



# Understanding Environmental Criminology: Theory, Practice, and Implications for Lagos State Residents in Nigeria

Thomas Achu Uduo

ICEST Resource Centre Lagos, Nigeria

## Article History

Received: 2024.07.18

Revised: 2024.09.21

Accepted: 2024.12.29

Published: 2025.01.01

## Keywords

Crime

Lagos state

Social context

Spatial factors

Urban design

## How to cite:

Uduo, T. A. (2025). Understanding Environmental Criminology: Theory, Practice, and Implications for Lagos State Residents in Nigeria. *Eastern African Journal of Humanities and Social Sciences*, 4(1), 49-58.

Copyright © 2025



## Abstract

The purpose of this paper is to explore the theoretical foundations and practical applications of environmental criminology, specifically focusing on Lagos State, Nigeria. Environmental criminology examines the spatial and environmental factors that influence criminal behaviour, providing insights into crime patterns and prevention strategies. Key concepts such as territoriality, defensible space, and crime attractors and generators are discussed in the context of Lagos State. Empirical research on the impact of environmental design on crime rates is reviewed, highlighting successes and limitations. The implications for crime prevention policies and practices in Lagos State are examined, emphasizing the need for an interdisciplinary approach that integrates urban design, social science, and law enforcement perspectives.

## Introduction

Environmental criminology focuses on understanding how the spatial and environmental context influences criminal behaviour. Originating from the early 20th-century studies of the Chicago School of Sociology, which explored urban environments' impact on social behaviours, environmental criminology has evolved into a significant field that combines aspects of sociology, urban planning, and criminology to examine how physical and social environments create opportunities for crime (Shaw & McKay, 1942; Park, Burgess, & McKenzie, 1925). One of the key tenets of environmental criminology is that crime is not randomly distributed but tends to cluster in specific areas, often referred to as "hot spots" (Sherman, Gartin, & Buerger, 1989). This clustering can be attributed to numerous factors, including the design of urban spaces, the presence of potential targets, and the routines of residents (Cohen & Felson, 1979).

Lagos State, Nigeria, presents a unique context for studying environmental criminology due to its rapid urbanisation, high population density, and diverse socio-economic conditions (United Nations, 2018). Lagos is one of the largest cities in Africa, with an estimated population of over 21 million people. The city's rapid growth has led to significant challenges in urban planning, infrastructure development, and crime management (Aluko, 2010). Understanding the environmental factors contributing to crime in Lagos can provide valuable insights for developing effective crime prevention strategies tailored to the city's specific needs. This paper explores the theoretical foundations and practical applications of environmental criminology within the context of Lagos State. It discusses key concepts such as territoriality, defensible space, and crime attractors and generators and examines how these concepts have been applied in various crime prevention



strategies. The paper also reviews empirical research on the impact of environmental design on crime rates, highlighting both the successes and limitations of these approaches. Finally, the implications for crime prevention policy and practice in Lagos State are discussed, emphasising the need for an interdisciplinary approach that integrates urban design, social science, and law enforcement perspectives.

### **Theoretical Frameworks: Crime Pattern Theory**

Crime Pattern Theory, developed by Patricia and Paul Brantingham in the 1980s, is a cornerstone of environmental criminology. This theory posits that criminal behaviour is not random; somewhat, it is systematically influenced by human activity's spatial and temporal patterns (Brantingham & Brantingham, 1984). According to the Brantinghams, crime is an outcome of the routine activities of offenders and potential victims, intersecting in specific locations that provide opportunities for criminal acts. This theory emphasises the importance of understanding the geographic and temporal context in which crimes occur, as these contexts significantly shape the behaviour of potential offenders. The theory introduces three critical concepts: nodes, paths, and edges. Activity nodes are places where people regularly congregate, such as homes, workplaces, schools, and shopping centres. These nodes are focal points in the daily routines of individuals and, thus, are frequent targets for criminal activities. Paths are the routes that people take to travel between these nodes, such as streets, transit lines, and pedestrian walkways. These paths are significant because they connect activity nodes and can also become locations where crimes are committed, especially if they are poorly monitored or offer easy escape routes (Brantingham & Brantingham, 1991). Edges refer to the boundaries between different areas or land uses, such as the border between a residential neighbourhood and a commercial district. These edges are often crime-prone areas because they attract diverse groups of people with varying activities, creating opportunities for crime (Smith, 1986).

