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# SECURITY ARCHITECTURE AND SAFETY IN RESIDENTIAL NEIGHBOURHOODS DURING COVID-19 PANDEMIC LOCKDOWN, LAGOS, NIGERIA

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Abstract: This paper examines the architecture of security and safety in residential neighbourhoods of Lagos State during COVID–19 pandemic lockdown in **Abstract:** This paper examines the architecture of security and safety in residential neighbourhoods of Lagos State during CUVID—19 pandemic lockdown in Nigeria. Both primary and secondary data were sourced using structured questionnaire and published materials. 200 respondents were selected proportionately across the selected residential neighbourhoods in the five local administrative division in Lagos State; questionnaire was designed electronically and deployed into a server using Survey CTO platform to collect information from the respondents. Over 90.0% of the residents claimed to be aware of COVID—19 lockdown and acknowledged that there were security challenges in their neighbourhoods. One Way Analysis of Variance (ANOVA) revealed that respondents being either victims or perpetrators of security threats were 32.0% before, 33.5% during and 33.6% after the COVID—19 lockdown. Variables causing security threats were: poverty (26.0%), unemployment(30.0%) and hunger(30.0%). Respondents who claimed safe walking in the night before, during and after COVID—19 lockdown was 86.0%, 30.0% and 56.0% respectively. The study concluded that Government's efforts on the security architecture and safety of residents before, during and after COVID—19 pandemic lockdown were insufficient. Provisioning of equipment to security personnel, media enlightenment on crime hotspots, and creation of conducive environment for employment opportunity and youth empowerment to reduce crimes, is required required.

Keywords: Security architecture, Residential neighbourhood safety, COVID-19 pandemic, Lockdown

### 1. INTRODUCTION

The evolution of insecurity in the urban centers, especially during the last decade, has considerably altered human understanding of residential neighborhood safety. United Nations (2013) affirmed that contemporary security challenges in the residential neighborhoods are not necessarily activated by worldwide war and interior clashes but by incessant and determined neediness, atmosphere-related debacles, composed crime, human dealing, wellbeing pandemics and abrupt monetary and budgetary downturns. Therefore, residential neighborhood insecurity gives rise to more intractable crises that are not only threatening individuals' wellbeing but often spillover into broader regional, national and international security threats.

Miller (2009) observed that residential neighborhood insecurity exacts a high cost on global development. He further noted that in sixty countries, over the last ten years, violence, crime, incessant bombing, terrorism, banditry and kidnapping have had significant effects and directly reduced economic growth, hampered poverty reduction efforts and limited progress towards the actualization of Millennium Development Goals (MDGs). Robert (2012) noted that a considerable number of middle and lower-income cities exhibit an above-average rate of residential neighborhood insecurity. He stated further that residential neighborhood insecurity is becoming more widespread and chronic in many of the world's largest-growing cities particularly in Latin America, the Caribbean, Sub-Saharan Africa, as well as South and Central Asia. While affecting all socio-economic groups in myriad direct and indirect ways, the burden of residential neighborhood insecurity is heavy on the urban poor.

Ogboi (2013) opined that over the years, the incidences of crime and violence have increased tremendously in Nigerian cities, making some residential neighborhoods literally inaccessible. The cities experience a wide range of criminal activities ranging from petty to violent, banditry, kidnapping, Fulani herdsmen attacks, Boko Haram and organized crimes which have led to grievous fatalities and, in extreme cases, death. The crimes are also aided by institutional weakness and deficiencies in security architecture. Against this background, the study examined the architecture of security and safety in residential neighborhoods during the COVID–19 pandemic lockdown in Lagos, one of the states with the highest crime rate in Nigeria. 2. CONCEPTUAL AND THEORETICAL ANCHOR

The concept of urban security governance and theory of citizens' participation are used as anchors for this study because these are considered appropriate for examining the architecture of security and safety in residential neighborhoods of Lagos during the COVID-19 pandemic lockdown in Nigeria. Danzi (2011) simply defined security governance as the application of governance theory in security studies. Based on the theoretical discussion and empirical observation of security and governance, he further defined security governance as a process during which security capacity can be strengthened through an effective

governing mechanism. According to Weber (2004), security governance comprises five features: hierarchy, the interaction of a large number of both public and private actors; both formal and informal institutionalization, relations between actors that are ideational in character, structured by norms and understandings as well as by formal regulations and collective purpose. Weber (2004) further stresses that security governance involves coordinated management and regulation of issues by multiple and separate authorities, the interventions of both public and private actors (depending upon the issue), formal and informal arrangements, in turn, structured by discourse and norms purposefully directed toward particular policy outcomes.

