PREVENTING VIOLENCE CRIMES (KIDNAPPING, ARMED ROBBERY, BRIGANDAGE OR COMMUNITY MASSACRE) WITH DRONES: AN EFFECTIVE ALTERNATIVE TO VEHICULAR PATROLS IN NIGERIA

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ABSTRACT
The study was examination ofPreventing Violent Crimes (Kidnapping, Armed Robbery, Brigandage or Community Massacre) With Drones: An Effective Alternative to Vehicular Patrols in Nigeria.The specific objectives were to determine the impact of drones in the prevention of kidnappings, Armed Robbery and Communal Killings in Nigeria. Three research questions and hypotheses guided the study. The study population was made of 114 officers drawn from Nigeria Police Collegewhile a sample size of 89 officers were selected for the study. The descriptive statistics was used to answer the research questions while R^2 value Regression analysis was applied to test the hypotheses of the study at 0.05 level of significance. The result of the study showed that drones have significant impact in the prevention of kidnappings, Armed Robbery, Communal Killings and other crimes in Nigeria. Recommendations proffered include the need for strategic deployment of drones in all security formation in the country, adequate budgetary provision .training of manpower, comprehensive monitoring and adequate assessment and action on information and intelligence received from drones.

1. Introduction

The increasing challenge of violent crimes has continued to exact grave consequences in our society and the nation at large leading to loss of lives and properties. This has posed significant challenges to the Nations security forces. Nigeria has experienced widespread insecurity for more than 20 years, which has led to the deaths of many innocent people such as foreign nationals, some members of the country's security forces, elected officials, and numerous government employees and others.The frequency of violent crimes, including suicide bombings, murders committed for religious reasons, ritual killings, kidnappings, and muggings, has been rising.As a result, vehicle patrols are no longer an effective method of monitoring and deterring these crimes. When a criminal uses or threatens to use harmful force against a victim, it is considered a violent crime. This includes crimes

like murder, assault, and assassination where the goal is to commit a violent act as well as crimes where the use of violence as a tool of coercion or show of force, such as robbery, extortion and terrorism. Falk (2021)

The use of technology gargets, such as drones instead of vehicular patrol, has therefore become essential to improve more effective monitoring and surveillance operations for the prevention and control of crimes, given the circumstances facing the country's security forces. Drones are an indispensable tool for law enforcement and border control surveillance teams to obtain information. Drones could have prevented events such as the attack at Kaduna International Airport and the bombing of the Abuja-Kaduna bound train in Nigeria on March 25, 2022, and April 4, 2022, which resulted in the deaths of approximately 60 people and the kidnapping of approximately 146 by the bandits.

In the majority of developed nations, including the United States, the United Kingdom, Germany and others, local, state, and federal governments have used drones for a variety of purposes and under a variety of conditions. They are being used to patrol the country's borders, prevent illegal immigration by criminals, terrorists, and undocumented immigrants, and assist in identifying and stopping the smuggling of drugs, weapons, and other contraband into the nation, (Escutia, 2009).

Drones are used by the US government to drop targeted missiles and carry out in-depth surveillance and reconnaissance missions over nations like Afghanistan, Iraq, and Iran. It is clear that more than seven hundred (700) drones were being used in Iraqi territory as of early 2007 (Peterson, 2009). The use of drones in the Middle Eastern states' post-9/11 armed conflicts gave rise to their popularity. Over 2.5 million drones are currently flying over the United States alone, according to the Federal Aviation Administration (FAA) of the United States. The US police use drones to locate suspects by using the aerial bird view. Drones capture a live bird's-eye view of various incidents, from theft to riots, and have the capacity to identify suspects while locating and tracking them down for arrest. This has proven to be more cost-effective and maneuverable than a helicopter, and it reduces and replaces the use of choppers, thereby decreasing the response time.

In Nigeria, using drones as a substitute for car patrols can improve the prevention of violent crimes. Drones are thought to be able to improve efficient aerial surveillance, efficient intelligence collection, and efficient security activity monitoring. Unmanned aerial vehicles (UAVs) are small aircraft that can fly without a human operator on board. They are also referred to as drones or remotely piloted vehicles (RPVs). These are self-contained devices that are capable of carrying payloads such as cameras, sensors, and communication devices. In recent times, drones have been found to be the most efficient tool for gathering intelligence, conducting aerial surveillance, and monitoring security. It is in the face of the security challenges that the study seeks to examine Preventing Violent Crimes (Kidnapping, Armed Robbery, Brigandage or Community Massacre) with Drones as an Effective Alternative to Vehicular Patrols in Nigeria.

