

Planning for safe neighbourhoods in Namibia: A comparative case study of two low-income neighbourhoods in the city of Windhoek

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ABSTRACT

The safety of neighbourhoods remains challenging in developing countries due to several dynamics. This article explores the role of urban planning for safer neighbourhoods in two low-income neighbourhoods in the city of Windhoek. The study focuses on several crime attractors and generators influencing housebreaking incidents in two neighbourhoods. Various physical characteristics influence opportunities for crime in Katutura and Otjomuise, such as the location of alcohol outlets within the residential areas and large and unmaintained public open spaces. A lack of development in Otjomuise also influenced incidents of crime. However, severe socio-economic conditions and social factors also contributed to opportunities for crime. The findings have implications on planning and development in Namibia in terms of policy development and planning guidelines and assessments.

KEYWORDS: Namibia; safety; neighbourhood; planning; policies

1. Introduction

Although goal 11 of the Sustainable Development Goals (SDGs) highlights the need for inclusive, safe, resilient and sustainable cities and human settlements, the development of safer environments remains a challenge, especially in developing countries. Developing countries are often associated with conditions that exacerbate crimes (Natarajan, 2016). The high crime rate is also a significant concern in Africa, a continent faced with everyday violence and civil conflict in urban areas, reinforcing perceptions of African cities as the unsafest places (Beal & Goodfellow, 2014). Namibia, a developing country, has similar conditions associated with high crime, and its crime rate fluctuates yearly. During the 2017/18 financial year, 93 093 crime cases were recorded countrywide, including 36 504 in the Khomas region, representing 39.2% of the national crimes (NamPol, 2018) and 18.5% of the total population in Namibia (NSA, 2019). More than fifty per cent of the overall crime incidents in the Khomas region occurred in Windhoek, with a population of 400 000 in 2016 (CoW, 2016).

Several factors influence neighbourhood safety, including broader socio-economic conditions and specific physical and social issues at the local level. The level of crime is often higher in lower-income neighbourhoods, while residents of these areas do not have the means to move to other neighbourhoods. Consequently, many residents remain within their existing neighbourhoods and regard crime as a natural phenomenon, and they have to deal with crimes frequently. Neighbourhood planning, design and management can influence crimes by facilitating or repelling specific crimes (Kruger et al., 2001; Cozens & Melenhorst, 2014). One approach contributing to neighbourhood safety is Crime Prevention through Environmental Design (CPTED).

According to Armitage (2018:1), CPTED 'represents a multi-faceted approach to crime reduction that draws upon urban design, psychology and criminology'. Ray Jeffery coined CPTED in the 1970s, following the earlier work of many researchers from the western context, including the work of Jane Jacobs and Oscar Newman. Jacobs (1961) introduced the concept of 'eyes on the street', focusing on the layout design of streets and advocating for demarcation of space, ownership and mixed land uses to provide constant surveillance to discourage offenders. Newman (1972) introduced Defensible Space, which is related to the protection of housing developments. CPTED is primarily rooted in the Defensible Space, referring to 'a residential environment whose physical characteristics – building layout and site plan – function to allow inhabitants to become critical agents in ensuring their security' (Cozens & Love, 2015:395). However, as advocated by the so-called 2nd generation CPTED, inhabitants can only ensure safety and maintain informal social control and guardianship to discourage criminal activities (Wo, 2019) through strong social cohesion. Planners, designers and communities have a role in crime prevention by eliminating opportunities for crime within neighbourhoods.

This article explores the role of neighbourhood planning and management towards safer neighbourhoods in the two low-income neighbourhoods, Katutura and Otjomuise, in Windhoek, Namibia. The discussion sets the scene with an overview of the planning context in Namibia and proceeds to highlight the relationship between planning and crime prevention. Following a brief articulation of the methodology, the authors unpack the various physical and social aspects that influence the occurrence of crime, specifically housebreaking, in these two neighbourhoods. This has several implications for planning safer neighbourhoods in Namibia.

2. A brief overview of urban planning policies in Namibia

The Namibian Constitution is the supreme authority in the country. It establishes legal instruments and institutions, including those dealing with crime and related matters (GRN, 1990). The Local Authorities Act No 23 of 1992 deals with the governance structure and mandates within the respective jurisdictions to ensure sustainable planning and development, public safety and a clean environment are provided and maintained. Among many mandates, local authorities are the first institutions to assess all land use proposals within their jurisdictions, allowing them to consider the implications on the surrounding environment, including safety. Local authorities are empowered to deal with the closure and maintenance of public open spaces and enact bylaws and policies for the general well-fare of the residents.

Until 2020, Urban Planning has been regulated by the Township and Division of Land Ordinance No. 11 of 1963 and Town Planning Ordinance No. 18 of 1954. Since then, the Urban and Planning Act No. 5 of 2018, which repealed the two ordinances, became a critical spatial planning instrument. Despite being the only key legislation for all matters related to planning, as with the previous ordinances, there is little consideration of the relation between the built environment and crime. One significant change is the Urban and Regional Planning Board, instead of the two previous boards established through the two ordinances. The board has functions related to all urban land use matters, including layout plans, township (neighbourhood) establishment, zoning schemes and other land use management systems. For instance, the Act states that the zoning scheme should ensure that security, safety, health and well-being are promoted and maintained to benefit all the residents. However, enforcement of some provisions of the legislation remains a concern. This is discussed below and in section 5.3.