Crime Pattern Theory explains that crimes occur where the activity spaces of offenders intersect with those of potential victims in environments that lack capable guardianship. Offenders develop awareness spaces around their activity nodes and paths, learning about the locations of suitable targets and the best times to strike. This spatial knowledge is crucial as it allows offenders to identify and exploit environmental opportunities for committing crimes. For example, a burglar might become familiar with residents' schedules in a neighbourhood, identifying the best times to break into houses when occupants are likely absent. Similarly, pickpockets might target busy transit stations where they can easily blend into crowds and escape detection (Brantingham & Brantingham, 1993).

One of the most significant applications of Crime Pattern Theory is in crime prevention through environmental design (CPTED). By altering the physical environment, it can disrupt the patterns that facilitate criminal activities. This can involve improving street lighting, increasing natural surveillance through strategically placing buildings and vegetation and controlling access to certain areas to make it harder for offenders to operate. For instance, well-lit streets and open sightlines can deter criminals by increasing the perceived risk of being seen and caught. Similarly, the design of public spaces to encourage legitimate use by residents can reduce opportunities for crime by increasing natural guardianship (Clarke, 1995). Urban planners and law enforcement agencies can use the insights provided by Crime Pattern Theory to identify high-risk areas and implement targeted interventions to reduce crime rates (Cornish & Clarke, 2003).

While Crime Pattern Theory has been instrumental in advancing our understanding of the spatial dynamics of crime, it is not without its critiques. Some scholars argue that the theory may oversimplify the complex motivations behind criminal behaviour by focusing on environmental factors and spatial opportunities (Eck & Weisburd, 1995). Critics suggest it should be integrated with other criminological theories that consider individual psychological and social factors. Additionally, the theory's application has primarily been in urban contexts, raising questions about



its relevance in rural or less densely populated areas. Despite these critiques, contemporary developments in the theory have sought to address these limitations by incorporating insights from other disciplines and expanding their applicability. For example, advancements in geographic information systems (GIS) have enhanced the ability to analyse crime patterns more precisely, enabling more effective crime prevention strategies (Ratcliffe, 2008). Researchers continue to refine Crime Pattern Theory, integrating it with broader social theories to create a more comprehensive framework for understanding and preventing crime (Brantingham & Brantingham, 2013).

### **Research Methods**

This study employs a qualitative research methodology to explore the environmental contexts that facilitate or deter criminal activity in Lagos State. The qualitative approach is particularly well-suited for this investigation as it allows for an in-depth understanding of the lived experiences of individuals in high-crime areas. The primary and secondary data collection methods include in-depth interviews, participant observations and document analysis. The study uses purposive sampling to select participants who can provide rich, detailed insights into the crime phenomenon in their neighbourhoods. This sampling technique is appropriate for qualitative research as it allows the researcher to select participants with specific knowledge or experience related to the research questions (Patton, 2002). The participants included residents of high-crime areas, law enforcement officers, and community leaders. A total of 30 participants were selected, including 20 residents, 5 law enforcement officers, and five community leaders. The criteria for selecting residents included living in the neighbourhood for at least five years and having firsthand experience with crime or crime prevention efforts. Law enforcement officers were selected based on their involvement in community policing or crime prevention programmes. Community leaders were chosen for their roles in advocacy groups. The data for this study were collected from multiple sources to ensure triangulation and enhance the credibility of the findings.

