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TOWARDS A SECURED URBAN NEIGHBOURHOOD ENVIRONMENT: RETHINKING THE LIVEABILITY OF CITIES

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ABSTRACT

One of the main issues influencing the urban environment is security. Life in urban areas can be affected by the state of security in their neighbourhood and this in turn influences urban attractiveness. Currently there are various researchers exploring security in the built environment, several of whom cite urban design as a main factor, or develop a rating scale which defines and quantifies urban elements that significantly affect security. In this study, six Security factors were used to analyze Security in Keffi urban neighbourhood environments. A Simple random sampling method was adopted, and questionnaires were administered to few residents of the neighbourhoods in Keffi as respondents. The questions were formulated using a Likert scale with which respondents were asked to express the importance of indicators under each factor on a five-point Likert style response scale (very Secured to not Secured). The result indicated that Security factors including personal Security from crime, personal Security from accidents, Security of personal property, access to police protection, availability of fire service, availability of security guards were the major determinants of Security in Keffi Neighbourhoods. This maybe predicated on the fact that the security challenges in the country is alarming and thus the choice of a Secured environment by residents of Keffi. Going by the overall results gathered, a conclusion was drawn that Keffi on the overall is Secured and a livable town. The experience from this research suggest that, an understanding of the Security of a town or an urban area can provide a general overview of why the people choose to live in the environment they are living or wish to relocate to the environment.

Keywords:

Security, Urban, Environment.

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1. INTRODUCTION

An urban area is an abode of abodes; an enclave of enclaves. It represents a group of human beings and their institutions interacting in a densely settled finite space, producing and distributing economic resources, services and other values. This explains why it is equally referred to as a distributional mechanism (Henry, 2004). The city is a mosaic of racial, ethnic, occupational, religious and ideological groups. Their differences generate both interdependence and conflict. It has been noted that urban neighbourhoods, communities and in fact urban areas are subsets of the city. An urban area comprises several communities while a community consists of many urban neighbourhoods (Henry, 2004). In cities throughout our urban world marked divisions persist between rich and poor, privileged and deprived, skilled and unskilled, employed and unemployed, healthy and ill, old and young, male and female, resident and immigrant, included and excluded, and inner city and outer city (Pacione, 2003).

Worldwide economic, cultural, environmental, social, etc. trends are having a greater and greater impact on urbanization. These global and local forces worldwide need to be understood to make sense of urbanization trends and other changes in the spatial distribution of the world's population over the last 15-20 years. Cities and urban-rural systems have been and will remain central to the socio-economic development of most countries. Nevertheless, the process of globalization may transform the economic and socio-cultural fabric of large urban areas and remodel their spatial structure. Ensuring that urban land serves the economic and socio-cultural needs of all urban inhabitants is one of the most complex tasks for urban government. At this juncture, competent and accountable urban governance is a key factor in the potential contribution of cities to economic and socio-cultural development. (Gilles, 2007)

The problems and challenges posed by the rapid urban growth in Nigeria just like every other developing countries of the world are immense. The explosive rates of growth have not only progressively complicated and aggravated inter-related problems of human settlements and the environment, but have been responsible for the general problem of human and environmental poverty, the declining Security and the under-utilized as well as untapped wealth of human resources (Sidhu, 2005). Presently, more than 80 million Nigerians live in poverty (Dawam and Ebehikalu, 2017). In fact, only China and India have more people than Nigeria. The demand for infrastructure, basic services and housing in expanding urban centres in Nigeria is on the increase. Housing and associated facilities such as pipe borne water, electricity, waste disposal etc. are grossly inadequate while millions of the citizenry live in substandard environments which are plagued by squalor and lack basic amenities of life such as shortage of schools, poor health facilities as well as lack of recreational facilities among others (Alkali, 2005).

2. LITERATURE REVIEW

One of the main issues influencing the urban environment is security. Life in urban environments can be affected by insecure environments and this in turn influences urban attractiveness. This work attempts to minimize the gap by establishing a framework for developing a quantitative security rating scale in urban environments to be used by urban stakeholders for evaluating and improving urban security. Urban characteristics: the literature survey shows that many researchers have noted that diverse urban elements are useful in assessing various risks in the urban environment. Many have pointed out which elements can assist, and others have described urban situations affecting vulnerable situations (Cooper Marcus and Sarkissian, 1986; Gehl, 1987, 2010; Lopez and Van Nes, 2007). Therefore, in order to develop a rating scale for

quantifying security, the literature is surveyed to define the urban elements relating to security. Currently there are various researchers exploring security in the built environment, several of whom cite urban design as a main factor, or develop a rating scale which defines and quantifies urban elements that significantly affect security.

