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Research Article

Geo-Quantitative Analysis of Violent Crime Intervention Strategies in Kaduna State, Nigeria

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ABSTRACT

The complexities and consequences of violent crimes require a robust and effective approach to achieve a sustainable reduction of violence in our society. This paper, therefore, presents an avenue to provide the geoquantitative analysis of violent occurrences in Kaduna State of Nigeria to determine the pragmatic interventionist strategies for managing violent crime incidence among the people of the study area. Geo-quantitative analysis entails transforming numerical data about criminal activities into a map of proportional circles to depict the distribution pattern of criminal activities and using scree plots and factor loading to show higher-order intervention measures for managing violent crimes. Five Local Government Areas (LGAs) with relatively high levels of violent incidence were purposively selected while snowball sampling method was used to administer questionnaires to 384 respondents. From the findings, the spatial distribution of violent crimes revealed that Birni-Gwari and Kachia LGAs accounted for the highest incidence of kidnapping and village raids respectively while Kajuru LGA is known for the highest cases of cattle rustling and armed robbery. The critical interventions in managing violent crimes are reconciliation efforts to restore order and normalcy, negotiation between aggrieved parties, and adoption of a traditional conflict resolution system with a rotated factor matrix of 0.828, 0.581, and 0.544 respectively. Furthermore, the strongest positive correlation exists between good government policies and equity with fairness in representation and establishment of developmental projects (r = 0.524, and p < 0.001). Therefore, the study recommended establishing conflict mediation centers across the communities. Similarly, it is essential to have a good governance system that will give people their fair share of national resources and adequate policing of communities that could guarantee the reduction of violent incidents to the barest minimum.

Keywords: Violence; crime; intervention; mediation; government policy

INTRODUCTION

Violent crime is costly but can still be managed if the proper measure is taken. Thus, learning from the victims of violent crime and implementing strategies emanating from them could yield significant results in curtailing crime and reducing the associated costs. Empirical studies have

shown that violence and the associated crimes are disproportionately detrimental to victims and the public (Rubin et al., 2008). Indeed, proactive measures to reduce violent incidents in regions prone to violence should recognize the multifaceted nature of violent crimes. The studies of (Ubogu et al., 2023; Abdullahi, 2019; Ojo, 2020; Ibrahim & Mukhtar, 2017) and Onwuaroh et al., 2017) have very well documented the complexities and consequences of regional banditry, insurgency, criminal networks, kidnappings, and all forms of violent crimes on regional security as well as the huge risk it poses to human security. The study of Amali et al. (2019) on the nexus between cattle rustling and the increasing spread of small arms in the Birnin Gwari area of Kaduna State observed that the pervasive proliferation of portable firearms is a major factor aggravating armed banditry with the incessant incidence of cattle rustling having wide-ranging implications on food security. Also, Nadama (2019) adoption of the Queer Ladder Theory (QLT) framework in its study of banditry in Zamfara State, Nigeria revealed that among the factors accounting for armed banditry are unemployment, drug abuse, cultural conflicts, porous nature of the border, proliferation of firearms and inadequate policing.

Moreover, the upshot of the Boko Haram uprising on the production of livestock in the North- Eastern part of Nigeria was highlighted by Iliyasu et al. (2015) while an evidence-based evaluation of the influence of the Boko Haram rebellion on agricultural enterprise in the Gujba Local Government Area of Yobe State Nigeria was conducted by Babagana et al., (2018). The paper's main findings are that between 2014 and 2016, the insurgency decimated agro-based activities in the area since many of the residents of the area were internally displaced thus virtually grinding to a halt all forms of agricultural activities. Similarly, a comparative study of the consequences of violent conflicts on Nigeria and Sudan's food security using a content review analysis of some reported conflicts between the two countries (Uthman, 2017) indicates that socioeconomic factors, political differences, and ethnoreligious reasons mainly account for most of the violent conflicts which have had adverse effects on the social fabric of the population, economic survival, and food security of the two countries. Also, the synthesis of Ubogu et al. (2023) espoused the causative factors of violent crimes in Kaduna State without identifying the appropriate interventionist methods that could help nip the menace of violence in the bud.