1.1 Objectives

The main objective of the study is to examinepreventing violent crimes with drones as an effective alternative to vehicular patrols in Nigeria.

The specific objective includes;

1. To examine the impact of drones in the prevention of kidnappings in Nigeria
2. To examine the impact of drones in the prevention of Armed Robbery in Nigeria
3. To examine the impact of drones in the prevention of community massacre in Nigeria

1.2 Research Questions

The research questions which guided the study are;

1. To what extent does the use of drones significantly impact on the prevention of kidnappings in Nigeria?
2. To what extent does the use of drones significantly impact on the prevention of Armed Robbery in Nigeria?

3. To what extent does the use of drones significantly impact on the prevention of Community Massacre in Nigeria?

1.3 Research Hypotheses

The following hypotheses were formulated to guide the study

HO1. There is no significant impact of drones in the prevention of kidnappings in Nigeria

HO2 There is no significantimpact of drones in the prevention of Armed Robbery in Nigeria

HO3 There is no significantimpact of drones in the prevention of Community Massacre in Nigeria

2. Review of Related Literature

2.0 Concept of Violent Crimes

When a criminal uses or threatens to use harmful force against a victim, it is considered a violent crime. This includes crimes like murder, assault, rape, and assassination where the goal is to commit a violent act, as well as crimes like robbery, extortion, and terrorism where the goal is to commit a violent act as a form of coercion or display of force. Weapons may or may not be used in violent crimes. Violent crimes can range in severity from homicide to harassment, depending on the jurisdiction. Roth and Reiss (2023). A victim of violent crime experiences physical harm or threats of violence. Sexual assault and rape, robberies, assaults, murders, and other crimes involving the deliberate use of force by one person against another are considered violent crimes.

2.1 Few Violence Crimes Statistics in Nigeria

To facilitate analysis, **Table 1** lists violent highway attacks involving kidnappings or abductions for ransom; **Table 2** lists violent attacks involving mass/indiscriminate killings without abductions; and **Table 3** lists attacks involving both mass/indiscriminate killings and abductions. The purpose of this is to illustrate the trends and driving forces behind some of the violent crimes that occur on Nigeria's roads.

Table 1. A Chronicle of Newspaper reportage of violent criminal attacks on Nigerian Highways involving kidnapping for ransom.

Newspaper	Date	Attacks, places and number of casualties
Vanguard	July 27, 2021	**60 people kidnapped by gunmen who hijack three buses in Sokoto** On Sunday, July 25, 2021, around sixty passengers from Sokoto who were riding on buses operated by the Sokoto State Transport Authority were allegedly kidnapped by bandits near the Sokoto-Gusau highway. Mohammed Yusuf, a driver who barely escaped the kidnapping, claimed that at around 3 p.m., the bandits blocked the road close to Dogon Karfe and abducted every passenger inside the three buses. Additionally, many of the Road Transport Workers' members in the states of Sokoto, Kebbi, and Zamfara have perished as a result of the wanton actions of gunmen along the highway, according to Bello Mai Laya, a member of the organization.
The Nation	December 23, 2021	**Abuja-bound bus passengers kidnapped.** On December 22, 2020, thugs on the Benin-Auchi Road in Edo State abducted passengers from a commercial bus that was headed for Abuja. They stopped the bus between Ehor and Iruekpen, fired shots into the air, and forced the passengers into the forest.