Danzi (2011) opined that security governance increasingly encompasses multi–dimensional indirect relationships with plural and dispersed societal entities. He identified six dimensions of security governance which include:

- actors both public and private, governmental organizations and non–governmental organizations, national, regional and global organizations properly participate in urban security/safety process and assume consequent responsibilities;
- direction order of authority is distributed into three, that is top–down, bottom–up and horizontal The bottom–up approach is a good source of information feedback and horizontal interaction is integral to inter–organizational communication and security sector reform;
- channel this is obedience by authority and where hierarchical power is surpassed by mutual trust, joint vision and negotiation. More efficient urban security management is realized through a well–agreed goal;
- form flexible and soft elements are brought into urban security management style. The traditional strict and formal orders are replaced with interpersonal negotiation and discussion;
- model security governance has more than one model; it is context–specific. The extent to, and the level at , which security governance could be adopted and applied depends largely on the key factors of that context, such as human resources, legal environment and the development of civil society;
- scope security governance can simultaneously find its empirical cases in the neighborhood, urban, national, regional and global range.

What needs to be stressed is that each dimension might take a variety of forms and different extents along with a range of the theoretical constructed framework. Danzi (2011) maintains that the presentation of the security administration hypothesis in urban security is known as urban security administration. Urban security administration evolved from the advancement of guilt between 1960s and 1990s when an exponential increment of culpability on the planet occurred (Findlay, 1999). As referenced by Adorno (2005), within the period of 30 years, the situation has gone from a narrative of wrongdoing as a special case to an account of regular crime while pictures of blameless are supplanted by change as well as up and coming risks. Around 1995, the degree of guilt in created nations balanced out and even declined in the previous decade. With time, in most of creating nations, misconduct has proceeded to either develop or balance out, but with a more elevated level of viciousness (United Nations Chronicle, 2013).

In the recent time, there is less attention on the use of arms and ammunitions in the protection of towns and cities from threats to the development of policy measures that aimed at protecting people and territories from man-made and natural threats otherwise called urban security concept. Urban security administration is comprehended as the nonattendance of a genuine danger with respect to guilt and the emotional view of assurance through different auxiliary and nearby factors (UN Chronicle, 2013). This definition of urban security governance buttressed the view of the European Organization for Security (2013), when it stated that urban security governance encompasses measures aimed at protecting people, infrastructure, processes and assets within urban spaces from man-made and natural threats. Urban security governance was explained further by the European Organization for Security (2013) as a variety of solutions, services and technologies for urban critical infrastructure protection, command and control while transportation security can make valuable contributions to security smarts, sustainable and resilient cities and services for free, prosperous inhabitants. Martin and Murard (2014) described urban security governance as a shared target, synonymous with public tranquility and peaceful enjoyment of public spaces for people. Security governance cannot be inclusive, collective and successful without the full participation of the citizens in terms of decision-making, policy formulation and implementation, especially on issues that bother on security and safety.

The root of citizen participation can be traced to ancient Greece and Colonial New England. Before 1960s, governmental processes and procedures were designed to facilitate external participation. Citizen participation was institutionalized in the mid–1960s with President Lyndon Johnson's Great Society programs (Cogan and Sharpe, 1986). Ohio State University fact sheet cited Cahn and Camper (1968) on the three rationales for citizen participation as follows: that merely knowing that one can participate promotes dignity and self–sufficiency within the individual, taps the energies and resources of individual citizens within the community and provides a source of special insight, information, knowledge, and experience, which contributes to the soundness of community solutions. These rationales influence the benefits of citizen participation to the planning process in terms of: information and ideals on public issues, public support for planning, decisions reservoir of goodwill which can carry over to future decisions and spirit of cooperation and trust between the agency and the public (Cogan and Sharpe, 1986).

It is assumed that citizen participation is a desired and necessary part of community development activities required for community betterment. Citizen participation can be approached or defined in many ways. Spiegel (1968) defined citizen participation as the process that can meaningfully tie programmes to people. However, Andre (2012) defined citizen participation in a broad perspective as a process in which ordinary people take part- whether on a voluntary or obligatory basis and whether acting alone or as part of a group-with the goal of influencing a decision involving significant choices that will affect their community. The opinion of Cogan and Sharpe (1986) on the meaning of citizen participation is in line with Andre (2012) when they opined that citizen participation is a process that provides private individuals with an opportunity to influence public decisions and has long been a component of the democratic decisionmaking process. For any citizen participation programme, such as neighborhood security governance to be effective, Cogan and Sharpe (1986) suggest that it must meet legal requirements; the goals and objectives must be clearly articulated; it must command political support; be an integral part of the decision-making structure; receive adequate funding, staff and time; identify concerned or affected publics and delineate clear roles and responsibilities for participants. However, Andre, Enserink, Connor and Croal (2006) have been able to identify the following three research questions on citizen participation that are yet to be answered by today's researchers:

- What are the strengths and weakness of current mechanisms of citizen participation on security challenges?
- How does citizen participation fit in with representative democracy to address issues that border on security?
- What constitutes an effective process of citizen participation, and how should it be assessed in order to enhance the security and safety of towns and cities?

According to Kathleen (2015), for cities to become the stable, secure, equitable and prosperous living environments that people demand, we will need to craft effective mechanisms of urban security governance. It is therefore, assumed that effective citizen participation is consequential to urban security governance. However, in order to address the issue of urban insecurity in the residential neighborhood densities of the developing countries of the world, there is the need for the practice of good urban security governance. Srinivas (2015) stated that focusing on local action, multi–stakeholder coalitions will have to be built that can monitor and evaluate actions towards good governance and will advise and guide implementation. To do this, broad participation and partnership among all local stakeholders in the development of good urban security governance will have to be ensured at the local level. Srinivas (2015) further explains that efforts towards institutional and administrative reform will have to be taken so that the intended impacts of good urban security governance are achieved.