Past and current legislation and guidelines related to urban planning have failed to address crime prevention and safety in several ways, namely (1) the relationship between planning

and safety and (2) a lack of CPTED policy. To illustrate this, the Ministry of Urban and Rural Development developed the guidelines and standards for town planning and urban design in 2013, but, surprisingly, it excluded CPTED or crime prevention approaches. To date, Namibia, in general, and local authorities, in particular, have no CPTED policy or strategy. In contrast, the Urban and Regional Planning Act sparingly uses the term safety and security with no specific reference to the crime that may emanate from poor planning or land uses. However, safety and security can be interpreted differently. It can be assumed to mean crime prevention, safe traffic flow, or protecting people from physical harm due to construction.

There is a lack of clarity related to the concept of safety, which is rarely used in past ordinances – while in current legislation, it remains vague. Such a lack of clarity could be due to the false premise that crime prevention is the sole responsibility of safety and security institutions. Consequently, it creates reluctance from planning professionals to deal with crime prevention decisively. Neighbourhood layout plans are designed and planned with less consideration for crime prevention. This lack of consideration may be related to Ceccato's (2012:23) proposition that 'if planners have poor knowledge about – or are prejudiced towards – the people they plan for, the result of the planning processes will illustrate just that'. Neighbourhoods reflect how the planners and designers envisioned their layout plans. The previous and current boards' compositions have no representative from safety and security clusters or the Namibia Police Force (NamPol). Consequently, crime and safety receive minimal attention in planning. To date, no scientific assessments have been undertaken on the influence of the built environment or physical characteristics of neighbourhoods and crime.

However, land use management systems such as rezoning, consolidation and consent use influence crime and crime prevention. People change land uses informally because the formal system and procedure are too onerous, costly and lengthy. Likewise, the lack of enforcement of zoning schemes provides people with opportunities to engage in illegal and informal activities. The escalation of unplanned informal activities negatively impacts the physical layout plans, zoning schemes and surrounding environment. These affect the traffic flow, crime and safety.

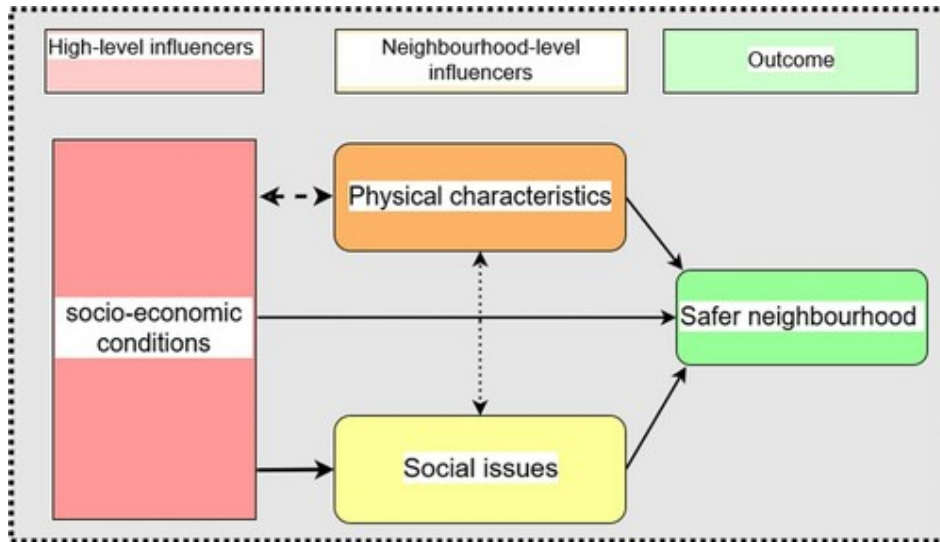
Similarly, some land parcels are zoned as 'undetermined' with no specific primary use but open for any use through consent and rezoning. The undetermined use zone is open for abuse and misinterpretation. Over time, they can be rezoned into something else, which may have detrimental effects such as increased crime or compromising the safety of the residents. These issues call for a reconsideration of planning for safer neighbourhoods.

3. Reconsidering safety in neighbourhoods

A crime requires three elements: an offender's desire, a target or victim and an opportunity (Cozens et al., 2005). Opportunities for crime emanate from crime attractors and crime generators within the neighbourhoods, concepts developed by Brantingham & Brantingham (1995) and investigated further by Cozens & Love (2015) and Hiropoulos & Porter (2014). Crime attractors refer to unmaintained spaces and places that lure offenders due to their known opportunities for crime. In contrast, crime generators denote places that attract more people through their routine activities (Cohen & Felson 1979), placing potential offenders and victims closer. Examples of such places include shopping centres, alcohol outlets and sports fields (Brantingham & Brantingham, 1995; Hiropoulos & Porter, 2014; Cozens & Love, 2015). These crime attractors and generators are often located close to or within the residential areas to facilitate convenient access; however, they can create opportunities for crime.

In pursuit of safer neighbourhoods for the residents, three important determinants and influences on crime must be considered and addressed: high-level influencers are mostly the socio-economic conditions, while physical characteristics and social issues influence crime opportunities at a neighbourhood level (Figure 1). Both these influencers strongly affect each other, and together, they consolidate their influences on crime.

Figure 1. Influences on crime in neighbourhoods.



Socio-economic conditions reflect the broader context (mezzo and macro-level), which can influence both physical conditions and social issues at a neighbourhood level. These include poverty, unemployment, inequality, limited economic activities leading to unaffordability, education level, family upbringing and a lack of shelter.

One or a combination of these conditions can trigger weak social cohesion, including disorder (Sampson & Raudenbush, 2001) among the residents. Similarly, previous studies found strong evidence of the influence of socio-economic conditions on crime (Ceccato, 2012; Lobont et al., 2017). Some people may engage in criminal activities for survival, particularly in developing and poor neighbourhoods. Similarly, socio-economic conditions can affect the physical characteristics of the neighbourhoods, as local authorities may not be able to provide adequate and quality services and amenities in poorer neighbourhoods.