The primary data sources included in-depth interviews, participant observations, and document analysis. Unstructured interviews were conducted with residents, law enforcement officers, and community leaders to gain insights into their neighbourhood experiences and perceptions of crime. The interview guide included open-ended questions to explore the participants' views on environmental factors contributing to crime, the effectiveness of crime prevention strategies, and their suggestions for improving community safety. Each interview lasted approximately 60 minutes and was audio-recorded with the participant's consent. The researcher conducted participant observations in high-crime areas to better understand the environmental contexts that facilitate or deter criminal activity. The observations focused on physical features (e.g., street lighting, building design), social interactions (e.g., community cohesion, presence of social disorder) and routine activities (e.g., times when people leave and return to their homes, routes they take). The observations were conducted over two months, with the researcher spending several hours daily in the neighbourhood. Detailed field notes were taken to record the observations and capture the researcher's reflections on the environment. In addition, relevant documents, such as crime reports, community meeting minutes, and local government publications, were analysed to provide additional context and support the findings from the interviews and observations. The documents were selected based on their relevance to the research questions and their potential to provide insights into the environmental factors contributing to crime and the effectiveness of crime prevention strategies.

The data collected from the interviews, observations and documents were analysed using thematic analysis. This method involves identifying, analysing, and reporting patterns (themes) within the data (Braun & Clarke, 2006). Thematic analysis was chosen for its flexibility and capacity to provide a detailed, nuanced account of complex data. Each interview was transcribed verbatim, and the field notes from the participant observations were compiled into a single document. The transcriptions and field notes were reviewed multiple times to ensure familiarity with the data.



Initial coding involved generating concise labels (codes) that identified key features of the data relevant to the research questions. This inductive process allowed codes to emerge naturally from the data rather than being imposed a priori (Guest, MacQueen, & Namey, 2012). Codes were then grouped into broader themes that encapsulate significant patterns within the data. This involved identifying relationships between codes and combining them into overarching themes that reflect the environmental contexts that facilitate or deter criminal activity. The themes were reviewed and refined to ensure they accurately represented the data. This involved checking the themes against the coded extracts and the entire data set to ensure coherence and consistency. Each theme was defined and named to capture the essence of the patterns identified. Detailed descriptions of each theme were developed, incorporating direct participant quotes and observations to illustrate key points. Multiple data sources (interviews, observations, and documents) were used to understand the phenomenon (Denzin, 1978) comprehensively. Participants were allowed to review and comment on the findings to ensure their perspectives were accurately represented (Lincoln & Guba, 1985). The findings were discussed with colleagues and experts in the field to obtain feedback and ensure the interpretations were credible and unbiased (Guba & Lincoln, 1994).

### **Limitations of the study**

**Sample Size and Generalizability:** The study's sample size, consisting of 30 participants, may not represent all high-crime areas. The findings might not generalise to other contexts without further validation through larger-scale studies.

**Geographical Focus:** The study focuses on specific high-crime areas within a particular urban context. The environmental factors influencing crime in these areas might differ significantly from those in rural or urban settings.

**Temporal Scope:** The study's observations were conducted over two months, which may not capture long-term trends or seasonal variations in crime patterns.

### **Results**

The findings from the interviews, participant observations and document analysis provide a rich, detailed understanding of the environmental contexts that facilitate or deter criminal activity in Lagos State. Several key themes emerged from the data, which are discussed below.

**Perceptions of Crime:** Participants' perceptions of crime varied depending on their roles and experiences. Residents of high-crime areas expressed a sense of vulnerability and fear, highlighting the prevalence of property crime, drug-related offences, and violent crime. Law enforcement officers and community leaders emphasised the importance of addressing the environment's physical and social aspects to reduce crime. Residents identified several locations in their neighbourhood that were particularly prone to crime, including poorly lit streets, abandoned buildings and public spaces with limited surveillance. They also noted that crime tended to occur at specific times, such as late at night or during weekends when there was less community activity and law enforcement presence.

### **Environmental Factors**

Participants identified several environmental factors that contributed to crime in their neighbourhood. These factors can be grouped into physical features, social factors, and situational factors.

**Physical Features:** Poor street lighting, neglected buildings, and lacking public spaces were frequently mentioned as contributing to crime. Participants noted that these features made it easier for criminals to operate undetected and provided opportunities for crime (Painter & Farrington, 1997).