### 3. STUDY AREA

Lagos metropolis is located approximately on Longitude 2° 42<sup>1</sup> and 3° 40<sup>1</sup> East of the Greenwich Meridian and Latitude 6° 23<sup>1</sup> and 6° 40<sup>1</sup> North as the Equator. Lagos shares boundary with Ogun State in the northern and north–eastern part, Republic of Benin in the western parts and Atlantic Ocean in the southern part (Figure 1). The vantage position of Lagos in terms of easy accessibility by air, water and land transport, either from within the country or outside the country, contributed to its sporadic growth and attendant residential neighborhood security challenges (Balogun, 2018).

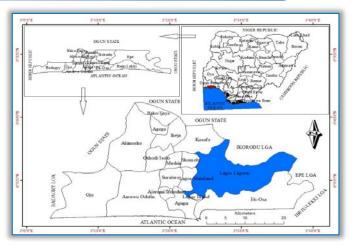


Figure 1: Map of Lagos State in the Context of Nigeria

### 4. METHODS

This research employed a three-stage data collection. The first stage identified Lagos State into five Local Administrative Divisions (Badagry, Epe, Ikorodu, Ikeja and Lagos) in form of clusters. The second stage identified the local governments in each of the divisions while the third stage identified the neighborhoods where respondents were selected for interview and data collection. The questionnaire was designed electronically and deployed into a server using Survey CTO platform from which enumerators went to the selected neighborhood and randomly selected residents for face-to-face interviews. The

sample size considered for this study is 200 which are conveniently linked with the available resources as it is very tough to conduct research during this period of COVID–19 without grants. The 200 samples were proportionately distributed across the selected neighborhood to ensure randomness based on the population of residential buildings in each division. The sample proportion for the divisions is as follows: Badagry (48), Epe (10), Ikeja (68), Ikorodu (13) and Lagos (61).

### 5. FINDINGS AND DISCUSSION

The study revealed that for every 10 persons, there are three females and this gender proportion is nearly the same across the administrative divisions of Lagos State. Among the respondents, 60 per cent constitutes the majority, among the respondents are between ages 35 and 49 years followed by those between 19 and 34 years which account for 21 percent. 50–64 years were 19 percent while nearly one falls between ages 65 years and above. However, nearly 4 out of 5 of the respondents are married with the highest in Badagry division and minimum at Ikeja. About 12 percent are single; five percent are widow/widower while three percent are divorced. Nearly 95 percent of the respondents are Nigerians while about five percent are non–Nigerians. The occupancy status of the residents showed that the majority, nearly 4 out of 5 are tenants with the highest in Badagry Division, 19 percent are either Landlords/Landladies with the highest in Ikorodu while three percent are squatters with the highest in Lagos.

Evidence showed that all the residents are aware of COVID-19 lockdown and the majority claimed that there are security challenges in their community before the lockdown. All the people in Ikorodu affirmed this while the least 27, percent, affirmed same in Badagry. This result indicates that the result of violence, kidnapping, etc. that has been in the news regarding Ikorodu is true, so also Lagos, Epe and Ikeja Divisions where a few proportions of the Lagos State residents rated the security of their residential neighborhoods at least good. 7 out of 10 rated the security to be fair while 14 percent submitted that the security was bad before the COVID–19 lockdown. During the COVID–19 lockdown, 100 per cent of the residents in Ikorodu affirmed they were faced with security challenges, Lagos (84 percent), Epe (70 percent), Ikeja (59 percent) and Badagry was fairly safe with 33 percent. Although, it is conspicuous that the majority, 60 percent rated the security of their community bad with all in Ikorodu while 3 out of 5 in Ikeja also affirmed this. 36 percent of the residents rated the security challenge as fair while a negligible proportion (4 percent) rated it well during the lockdown. After the COVID–19 lockdown, evidence still shows that there are security challenges in the State as 3 out of 5 affirmed they are faced with security challenges in their community with the highest (80 percent) in Lagos Division followed by Ikeja Division (71 percent), then Ikorodu Division (69 percent), Epe Division (50 percent) and Badagry Division (21 percent). The majority, 79 percent of the people of Badagry Division, claimed they are not faced with any security challenge irrespective of the proximity to the international border and the ocean. After COVID-19, the majority (80 percent) of the people in Badagry rated the security of their community bad which makes the division next to Ikorodu to be consistently faced with security challenges