However, **social issues** also influence the perceived fear of crime and safety. In addition, the history of violence is associated with weak social cohesion (Olutola & Bello, 2016; Petrus, 2021). Olutola & Bello (2016:174) found that community cohesion 'is a strong determinant for crime reduction' and neighbourhood safety. Cohesion allows the residents to have social control of their areas, which is essential for crime prevention and safety. The social disorder results from inadequate social control (Harcourt & Ludwig, 2006) and can lead to drug dealers and gang activity. Other issues include heterogeneity (cultural diversity), stereotypes, distrust and some residents colluding with offenders. These social issues further exacerbate physical disorders, such as broken windows, offensive graffiti and vandalism, commonly known as the Broken Window theory (Wilson & Kelling, 1982). The Broken Window Theory implies that any minor crime left unattended can result in more disorders and crime.

Opportunities for a crime can emanate from a combination of **physical characteristics**, particularly how the space is designed (Hiropoulos & Porter, 2014) and the levels of development (Petrus, 2021:472). The physical characteristics of the neighbourhoods strongly influence the fear of crime and contribute to crime. Similarly, it influences physical disorders and affects social cohesion. These included street layout, land uses, amenities and services, ownership of spaces and other measures related to CPTED such as territoriality, access control, target hardening, management/maintenance, activity support and surveillance. The unmaintained places provide opportunities for crime to thrive and become crime hotspots (Snyders & Landman, 2018), supporting previous studies that well-maintained spaces can reduce crime (Cozens & Melenhorst, 2014; Landman, 2017).

Given these influences on crime, CPTED is concerned with modifying the built environment to lessen opportunities for crime. CPTED has successfully reduced crimes in many western countries (Cozens et al., 2005). However, CPTED's effectiveness and relevance to non-western contexts, including developing countries, have been questioned (Ekblom et al., 2013). Different contexts require tailored solutions and approaches. Previous studies have documented the influence of socio-economic conditions on crime. In some countries, such as South Africa, CPTED has been reframed to suit the local conditions and aims to 'reduce the causes of, and opportunities for, criminal events and address the fear of crime by applying sound planning, design and management principles to the built environment' (Kruger et al., 2001:7). There is a need to understand the relationship between crime and the physical environment in Namibia and the subsequent role of planning to contribute to safer neighbourhoods in the country.

4. Study background and methods

4.1. Planning and safety in Windhoek

The Windhoek morphology is primarily influenced by colonial policies and modernist ideas borrowed from western urban planning (Friedman, 2000). Apartheid planning policy and development also influenced the current 'structure and spatial nature of its urban environment' through 'separate development', which segregated people based on the 'homogenisation of ethnically and culturally distinct groups'. Segregated environments played a role in the manifestation of social and economic challenges. Specific high-income neighbourhoods (those that were reserved for white) were provided with essential infrastructure and amenities centred on the 'western lifestyle' (Friedman, 2006:1, 3, 37). These policies created a fragmented built environment characterised by urban sprawl and segregation, which exposed many people to criminal activities due to the long distances they had to walk to various designations (Kruger & Landman, 2008). Most job opportunities are located in the southern part of Windhoek, and due to a lack of taxis and high costs, people have to walk through unsafe places such as large unmaintained riverbeds as shortcuts to their workplaces. Even after Namibia's independence in 1990, people still walk long distances through the unmaintained spaces, which expose them to various crimes. This trend of providing low-income neighbourhoods with inadequate services and amenities continued unabated.

4.2. Case study areas

The study compared two low-income neighbourhoods in Windhoek, Katutura (Figure 2) and Otjomuise (Figure 3). Katutura was developed before independence, while Otjomuise was developed afterwards. The city serves as the administrative and economic centre of the country. Windhoek displays spatial development disparities between high-income and low-income neighbourhoods, of which the last-mentioned neighbourhoods exhibits similar socio-economic conditions such as high unemployment, poverty and inequality. Informal

settlements further compound the adverse socio-economic conditions in Otjomuise. The housebreaking incidents varied yearly between the two neighbourhoods (Table 1).

Figure 2. Five sites of housebreaking in the Katutura neighbourhood.

Source: Adapted from the city of Windhoek, 2020.

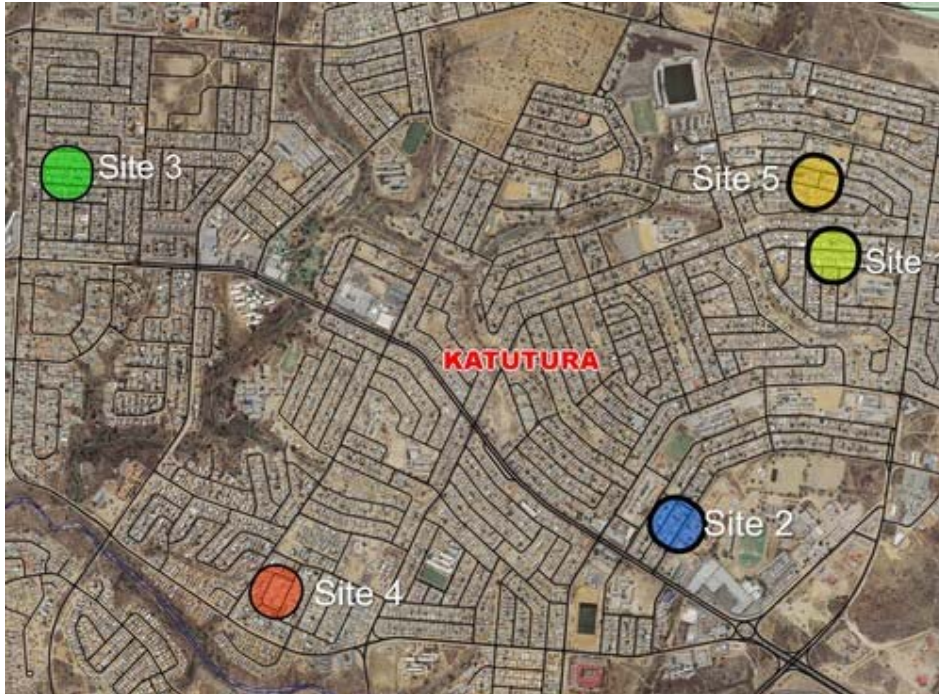


Figure 3. Five sites of housebreaking in the Otjomuise neighbourhood.