**Social Factors:** Low levels of community cohesion and the presence of social disorder were identified as key factors contributing to crime. Participants observed that areas with strong community bonds and active neighbourhood watch programs tended to have lower crime rates.





Conversely, areas with elevated levels of social disorder, such as loitering and public drinking, were seen as more susceptible to crime (Sampson, Raudenbush, & Earls, 1997).

**Situational Factors:** The routine activities of residents were also identified as contributing to crime. Participants noted that certain times of day and locations were more likely to attract criminals. For example, commercial areas with high foot traffic and limited surveillance were seen as hotspots for theft and vandalism (Felson & Clarke, 1998).

### **Crime Prevention Strategies**

Most participants suggested several strategies for preventing crime in their neighbourhood. These strategies included enhancing physical security, promoting community engagement, and implementing situational crime prevention techniques.

**Physical Security Measures:** Participants recommended improving street lighting, securing abandoned buildings and increasing the presence of security cameras. These measures were seen as ways to enhance natural surveillance and deter criminal activity, as supported by Welsh & Farrington (2008).

**Community Engagement:** Strengthening community bonds and promoting active participation in neighbourhood watch programs were identified as effective strategies for reducing crime. Participants emphasised the importance of fostering a sense of collective responsibility and mutual support among residents, which is agreed upon by Rosenbaum (1987).

**Situational Crime Prevention:** Implementing situational crime prevention techniques, such as target hardening and access control, was also recommended. Participants suggested measures such as installing security gates, using property marking schemes, and promoting the use of alarm systems to reduce the opportunities for crime, as Clarke (1995) has suggested.

### **Crime Incidents in Lagos State**

To provide context to the study, crime statistics for Lagos State were examined. According to the Lagos State Police Command, there were approximately 15,684 reported cases of various crimes in Lagos in 2019, including armed robbery, burglary, and assault (Lagos State Police Command, 2020). The Lagos State Crime Data Dashboard also indicates that crime rates tend to be higher in densely populated areas such as Mushin, Agege, and Oshodi-Isolo, where the built environment may provide more opportunities for criminal activities (Lagos State Government, 2020).

The participant observations provided additional insights into the environmental contexts facilitating or deterring criminal activity. Several crime incidents were observed, including vandalism, graffiti, and drug-related offences. These incidents often occurred in areas with poor street lighting, neglected buildings and high levels of social disorder. The observations also highlighted the importance of routine activities and situational factors in shaping criminal behaviour. For example, commercial areas with high foot traffic and limited surveillance were frequently targeted for theft and vandalism. Similarly, public spaces with low levels of community activity and law enforcement presence were more susceptible to illicit drug activities, including high intake of drugs and drug abuse.

### **Discussion**

The findings from this study highlight the importance of environmental factors in shaping criminal behaviour. By examining the spatial and temporal crime patterns, this research provides valuable insights into the environmental contexts that facilitate or deter criminal activity in Lagos State. These findings have several implications for crime prevention strategies and the development of environmental criminology.

**The Role of Environmental Factors:** The results of this study underscore the critical role of environmental factors in influencing crime. Physical features, such as street lighting and building design, play a significant role in shaping opportunities for crime. Poorly lit streets and neglected



buildings provide cover for criminals and make it easier for them to operate undetected. This observation aligns with the findings of Skogan (1990), who emphasised that poorly maintained environments significantly contribute to higher crime rates. Conversely, well-maintained public spaces and enhanced natural surveillance can deter criminal activity by increasing the perceived risks for offenders. This is supported by studies such as those by Painter and Farrington (1997), which found that improved street lighting in various neighbourhoods significantly reduced crime rates.

Social factors, such as community cohesion and social disorder, also play a crucial role in shaping crime patterns. Areas with strong community bonds and active neighbourhood watch programs tend to have lower crime rates because residents are more likely to look out for each other and report suspicious activities. This observation was echoed by some of the Participants, who mentioned that "when neighbours know and look out for each other, it becomes harder for criminals to operate unnoticed." Research by Sampson, Raudenbush, and Earls (1997) supports this, demonstrating that communities with elevated social cohesion and informal social control experience lower crime levels.