There are various security threats in Lagos State being the commercial center and the fastest growing city in Nigeria that inhabits almost all tribes within and the non–Nigerians. However, not all the security threats are strongly active based on the government efforts to ensure that they secure the people and their

properties. Before COVID-19 lockdown, youth violence and cultist attacks account for 31 percent and 13 percent respectively while nearly equal proportion, 11 percent each, claimed they are faced with burglary and community clash. Other security threats account for 34 percent. Evidence from this investigation revealed that some security threats gained space during the COVID-19 lockdown. The percentage increase of armed robbery before and during COVID-19 lockdown is more than double; the percentage increase in burglary threats is nearly triple while there is a percentage decrease of 93 percent in cultist attack across the State. There was 35 percent decrease in youth violence, 83 percent decrease in community clash and 1 percent decrease in other security threats. There is a decrease in some of the security threats in the State during the lockdown which could be linked to the restriction of people's movement. Other security threats include rape and theft. The reason for the reduction in security threats is that there was no opportunity for miscreant's operation as a result of the restriction of movement. However, there was a nightmarish situation where "One Million boys" and "Awawa" gangs use the frightening scenario for robbery and other sorts of security threats in the State. There was no gang robbery before and during the COVID-19 lockdown as affirmed by the respondents and immediately after the COVID-19 lockdown, this investigation established that gang robbery was replaced with armed robbery in the state which could be linked to the operation of One-Million Boys and Awawa gangs who moved in large numbers to threat residents, subdue security powers and use the opportunity for robberies and destruction of properties in the residential neighborhoods of Lagos State and its neighboring State, Ogun; although many of them were later arrested.

There was a decrease in burglary attack before the lockdown while cultist attacks, community clashes and youth violence were on the increase. Other security threats were in a continuous decrease. This research is validated by Miller (2009) and Robert (2012) who discovered that hampering the economic growth could result in insecurity of any form. The study shows that there is a significant difference in the type of security threats most frequent across residential neighborhoods of Lagos State but not in the period before, during and after the COVID–19 lockdown (see Table 1 and 2).

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lable	1: Securit	y threats before	, during and	i ailer CU	VID-19 L	OCKOOWII

Types of Security Threat		Percentage	
Types of security filled	Before	During	After
Armed robbery	0.4	0.9	0.0
Burglary	11.4	42.5	31.3
Cultist attack	12.5	0.9	8.5
Gang robbery	0.0	0.0	1.6
Youth violence	31.1	20.2	24.4
Community clash	10.6	1.8	11.7
Others	34.1	33.6	22.5
Total	100	100	100
Total			

Source: Field Survey (2022)

Table 2.7 month of americanes in the most security and as in Edgos state							
Source of Variation	SS	Df	MS	F	P-value	F crit	
Type of Security threats most frequent	15863.33	5	3172.667	7.579	0.003	3.326	
Period (before, during and after)	800.3333	2	400.167	0.956	0.417	4.103	
Error	4186.333	10	418.633				
Total	20850	17					
	C	(2022)					

Table 2. ANOVA of differences in the most security threats in Lagos State

Source: Field Survey (2022)

There are several causes of security threats which vary from town-to-town and city-to-city. The causes of security threats were investigated before, during and after the COVID-19 lockdown. Before the COVID-19 lockdown, the people were asked about the causes of security threats in their residential neighborhoods. It is evident that unemployment takes the leading factor with 1 out of respondents adducing it for the cause of security threats. The next in rank is other security threats which accounts for 28 per cent. Poverty ranks next which 1 out of 5 respondents perceiving it as the cause of security threats, while hunger which accounts for 18 per cent remains the least cause of security threats in the residential neighborhoods of Lagos State. Ikorodu affirms that poverty and hunger have been the lead cause of security threats in their communities; most people in Epe claimed it is unemployment while the majority in Badagry claimed other causes, which could be linked to the nefarious activities of smugglers. During the COVID-19 lockdown, there was an upsurge in hunger as the highest cause of security threats in residential neighborhoods of Lagos. The lockdown has immense effect on the social-economy of the residents as many could not make it to their workplaces due to restriction of movement. Majority of the people in the informal sector have fewer savings that could sustain them for a longer period of time which consequently increased the level of hunger and resulted to security threats in the residential neighborhoods of Lagos. One out of four claimed that poverty and unemployment are the causes of security threats during the lockdown and more prevalent in Ikorodu than other divisions while others account for 20 percent. During the lockdown, Epe still claimed that unemployment is the chief cause of security threats in the community. After the COVID–19 lockdown, there were further increase in the level of poverty accounting for 26 percent

and unemployment accounting for 30 percent, as the causes of security threats. There was also a decline in the level of hunger accounting for 30 percent and other causes accounting for 16 percent when compared with the proportions during the lockdown. This result supported Miller (2009) that if the economic growth is hampered and resulted to mass poverty, insecurity will escalate beyond control. This was also supported by the United Nations report of 2013 that insecurity is not only caused by war but by abrupt monetary and budgetary downturns. The residents affirmed that other causes of security threats before, during and after the lockdown are discrimination, illiteracy, tribalism, bad governance and idleness. Table 3 presents the victims of security threats in residential neighborhoods of Lagos State. Evidence shows that both genders are victims with the significant difference before, during and after COVID–19 lockdown and no significant difference across the local administrative divisions (see Table 4).