It is glaring that most of these research works dwell on the causes and effects of conflicts and violent crimes without considering the interventionist measures that be put in place to comprehensively reduce the incidence of violence in our communities. According to the report of the United States Department of Justice (2021), reducing violence-related crimes requires a robust and effective approach, well-grounded in research, and consistent with societal values. Moreover, as aptly indicated by Rubin et al. (2008), interventions for managing violence can have direct, often relatively easy-to-quantify impacts and indirect, more often very difficult-to-quantify impacts. The impacts may be short-lived, though may not be sustained, with inferences for the effectiveness of findings in the longer term. Also, it may have implications for the cost-benefit of executing interventions with temporary versus long-lived outcomes. Consequently, managing violence requires a multi-faceted approach to achieve a sustainable reduction of violence in communities.

An attempt by Shittu et al. (2022) to manage violence relies on the review method, by employing the use of environmental target hardening and developmental prevention strategies as valuable approaches in the management of violent crimes in Lagos. This approach according to the authors entails environmental development, surveillance strategy, erecting of security barriers, street lighting systems, and deployment of closed-circuit television cameras (CCTV) amongst other measures. The basic idea of this approach is to reduce the attractiveness of crime and harden the environment to crime and other forms of criminality. However, the main drawback of this study is its mere reliance on reviewed papers without empirically indicating any data to show how these strategies have helped to reduce the occurrence of crime in the study area. Also, the authors did not realistically indicate how these approaches can be effective in a region comprising rural and urban centers with different ethnoreligious groups.

The efforts of the international community have very well-positioned education as a veritable tool to avert crime, social vices, and violent displays of extremism in youths. To this end, the Nigeria Federal Ministry of Education in conjunction with the United Nations Office on Drugs and Crime (UNODC) unveiled the Education for Justice (E4J) idea in 2016. The E4J intends to avert crime and ensure adherence to the law with the aid of education designed for the three tiers of education (UNODC, 2019). The fundamental objective of this initiative is to help educators inculcate respect, integrity, fairness, and empathy as basic values in students to make them refrain from crime, violent extremist ideas, and drug abuse. Therefore, it will help to encourage youths to actively participate in communities' developmental programs and promote a culture of lawfulness. Indeed, while this initiative is a lofty idea, its scope is limited to only students at primary, secondary, and tertiary levels thus excluding the out-of-school and the elderly ones who do not fall within the coverage of the program but are among the actors in violence occurrence particularly in Nigeria.

It is apparent from the foregoing that whilst most studies have concentrated much effort on exploring the causative factors and consequences of different forms of violent crime in general (Ubogu et al., 2023; Nadama, 2019; & Uthman, 2017), few studies have dwelt on interventionist approaches and management of violence which have become a recurring decimal in Nigeria in general and Kaduna State in particular. Incidentally, approaches like those of Shittu et al., (2022) and UNODC (2019) are quite limited in methodology, scope, or approach and therefore could not fit into a robust regional analysis of violent crime intervention strategy. It is this gap in knowledge that this paper intends to fill. Therefore, this paper analyses the pragmatic strategies for managing violent crime in Kaduna State as well as identify an effective interventionist approach to managing violent crime in the study area.

METHODS

Research Design

We employed quantitative measurement of criminal occurrences in the area of study. Data on the number and frequency of occurrence of criminal engagements such as kidnapping, village raids, cattle rustling, and armed robbery were collected from Police and civil Defense authorities. The data was spatially analyzed using a map of proportional circles to depict the distribution pattern and the spatial extent of criminal activities across the area. Also, scree plots and factor loading were used to show higher-order intervention measures for managing violent crime. The methodology entails purposive selection of five (5) Local Government Areas (LGAs) which are Birni Gwari, Jema'a, Kaduna North, Kaduna South, and Sanga (see Figure 1). These LGAs were selected due to the relatively high level of violent incidences occurring in them. They are thus known as violent hot spots in Kaduna State because of the reported incidences of banditry, kidnapping, and general insecurity in these LGAs. Furthermore, the violent-prone wards and communities within the selected LGAs were also identified and chosen for the administration of questionnaires designed to elicit effective interventionist measures to curtail violence occurrence.