Newspaper	Date	Attacks, places and number of casualties
Daily Trust.	January 15, 2021	**How gunmen kidnapped 18 Kano traders in Kogi** Eighteen Kano traders who were on their way to Abia were abducted by gunmen in Kogi state. The victims, who were all from the well-known Katin Kwari Textile Market, were being driven to Aba in the state of Abia to make purchases when gunmen ambushed their car and drove them into the bush.
Daily Trust	January 19, 2021	**Gunmen abduct travelers on Ilesa-Akure expressway** On the Ilesa-Akure expressway yesterday, January 18, 2021, a few travelers were kidnapped by unidentified gunmen. It was discovered that the alleged abductors halted the tour bus carrying the passengers, removing a number of them into the forest and allowing others to flee. Chief Amitolu Shitu, the Amotekun Corps' field commander in the state, verified the incident. "We have received reports……."
THE NATION	February 9, 2021	**Kidnappers attack funeral convoy in Edo: Brother of deceased abducted, Driver Killed** Yesterday, a funeral convoy in Edo state was attacked by kidnappers. They killed a driver by shooting him and kidnapped the deceased's younger brother. The convoy was attacked near the Ahor community, which is now known for kidnapping, at the Benin Bypass while traveling from Lagos to Enugu. The attackers shot straight at the cars in the convoy, severely damaging the ambulance. The ambulance's behind-the-wheel driver lost his life.
THE NATION	February 11, 2021	**13 passengers kidnapped in Bayelsa, Delta** In Delta State, on Tuesday, February 9, 2021, there were reported kidnappings of about seven people along the Sapale/Oghara axis of the East-West Road. The victims had a journey to Warri. There were reports that some of the victims were Delta State Polytechnic, Oghara students.
NEW TELEGRAPH.	February 15, 2021	**Bandits abduct 18 passengers, abandon woman, baby in Niger.** Eighteen Niger State Transportation Authority (NSTA) passengers are missing after bandits kidnapped them while they were traveling from Kontagora to Minna. This happened near Yakila village in the state's Rafi Local Government Area. The attack happened on February 14, 2021. Ibrahim Balarabe Kagara, the Chief of Staff of the State Government, and Mallam Ibrahim Inga, the Director General of the Niger State Emergency Management Agency, barely escaped when the bandits arrived on the scene, having just finished their operations. It was learned that the bandits fled with the other eighteen passengers to an unidentified location, leaving a woman and her infant behind.

Source: Authors' Field Survey, 2021.

Table 2. Chronicle of Newspaper reportage of violent criminal attacks on Nigerian Highways involving mass or indiscriminate killings.

Newspaper	Date	Attacks, places and number of casualties
Vanguard.	November 28, 2020	**Gunmen kill Ondo Monarch** Suspected kidnappers on November 26, 2020, reportedly killed a first-class traditional ruler in Ondo State, the Olufon of Ifon, Oba Isreal Adewusi, in the Ose Local Government Area of the state. … it was learnt that the monarch was hit by a hail of bullets, when the gunmen, who hid inside the bush along the highways attacked his vehicle in the Elegbeka area, shooting severally in an attempt to stop the driver from fleeing. The monarch was said to have been rushed to the Federal Medical Centre in Owo, where he died.
The Newsguru	November 19, 2020	**Gunmen kill ex-educational secretary, kidnaps 20 travelers in Nasarawa.** https://thenewsguru.com/nigeria_news/kidnaps_20_travellers_in_Nasarawa/Gunmen have killed the former education secretary of Nasarawa Local Government Area of the state, Malami Salihu and kidnapped 20 people who were travelling to Toto Local Government of the state. The incident of Tuesday afternoon on 5th January along Mungi sharp corner Buga Gwari, Gadabuke area of Toko LGA, gunmen kidnapped 20 travellers who were travelling in three vehicles when they were intercepted and matched into the bush by the gunmen to unknown destination.
Daily Trust	January 8, 2021	**Bandits kill four in Kaduna village: Two others along Birnin Gwari Kaduna highway** Four persons were killed on Wednesday, January 6, 2021, when armed bandits attacked Katarma village in Chikun Local Government Area of Kaduna State. In a related development, armed bandits yesterday (January 7, 2021) opened fire on a moving vehicle along Birnin Gwari Kaduna highway, killing the driver and one other person. Daily Trust gathered that the attack took place at Zankoro area of Unguwar Yako, about 20 km to Kaduna town around 10am. This came after nine persons were killed in the same area last Sunday (January 3, 2021). The chairman of Birnin Gwari Emirate Progressive Union (BEPU), Barrister Salisu Haruna, confirmed the incident in a statement yesterday (January 7, 2021)
Daily Trust.	January 17, 2021	**7 still missing as bandits' ambush police officers in Kaduna** The whereabouts of seven police officers out of 15 that were ambushed by bandits along the Birni Gwari-Funtua road on Friday is still uncertain. However, Daily Trust on Sunday gathered that eight of the officers were rescued…. While speaking with Daily Trust on Sunday, the BEPU chairman, Salihu Haruna, said the whereabouts of many of the police officers was uncertain, adding that others officers around Dogon Dawa and other nearby communities had been informed of the incident. A vigilante source in Birni Gwari confirmed that the eight officers who were rescued were in the custody of military operatives in Maganda, while contact had been made with another police officer within the forest area.
New Telegraph	July 20, 2020	**Katsina: Bandits kill three officers, 13 solders** Bandits have killed three officers and 13 soldiers in an ambush at Shimfida in the

