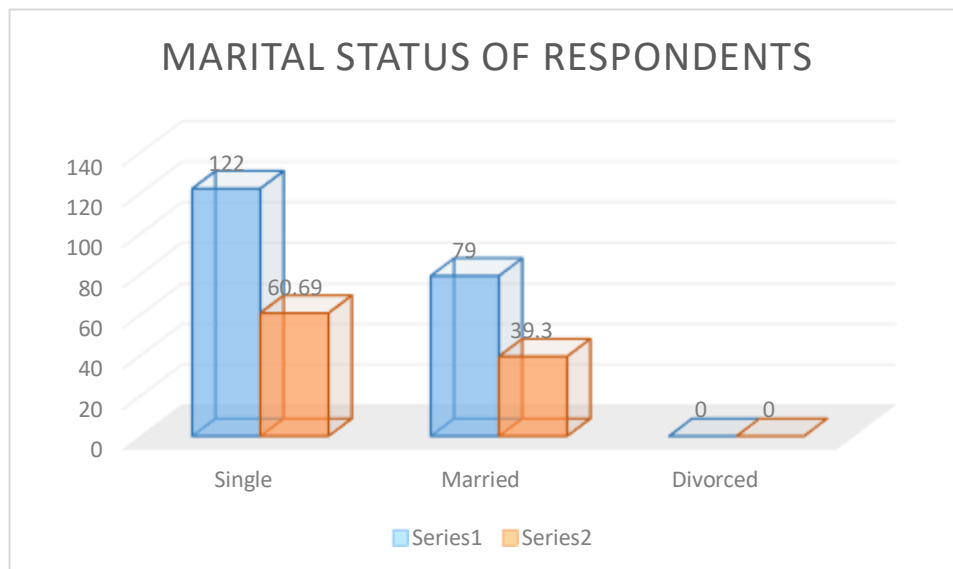


The above chart which shows the age bracket of respondents indicates that 62(30.85%) respondents were within the age of 18-28, 81 (40.30%) were within the age range of 29-39 and 58 (28.85%) were within the age range of 40 and above.



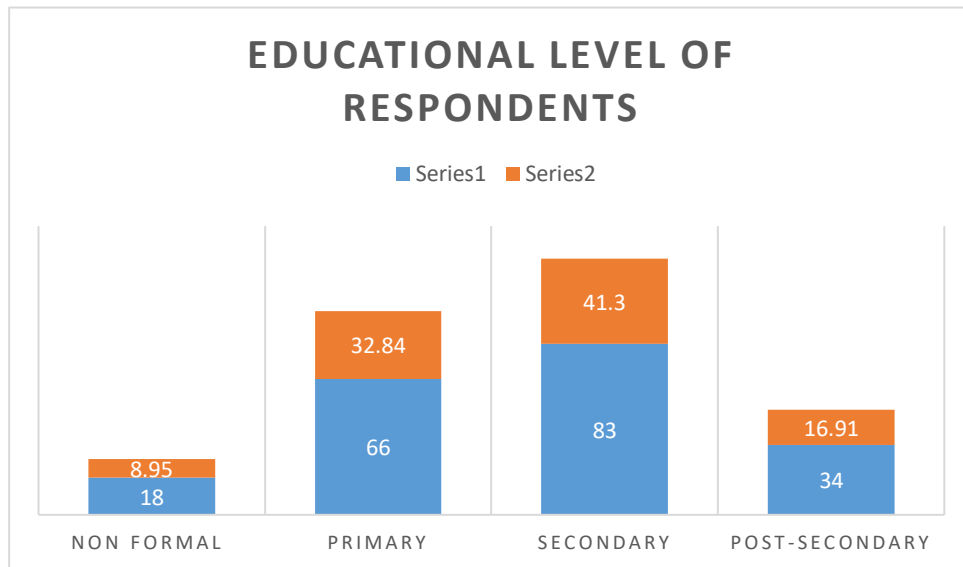
Source: Fieldwork, 2024.

The respondents sex distribution as shown in the above chart shows that 145 (72.13%) of the respondents were males while 56 (27.86 %) were females



Source: Fieldwork 2024.

The above distribution shows that 122 (60.69%) respondents were single, 79 (39.30%) were married and 0 (0%) were divorced.



Source: Fieldwork, 2024.

The Above chart shows that 18 (8.95 %) respondents had no formal education, 66 (32.84%) were at the level of Primary Education, 83 (41.30%) were at the level of Secondary and 34 (16.91%) had post-secondary education.