Male and Female are the victims of security threat(s) in Lagos Residential Neighborhood									
			Local J	Administrative D	ivision		Total		
		Badagry	Epe	lkeja	lkorodu	Lagos			
Before	Count	44	10	63	13	54	184		
Belote	% within Local Administrative Division	33.1%	33.3%	33.7%	33.3%	31.8%	32.9%		
During	Count	44	10	62	13	58	187		
During	% within Local Administrative Division	33.1%	33.3%	33.2%	33.3%	34.1%	33.5%		
After	Count	45	10	62	13	58	188		
Alter	% within Local Administrative Division	33.8%	33.3%	33.2%	33.3%	34.1%	33.6%		
Total	Count	133	30	187	39	170	559		
	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
	ſ	Courses Field Cur	(2022)						

Table 3. Victims of security threat(s) in residential neighborhoods of Lagos State

Source: Field Survey (2022)

Period (before, during and after COVID-19 lockdown) 1.733 2 0.867 0.675 0.5358 4.4589	Table 4. ANOVA of victims of security threats in residential neighborhoods of Lagos										
Local Administrative Divisions 7160.933 4 1790.233 1394.987 0.000 3.8378	Source of Variation SS df MS F P-value F crit										
	Period (before, during and after COVID—19 lockdown)	1.733	2	0.867	0.675	0.5358	4.45897				
Error 10.2667 8 1.283333	Local Administrative Divisions	7160.933	4	1790.233	1394.987	0.000	3.837853				
	Error	10.2667	8	1.283333							
Total 7172.933 14	Total	7172.933	14								

### Source: Field Survey (2022)

This suggests that no gender is exempted from being a victim of security threats, while further evidence in this investigation reveals that, irrespective of the period, even during pandemic, both genders happen to be the victims. However, there is a significant difference in the genders that perpetrate security threats before, during and after COVID–19 but no significant difference between the local administrative divisions. As established above, lkorodu and Epe are more vulnerable to security threats but Badagry has few security threats, however, both genders perpetrate security threats across Lagos State (see Table 5 and 6).

Local Administrative Division								
	Badagry	Total						
Count	43	8	53	13	54	171		
% within Local Administrative Division	33.3%	32.0%	34.0%	33.3%	32.9%	33.3%		
Count	43	8	51	13	55	170		
% within Local Administrative Division	33.3%	32.0%	32.7%	33.3%	33.5%	33.1%		
Count	43	9	52	13	55	172		
% within Local Administrative Division	33.3%	36.0%	33.3%	33.3%	33.5%	33.5%		
Count	129	25	156	39	164	513		
% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
	% within Local Administrative Division Count % within Local Administrative Division Count % within Local Administrative Division Count	Count43% within Local Administrative Division33.3%Count43% within Local Administrative Division33.3%Count43% within Local Administrative Division33.3%Count43% within Local Administrative Division33.3%Count129	BadagryEpeCount438% within Local Administrative Division33.3%32.0%Count438% within Local Administrative Division33.3%32.0%Count439% within Local Administrative Division33.3%36.0%Count12925% within Local Administrative Division100.0%100.0%	Badagry Epe Ikeja   Count 43 8 53   % within Local Administrative Division 33.3% 32.0% 34.0%   Count 43 8 51   % within Local Administrative Division 33.3% 32.0% 32.7%   % within Local Administrative Division 33.3% 32.0% 32.7%   Count 43 9 52   % within Local Administrative Division 33.3% 36.0% 33.3%   Count 129 25 156   % within Local Administrative Division 100.0% 100.0% 100.0%	Badagry Epe Ikeja Ikorodu   Count 43 8 53 13   % within Local Administrative Division 33.3% 32.0% 34.0% 33.3%   Count 43 8 51 13   % within Local Administrative Division 33.3% 32.0% 32.7% 33.3%   Count 43 9 52 13   % within Local Administrative Division 33.3% 36.0% 33.3% 33.3%   Count 43 9 52 13   % within Local Administrative Division 33.3% 36.0% 33.3% 33.3%   Count 129 25 156 39 39   % within Local Administrative Division 100.0% 100.0% 100.0% 100.0%	Badagry Epe Ikeja Ikorodu Lagos   Count 43 8 53 13 54   % within Local Administrative Division 33.3% 32.0% 34.0% 33.3% 32.9%   Count 43 8 51 13 55   % within Local Administrative Division 33.3% 32.0% 32.7% 33.3% 33.5%   Count 43 9 52 13 55   % within Local Administrative Division 33.3% 36.0% 33.3% 33.5%   Count 43 9 52 13 55   % within Local Administrative Division 33.3% 36.0% 33.3% 33.5%   Count 129 25 156 39 164   % within Local Administrative Division 100.0% 100.0% 100.0% 100.0%		

## Table 5. Perpetrators of security threats in residential neighborhoods of Lagos

Source: Field Survey (2022)

Table 6. ANOVA of perpetrators of security threats in residential neighborhoods of Lagos

Source of Variation	SS	df	MS		P—value	F crit
Period (before, during and after COVID—19 lockdown)	0.400	2	0.200	0.545	0.600	4.459
Local Administrative Divisions	5795.067	4	1448.767	3951.182	0.000	3.838
Error	2.933	8	0.367			
Total	5798.4	14				
	E: 110	(2022)				