The study adopted the Krejcie and Morgan table of sample size determination which stipulated the sample size of 400 respondents. The respondents were thereafter selected through snowball sampling that guaranteed the characterization of the respondents as those who have first-hand knowledge of violent incidents in the sampled communities. The study successfully retrieved 384 copies of the questionnaire which was used for the analysis thus giving a success rate of 96%. The study also relied on secondary data on violent crimes including all forms of banditry which were gleaned from records of Kaduna State headquarters of Police Command, Kaduna; Kaduna Command of the Nigerian Security and Civil Defense Corps (NSCDC) and Ministry of Internal Security and Home Affairs of Kaduna State. The study employed proportional circles in mapping the spatial spread of violent attacks in the study area. Also, inferential statistics (factor analysis) was used to identify the most effective and significant interventionist strategies

employed in the area. It is adopted for this study that values less than 0.4 at extraction were trivial and represent variables that are not significant, and hence were possibly not considered.

Description of the Study Area

Kaduna State is positioned between longitude 6005' E to 8048'E and latitudes 9003'N to 11032' N (see Figure 1). Kaduna State shares borderline with Zamfara, Katsina, and Kano States to the north; Plateau and Bauchi to the east; Nasarawa State to the south; and Niger to the west. Kaduna State comprises 23 Local Government Areas (LGAs) and has a landmass of about 43, 898 km2 (Figure 1). Kaduna State witnesses a tropical climate comprising two distinct seasonal regimes, undulating between cool to hot and dry, and humid to wet.

The spatiotemporal spread of rainfall ranges in the region of 1530 mm in the southeastern part of the State and 1015 mm in the northeastern (Ikara and Makarfi) areas of the State. In general, the rainy season starts in April increasing gradually to its peak in August, declines by September, and terminates in October. The hottest months of the year occur in April, May, and June. The main local relief comprises Inselbergs of diverse shapes and sizes with Kufena and Kagoro hills and the Wailkadawu Ring Complex predominantly being conspicuous. River Kaduna is the major river that drains the State although it is fed by many tributaries which eventually empties its water into River Niger. The soils of the study area consist of red-brown to red-yellow tropical ferruginous soil that covers over half of the State and some deposits of weathered lateritic plains of basement granite rocks. The vegetation of Kaduna State is the northern Guinea Savanna composed of woodland, (trees), shrubs, extensive grassland, forest, and grazing reserves (Kaduna State Government, 2016).

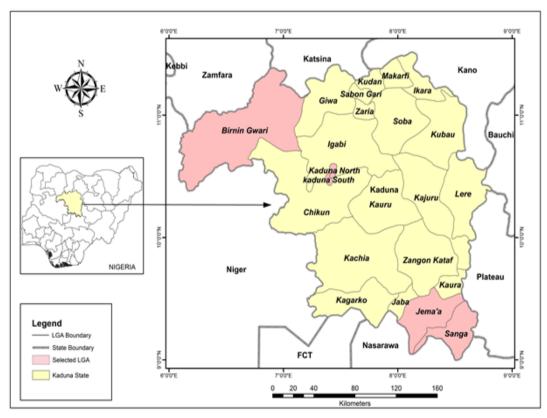


Figure 1. Kaduna showing the selected LGAs of Study

The estimated population of Kaduna State in 2021 as projected is about 9, 262, 304 people comprising multi-ethnicity of different languages and art, and the poverty index of Kaduna State as of 2019 is put at 43.5%. Agriculture and trading are the main occupations of the people while many others are employed in the public service, industry, and other informal sectors of the economy (Kaduna State Government, 2017).

RESULTS

The nature and distributional pattern of violent incidence in Kaduna State is a panacea to understanding the appropriate interventionist measures that can help nip the menace in the bud. Although there are different types of violence, this study examines kidnapping, village raids, cattle rustling, and armed robbery as forms of violent crime. These forms of violence constitute what is often called banditry.

Spatial Distribution of Violent Crimes in Kaduna State

The distribution pattern of violent crimes in the State by Local Government Areas gives us an indication of the spatial extent of the criminal activities confronting the State and the enormity of the challenges law enforcement has to contend with. Figure 2 depicts the distributional pattern of kidnapping occurrences in Kaduna State from 2011 to 2020. It is glaring from Figure 2 that Birnin Gwari LGA accounted for the highest incidence of kidnapping with over 500 cases in the State during the period under investigation. Kajuru LGA recorded the second-highest incidence of the menace of kidnapping during the period. Furthermore, other locations with a relatively high number of kidnapped victims are Chikun, Igabi, and, Giwa LGAs. These LGAs approximate areas of widespread banditry activities. Indeed, it is suggested that apart from bandits raiding communities for the sole purpose of kidnapping victims, a substantial proportion of the reported cases of kidnapped victims occur on major highways such as Kaduna-Giwa-Tegina road, Kaduna-Abuja road as well as Kaduna-Kachia-Kafanchan road corridor. These victims, more often than not, end up being killed or released in exchange for the payment of ransom which runs into billions of Naira.