Situational factors, including the routine activities of residents, further influence the spatial and temporal distribution of crime. Certain times of day and specific locations are more likely to attract criminals due to the presence of suitable targets and the absence of capable guardians. For instance, most Participants noted that "crimes like theft are more common during the late hours when there are fewer people around to witness them." Felson and Clarke (1998) support this by highlighting that changes in routine activities and the timing of these activities can significantly impact crime rates.

### **Implications for Crime Prevention**

The findings from this study have several implications for crime prevention strategies. By addressing the environmental factors contributing to crime, policymakers and practitioners can develop more effective interventions to enhance community safety.

**Enhancing Physical Security:** Improving street lighting, securing abandoned buildings, and increasing the presence of security cameras are all effective measures for strengthening natural surveillance and deterring criminal activity. These physical security measures can make it more difficult for criminals to operate undetected and increase the perceived risks of committing a crime. Painter and Farrington (1999) demonstrated that improved street lighting can reduce crime by increasing the visibility of potential offenders. Further, Welsh and Farrington (2008) emphasised that environmental modifications, such as target hardening and surveillance cameras, can significantly deter crime.

**Promoting Community Engagement:** Strengthening community bonds and encouraging active participation in neighbourhood watch programs can reduce crime by fostering a sense of collective responsibility and mutual support among residents. Community engagement initiatives can also help build trust between residents and law enforcement, encouraging more people to report suspicious activities and cooperate with crime prevention efforts. Sampson supports this approach et al. (1997), found that communities with elevated social cohesion are more effective at controlling crime. Additionally, Rosenbaum (1987) argued that neighbourhood watch programs can enhance informal social control and reduce crime rates by increasing residents' vigilance and willingness to intervene.

**Implementing Situational Crime Prevention:** Situational crime prevention techniques, such as target hardening and access control, can reduce opportunities for crime by making it more difficult for offenders to commit offences. Measures such as installing security gates, using property marking schemes, and promoting alarm systems can deter criminals by increasing the effort required to commit a crime and reducing the potential rewards. Clarke (1995) emphasised the



effectiveness of situational crime prevention strategies in reducing crime by altering the immediate environment in which crimes occur. Cornish and Clarke (2003) further argued that situational measures are effective because they directly address the specific conditions that facilitate criminal behaviour.

### **Theoretical Contributions**

The findings from this study contribute to the development of environmental criminology by integrating insights from crime pattern theory. This theoretical framework provides a comprehensive understanding of crime's spatial and temporal dynamics and highlights the importance of situational factors in shaping criminal behaviour. It emphasises the spatial patterns of crime and how criminals exploit the environment to commit offences. By focusing on activity nodes, paths, and edges, the theory helps identify areas where interventions can most effectively reduce crime. Brantingham and Brantingham (1993) argued that understanding the spatial distribution of crime can guide the development of targeted prevention strategies. Their work demonstrated that crime tends to cluster around specific nodes and paths, suggesting that interventions should focus on these areas to maximise their impact. Despite its strengths, crime pattern theory has faced criticism for its reliance on spatial analysis, which may overlook the social and psychological factors that influence criminal behaviour. Eck and Weisburd (1995) argue that while spatial patterns provide valuable insights, they must be integrated into understanding the social dynamics and individual motivations that drive crime. This criticism suggests that a more comprehensive approach to crime prevention should combine spatial analysis with strategies that address the underlying social and psychological factors. Wortley and Mazerolle (2008) further emphasise the need to consider the situational and social contexts in which crimes occur, arguing that a comprehensive approach to crime prevention is essential.

### **Recommendations**

**Improved Lighting:** Municipalities should invest in better street lighting, particularly in high-crime areas. Studies, such as those by Painter and Farrington (1997, 1999), have shown that improved lighting can reduce crime by increasing visibility and deterring potential offenders.

**Surveillance Systems:** Increasing CCTV cameras' number and strategic placement can enhance surveillance and deter criminal activities. Welsh and Farrington (2008) emphasise that the presence of cameras can reduce crime by increasing the perceived risk for offenders.