Newspaper	Date	Attacks, places and number of casualties
		Jibia Local Government Area of Katsina State. But the Acting Director Defence Media Operations, Brigadier General Benard Onyeuko, said only one officer and two soldiers were killed, while the troops neutralised 17 bandits. But highly placed establishment sources told the New Telegraph the troops of the Nigerian Army Super Camp (NASC) 4, were advancing on foot towards the camp of the bandits' leader when the attack occurred. It was learnt that on the last count, a Major, a Captain as well as a Lieutenant were killed in the surprise attack. Also, 13 soldiers paid the supreme price, while 28 others were wounded in action. Two of the bandits were, however, neutralized.
DAILY SUN	July 9, 2020	**19 soldiers feared killed in another Boko Haran ambush** Book Haram have allegedly killed about 19 soldiers when the insurgents ambushed troops of 25 Task Force Brigade, a military operation team, along Maiduguri Damboa road in Borno State, on Tuesday afternoon. Military sources said an exchange of fire ensured between troops and Boko Haram leading to the death of 19 soldiers. The incident was not immediately known in Maiduguri, Borno State capital, until Wednesday. (08/07/20).

Source: Authors' Field Survey, 2021.

Table 3. Chronicle of Newspaper reportage of violent criminal attacks on Nigerian Highways involving both kidnapping for ransom and mass killings.

Newspaper	Date	Attacks, places and number of casualties
Daily Trust	January 5, 2021	**Nine travelers killed by bandits in Kaduna, 11 others kidnapped** On Sunday 3rd January 2021, bandits laid siege on innocent travelers at Zankoro, along dreaded Birnin-Gwari-Kadun highway, killing nine people (including three infants) that are on their way for ceremony at Doka, Birnin-Gwari LGA. In the last two weeks, bandits terrorising the people of Birnin-Gwari, especially those travelling along Birnin-Gwari-Funtua and Birnin-Gwari Kaduna highways have become intensely aggressive as they continued to kill and abduct innocent citizens unabated. There were more than 40 abductees currently at the mercy of the bandits who were kidnapped between December 20, 2020 and January 4, 2021.
Daily Trust	January 29, 2021	**Gunmen kill 10 in Katsina, abduct 81 in Niger, Taraba.** Eighteen Niger State Transportation Authority (NSTA) passengers are missing after bandits kidnapped them while they were traveling from Kontagora to Minna. According to our correspondent's findings, the attack happened near Yakila village in the state's Rafi Local Government Area. The attack happened yesterday afternoon, February 14, 2021. Ibrahim Balarabe Kagara, the Chief of Staff of the State Government, and Mallam Ibrahim Inga, the Director General of the Niger State Emergency Management Agency, barely escaped when the bandits arrived on

Newspaper	Date	Attacks, places and number of casualties
		the scene, having just finished their operations. It was learned that the bandits fled with the other eighteen passengers to an unidentified location, leaving a woman and her infant behind.

Source: Authors' Field Survey, 2021.

2.2 Concept of Drones

An unmanned aerial vehicle (UAV) is a drone. The aircraft is devoid of any human pilot, crew, or passengers. Throughout the 20th century, UAVs were initially developed for military missions that were deemed too "dull, dirty, or dangerous." Tice (Spring 1991) An unmanned aerial vehicle, or UAV, is a "powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or nonlethal payload". A drone is an unmanned aerial vehicle that can be controlled by a person from a distance or can operate on its own in a predetermined mode. Drones are essentially flying robots that are typically operated from a specialized remote unitcan control everything in the air thanks to clever software. Although drones have a long and well-established history that extends back centuries, there is currently a paradigm shift in the use of drones in crime prevention. Drones can be used for surveillance, crime detection, and aiding law enforcement in locating criminal hotspots and hideouts. The drone is equipped with numerous functional sensors, such as GPS, which help it maintain the appropriate flight mode (Phillips, 2016). Drones have their origins traced back to specific methods created to give the military pertinent information. In the 1930s, the first aircraft with a reusable radio control mechanism was created, and it functioned similarly to a base model.