Similarly, the modus operandi of banditry activities sometimes transcend kidnapping for ransom but also encompass the raiding of villages for their valuables. The main essence of these raids is to loot the villages of both consumable and non-consumable items. Figure 3 shows the distributional pattern of village raids in Kaduna State by LGAs. Virtually all the LGAs experienced one form of community raid or the other during the period under study. The number and occurrences of village raids were depicted in proportional circles with the highest cases between 136 and 200 while the lowest case is between the range of 30 and 34.

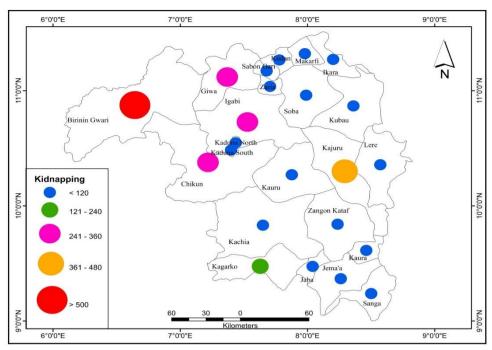


Figure 2. Spatial Spread of Kidnapping Incidence in Kaduna State

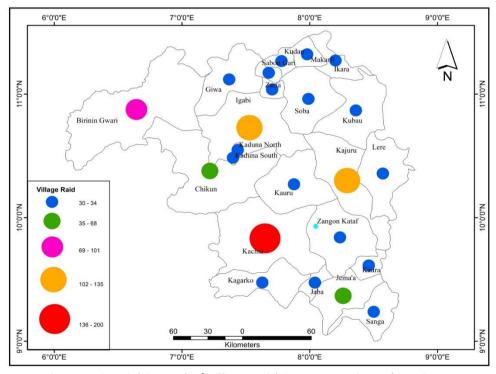


Figure 3. Spatial Spread of Village Raid Occurrence in Kaduna State

The proportional circle in order of magnitude of the reported cases of village raids shows that Kachia, Kajuru, and Igabi accounted for the highest incidence accordingly. The raiding of communities by bandits mainly dispossesses residents of their valuables like domestic animals, crops, and household properties and in some instances destroys the properties in the communities by setting the houses of affected communities on fire. The magnitude of the destruction of these raids by bandits is sometimes likened to scorched-earth policy. There is no doubt that the activities of bandits have affected the production of crops and livestock by farmers and herdsmen.

As aptly asserted by Amali et al. (2019), cattle rustling is one of the prime signatures of banditry. One of the major scopes of operation of bandits is cattle rustling. Many cattle herders have been victims of cattle rustling which is prevalent among the activities of bandits. Strictly speaking, cattle rustling is a major preoccupation of banditry in the area. Figure 4 shows that in order of magnitude, cattle rustling is more pronounced in Kajuru LGA, closely followed by Birnin Gwari, Igabi, and Kachia LGAs accordingly. As shown in Figure 3, virtually all the local governments in Kaduna State have had their fair share of cattle rustling although with differences in the severity of the menace. According to Murtala, (2018), one of the commonest features of banditry is cattle rustling. Indeed, it is instructive to note that whilst most herdsmen could do anything possible to protect their herds, the bandits then employ maximum oppression using portable firearms to carry out the thieving of livestock. This factor mainly accounts for the application of force during cattle rustling. Armed robbery is among the sundry violent crimes that occur in Kaduna State. Criminal elements of different categories and levels of operation engage in highway robbery and sometimes their scope of operation is extended to household or neighborhood robbery where victims are disposed of their valuables at gunpoint.