Source: Adapted from the city of Windhoek, 2020.

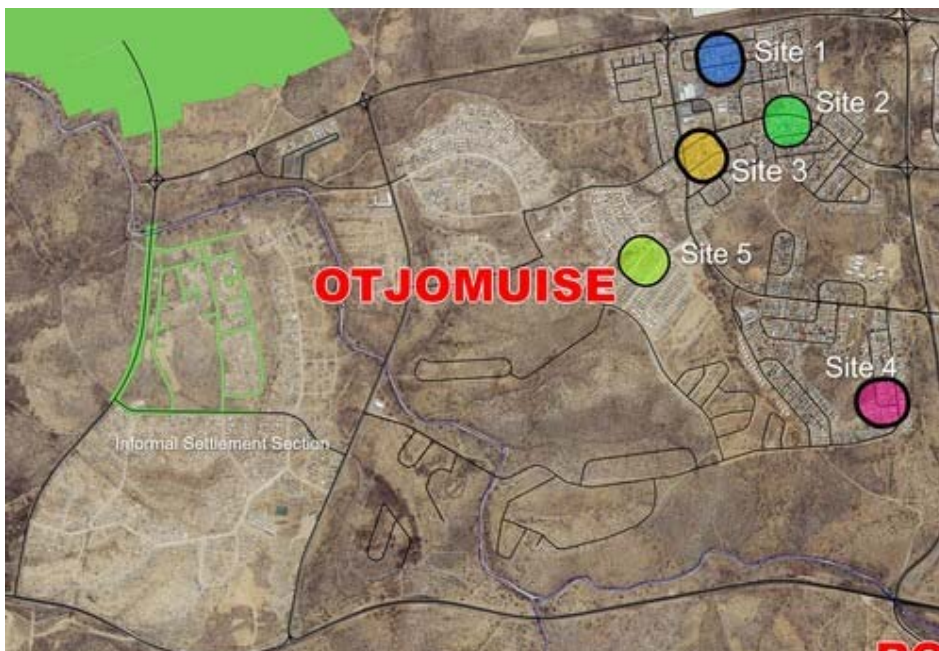


Table 1. Crime incidents in Katutura and Otjomuise neighbourhoods.

Neighbourhood	Population	Housebreaking cases*		Robbery cases	
		2017/18	2018/19	2017/18	2018/19
Katutura	63,222	743	674	552	836
Otjomuise	16,453	435	440	364	373

*The crimes reported at Katutura and Otjomuise Police Stations do not represent respective neighbourhoods only but include other neighbourhoods falling under these police station's jurisdictions. Source: NamPol, 2020; NSA, 2012.

Katutura is an Otjiherero word (one of the indigenous languages), which means '(a place where) we do not stay (rest)' (Melber, 2016:2). Katutura was established in 1959 when black people had to leave Hochland Park (the then Old Location) to settle in this area by the apartheid regime through an autocratic and non-participatory approach. Through the apartheid policy of separate development and racial segregation, black communities were divided into specific locations based on ethnicity. One significant difference between these two neighbourhoods is that Katutura has no informal settlements like Otjomuise (a place of steam in Otjiherero), which was developed in 1992 due to population growth and high demand for housing experienced in Windhoek since independence in 1990. Consequently, there has been an ever-increasing demand for housing, leading to the development of informal settlements and frequent attempts of land grabbing, mainly in the low-income neighbourhoods such as Otjomuise.

4.3. Methodology

The study adopted a qualitative research approach and comparative case study design. Seven crime sites were purposively selected in each neighbourhood based on specific criteria. The criteria included a housebreaking scene but not an active crime scene and offered a broader diversity of surrounding land use. Five sites were related to housebreaking and two to robbery. This article will only focus on the sites associated with housebreaking (Figures 2 and 3). Due to ongoing investigations, the exact address of the sites was not indicated. However, the approximate locations were identified for investigation purposes.

Three data gathering methods were used. The first method involved document review, including the crime statistics reports from NamPol, to understand the nature of the crime. Secondly, the participants were interviewed face-to-face through semi-structured interviews. Thirty residents from the various sites in both neighbourhoods (Figures 2 and 3) and ten crime investigators from the two police stations were interviewed. The residents from the multiple sites and crime investigators were selected based on purposive and sequential sampling, respectively. The qualitative case study focused on a small number of key participants to provide adequate and rich information. These key informants were those who primarily interact with spaces daily. Thirdly, non-participant observations, accompanied by the Manual Audit Worksheet (MAWs), were carried out to observe the nature and physical characteristics of the two neighbourhoods and how they were planned, designed and continuously managed. During observations, photographs and field notes, as part of MAWs, assisted the researcher in capturing the 'neighbourhoods' physical characteristics. Pseudonyms are used for all respondents.

Table 2. Similarities and differences in potential crime influencing elements between the neighbourhoods.