### Source: Field Survey (2022)

It is believed that most African countries do not have ultimate powers to subdue security threats as a result of inadequate mercenaries and politicization of government affairs and therefore, this has resulted to people using different security measures in protecting their lives and properties. In this investigation, it is obvious that 42 per cent of the people participating in the security of their community bulge down to employing security guards, the highest proportions among the measures put in place even beyond the lawful agents who are allowed to use weapons, which are the police accounts for 24 percent. The use of animals such as dogs receives little significance of 14 percent while the use of CCTV, community–based

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patrolling and the use of spiritual powers receive minimal proportions, among others. This investigation validates the European Organization for Security (2013) showing that varieties of solutions, services and technologies are critical infrastructure in the protection of lives and properties across the world. Further evidence in this investigation reveals that there is no significant difference between the measures before, during and after the COVID–19 lockdown, while there is a significant difference in the measures used for the security of residential neighborhoods in Lagos State (see Table 7 and8). Other measures account for 10 percent where the people fallback to spiritual, night guards, perimeter wire fence and gates.

It is established that the security measures put in place by residential neighborhoods are effective with a large chunk of affirmation in Badagry who have recorded low–security threats among the local administrative divisions, however, there are significant differences in the effectiveness of the security measures across the five local administrative divisions (see Table 9). This validates Martin and Murard (2014) reasoning that there is tranquility and peaceful enjoyment in the division.

	nty of residential neighbourhoods before, during and			1.6
Measures used for Security of communities in Lagos State		Before	During	After
Police/Military patrolling	Count	81	79	77
r olice/militaly patrolling	% within Local Administrative Division	25.40%	25.10%	23.50%
Community-based patrolling	Count	7	8	13
community—based patronning	% within Local Administrative Division	2.20%	2.50%	4.00%
Close Circuit Television Camera	Count	15	15	16
	% within Local Administrative Division	4.70%	4.80%	4.90%
Traditional/Spiritual power	Count	4	2	3
Tradicional/splittual power	% within Local Administrative Division	1.30%	0.60%	0.90%
Animals	Count	42	44	46
Attitudis	% within Local Administrative Division	13.20%	14.00%	14.00%
Private Security quards	Count	129	118	139
r nvale security guarus	% within Local Administrative Division	40.40%	37.50%	42.40%
Others	Count	41	49	34
UTIELS	% within Local Administrative Division	12.90%	15.60%	10.40%
Total	Count	319	315	328
IULAI	% within Local Administrative Division	100.00%	100.00%	100.00%

Table 7. Measure(s) used for the security of residential neighbourhoods before, during and after COVID—19 lockdown

Source: Field Survey (2022) Table 8: ANOVA on the measures use for security of residential neighborhoods

Source of Variation	SS	df	MS	F	P—value	F crit		
Security Measures	36246.571	6	6041.095	201.370	0.000	2.99612		
Period (before, during and after COVID—19 lockdown)	12.667	2	6.333	0.211	0.813	3.885294		
Error	360	12	30					
Total	36619.238	20						

### Source: Field Survey (2022) Table 9. Level of effectiveness of the security measures

	Effocti	veness of Security Measures		Local A	dministrative D	ivision		Total
	LIICUI	veness of security measures	Badagry	Ере	lkeja	Ikorodu	Lagos	TULAT
_	Highly	Count	29	3	33	0	19	84
of ) you	effective	% within Local Administrative Division	60.4%	30.0%	48.5%	0.0%	31.1%	42.0%
effective ( easure(s)	Averagely	Count	15	3	22	8	16	64
fec	effective	% within Local Administrative Division	31.3%	30.0%	32.4%	61.5%	26.2%	32.0%
of e mea	Low effective	Count	3	2	9	4	17	35
	LOW CIICCUVC	% within Local Administrative Division	6.3%	20.0%	13.2%	30.8%	27.9%	17.5%
Level	Not effective	Count	1	2	4	1	9	17
Š	NOTELIECTIVE	% within Local Administrative Division	2.1%	20.0%	5.9%	7.7%	14.8%	8.5%
	Total	Count	48	10	68	13	61	200
	Total	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Field Survey (2022)

Walking in the night hours in residential neighborhoods of Lagos State is inevitable to many as a result of the traffic gridlocks which keep people late to reach their residence at night. It is believed that if communities are secured from any form of threats, it is not unruly to walk in the night. However, this study investigated how safe people feel walking in their community at night and it is evident that before the COVID–19 lockdown, the majority, 86 percent claimed to feel safe walking in the night with a significant difference across the local administrative divisions. It is noted that it is safe to walk in the night in Ikorodu as claimed by the residents. This has been established earlier that the administrative division has high-security threats. Evidence shows that during the COVID–19 lockdown, it was not safe for people to walk in their communities at night except Badagry that is very safe while it is terribly worse in Ikorodu. This proves that there is a significant difference in feeling safe walking at night in residential neighborhoods of Lagos State, but after the COVID–19 lockdown, the situation improved as the majority, 56 percent, claimed they

feel safe walking in their communities at night with a significant difference across the local administrative divisions, although, the people of Badagry division feel safe walking in the night than other divisions while the people in the Ikorodu division are not safe. The fact that it is not safe walking in the night shows that the incidence of crimes and violence have increased and this corroborates Ogboi (2013) that it makes the neighborhood literally inaccessible.