Although the incidence and distribution of this nefarious activity occurred across the study area, Kajuru LGA accounted for the highest share of the reported cases with over 481 cases during the period under investigation (see Figure 5). Furthermore, Birnin Gwari and Kagarko accounted for the second-highest incidents of armed robbery. Other LGAs that recorded between 241-360 incidents are Igabi, Kubau, Chikun, and Kachia. It is therefore glaring that no LGA is spared of this violent criminal activity. Similarly, the majority of the large-scale farms where cattle are reared especially along the Kaduna-Abuja road, in Giwa and Birnin Gwari LGAs have virtually lost most of their herds to cattle rustlers. It is not surprising that this has resulted in the shutting down of these farms that employ many individuals.

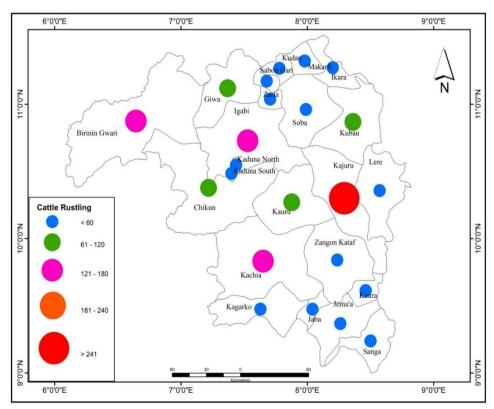


Figure 4: Spatial Spread of Cattle Rustling Incidence in Kaduna State

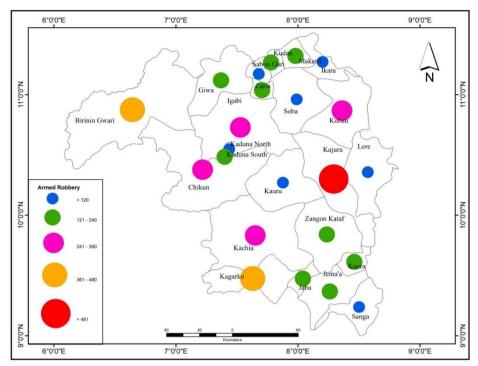


Figure 5. Spatial Spread of Armed Robbery Incidence in Kaduna State

The implications are that the economy is generally affected as the farms are no longer productive, workers become unemployed as well and the revenue accruable to the state through taxes that are derived from the farms ceases to flow. Also, the traumatic experience of the people, their relatives, and the entire community when they are attacked by bandits either in the form of violent raiding, kidnapping, cattle rustling, or armed robbery, is, to say the least, horrific.

Management of Violent Incidents in Kaduna State

The management of violence at the scale presently being perpetuated in the study area is no doubt complex. Consequently, any intervention scheme to nip it in the bud must be homegrown, regionally effective, and locationally specific given the dimension and severity of the violent attacks. Some studies such as Mamman et al. (2014) and Shittu et al. (2022) have widely reported various interventionist approaches to the management of violent attacks. In the face of these interventionist measures which could help to reduce the menace of violent attacks, this paper has relied on eleven (11) of these interventionist methods. The approach includes reconciliation to restore normalcy denoted as X1, adoption of a traditional conflict resolution system (X2), an early warning system to forestall outbursts of violent attacks (X3), interfaith/religious dialogue system (X4), the establishment of peace commission (X5) and equity and fairness in representation and establishment of development projects (X6). Others are sensitization of youths to the dangers of drugs, religious/cultural values and norms (X7), good government policy (X8), Confidence building amongst communities through effective communication system (X9), negotiation between aggrieved parties (X10) and finally empowering security agencies to curb the proliferation of arms and violent acts (X11).

Violence management interventions are naturally interdependent, although depending on the nature of interconnection that interventionists link to them. It is therefore important to know the nature of the interrelation that exists among the factors. The results as shown in Table 1 stipulate the correlation matrix of the nature and magnitude of the relationship. The best positive association between the pairs of factors examined occurred between good government policy (X8) and equity and fairness in the representation and establishment of development projects (X6), with r = 0.524, and p < 0.001. This result implies that the better veritable government policies are enacted and implemented through an effective governance system, the more equitable and

fairer the establishment of development projects in communities and their level of representation becomes satisfactory. Essentially, good government policies potentially create some level of satisfaction in the citizens when they feel a sense of belonging thus helping to reduce tension and its associated criminality.