Security can be described as the degree of protection against danger or criminal activities (Stummvoll, 2012). Jacobs (1961) defined the term 'eyes on the streets' as an important component for making good, safe and secure neighbourhoods. She defined this feature as one of the main factors that should exist in a good city. Both Newman (1972, 1995) and Jacobs (1961) defined the issues of visibility and surveillance as core factors for evaluating security, which can be measured by length of the sight-lines. Oscar Newman's (Newman, 1972, 1995) 'defensible spaces' theory emphasises the relationship between space and crime. He proposed a mechanism focusing mainly on surveillance by users. He argued that there should be a hierarchy of space types from the most public area, the street, to the most private, the dwelling interiors, with semi-public space reserved for the dwelling's visitors and semi-private space for every single dwelling but open to public access.

Greenberg et al. (1982) argued that some urban neighbourhoods maintain a relatively low level of crime despite their physical proximity and social similarity to high-crime areas and explored differences in physical characteristics and various dimensions of the concept of safety and territoriality. Their study focused on the objective characteristics of neighbourhoods that have been linked to crime and territorial issues.

Objective characteristics were defined relating to physical designs, social characteristics and characteristics of neighbourhood boundaries, such as usage, vacant land, housing units per structure, street characteristics, percentage of small blocks within the neighbourhood street, building setbacks, distribution of

commercial land use, numbers of blocks, residential blocks, street lights, visual obstructions and parking types.

Many of these characteristics can be defined objectively. Cooper Marcus and Sarkissian (1986) pointed out the importance of neighbourhood surveillance, which should be developed with a delicate balance between designing for ease of surveillance and designing for privacy. They described opportunities for surveillance which can be facilitated by the positioning of windows and gardens, the location and design of pathways and play areas, and the quality of lighting and landscaping. In addition they found a correlation between security and vandalism. Furthermore, they defined several elements that can assist in preventing criminal events, for

example, visible entry from the nearest public circulation path, front porches designed and located to enable surveillance from windows, secured footpaths, paths which allow pre-scanning before use, and footpath lighting. Gehl (2010) also related to safe and secure cities, mainly searching for elements that can be determined and seen in an urban area. He determined that the potential for a safe city is strengthened when more people move about and stay within the city space. Hence, a city that invites people to walk must have a reasonably cohesive structure that offers short walking distances, attractive public spaces, and varieties of urban functions and, as a result, increased activity and the feeling of security in and around the city space.

Thus there are more eyes along the street and a greater incentive to follow the events going on in the city from surrounding housing and buildings, and as Gehl described: 'Life in the city means safer cities'. In addition, he determined several urban characters and elements that promote this goal, such as clear-cut territories. Interacting with others and protecting the private sphere are two sides of the same coin. Clear articulation of private and public territories is an important prerequisite for a sense of security.

Other key urban features which affect security are discussed by Little (2004), who points out that civil infrastructure systems are essential in providing security to a range of stakeholders, including governmental agencies, the business sector and the general population. Infrastructures which affect security are complex, vulnerable and intertwined systems that lie within the public domain but in many ways are out of its reach. Little's analysis of infrastructure systems draws a management strategy that reflects on the urban security.

In this research paper, the aim is to explore the urban element as affecting vulnerability in the urban environment and by defining a way to measure the related parameters objectively in urban environments as perceived by neighbourhood residents as it affects their neighbourhoods within the context of a medium sized community in Nigeria (Keffi). The objective is to analyze the security pattern of the neighbourhoods in Keffi based on the following parameters: personal Security from crime, personal Security from accidents, Security of personal property, access to police protection, availability of fire service, and availability of security guards, as being derived from the urban environment. We also view urban security as being subjective since we ask residents what they perceived to be a secured environment in their neighbourhoods.

3. MATERIALS AND METHODS

The research utilized descriptive and closed-ended designed questions which involved the collection of quantitative and qualitative data, including inhabitants' information and Environmental infrastructures. In this study, Security factors such as personal Security from crime, personal Security from accidents, Security of personal property, access to police protection, availability of fire service, availability of security guards were used to analyze Security in Keffi urban neighbourhood environments. A systematic random sampling method was adopted in estimating the sample size from the sample frame, and questionnaires were administered

to the residents of Keffi as respondents. The questions were formulated using a Likert scale with which respondents were asked to express the importance of indicators under on a five-point Likert style response scale (very Secured to not Secured). Apart from this, the questionnaire also contained demographic questions that included the respondent's age, gender, tenure status and length of residency in the neighbourhood. The results obtained were recorded into various categories to facilitate statistical analysis. A mean of the factors was calculated to measure and analyse the Security factors in the neighbourhoods to determine the Security patterns of the neighbourhoods. This research provided better understanding of the security index of Keffi.