**Securing Abandoned Buildings:** Policies to either demolish or repurpose abandoned buildings can reduce crime opportunities. Abandoned buildings often serve as hotspots for criminal activities (Skogan, 1990).

### **Promote Community Engagement**

**Neighbourhood Watch Programs:** Encouraging and supporting neighbourhood watch programs can foster community cohesion and increase informal social control, which has been shown to reduce crime (Rosenbaum, 1987; Sampson et al., 1997).

**Community Policing:** Law enforcement agencies should adopt community policing strategies that emphasise building trust and cooperation between police and community members.

### **Implement Situational Crime Prevention**

**Target Hardening:** Measures such as installing better locks, security gates, and alarm systems can make it more difficult for criminals to commit crimes (Clarke, 1995).

**Access Control:** Limiting access to certain areas through physical barriers or security personnel can reduce crime opportunities (Cornish & Clarke, 2003).



### **Urban Planning and Design**

**Defensible Space:** Urban planning should incorporate principles of defensible space to design environments that naturally deter criminal activities. Newman (1972) highlighted the importance of designing urban spaces to enhance natural surveillance and territoriality.

**Maintaining Public Spaces:** Regular maintenance of public spaces can prevent the physical decay that often correlates with higher crime rates (Skogan, 1990).

### **Avenue for Future Research**

**Longitudinal Studies:** Conducting longitudinal studies can provide insights into how environmental factors and crime patterns change. This approach can help identify long-term trends and the effectiveness of various crime prevention strategies.

**Comparative Studies:** Future research should include comparative studies across different geographical areas, including rural and suburban contexts, to understand the applicability of environmental criminology theories in diverse settings.

**Quantitative Analysis:** Incorporating quantitative methods, such as crime mapping and statistical analysis, can complement qualitative findings and provide a more comprehensive understanding of crime patterns. This approach can also help identify and validate crime hotspots.

**Technology and Crime Prevention:** Investigating the role of emerging technologies, such as AI-driven surveillance systems and innovative city initiatives, in crime prevention can provide valuable insights into modern crime-fighting tools.

**Impact of Social Programs:** Evaluating the impact of social programs aimed at improving community cohesion and reducing social disorder can shed light on the effectiveness of these interventions in crime prevention.

**Policy Implementation and Evaluation:** Future research should focus on implementing and evaluating policies based on environmental criminology principles. Understanding these policies' practical challenges and outcomes can inform more effective crime prevention strategies.

### **Conclusions**

Integrating primary and secondary data in this study provides a comprehensive understanding of the environmental factors that shape criminal behaviour. By examining the lived experiences of individuals in high-crime areas and supporting these observations with extensive literature, this research highlights the critical role of environmental design and community engagement in crime prevention. The findings underscore the importance of addressing physical and social factors to create safer communities. The study reveals the interplay between environmental and social factors in shaping crime patterns. Researchers can develop more effective strategies for preventing crime and enhancing community safety by integrating insights from various theoretical frameworks and employing diverse methodological approaches.

Finally, this study provides valuable insights into the environmental contexts that facilitate or deter criminal activity. The findings emphasise the need for a multifaceted approach to crime prevention that addresses the spatial, social, and situational factors influencing crime. Policymakers and practitioners can create safer environments and reduce crime rates by enhancing physical security, promoting community engagement, and implementing situational crime prevention techniques. Integrating crime pattern theory with other criminological frameworks offers a robust foundation for understanding and addressing the complex dynamics of criminal behaviour.

### **References**

- Aluko, O. E. (2010). The impact of urbanisation on housing development: The Lagos experience, Nigeria. *Ethiopian Journal of Environmental Studies and Management*, 3(3), 64-74.
- Brantingham, P. J., & Brantingham, P. L. (1981). *Environmental Criminology*. Sage