Table 1. Correlation Matrix of the Violence Intervention Factors

•	X1	X2	Х3	X4	X5	X6	X7	X8	X9	X10	X11
X1	1.000										
X2	.496	1.000									
X3	.452	·345	1.000								
X4	.239	.450	.391	1.00							
X5	.176	.291	.356	.476	1.000						
X6	043	.047	.137	.176	.133	1.000					
X7	.351	.296	.417	.459	.360	.413	1.000				
X8	.204	.158	.136	.244	.209	.524	.310	1.000			
X9	.464	.293	.351	.290	.176	.226	.376	.363	1.000		
X10	.471	.425	.361	. 342	.215	056	.305	011	.309	1.000	
X11	.065	.131	.047	-013	079	.221	.012	.232	.190	.014	1.000

Similarly, the adoption of a traditional conflict resolution system correlated positively with reconciliation to restore normalcy, r = 0.496, p < 0.001. This result is quite revealing because the more prominent the adoption of a traditional conflict resolution system as a violence intervention mechanism, the greater the probability of reconciling the aggrieved parties rather than resorting to violence. Furthermore, the correlation between the establishment of a peace commission and the inter-faith/religious dialogue system shows a positive good correlation (r = 0.476, p < 0.001). This relationship indicates that the greater the establishment of a vibrant peace commission, the greater the probability of an inter-faith/religious dialogue system being an effective intervention mechanism in the management of violent incidents. Effective management of violence is often considered from the standpoint of the intervention mechanism to reconcile aggrieved parties. It is not surprising however that the pair of relationships that exist among negotiation between aggrieved parties and reconciliation to restore order and normalcy showed a positive good correlation, r = 0.471, p < 0.001. In general, the relationship portrayed in Table 1 perhaps provides an important reliability assessment of the respondents' reactions to the intervention mechanism being investigated.

In a study of this nature, it is necessary to come up with a limited orthogonal factor that could justify the choice of the major factors that act as the most robust intervention methods in managing violent incidents in Kaduna State. To this end, the extracted factors with the total variances are contained in Table 2 which reveals three (3) factors as having eigenvalues greater than 1 and the corresponding percentage of total variance. Table 2 shows that factor one depicts an eigenvalue of 3.727 representing 33.886% of the explained total variance by the factor analysis. Also, factors two and three indicate eigenvalues of 1.677 (15.242%) and 1.223 (11.117%) respectively.

Table 2. Explained Total Variance by the Factors

Factor		Initial Eigenvalu	ies	Rotation Sums of Squared Loadings				
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %		
1	3.727	33.886	33.886	2.013	18.303	18.302		
2	1.677	15.242	49.129	1.631	14.830	33.133		
3	1.223	11.117	60.245	1.442	13.105	46.238		
4	.829	7.536	67.781					
5	.681	6.188	73.970					
6	.649	5.897	79.867					
7	.564	5.128	84.995					
8	.507	4.608	89.604					
9	.458	4.161	93.765					
10	.409	3.715	97.480					
11	.277	2.520	100.000					

Note: Extraction Method, Principal Axis factoring. KMO Bartletts' test of sphericity = 0.775, df (55), Sig 0.000

Indeed, the aggregate percentage of the three factors alone accounts for 60.245%. The magnitude of the factor loadings gives an underlying dimension of the violence intervention factors that was trimmed down to three important factors which are those having eigenvalues greater than 1. Furthermore, in an attempt to identify how the variation not explained is distributed among the violence intervention factors, a scree plot is used to display the loadings (see Figure 6). The plot indicates an 'elbow' shape which means that there is a reduction in the contribution of the intervention factors as you move down from factor 1 to factor 11 with a sharp decrease in the second and third factors (Ubogu, 2013). This curve infers that the main violence intervention measures of great importance are the first three factors.

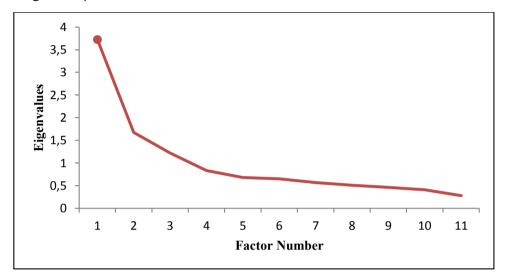


Figure 6. Scree Plot of factors loading of the Violence intervention measures

According to Ubogu (2013) and Landau & Everitt (2003), efforts should be intensified to single out the factors that can serve to explain the orthogonal components of violence intervention factors being considered. This requires employing some factor rotation techniques. Therefore, the data is subjected to the varimax rotation method to interpret the factor analysis. Table 3 illustrates the rotated factor matrix. A perusal of Table 3 confirms that reconciliation efforts to restore order and normalcy (0.828), negotiation between aggrieved parties (0.581), and adoption of a traditional conflict resolution system (0.544) load highly on factor one. These are the three most significant methods of managing the ravaging menace of violence in Kaduna State.