The fear of security threat(s) is the fear of not being attacked by criminals who might not be residents in the communities but perpetrate evil in residential neighborhoods of Lagos State. The result is presented in Table 10 and it could be established from the outcome that Badagry Division has been consistently safe. Next are Ikeja and Epe whose rate of fear is found to be 81 percent, 57 percent and 50 percent respectively before the COVID–19 lockdown while Ikorodu and Lagos declined this claim. The trend changed during the COVID–19 lockdown for the local administrative divisions except Badagry division which rated the fear of security threat(s) lower than the other divisions. The Badagry division keeps the fear of security threat(s) low after the COVID–19 lockdown but was at the peak in Ikorodu division and considerably high in the other three divisions. It is evident that there is a significant difference in the fear of security threat(s) in the residential neighborhoods of Lagos State before, during and after the COVID–19 lockdown.

	Dating of	fears of security threats in Lagos State		Local A	dministrative [	Division		Total
	natiliy ui	Tears of security tilleats in Layos State	Badagry	Epe	lkeja	Ikorodu	Lagos	
	Vonchigh	Count	1	1	3	0	2	7
Ę	Very high	% within Local Administrative Division	2.1%	10.0%	4.4%	0.0%	3.3%	3.5%
op	lliab	Count	1	0	8	4	6	19
Before COVID—19 lockdown	High	% within Local Administrative Division	2.1%	0.0%	11.8%	30.8%	9.8%	9.5%
-19	Madarata	Count	7	4	18	8	32	69
-OI/	Moderate	% within Local Administrative Division	14.6%	40.0%	26.5%	61.5%	52.5%	34.5%
CO	Low	Count	39	5	39	1	21	105
ore	Low	% within Local Administrative Division	81.3%	50.0%	57.4%	7.7%	34.4%	52.5%
Bet	Total	Count	48	10	68	13	61	200
	TOLAT	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Very high	Count	9	4	17	13	16	59
٨		% within Local Administrative Division	18.8%	40.0%	25.0%	100.0%	26.2%	29.5%
During COVID—19 lockdown	lliab	Count	4	0	16	0	16	36
loc	High	% within Local Administrative Division	8.3%	0.0%	23.5%	0.0%	26.2%	18.0%
-19	Moderate	Count	4	3	17	0	23	47
-OIN	wouerate	% within Local Administrative Division	8.3%	30.0%	25.0%	0.0%	37.7%	23.5%
CO	Low	Count	31	3	18	0	6	58
ring		% within Local Administrative Division	64.6%	30.0%	26.5%	0.0%	9.8%	29.0%
Dui	Total	Count	48	10	68	13	61	200
	TOLAT	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Vonubiab	Count	4	1	16	2	5	28
Ę	Very high	% within Local Administrative Division	8.3%	10.0%	23.5%	15.4%	8.2%	14.0%
Nop	High	Count	6	3	19	8	19	55
ock	nığıı	% within Local Administrative Division	12.5%	30.0%	27.9%	61.5%	31.1%	27.5%
191	Moderate	Count	4	3	14	3	29	53
After COVID—19 lockdown	WOUCHALE	% within Local Administrative Division	8.3%	30.0%	20.6%	23.1%	47.5%	26.5%
COV	low	Count	34	3	19	0	8	64
ter (	LUW	% within Local Administrative Division	70.8%	30.0%	27.9%	0.0%	13.1%	32.0%
Af	Total	Count	48	10	68	13	61	200
	TULAT	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10. Fear of security threats in residential neighborhoods of Lagos State

Source: Field Survey (2022)

As a result of inadequate security personnel provided by the government, the residents, under the Community Development Association (CDA) and Community Development Council (CDC), involved in securing architecture of their communities through cooperation and provision of resources such as funds and engaging night guards, as well as being informants when there is a strange movement of people in the residential neighborhoods. Although the communities work hand–in–hand with the police to ensure that their communities are safe except in an area where the police are overpowered by the perpetrators of security threat(s). The level of residents' participation in the security of communities in Lagos State was investigated and the result shows that there is a high level of residents' participation in the security of the communities before, during and after the COVID–19 lockdown. This corroborates Cahn and Camper (1968) that citizens' participation fosters dignity and self–sufficiency in security governance. The result is same in Andre (2012). However, there is a significant difference in the level of participation across the local administrative division. More participation was recorded in the Badagry Division which validates the level

of security and walking in the night. The level of residents' participation in Ikorodu and Lagos Divisions are not encouraging before and during the COVID–19 lockdown, while Ikeja was included in the group after the COVID–19 lockdown. This validates Connor and Croal (2006) that there are strengths and weaknesses in the citizens' participation in the mechanism of place for security challenges.