Subsequently, traditional sensors and camera units were developed for military drones and installed inside missiles. Furthermore, according to (Engberts and Gillissen, 2016), there are a plethora of drone variations readily available due to technological advancements. While some are employed for military purposes, others are discovering possible roles in numerous large corporations.

2.3 Use of Drones for Vehicular Patrols in Nigeria

According to Phillips (2022), drone technology makes it possible for law enforcement and criminal justice to carry out surveillance, track criminal suspects, identify criminal activity at crime hotspots, help police investigators apprehend criminals at a crime scene, and gather evidence to solve crimes. Drone technology helps law enforcement and criminal justice agencies operate more efficiently. It offers complete transparency throughout the asset, equipment, incident, exhibit, and evidence life-cycle, as well as general incident management. It also helps law enforcement manage investigations and forensic processes more effectively by protecting, tracking, and maintaining the integrity of all digital and physical property and evidence with thorough audit trails, from capture or seizure to disposal. Finally, it enables criminal justice officials and legally authorized organizations to gather exhibits on the scene and construct a complete audit trail of all movements and transfer of custody of exhibits (Wondershare Technology, 2021).

2.4Theoretical frameworks

Theory of drone operational abilities and capabilities by Grégoire Chamayou

Grégoire Chamayou uses a philosophical lens to help us understand how drones are transforming our world. A state has asserted its right to wage war over a mobile battlefield that may potentially span the entire planet for the first time in history. He contends that the use of remote-control aircraft goes far beyond George W. Bush's justification for the war on terror.The laws of war, which have defined military conflict as occurring between combatants, are fundamentally changing as we watch. With the increasing deployment of drones in combat, war has the potential to become a domain of covert, targeted assassinations, out of the sight

and control of both potential adversaries and democratic citizens.More than just a piece of technology, Chamayou demonstrates how drones are changing the very essence of what it means for a democracy to go to war. Drones fundamentally alter the psychological, moral, and physical space as well as the art of killing, according to Chamayou's incisive narrative. What is even more terrifying is his theory about the drone. It requires us to think about the emergence of a new political and ethical standard for war, one that is neither peace nor war as we know it. There is a twisted logic underlying the "principle of immunity for the imperial combatant": The ability of the drone operator, one of the numerous recently appointed masters of "lethal surveillance," to move between killing fields and coffee breaks throughout the day is one thing between home and the front lines of conflict. The recruitment of citizens to embrace the "moral obligation" to kill, on the other hand, is another option. The theory behind drone applications is predicated on the idea that drones can be used for monitoring, detection, and surveillance of criminal activity and incidents. Drones are able to take photos during flights that can be used as evidence in court. By creating a flight over a region inside a Trimble propeller, law enforcement can make use of technology. Data transmitted from the operations can be viewed on an iPad or other electronic device. Without the need for human pilot control, the drone autonomously searches the area once its flight parameters are established.

The drone collects millions of photos and data while in the air, conducting an accurate survey of the region (Coccia and Watts, 2020). After that, the information is uploaded into the computer program that compiles and filters the data gathered from the exercise. Information is made available to all law enforcement agencies, including the police services, once it has been collected and analyzed. According to the theory, the use of drone technology can help law enforcement and police officers gather information through iPads and other electronic devices. This information can then be used to track down and arrest criminals as well as apprehend suspects and dismantle criminal organizations. (Coccia and Watts, 2020). Drone technology is sophisticated.

Drones and helicopters differ in that the former can fly on their own while the latter requires a pilot to give it directions. The drone's specialized multipropeller system gives it a high degree of independence. The multiple propeller helps lower the number of drone operation errors. One noteworthy feature of this multipropeller system is that, should a motor inside the apparatus malfunction, it will still be able to fly thanks to the collective force of its propellers (Coccia and Watts, 2020). Larger internal motor counts enable drones to control their elevation more effectively, allowing them to carry heavier payloads while in flight. There is a specific source of power for these propellers, additionally, the majority of these gadgets have detachable batteries for extended periods of time in the air. Strong batteries included in the design allow for an extension of the flight time. An essential part of the drone flying mechanism is the controller. Experts use this device, according to Downer (2010), to control every movement of the drone, including its launch, navigation, and landing.