Factor two loads highly on inter-faith/religious dialogue system (0.694) and establishment of a peace commission (0.622) and sensitization of people to respect religious and cultural values (0.524). The variables of factors one and two may collectively be termed 'peaceful resolution of disputes. On the other hand, factor three loads highly on equity and fairness in the establishment of development projects, representation and appointments (0.745), and good government policies (0.669). These variables could be referred to as 'good governance' as an effective intervention method that could potentially help to manage violence. This is because citizens of the State may develop a sense of belonging. Also, when a good governance system is practiced, it reduces animosity among communities. Indeed, the frequency, magnitude, and brutality of violent incidents in Kaduna State have become a subject of concern to the people and government of the state. The scales at which violent incidents occur in Kaduna State have become worrisome, especially during the period under investigation.

Table 3. Rotated Factor Matrix of the Violence Intervention Variables							
Violence Intervention Variables		Factor					
	1	2	3				
Reconciliation to restore order and normalcy	.828						
Negotiation between aggrieved parties	.581						
Adoption of traditional conflict resolution system	. 544						
Confidence building through an effective communication system	408						

Reconciliation to restore order and normalcy	.828		
Negotiation between aggrieved parties	.581		
Adoption of traditional conflict resolution system	·544		
Confidence building through an effective communication system	.498		
Early warning system to forestall violent conflicts	.465	.404	
Inter-faith/religious dialogue system		.694	
Establishment of the peace commission		.622	
Sensitization of people to respect religious, and cultural values		.524	
Equity and Fairness in Representation and Development Projects			. 745
Good government policies			.669

DISCUSSION

Violent incidents in Kaduna State that, in the past used to be characterized by riots, arson, theft, and occasional farmers-herders clashes have increased, spread, and intensified over the years. It has unarguably been transformed into organized criminality ranging from cattle rustling, kidnapping, village, and community raids as well as armed robbery incidents. The scale and ferocity of the violence associated with these crimes have become alarming and sometimes overwhelmed security agencies. It has created existential crises (Ibrahim, 2019) not only for the State but for Nigeria in general. All these constitute what is termed banditry with occasional terrorist connotations. These security challenges are being fueled by rising levels of unemployment, growing rates of poverty, increasing use of hard drugs, brainwashing of youths by fanatics and violent instigators, intolerance and extremist views of terrorists as well as moral decadence.

It is apparent that the entire data has been reduced to two major intervention factors: 'peaceful resolution' and 'good governance'. Peaceful resolution of disputes could potentially reduce violent incidents by eliminating costs among disputants. It strengthens the solidarity of the disputants if properly resolved and by so doing reconciles aggrieved parties. This finding is similar to that of the committee set up by the Kaduna State Government on July 1, 2015, chaired by Gen Martin Luther Agwai to find ways of stamping out attacks on Southern Kaduna. The committee hereafter recommended that a Peace and Reconciliation Commission should be established to carry out conflict resolution and peace-building activities in the entire State on a continuous and permanent basis. One important way of achieving this is through traditional conflict resolution this manner, disputants or aggrieved parties In community/village/district heads for the resolution of the disputes where customary mediation, compensation, and restitution are made to amicably resolve the disputes. The essence is to ensure that disputants do not resort to self-help. It has been argued that traditional conflict resolution mechanism is effective, efficient, and fair in handling disputes without resorting to violence.

Previously in Kaduna State, examples abound of how traditional conflict resolution mechanism was used to resolve land and boundary disputes between and amongst communities. Similarly, farmers-herders disputes have also been resolved thus averting violent clashes between the two groups (Ibrahim, 2019). However, according to Buckly-Zistel, (2008), traditional conflict management measures stand more effective for dealing with intermediate crimes than intra-state conflicts. Therefore, to reduce violent conflicts, the historical and social context as well as the perpetuating factors like economic gains and interest must be considered. Similarly, the relationship between the disputants must be addressed including the wider community to end violent conflict.