Elements for comparison	Katutura	Otjomuise
Natural environment	<ul style="list-style-type: none"> Slightly flat with some riverbeds and isolated natural steep slopes Surrounded by other neighbourhoods 	<ul style="list-style-type: none"> Characterised by the rocky and many natural steep slopes with valleys Mostly surrounded by mountains, steep hills, riverbeds and bushes, particularly on its western and northern sides
Neighbourhood and site design	<ul style="list-style-type: none"> In general, Otjomuise has more long streets with limited connectivity than Katutura. More access and escape routes from several sites, particularly those close to large vacant spaces Site 4 was characterised by clustered and semi-detached houses with poor territoriality, narrow streets and corridors. 	<ul style="list-style-type: none"> Otjomuise sites (e.g. Site 4) have more passageways, of which some connect to unmaintained riverbeds
Level of development in the neighbourhoods	<ul style="list-style-type: none"> Has no informal settlement 	<ul style="list-style-type: none"> Lack of amenities and spatial development disparities are apparent in Otjomuise due to three levels of development – formal, semi-formal and informal settlements.
Land use	<ul style="list-style-type: none"> Both sites were mostly dominated by mono-land use (residential) and some minimal non-residential land use and activities, hence limited activity support. Site 4 in Katutura has more alcohol outlets than other sites in both neighbourhoods. In general, Otjomuise has more alcohol outlets (shebeens) than Katutura. Most alcohol outlets were accommodated within residential areas (e.g. a house and bar in one erf). 	
Location of burgled houses in relation to opportunities for crime	<p>Most of the burgled houses investigated were either adjacent, opposite or close to opportunities for crime, particularly in Otjomuise.</p>	

Elements for comparison	Katutura	Otjomuise
Territoriality Maintenance	<p>Some houses had no physical boundaries/clear demarcation, e.g. in Site 4, Katutura</p> <ul style="list-style-type: none"> • Poorly maintained public open spaces and vacant residential erven characterised by vegetation. • People dump solid waste illegally in many unmaintained spaces, particularly in Otjomuise. <ul style="list-style-type: none"> • Few large unmaintained public open spaces, including riverbeds. • Hardly any vacant residential erven. 	<ul style="list-style-type: none"> • Several Large unmaintained public open spaces, including riverbeds and valleys with overgrown vegetation. • Other common vacant erven were zoned residential or business.
Surveillance	<ul style="list-style-type: none"> • High walls (of many houses) interfere with surveillance in both neighbourhoods. • Limited private and public CCTV cameras. • There is poor illumination in vacant spaces and some streets due to malfunctioning streetlights. • Poorly maintained public open spaces, including riverbeds, affect visibility and surveillance. • Natural steep slopes hinder visibility and surveillance in some neighbourhoods, more prominent in Otjomuise. <ul style="list-style-type: none"> • No official neighbourhood watch. 	<ul style="list-style-type: none"> • One neighbourhood watch serves a small extension of the neighbourhood, and only a few houses were part of it.

Source: Authors, 2022.

5. The influences on crime in Katutura and Otjomuise

The findings revealed a set of crime-influencing elements in both neighbourhoods. Most of these influences on crime are due to improper planning and development in the low-income neighbourhoods are discussed in the following section. In addition, the similarities and differences in the crime-influencing elements in the neighbourhoods are summarised in Table 2.

5.1. Location of houses

The location of houses within a neighbourhood can influence crime. One significant finding that has implications for a safer neighbourhood is the proximity of the burgled 'houses' location to the physical blind spots. Physical blind spots include unmaintained spaces such as riverbeds, passageways, vacant erven, natural environments (steep slopes) and other human-made that inhibit surveillance and provide opportunities for crime. Most burgled houses were either adjacent or close to the physical blind spots, particularly in Otjomuise. Similarly, these houses in both neighbourhoods were detached and prone to burglaries due to the distance between them, unlike the groups of flats. In addition, these detached houses were located close to three-ways intersections of residential roads (streets), implying more access and escape routes. This supports Eck & Weisburd's (1995:14) finding that accessibility to an area 'is associated with a high crime rate' and fear of crime. Residential streets are often deserted and quiet after dark hours. This finding corroborates with NamPol crime reports, which revealed that most housebreakings in both neighbourhoods were committed during dark hours, i.e. from 8:00 pm to 4:00 am. Houses located in proximity to physical blind spots or further away from the alcohol outlets can be targeted in the absence of a guardian around (for possible eyes on the street), particularly during dark hours, particularly in the Otjomuise neighbourhood.

5.2. Level of development in the neighbourhoods

Otjomuise is less spatially developed compared to Katutura. However, it is constantly expanding and changing due to existing open land used for residential and other necessary land uses. The spatial changes included apartment complexes, business development and servicing of land for diverse activities. Participants from Otjomuise raised the issue of spatial development imbalances, which is evident between the neighbourhood's three sections (formal, semi-formal and informal settlement). Although the formal section of the neighbourhood lacks some essential amenities such as well-functioning parks and recreational facilities, it is more developed than the semi-formal and informal settlement sections.

Many participants from the formal section and crime investigators claimed that spatial development disparities influence crime in the formal section where all sites were located. For instance, a crime investigator, Shatipamba (2020-05-12), argued that the way Otjomuise is planned influences crime 'because people residing at the informal settlements are not well-off' and engage in criminal activities. Low-income neighbourhoods often lack essential services and amenities such as well-functioning parks and sports facilities, proper roads, adequate sanitation and stormwater, and streetlights. Most crimes reported in Otjomuise, particularly housebreakings, robberies and snatching, were committed in the formal section, where more business activities are located. Participants believed these crimes are committed by outsiders, such as those from other neighbourhoods and informal settlements, due to socio-economic conditions. However, this does not mean the residents of informal settlements are the only offenders; locals can also commit housebreakings and other crimes.