3.0 Methodology

This study adopted survey research design which consists of a series of structured questions, each of which is intended to elicit a particular piece of data. The instruments (questionnaires) applied in this survey seeks to elicit information on preventing violent crimes with drones as an effective alternative to vehicular patrols in Nigeria. The study was conducted in Nigeria Police College, Ikeja, Lagos state. The biographical information of the respondents was presented in Section A, while structured questionnaires with multiple-choice questions about preventing violent crimes were presented in Sections B and C. Respondents were asked to rate the questionnaire on a four-point scale by selecting one of the following options from the list;

1. ***Agree (A),*** 2. ***Strongly Agree (SA),*** 3. ***Disagree (D),*** 4. ***Strongly Disagree (SD).***

3.2 Population of the Study

The study population was made of 114 students drawn from Nigeria Police Collegeas shown in Table 1

Table 1: Population Distribution of School

S/N	Nigeria Police College	No of Students
1	Senior officers	60
2	Junior officers	54
	Total	114

Source: Field Survey, 2023

3.5 Sampling and Sampling Techniques

A total of 89 were selected as sample size for the study using the Taro Yamane formular.

Sample Size Determination

This formula is given as follows

$$N = \frac{N}{1+N(e)^2}$$

Where
N= Population
n=Sample size
e=Margin of error(0.05)
Hence we have

$$n = \frac{114}{1+114(0.05)^2}$$

$$n = \frac{114}{1+114(0.0025)}$$

$$n = \frac{114}{1.285}$$

$$n = 89$$

Table 2: Sample Distribution

S/N	Nigerian police college	No of Students
1	Senior officers	60
2	Junior officers	54
	Total	114

Source: Field Survey, 2024.

The questionnaires were successfully administered and retrievedout of 114 distributed, 89 copies retrieved.

3.1 Reliability of the Instrument

A test-retest reliability method was used to guarantee the instrument's dependability. Fifteen students who were not included in the initial study group were chosen to take the test. The same test was given to the same students again after a two-week period. By computing their variances, the scores acquired for the two administrations were statistically processed. The instrument's reliability was ascertained by calculating the ratio of the two variances. The internal consistency of the survey was assessed using a reliability coefficient ratio of 0.88.

4.0 ANALYSIS, RESULT, DISCUSSION

The descriptive statistics was used to answer the research questions while R^2 value Regression analysis was applied to test the hypotheses of the study at 0.05 level of significance. This sections provided answers to the research questions and test of the hypothesesas follows;

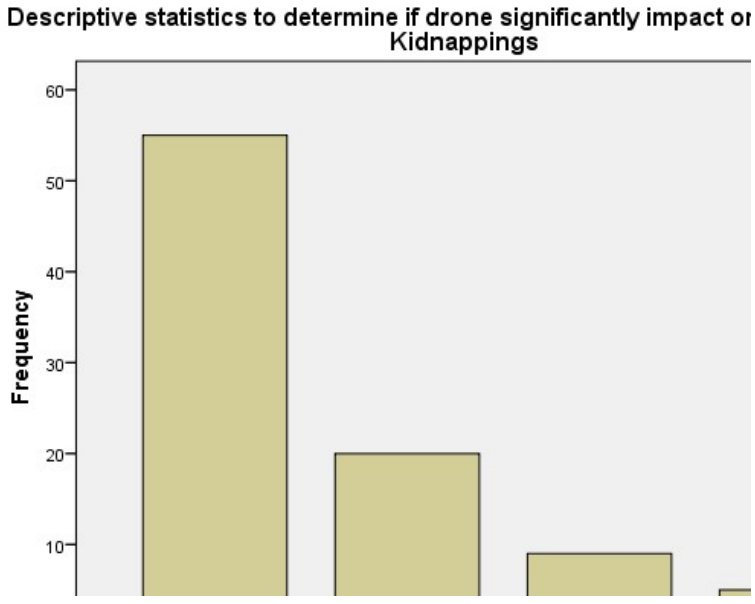
4.1 Research Question One

1.To what extent does the use of drones significantly impact on the prevention of kidnappings in Nigeria

Table 4.1

Descriptive statistics to determine if drone significantly impact on prevention of Kidnappings