4. RESULTS AND DISCUSSION HOW SECURES ARE KEFFI URBAN NEIGHBOURHOODS

Studies on urban crime and violence in Nigerian cities revealed that the total index has experienced an upscale of 120% to 156,455 cases in 2004 from 70,823 in 1980 (Sidhu, 2005). In 2015, the rate was projected to reach 208,076 (Sidhu, 2006). Similarly, according to data, 2,489 road accidents occurred in the fourth quarter of last year, 2018 while 2,482 accidents were recorded in the first quarter of this year, 2019 (NBS, 2019).

In this study, the Security factors were measured indirectly using perceived level of crime, Security of property, Security from accidents, Security of properties and access to police and fire services. The availability of police protection and presence of security guards in their urban neighbourhood compound is deemed to be the most important Security factors. Guards at the entrance guardhouse as well as periodic

patrols by “Vigilante” group give residents a sense of Security. Nonetheless, the nature of this service is more of a public good, and those who do not pay their dues obtain a free ride. This could be part of the reason residents feel reluctant in engaging the service. Overall, the mean scores on crime and criminality with the neighbourhood is 4.30, which is a high level of Security. Generally, therefore, it may be concluded that on the basis of crime alone, Keffi is a Secured and liveable place. However, only 18 neighbourhoods scored above the city average of 4.3 with 22 neighbourhoods below the average, indicating that, improvements can still be made to raise the residents’ expectations. Where compared with fire services, the entire neighbourhood do not feel Secured from fire with an average mean score of 2.4 (see table 1).

Table 1: Summary of the level of security in Keffi urban neighbourhoods

S/N	Neighbourhoods	Crime		Accidents		Properties		Police Protection		Fire Service		Security Guards	
		Mean	Level of Security	Mean	Level of Security	Mean	Level of Security	Mean	Level of Security	Mean	Level of Security	Mean	Level of Security
1.	Angwan Jabba	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
2.	Angwan Jama'a	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
3.	Angwan Kare	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
4.	Angwan Lambu	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
5.	Angwan NEPA	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
6.	Angwan Rimi	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
7.	Angwan Sokotawa	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
8.	Angwan Stadium	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
9.	Angwan Tanko	4.6000	Very Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
10.	Angwan TIV	4.1750	Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
11.	Angwan Tofa	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
12.	BCG	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
13.	CRDP	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
14.	Dadin Kowa	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
15.	Doctor's Quarters	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
16.	Emir's Palace	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
17.	FMC	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
18.	Ganuwa	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
19.	Gauta	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
20.	GRA	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
21.	High Court	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
22.	Kaduna Road	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
23.	Karofi	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
24.	Kofa	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
25.	Kofan Goria	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
26.	Kofar Hausa	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
27.	Kongo	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
28.	Lowcost	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
29.	Makwala	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
30.	Maloney Hill	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
31.	Massalaci IDI	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
32.	NTA	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
33.	Pyanku	3.9000	Secured	4.0500	Secured	4.6000	Very Secured	3.6500	Secured	3.1500	Fairly Secured	4.1500	Secured
34.	Sabon Layi	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
35.	Tsohon Kasuwa	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
36.	Tudu	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
37.	Tudun Amama	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured
38.	Tudun Wada	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
39.	Yara	4.6000	Very Secured	4.5500	Very Secured	3.5750	Secured	3.9000	Secured	2.1500	Less Secured	3.4250	Fairly Secured
40.	Yelwa	4.1750	Secured	4.3250	Secured	4.2750	Secured	4.4750	Secured	2.6750	Fairly Secured	3.9250	Secured

Source: Researcher's field exercise, 2021.

Key: 0-1.45=Not Secured; 1.5-2.45=Less Secured; 2.5-3.45=Fairly Secured; 3.5-4.45=Secured; 4.5-5=Very Secured

Apart from the formal surveillance of security guards and police, casual or informal surveillance is equally critical. The latter concerns the design of the site that allows residents to observe the activities of their neighbours and families. The process of seeing and being seen creates a sense of community, which in turn creates territoriality among its inhabitants. The ability to take control of living space and better social surveillance tend to reduce crime and the fear of crime in communities. Adding to this, urban neighbourhood design also impacts travel behaviour, which is important in reducing injuries and casualties due to accidents.

From the above findings (table 1), one may deduced that the creation of a walk-able urban neighbourhood will encourage more pedestrian traffic that will provide greater opportunities for natural surveillance. In addition to minimising residents' worries, such a design will improve air quality, reduce

congestion and create a more liveable environment. At the same time, reduced dependency on vehicles in the urban neighbourhood, this is the first step towards environmental sustainability. The perception of crime is greatly influenced by the way an urban neighbourhood is managed and maintained. In addition to the presence of criminal activities, the presence of incivilities such as vacant lots, litter, vandalism, graffiti and rundown areas or buildings tends to generate a fear of crime. When considering a strategy to reduce the fear of crime and even crime itself, urban neighbourhood must be designed with minimal unassigned space. Such ambiguous spaces are vulnerable because they allow residents and outsiders to engage in mischievous and antisocial activities. In view of this, spaces need to be clearly designated as private, public or semi-private in order to prevent urban crime (see fig. 1).