According to the United Nations OHCHR (undated), good governance denotes the institutional and political procedures and outcomes that are imperative to achieve the goals of development. It represents the degree of deliverance on the assurance of human rights including social, economic, cultural, political, and civil rights as well as effectively guaranteeing fair justice and personal security. Some scholars (Tahir & Usman, 2021) have attributed the violent attacks associated with banditry to poor governance systems currently being experienced in the study area.

One of the consequences of poor governance is the increased acquisition of minor arms and light weapons in Kaduna State to be precise and generally in Nigeria. The ease at which criminal elements possess sophisticated weapons that are used to maim and terrorize communities in Kaduna State shows the failure of governance. In general, as bandits attack communities with sophisticated weapons for cattle rustling, kidnapping, and village raids, in turn, farmers, herdsmen, and communities acquire guns to protect themselves through the establishment of vigilantes. Consequently, as both sides become armed, the resultant violence unleashed assumes a vicious dimension with unprecedented proportions. Therefore, there is a need to curb the inflow of illegal weapons and conduct security measures to mop up all the illegal weapons in the State. Furthermore, governance is virtually absent in some communities of Kaduna State especially rural areas where social and security provision is absent. Bandits and other criminal outlaws take advantage of this vacuum to perpetuate their criminal enterprise and ultimately transform such areas into ungoverned spaces.

A good governance system should also be accountable and fair to everyone in the State and thus guarantee justice. Equity and fairness in appointment, representation, and development projects are paramount to good governance. Also, impunity and injustice have been observed to be one of the driving forces of banditry in Kaduna State (Ibrahim, 2019). Indeed, the inability of the government to dispense judicial punishment timeously to those who rustle cattle, kidnap victims, rob, and collect huge sums of money as ransom has invariably emboldened them to continue with criminal activities. Conversely, victims who feel unjustly treated may resort to self-help. This ultimately results in a cycle of violence being witnessed presently with attacks and reprisal attacks. Consequent to the slow and inefficient criminal justice system, criminals take advantage of the system to evade justice. This challenge is often compounded with apprehended criminals sometimes being released to the communities' detriment.

Finally, since one of the fundamental elements of good governance is guaranteeing personal security, there is a need to effectively police the entire study area. This essentially requires the deployment of security agencies in high crime-prone areas. This is to effectively secure the vast ungoverned spaces of the State. The robust presence of security agencies in volatile areas is to be complemented by an efficient and proactive intelligence-gathering system. This is to ensure that the security architecture will always be ahead of the criminals. By so doing all criminal elements and their nefarious activities can be quickly nipped in the bud.

CONCLUSION

The management of violence requires effective intervention systems that are tailored not only to inhibit the occurrence of violence but also to deal decisively with violent crime. This paper has espoused the distribution, intensity, and intervention methods that could help curb the menace of violent incidents in Kaduna State. Based on a robust data set obtained from reliable secondary sources and respondents from the affected communities, this paper applied a quantitative mapping technique to depict the distribution and intensity of violent incidents in Kaduna State. Furthermore, the paper applied factor analysis to recognize the most expository intervention measures that could reliably help to ameliorate the menace of violent incidents in Kaduna State. The findings reveal that among the myriad of violence intervention approaches, peaceful resolution and a good governance system are the two critical methods that can be used to manage violence. The paper, therefore, recommends that conflict mediation centers should be established across conflict neighborhoods in the State and other similar places in Nigeria as a whole. Also, community leaders and traditional rulers should be adequately empowered to effectively manage conflicts among the aggrieved parties in the entire State continuously. Similarly, the paper suggests a good governance system that will give people their fair share of

national resources and adequate policing of communities that could guarantee the reduction of violent incidents to the barest minimum. This in essence is crucial in the entrenchment of peace and security in Kaduna State.

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DECLARATIONS

Conflict of Interest

The authors declared that they had no known competing interests.

Ethical Approval

The research has been approved by the Research Committee of Federal University Dutsin-Ma. All research was carried out in accordance with Federal University Dutsin-Ma research ethics guidelines applicable when human participants are involved.

Informed Consent

Before conducting the study, we had obtained the consent of all the research subjects involved in the study. To maintain the confidentiality of the data, the research subjects were coded or anonymous.

DATA AVAILABILITY

Data used to support the findings of this study are available from the corresponding author upon request.

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