5.3. Alcohol outlets and other land use

The presence of alcohol outlets within residential areas has raised several concerns. The participants questioned the location of alcohol outlets, including houses that sell alcohol illegally, even after the prescribed trading hours. Although alcohol outlets provide some sources of livelihood, participants claimed they are sources of criminal activities within the residential areas. This tension needs some levels of convergence and trade-off between local economic development, livelihood, crime and harmonious development among the stakeholders. Participants claimed that offenders congregate at alcohol outlets (locally known as shebeens) to search for opportunities for crime and identify the target – houses with weak security measures.

When locals and outsiders of these neighbourhoods congregate at alcohol outlets, the expectation is that suspicious activities and movements can be detected, and they may be willing to intervene for a common cause (Sampson & Raudenbush, 2001). However, congregation coupled with weak social cohesion can make it challenging for residents to maintain informal social control. Participants' 'eyes on the streets' reported by Zahnow (2018:1138) may be ineffective. Participants stated that houses close to the crime attractors and generators, such as alcohol outlets, are often targeted the most. Similarly, other land use, such as public open spaces, also influenced the opportunities for crime – discussed further in the next section.

There were alcohol outlets in both neighbourhoods. Site four in Katutura had the most alcohol outlets of all the sites in both neighbourhoods. The observations revealed an alcohol outlet at almost every third house, including small tuckshops that sell alcohol, which can be attributed to land use management systems and weak enforcement of planning laws. Site four is located within the Single Quarters area, with many informal economic activities in Katutura, including alcohol outlets and Oshetu Open Market, where Kapana meat (grilled beef) is sold. The Single Quarters was developed during the apartheid regime exclusively for contract labourers to work in several factories and is characterised by high density – clustered and semi-detached houses with poor territoriality, narrow streets and corridors.

5.4. Unmaintained open spaces and passageways

The unmaintained spaces provide easy access and escape routes for the offenders and weaken the access control principles of CPTED. This relates to previous studies that found that vacant and unmaintained spaces provide more opportunities for crime (Wo, 2019). Furthermore, more passageways between houses and large vacant spaces were also identified as problematic to the residents through attracting opportunity offenders. Otjomuise has more physical blind spots than Katutura. Many housebreakings and other crimes occurred nearby unmaintained spaces and mostly in the streets during dark hours. This may have been due to more access and escape routes. Crimes were based on three fundamental conditions: available opportunity, at the right time (dark hours) and right target (victim/house) (Haberman & Kelsay, 2020).

Similarly, offenders use these unmaintained spaces to hide and escape before and after burglaries, respectively. Offenders may feel welcomed at the hideout places to plan their modus operandi. Houses on the edge of the unmaintained spaces, including riverbeds, provide shelters to offenders where they comfortably hide and plan further criminal activities. These houses were more susceptible than others.

5.5. Neighbourhood physical layout

The two neighbourhoods offer opportunities for crime related to how they are planned, designed and managed. The findings indicated that there might be a link between the natural environment, such as slope and crime. However, the relationship between the slope and crime was not extensively investigated in this study to support or contradict Breetzke's (2012:66) work that steeper slopes 'had no effect' on burglary. The natural environment, such as hills, steep slopes and riverbeds, resulted in several prominent public open spaces – undeveloped and unmaintained, especially in Otjomuise. Unlike Katutura, Otjomuise's natural environment presents a challenge for spatial layout. Consequently, planning needs to be geared towards eliminating opportunities for crime. The neighbourhood layout (e.g. location of houses and street design) might be significantly influenced by other facts (cost of servicing land and its associated infrastructure) due to the natural environment.

The two neighbourhoods have similar designs in terms of the street grid. However, several of Otjomuise's residential blocks are long, justifying the existing passageways between houses. These passageways (Figure 4) are unsafe for pedestrians, particularly those connected to the vacant, unmaintained public open spaces (Figure 5), as offenders linger there and wait to rob individuals.

Figure 4. A passageway connecting a street and public open space.



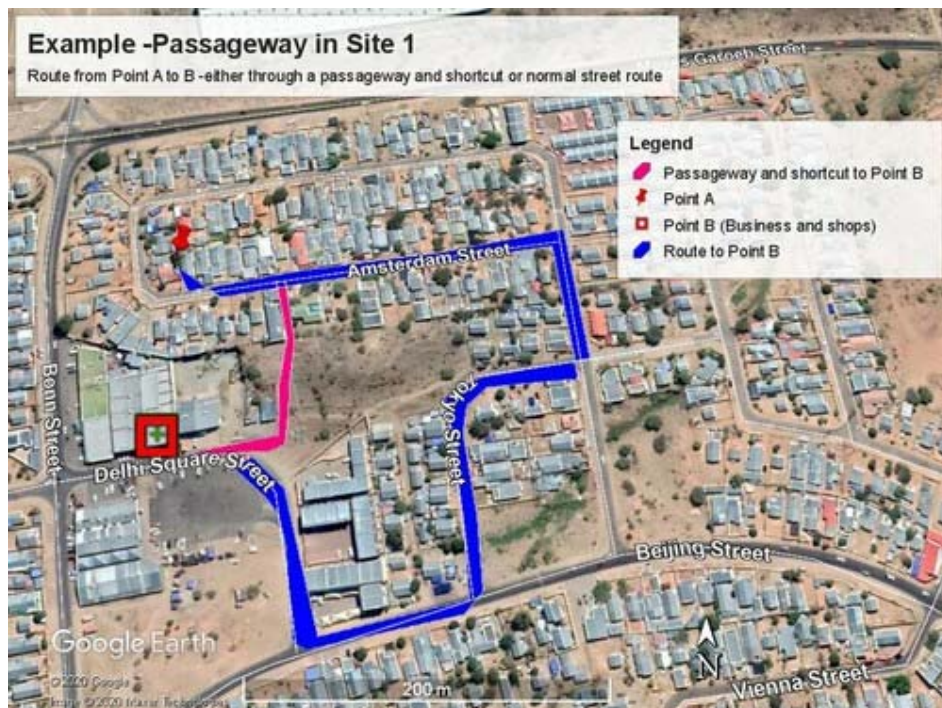
Figure 5. A path leading to a passageway outside Site 5.