Staff of Nigerian police college		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std.Deviation
	Strongly Agreed	55	61.8	61.8	61.8	1.5955	.88830
	Agreed	20	22.5	22.5	84.3		
	Strongly disagreed	9	10.1	10.1	94.4		
	Disagreed	5	5.6	5.6	100.0		
	Total	89	100.0	100.0			



Result; The descriptive statistics showed that 55 respondent representing 61.8% of total respondents strongly agreed that drones significantly impact on the prevention of kidnappings in Nigeria

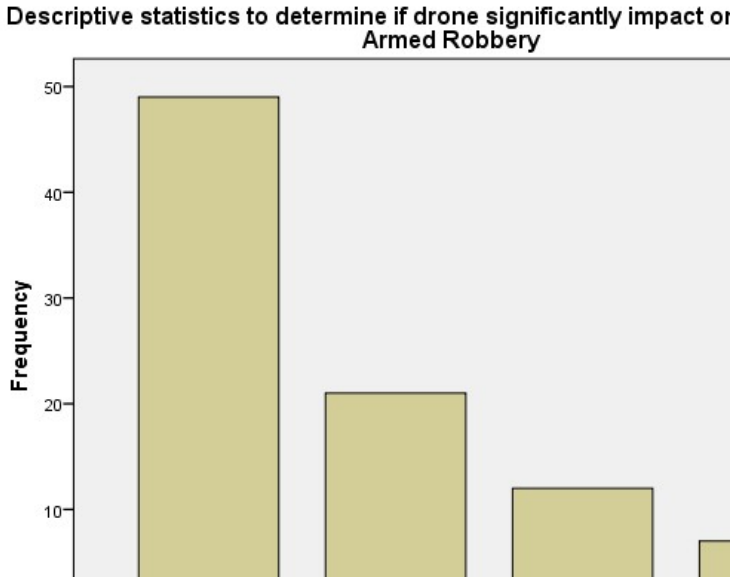
4.2 Research Questions Two

To what extent does the use of drones significantly impact on the prevention of armedrobbery in Nigeria?

Table 4.2

Descriptive statistics to determine if drone significantly impact on prevention of Armed Robbery

Staff of Nigerian police college		Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std.Deviation
	Strongly Agreed	49	55.1	55.1	55.1	1.7416	.97150
	Agreed	21	23.6	23.6	78.7		
	Strongly disagreed	12	13.5	13.5	92.1		
	Disagreed	7	7.9	7.9	100.0		
	Total	89	100.0	100.0			



Result;The descriptive statistics showed that 49 respondent representing 55.1 % of total respondents strongly agreed that drones significantly impact on the prevention of ArmedRobbery in Nigeria.

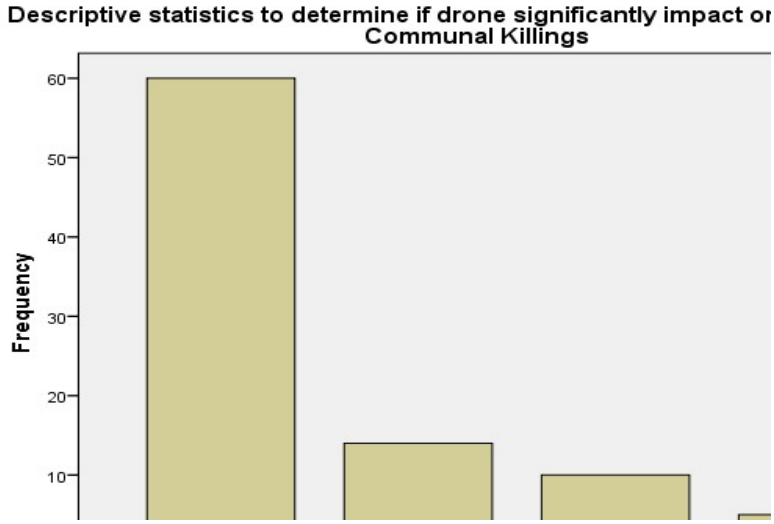
4.3Research Questions Three

To what extent does the use of drones significantly impact on the prevention of Community Massacre in Nigeria?