Having access to the stakeholders in the security architecture of the residential neighborhoods is a key factor to reducing or minimizing the occurrence of security threat(s) in the residential neighborhoods. This will create fear in the mind of the perpetrators before committing crime in the residential neighborhoods. The lawful security agents who are permitted to carry weapons and at the same time arrest and prosecute across the Nigerian states is the Police. The residents of Lagos State were asked during this investigation if they have access to the police communication lines before, during and after COVID-19 lockdown. It was found that the majority do not have access to the police communication lines even if they are been threatened in their various residential neighborhoods across the state. There is a significant difference before, during and after the COVID-19 lockdown but there is no significant difference across the local administrative divisions in each of the considered periods. What this suggests is that as the majority of the people do not have access to police communication lines, there is high tendency of being threatened and the perpetrators get away with it. From the sizeable number of residents and communities across the local administrative divisions that have access to the police communication lines, it is established from this investigation that the lines were effective before, during and after the COVID-19 lockdown, with a significant difference across the local administrative divisions. However, the study established that the lines were not effective in the Ikorodu division before, during and after the COVID-19 lockdown for unknown reasons. The effectiveness of the access to the police communication lines dropped in Ikeja division during the COVID–19 lockdown and further divided thereafter.

As established above, the people have resulted in making choices of the personal security measure(s) in response to security threat(s) when the State could not provide 100 percent or guarantee all the residents and the communities' security of lives and properties as measures were rated before, during and after the COVID–19 lockdown. Evidence from this investigation reveals that, the measures have been effective before, during and after the COVID–19 lockdown as affirmed by the majority of the residents across the residential neighborhoods of Lagos State, with a significant difference across the local administrative divisions. However, these measures are not highly effective in the Ikorodu division like other divisions.

	Decision of making ones available for COVID—19 vaccines			Local A	dministrative D	ivision		Total
	Decision of making one:		Badagry	Epe	lkeja	Ikorodu	Lagos	TULAI
- ~:	Fear of the vaccine's	Count	9	3	8	2	11	33
ole fo virus	side effects	% within Local Administrative Division	18.8%	30.0%	11.8%	15.4%	18.0%	16.5%
ailab the	Not interested in the	Count	26	4	42	9	30	111
made yourself available for 9 vaccines against the virus?	vaccine	% within Local Administrative Division	54.2%	40.0%	61.8%	69.2%	49.2%	55.5%
ourse s ag	No confidence in the	Count	2	0	2	1	2	7
le yc	vaccines' source	% within Local Administrative Division	4.2%	0.0%	2.9%	7.7%	3.3%	3.5%
mac 9 vac	No confidence in the	Count	0	0	0	0	2	2
Have you COVID—19	vaccination process	% within Local Administrative Division	0.0%	0.0%	0.0%	0.0%	3.3%	1.0%
lave OVI[	Other reasons	Count	11	3	16	1	16	47
ΤÖ	Other reasons	% within Local Administrative Division	22.9%	30.0%	23.5%	7.7%	26.2%	23.5%
	Total	Count	48	10	68	13	61	200
	TULAI	% within Local Administrative Division	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		Courses	Eigld Survey (20	121)				

Table 11. Making Self Available for COVID-19 Vaccines

Source: Field Survey (2021)

The COVID–19 pandemic that ravaged the world got vaccines thereafter from which Nigeria benefited and the government made the fewer proportions to the people to be taken against the virus. The level of trust the people have in the government in the past as well as the availability of the vaccines against the virus create fears in the people of Nigeria as well as the residents of the most populous State in Nigeria as a result of the side–effect of the vaccines. However, this investigation sought to know why the residents of the Lagos State communities made themselves available for the COVID–19 vaccines. The result is presented in Table 11 and the outcome showed that the majority, 55 percent claimed they are not interested in the vaccines with a significant difference across the five divisions and worse in the Ikorodu division while 24 percent affirmed they would not make themselves available for the vaccines based on other reasons known to them. Not that people do not have confidence in the source and the process of vaccination but 17 percent are gripped with the fear of the alleged side effects of the vaccines.

### 6. CONCLUSION & RECOMMENDATIONS

Architecture of security and safety of residents is of paramount importance in any ideal society, especially before, during and after the tragic experience of COVID–19 pandemic lockdown. The findings of the study revealed that the effort of Lagos State Government on the architecture of security and safety of residents before, during and after COVID-19 pandemic lockdown was not sufficient enough. For example, Ikorodu has been consistently faced with security issues as a result of the closeness to the lagoon and the urban sprawl which led to the latest development as well as the population growth. Badagry Division has been safe before and during the lockdown except after the lockdown that the residents rated the security of their community bad due to the nefarious activities of smugglers in the division. However, there is variance in the security threats most frequent in the Lagos residential neighborhood before, during and after the COVID-19 lockdown. Interestingly, immediately after the COVID-19 lockdown, gang robbery replaced armed robbery which could be attributed to factors such as unemployment, hunger and poverty. It is established that unemployment has worsened the causes of security threats after the COVID-19 lockdown which although was more before the lockdown. However, there has been no significant difference in the effect of poverty as the cause of security threats while there are in hunger, unemployment and other causes. In enhancing the security architecture of residential neighborhoods in Lagos State, provisioning of equipment to security personnel, community policing by residents, media enlightenment on crime hot spot, creation of a conducive environment for employment opportunity, quick response by police to security threats, youth empowerment as means of reducing crimes, improve access to police communication lines and strengthening the capacity and capability of security personnel through the provision of State Police are required.

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