The purpose of the passageways is to enhance accessibility for pedestrians. For example, if someone who resides at Point A needs to buy commodities at Point B (the main business centre of Otjomuise), this would mean walking a long distance along the street (Figure 6).

Figure 6. Illustrating argument for and against a passageway in Otjomuise.

Source: A adopted from Google, 2020.



The distance between points A and B (Figure 7) is a walking distance with no obstruction, such as the influence of the natural environment. It does not necessarily justify the need for a passageway (Figure 7). However, one can argue that not all passageways are required because the residential blocks are not long, and residents can easily reach their destinations.

Figure 7. Illustrating argument against a passageway in Katutura.

Source: Adopted from Google, 2020.



Jane Jacobs already highlighted the need for short blocks in the early 1960s. The Smart Growth and New Urbanism movements also discourage long residential blocks. Cozens (2008:430) states, 'New Urbanism promotes compact, pedestrian-friendly, mixed-use residential developments close to amenities and public transport'. Mixed-use environments may discourage opportunities for crime due to increased surveillance, more pedestrians and additional opportunities for social interaction and control. Similarly, it was also found in England, particularly in Liverpool, that alleyways behind or between plots can contribute to opportunities for crime (Young, 1999; Hirschfield & Young, 2000).

Surveillance at the neighbourhood level was also an issue of concern to the participants. The steep slopes and valleys affect the natural surveillance within the neighbourhoods and sites, particularly in Otjomuise. This is exacerbated by unmaintained public open spaces around the pathways and passageways.

5.6. Socio-economic conditions and weak social cohesion

The participants raised concerns about weak social cohesion and socio-economic conditions, including drug dealings, alcohol abuse, unemployment and poverty. The participants believed these influence crime and safety in both neighbourhoods. Keingub (2020-07-13), a youth community member, claimed, 'people do not have jobs and are in poverty. Poverty is real here. People use any opportunity that comes along their way to

improve their living or buy food'. Likewise, David (2020-08-01) boldly stated, 'if I do not have anything to eat, I will try by all means to bring bread at home'. This statement implies that some people commit crimes to sustain their families. Some community members also engage in drug dealings and alcohol abuse. For instance, a criminal investigator from Ndeya (12-08-2020) claimed that addiction to drugs and alcohol forces people 'to break into houses and steal whatever they find and go sell them quickly'. A community member from Katutura, Simasiku (06 July 2020), supported this sentiment: 'At night, the youth engage in drug use and sell stolen items, including exchanging items for drugs'.

Strong social cohesion can mitigate opportunities for crime. However, in the absence thereof, this chance is lost. A senior community member, van Wyk (2020-09-11), emphasised that everyone is 'on his/her own. No cooperation and communication because you cannot ask the neighbours for any help'. Even with proper planning and management of these two neighbourhoods, safety will be compromised by adverse socio-economic conditions, particularly in high-density and low-income neighbourhoods.

6. Practical implications for planning and management for safer neighbourhoods in the Namibian context

The United Nations developed Guidelines on Safer Cities and Human Settlements to guide national and local governments to plan and make these places safer. This approach is based on prevention rather than a reaction to address the complex challenges of insecurity, crime and violence (Ceccato et al., 2020). Given this, sustaining safety within neighbourhoods requires ongoing commitments from physical and social perspectives. Maintaining security requires a solid partnership among all the stakeholders, such as the community and police, to ensure social control of the space. Safety is affected by broader socio-economic conditions, specific physical characteristics, and social issues within neighbourhoods. Addressing only one component, such as physical characteristics, may be insignificant. Hence, the three components must be addressed simultaneously to pursue a safer neighbourhood. It is worth mentioning that physical characteristics can and should play an essential role towards safer and sustainable cities. Crime prevention and safety foundation lies within a legal framework, including specific planning policies. Crime prevention and safety can be addressed through appropriate policies to ensure proper neighbourhood planning. A lack of CPTED policy at national, regional and local levels is of great concern for safer and secure neighbourhoods for all, including the marginalised members of society. They are often overlooked during the planning and management of neighbourhoods. It is, therefore, important that countries such as Namibia acknowledge the UN guidelines and incorporate measures for safer cities in their policies.

Planning for safety means reconsidering inappropriate land use allocation, such as alcohol outlets and their impacts on the surrounding environment in terms of traffic flows and crime and safety. The absence of a safer planning representative in the past and current board's compositions responsible for dealing with urban and regional planning matters perpetuate the trajectory of considering crime prevention and safety through planning as insignificant. The current board offers an opportunity to include a member to advise the board on safer cities and implement CPTED at a local level.