Table 4.3

Descriptive statistics to determine if drone significantly impact on prevention of Community Massacre

Staff of Nigerian police college	Frequency	Percent	Valid Percent	Cumulative Percent	Mean	Std.Deviation
Strongly Agreed	60	67.4	67.4	67.4	1.5506	.90468
Agreed	14	15.7	15.7	83.1		
Strongly disagreed	10	11.2	11.2	94.4		
Disagreed	5	5.6	5.6	100.0		
Total	89	100.0	100.0			



Result; The descriptive statistics showed that 60 respondents representing 67.4 % of total respondents strongly agreed that drones significantly impact on the prevention of Community Massacre in Nigeria

4.4 Test of Hypotheses

1. Hypotheses One

HO1. There is no significantimpact of drones in the prevention of kidnappings in Nigeria

The **Table 4.4.1**presents a regression model summary derived from an SPSS regression analysis. TheR-Squared value shows the extent to which the dependent variable relates with the independent variable.

Table 4.4.1

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.998[a]	.889	.996	.72232	.078

a. Predictors: (Constant), Drones

b. Dependent Variable: Prevention of kidnappings

Result-Model Summary

The result of the analysis shows that the r^2 values stood at 88.9% which is high, therefore there is significantimpact of drones in the prevention of kidnappings in Nigeria

2. Hypothesis Two

HO2 There is no significantimpact of drones in the prevention of Armed Robbery in Nigeria

The **Table 4.4.2** presents a regression model summary derived from an SPSS regression analysis**.** TheR-Squared value shows the extent to which the dependent variable relates with the independent variable.

Table 4.4.2

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.984a	.969	.968	2.15106	.134

a. Predictors: (Constant), Drones

b. Dependent Variable: Prevention of Armed Robbery

sources: SPSS regression analysis

Result-Model Summary

The result of the analysis shows that the r^2 values stood at 99.6% which is high, therefore there is significant impact of drones in the prevention of Armed Robbery in Nigeria

3. Hypothesis Three

HO3 There is no significantimpact of drones in the prevention of Community Massacre in Nigeria

The **Table 4.4.3** presents a regression model summary derived from an SPSS regression analysis**.** TheR-Squared value shows the extent to which the dependent variable relates with the independent variable.

Table 4.4.3

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.957[a]	.789	.915	4.74589	.059

a. Predictors: (Constant), Drones

b. Dependent Variable: Prevention of Community Massacre

Result- model summary

The result of the analysis shows that the r^2 values stood at 78.9% which is high. Therefore, there is significantimpact of drones in the prevention of Communal Killings in Nigeria

4.5 Results

The result of the study is summarized as follows

1. Therefore, there is significantimpact of drones in the prevention of kidnappings in Nigeria
2. There is significant impact of drones in the prevention of Armed Robbery in Nigeria
3. Therefore, there is significantimpact of drones in the prevention of Community Massacre in Nigeria

4.6 Discussion

The study showed that there is significantimpact of drones in the prevention of kidnappings, Armed Robbery and Communal Killings in Nigeria.In Nigeria the use drone can constitute an alternative to vehicular patrol to enhance the prevention of violent crimes. It is believing that drones can enhance effective aerial surveillance, effective, intelligence gathering and monitoring security activities. Unmanned aerial vehicles (UAVs) known variously as drones or remotely pilotedvehicles (RPVs) are small aircraft that can fly without an onboard human operator. They areautonomous machines that can carry cameras, sensors, communication equipment or other payloads. Drones' usage has been identified as the most effective for intelligence gathering, aerial surveillance and security monitoring in recent times

5.0 Conclusion and Recommendations

5.1 Conclusion

The study concludes thatDrones are effective alternative to vehicular patrols in Nigeriain preventing violent crimes such askidnapping, armed robbery, communal killings and others. The use of drones goes alongway to prevent such crimes. Therefore, adequate measures and strategies should be implemented to ensure the deployment of drone at all level of security management to ensure the safety of lives and properties.

5.2 Recommendation

Based on the findings, the following recommendations is made;

1. The government should through policy formulation ensured the strategic deployment of drones in all security formation in the country
2. Adequate budgetary provision should be made to ensure the efficient deployment of drones by security forces
3. Adequate training of manpower should be made to ensure the efficient utilization of drones' deployment
4. The deployment of drones should be adequate both in the rural and urban areas so as to provide comprehensive monitoring and prevention of violent crimes
5. Adequate assessment of information and intelligence received from drones should be made for proper action.

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