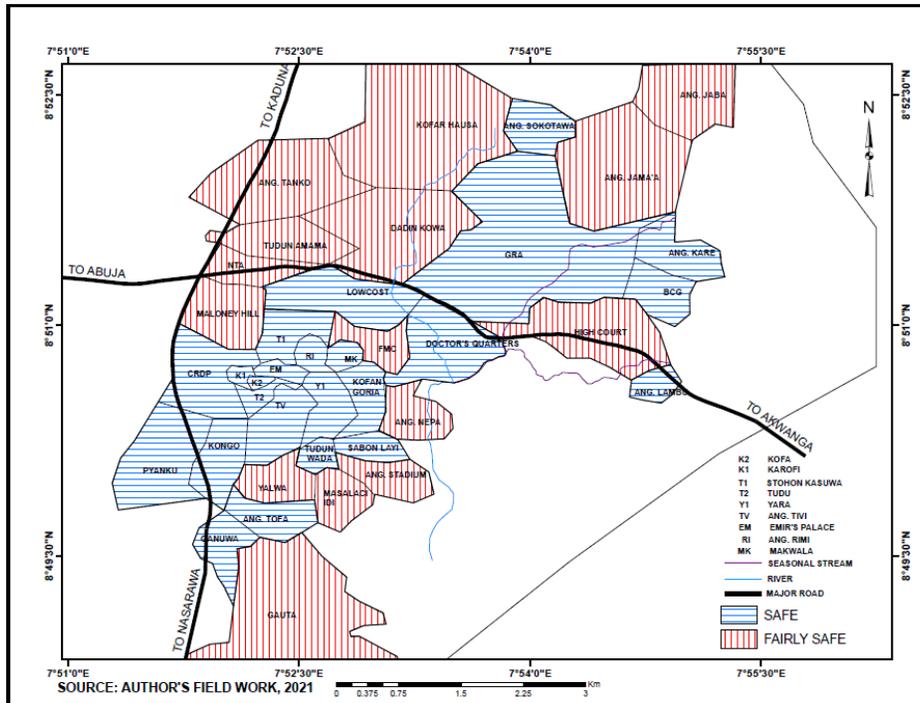


Fig. 1: Level of Security with Security factors in Keffi neighbourhoods

Source: Field survey (2021).

5. CONCLUSIONS

The findings of this study have provided a better understanding of what Keffi residents considers to be the key determinant of Security in Keffi that impacts on its spatial neighbourhood pattern. Going by the overall findings and analysis of this Security determinant of Security in all the neighbourhoods of Keffi, the results showed that neighbourhoods such as GRA, CRDP, Kongo, Lowcost, Doctor's Quarters, Pyanku are the highly liveable neighbourhoods in Keffi, followed by neighbourhoods such as Ang. NEPA, Ang. Stadium, Dadin Kowa, Kaduna Road, NTA, Tudun Amama, Ang. Tofa, Gauta, High Court, Maloney Hill, Kofar Hausa, Yelwa, FMC, Massalaci IDI, Ang. Jabba, Ang. Jama'a the averagely liveable neighbourhoods, while neighbourhoods such as Makwala, Ang. Rimi, Yara, Ang. TIV, Tudun Wada, Sabon Layi, BCG, Tsohon Kasuwa, Emir's Palace, Kofan Goria, Tudu, Kofa, Karofi, Ang. Tofa, Ganuwa, Ang. Sokotawa, Ang. Kare, Ang. Lambu are grouped under poorly liveable neighbourhoods. Going by the overall results of all the neighbourhoods gathered, a conclusion can also be drawn that Keffi on the overall is Secured and a liveable town if it were to be placed on a percentage score. The experience from this research suggest that, an understanding of the Security of a town or an urban area can provide a general overview of why the people choose to live in the environment they are living or wish to relocate to an environment.

6. RECOMMENDATION

The analysis indicated that efforts to promote urban neighbourhood Security should focus on ensuring the overall Security of the community because this tends to increase their Security level. In Keffi, the majority of the dwellings are being separated from the street by high fences. This is an expression of

feeling unsecured and the distrust that residents hold toward their environment. Rather than providing more privacy and Security, such design has actually caused the street to be more detached from the residents. It is suggested that future town planning should consider the concept of social surveillance in their design.

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