Starting at the policy level would make provision for other interventions and improvements. Similarly, there is a need to re-think town planning standards and guidelines for proper and informed neighbourhood planning, including addressing incompatible land uses and the presence and location of crime generators and attractors such as alcohol outlets. For example, Bowers (2014) claims that crime generators and attractors should not be situated close to one another to lessen opportunities for crime. The threshold capacity of specific land-use activities can also exceed the capacity and ability of police and neighbourhood

watch to maintain a high standard level of safety for all the residents (Cozens & Love, 2015). However, this is not always a simple matter of closing down all the alcohol outlets. There is a need to consider current and future locations of alcohol outlets within residential areas, particularly those close to schools and churches. However, it calls for a broader discussion on the impact of alcohol outlets or *shebeens* in the context of poverty and unemployment and the lack of places of entertainment, especially in lower-income neighbourhoods. While *shebeens* are acting as a significant crime attractor and generator, they also offer opportunities for earning a livelihood in an economically constrained environment. The discussion needs to take place within the ambit of local economic development and social perspectives to acknowledge the impact of alcohol outlets on general crimes, based on available evidence from developed and developing countries. Such a national discussion is essential for crime prevention, but it can also uplift people's sense of belonging and contribute to 'individuals' well-being. However, the local reality and context are critical to such national discourse. The lack of amenities and spatial development imbalances between low and high-income neighbourhoods need to be revisited and require long-term solutions and commitments. Furthermore, the current and future expansion of informal settlements presents a severe threat to the safety of neighbourhoods and further exacerbates social and physical disorders and crime. Solving the situation of the informal settlements requires concerted efforts and long-term solutions from all stakeholders.

It also raises issues related to the layout or road structure of the neighbourhood and whether more open or closed road networks are more or less conducive to facilitating opportunities for crime. The structure of the roads relates to Armitage's (2013:127) work 'that offenders prefer permeable neighbourhoods due to the ease they offer in terms of entry, through movement and escape'. According to this study, altering the neighbourhood's layout through the closure of streets and passageways have proven to reduce crime (Armitage, 2013). In addition, closing streets is similar to cul-de-sacs, which remains inconclusive. However, Armitage (2013:133) reported that 'cul-de-sacs are the least safe option but can be safer when embedded into the street network and made large and linear enough to provide that safety in numbers'. Different types of cul-de-sacs offer diverse findings regarding safety; however, this was beyond the scope of this article to disentangle the differences and similarities. The study also demonstrated how unnecessary passageways and vacant and unmaintained spaces facilitate several crimes and require appropriate urban and spatial restructuring mechanisms such as growth management and infill development, incorporated (consolidated) into adjacent land uses.

Another prominent issue raised was the relationship between density and opportunities for crime, especially in lower-income neighbourhoods that are often less developed. The issue of density relates to Falk's (2006) work that high-density neighbourhoods are often perceived as overcrowded and characterised by several problems such as crime and socio-economic conditions. High population density and other social influencers, such as weak social cohesion, can lead to disorder and exacerbate specific crimes, as in Otjomuise. Density appeared to be less of an issue in Katutura due to the higher levels of development present there. Likewise, many low-income neighbourhoods, including Katutura, were labelled as dirty (Friedman, 2000), noisy and associated with high crime rates based on the history of criminal activity activities/violence, perceptions and stereotypes, and due to their physical characteristics and social issues, as well as socio-economic conditions. Severe socio-economic conditions (Lobonț et al., 2017) and weak social cohesion can negatively influence the ability of the physical infrastructure to mitigate opportunities for crime.

7. Conclusion

The article explored the role of urban planning and management for safer neighbourhoods in two low-income neighbourhoods, Katutura and Otjomuise, in the city of Windhoek. Despite

these neighbourhoods having been established before and after independence and based on different planning approaches, the study found similar features linked to opportunities for crime. The discussion confirmed that safety is a serious concern and a threat to the socio-economic well-being of the neighbourhoods. At a micro-scale, the findings revealed that the natural environment, including steep slopes, influenced the physical planning of the two neighbourhoods, particularly in Otjomuise, where passageways and other irregular shapes of vacant sites are prominent and created opportunities for crime. Many burgled houses in some sites and both neighbourhoods were either adjacent, opposite or within the proximity of physical blind spots that might have facilitated such crime cases. Therefore, urban planning at the neighbourhood and precinct levels need to reduce opportunities for crime by addressing the physical and social issues conducive to creating crime opportunities in these areas. Planning and designing safe neighbourhoods could go a long way to address some of the critical concerns related to the nature of the physical environments. Of great concern to both neighbourhoods was the location of alcohol outlets within residential areas. Participants were concerned with alcohol outlets, where most crimes such as robberies, assaults and snatching were committed. Their presence within the residential areas provides the opportunity for offenders to familiarise themselves with opportunities in these areas.

Residents bemoaned the disparities in development and services between the formal, semi-formal and informal sections of Otjomuise, as it impacted their safety, well-being and peaceful coexistence. However, the discussion also indicated that broader socio-economic conditions influence safety within these neighbourhoods to an extensive extent. This issue should be addressed at a city level, where urban planners should consider the impact of a lack of development on crime. Planning approaches should work together with social crime prevention and law enforcement measures to address the socio-economic conditions and local opportunities for crime.

While crime remains a serious concern in Southern Africa, including Namibia in particular, planning can significantly reduce opportunities for crime and enhance all residents' safety. Planning for safety requires focusing on planning policy, standards, guidelines and assessments. The findings revealed no reference to safer neighbourhoods in the current planning policies. CPTED needs to be acknowledged and considered for implementation where appropriate. Crime prevention needs to take centre stage during planning and design. Planning needs to consider the specific context and adopt a more appropriate approach to eliminate opportunities for crime. The steep slopes area could be used for high-rise apartments rather than single apartments for improved sightlines and surveillance. This approach will complement the large block of high-rise and row-rise flats in Otjomuise. In contrast, others could be used for recreational purposes. The current Urban and Regional Planning Board can include a knowledgeable person on how CPTED can be integrated into current plans. Moreover, planners in Namibia could consider adapting the UN's guidelines for safer human settlements to guide the development and modification of existing neighbourhoods to reduce local opportunities for crime. Such a combination of measures can go a long way to enhance the role of planning towards safer neighbourhoods in Namibia and offer a way forward to consider the relevance of CPTED in developing countries.

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