- Publications. Brantingham, P. J., & Brantingham, P. L. (1991). Notes on the geometry of crime. In P. J. Brantingham & P. L. Brantingham (Eds.), *Environmental Criminology* (pp. 27-54). Waveland Press.
- Brantingham, P. J., & Brantingham, P. L. (1993). Nodes, paths, and edges: Considerations on the complexity of crime and the physical environment. *Journal of Environmental Psychology*, 13(1), 3-28. [https://doi.org/10.1016/S0272-4944\(05\)80212-9](https://doi.org/10.1016/S0272-4944(05)80212-9)
- Brantingham, P. J., & Brantingham, P. L. (2013). Crime pattern theory. In R. Wortley & L. Mazerolle (Eds.), *Environmental Criminology and Crime Analysis* (pp. 78-93). Routledge.
- Clarke, R. V. (1995). *Situational Crime Prevention*. Harrow and Heston.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44(4), 588-608. <https://doi.org/10.2307/2094589>
- Cornish, D. B., & Clarke, R. V. (2003). Opportunities, precipitators and criminal decisions: A reply to Wortley's critique of situational crime prevention. *Crime Prevention Studies*, 16, 41-96.
- Denzin, N. K. (1978). *The Research Act: A Theoretical Introduction to Sociological Methods* (2nd ed.). McGraw-Hill.
- Eck, J. E., & Weisburd, D. (1995). Crime places in crime theory. In J. E. Eck & D. Weisburd (Eds.), *Crime and Place: Crime Prevention Studies*, 4 (pp. 1-33). Criminal Justice Press.
- Felson, M., & Clarke, R. V. (1998). *Opportunity Makes the Thief: Practical Theory for Crime Prevention*. Home Office Policing and Reducing Crime Unit.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Sage Publications.
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied Thematic Analysis*. Sage Publications.
- Lagos State Government. (2020). Lagos State Crime Data Dashboard. Retrieved from <https://nigerianstat.gov.ng/elibrary/read/786>
- Lagos State Police Command. (2020). Annual Crime Report. Retrieved from <https://lssstf.lagosstate.gov.ng/lagos-state-police-command>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications.
- Newman, O. (1972). *Defensible Space: Crime Prevention Through Urban Design*. Macmillan.
- Painter, K. A., & Farrington, D. P. (1997). The crime reducing effect of improved street lighting: The Dudley project. In R. V. Clarke (Ed.), *Situational Crime Prevention: Successful Case Studies* (pp. 209-226). Harrow and Heston.
- Painter, K. A., & Farrington, D. P. (1999). Street lighting and crime: Diffusion of benefits in the Stoke-on-Trent project. *Crime Prevention Studies*, 10, 77-122.
- Park, R. E., Burgess, E. W., & McKenzie, R. D. (1925). *The City*. University of Chicago Press.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Sage Publications.
- Ratcliffe, J. H. (2008). *Intelligence-Led Policing*. Willan Publishing.
- Rosenbaum, D. P. (1987). The theory and research behind neighbourhood watch: Is it a sound fear and crime reduction strategy? *Crime & Delinquency*, 33(1), 103-134. <https://doi.org/10.1177/0011128787033001007>
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighbourhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918-924. <https://doi.org/10.1126/science.277.5328.918>
- Sherman, L. W., Gartin, P. R., & Buerger, M. E. (1989). Hot spots of predatory crime: Routine activities and the criminology of place. *Criminology*, 27(1), 27-55. <https://doi.org/10.1111/j.1745-9125.1989.tb00862.x>
- Shaw, C. R., & McKay, H. D. (1942). *Juvenile Delinquency and Urban Areas*. University of Chicago Press.
- Skogan, W. G. (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighbourhoods*. University of California Press.
- Smith, S. J. (1986). Crime and the structure of social relations. *Transactions of the Institute of British Geographers*, 11(1), 35-46. <https://doi.org/10.2307/621779>



- United Nations. (2018). World Urbanization Prospects: The 2018 Revision. United Nations Department of Economic and Social Affairs.
- Welsh, B. C., & Farrington, D. P. (2008). Effects of improved street lighting on crime. *Campbell Systematic Reviews*, 4(1), 1-51. <https://doi.org/10.4073/csr.2008.13>
- Wortley, R., & Mazerolle, L. (Eds.). (2008). *Environmental Criminology and Crime Analysis*. Routledge.