### *Hypothesis 1*

*Pearson Product Moment Correlation of the relationship between Permeable premises and theft.*

		Permeable premises	Theft
Permeable Premises	Pearson Correlation	1	.680**
	Sig. (2-tailed)		.000
	N	201	201
Theft	Pearson Correlation	.680**	1
	Sig (2-tailed)	.000	
	N	201	201

\*\* Correlation is significant at the 0.05 level (2- tailed)df= 199, Critical r-value = .135

The SPSS analysis indicates that the calculated value of 0.669 is significantly greater than the critical r-value of 0.135 at a 0.05 significance level with 199 degrees of freedom. This result leads to the rejection of the null hypothesis and the acceptance of the alternate hypothesis. Therefore, the null hypothesis, which states that residents perceive no significant relationship between permeable premises and theft in Calabar South Local Government Area, is rejected. The conclusion is that residents do perceive a significant relationship between permeable premises and theft in the area.

### *Hypothesis 2*

*Pearson Product Moment Correlation of the relationship between crowded premises and theft*

		Permeable premises	Theft
Crowded Premises	Pearson Correlation	1	.669**
	Sig. (2-tailed)		.000
	N	201	201
Theft	Pearson Correlation	.669**	1
	Sig (2-tailed)	.000	
	N	201	201

\*\* Correlation is significant at the 0.05 level (2-tailed), df= 199, Critical r-value = .135

The SPSS analysis clearly shows that the calculated value of 0.669 is greater than the table critical r-value of 0.135 at a 0.05 significance level with 199 degrees of freedom. This necessitates the rejection of the null hypothesis and the acceptance of the alternate hypothesis. Therefore, the null hypothesis, which states that residents perceive no significant relationship between permeable premises and theft in Calabar South Local Government Area, is rejected. The conclusion is that residents perceive a significant relationship between permeable premises and theft in the area.

## Discussion of Findings

### *Hypothesis One*

From the findings, the study reveals that residents actually perceive a significant relationship between permeable premises and theft in the area. These findings aligned with the postulations that, increased permeability enhances opportunities for crime (Han et al 2018). Additionally, the findings affirmed the analysis, which indicated that homes in gated communities experience relatively fewer burglaries (Addington and Rennison's (2013). They also support the results of Branich and Kubrin (2017), who discovered that blocks within gated communities had lower rates of property crimes. The baseline model used in this study further substantiates these findings by demonstrating a 22.8% reduction in expected property crimes for gated communities compared to non-gated blocks in the sample. In this research, 86.8% of respondents acknowledged the strong connection between most houses and the streets, creating an environment conducive to various forms of theft. They noted that carelessness, such as leaving room doors open or leaving personal items unattended in public spaces within the compound, often leads to losses due to easy access granted to everyone in the area.

### *Hypothesis Two*

This study also reveals that residents perceive a significant relationship between crowded premises and theft in the area. These findings agree with the argument put forth by Johansson, Batty, Hayashi, Al Bar, Marcozzi & Memish (2012), who asserts that crowded environments are not only conducive to the outbreak of diseases but also contribute to higher rates of criminal activities. Additionally, the findings support the assertions made by Schneider and Kitchen (2007), who reported significantly higher incidents of burglaries, auto crime, arson and public disorder in densely populated developments. Specifically, 92% of respondents in this study affirmed that occurrences of missing items are prevalent in crowded premises, while 87% agreed that it is difficult to trace missing items in such environments. These findings indicate that in premises with fewer co-residents, one can more easily suspect and trace missing items to specific apartments, increasing the likelihood of recovery. However, crowded premises lack this advantage. Furthermore, 87% of respondents agreed that co-residents with criminal intentions may exploit the crowded nature of the residence to perpetrate theft. This implies that the fear of being caught may deter opportunistic theft by criminal-minded co-residents in non-crowded or less crowded premises, resulting in fewer theft incidents. Overall, these findings shed light on the significant role that crowded premises incentivized and facilitate theft, as perceived by the residents.

## Conclusion and Recommendations

The recognition that the physical environment can influence criminal activity has led to the development of the template of crime prevention through environmental design. Despite the widespread adoption of this approach in various areas, Calabar South Local Government Area has not fully embraced its principles, resulting in a poorly or unintentionally designed environment that fails to effectively combat crime. This may partially account for the area's reputation as a hub for criminal activities. The findings of this research support the notion that the shape of the environment is a significant factor in determining theft rates in an area. Based on these findings, the study proposes the following recommendations to mitigate the situation:

- That House owners should reshape their houses to avoid unnecessary access into the buildings
- That House owners should block unnecessary connecting points within their premises that pedestrians use to access other streets or houses.
- That the government should provide houses with low cost in the area to reduce the congestions of the few available buildings.
- That future houses should be belt with lesser apartment and in the situations where land lords intend to use a massive land to build for accommodations then proper fencing to properly separate the premises in such a way that a sizable number can occupy a defendable space should be employed.

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