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## IMPACT OF CRIME ON INTERSTATE TRANSPORT OPERATIONS IN NORTHCENTRAL NIGERIA

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**Terrorism Studies**

**Impact of Crime on Interstate Transport Operations in Northcentral Nigeria**

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**Abstract**

The study investigated the impact of crime on interstate road transport operations in north-central Nigeria. The study relies on descriptive statistics to describe the features of the populations. 200 questionnaires were purposefully administered to the four major interstate motor parks in the capital of some north-central states (i.e., Minna, Lokoja, Benue, and Lafia) using random sampling techniques. The gathered data was analysed using percentages and charts, while the T-test statistics were used to test the study hypothesis. The result shows that there is a statistically significant influence of crimes on interstate transport operations in north-central Nigeria. The study concluded that improving the safety of the road transport network will motivate transport operators to operate more efficiently on the routes.

**Keywords :** *Crime, Northcentral Nigeria, Operations, Road Transport, & Transport Operators*

**INTRODUCTION**

Crime in Northern Nigeria's transport network can be traced back to the activities of Boko Haram in the northeastern part of the country. Boko Haram has been involved in kidnapping, killing, and assaulting their victims. They use hostages as shields to

escape crime scenes, demand ransom, or access hidden areas (Ibrahim & Muktar, 2017). More recently, Fulani militants have also been linked to crimes such as banditry, terrorism, and kidnapping. According to the 2014 Global Terrorism Index, Fulani militants were ranked the fourth deadliest terrorist group. They have used machine

guns and other light weapons to target and terrorize farmers in North Central states like Benue, Nasarawa, Kogi, and Niger. Terrorist activities along the roadways in the North Central region have had severe consequences for travelers and transport operators.

Documents provided by Beacon Consulting (2021) revealed approximately 42 incidents of insecurity on North Central roads in 2021, affecting around 254 lives. In November 2018 alone, there were 71 murders and 183 kidnappings. The data further showed that civilians were disproportionately impacted, with roughly 90.7% of the attacks targeting them on the North Central interstate transport network.

Researchers have identified several causes for the terrorism, banditry and kidnapping affecting transport networks. These include weak institutional capacity, inadequate security measures, porous borders, ineffective leadership, and widespread poverty (Anigbuogu, 2019). Achumba et al. (2013) concluded that insufficient training and equipment for the country's security forces significantly contribute to the nation's security challenges. The rise in kidnapping in Nigeria and many other developing countries in Africa and Asia is also largely attributed to political instability and the lack of legal employment opportunities for youth.

Crimes on the transport network negatively affect both passengers and transport providers' performance. Transport operator performance refers to how well a service provider (such as logistics companies, public transport agencies, or private carriers) operates to meet the needs of customers and stakeholders. Terrorism, banditry, and kidnapping on transport

networks can impact key performance, including on-time delivery, operational efficiency, safety performance, and service reliability (Iwan et al., 2016; Gatta et al., 2019).

Ajiboye et al. (2023) noted that increased travel time and reduced patronage are direct consequences of these crimes on interstate transport networks. Previous literature highlights other impacts on transport operator performance, such as fear of travel, vehicle damage from attacks, decreased revenue due to fewer patrons, longer travel times, psychological distress, and time lost due to longer queue at security checkpoints (Adewumi et al., 2015; Juergen et al., 2006; Abdullahi, 2023; Kachele et al., 2001). Prolonged criminal activity on transport networks can ultimately discourage both passengers and transport providers from using these routes.

Despite government efforts to reduce terrorism, banditry, and kidnapping across the transport network through investments in information technology, the establishment of security checkpoints, security staff training, hiring more personnel, and acquiring advanced security equipment these crimes persist. Road transport operators continue to face challenges, including reduced revenue per mile, lower ticket sales, time wastage, inability to cover operating costs, diminished vehicle turnaround time, loss of skilled personnel, and fear and anxiety, which all reduce road usage. This study aims to address the gap in literature by focusing on four North Central Nigerian states: Niger, Kogi, Nasarawa, and Benue. It captures the perceptions of interstate transport operators at major transport terminals in these states. The study proposes one null hypothesis: There is no

statistically significant influence of terrorism, banditry, and kidnapping on interstate transport performance in North Central Nigeria.

## **METHOD**

### **Theoretical framework**

One theory that is important to this investigation is the event system theory. Anything that happens is called an event or an occurrence. The idea of an event began to take on a philosophical life of its own in the 20th century, partly because of a renewed interest in the concept of change, to which the idea of an event seems inextricably linked, and partly because the concept of an event was increasingly used in scientific and meta-scientific writing (Broad 1933; McTaggart 1927; and Whitehead 1929). Events include things like battles, highway kidnapping, banditry, herdsmen, armed robberies on highways, and other incidents. Every occurrence is regarded as an event. Most philosophers regard events as abstract particulars because they are distinct and spatially locatable, but they are also abstract because multiple events may occur simultaneously in the same location (Lombard, 1986).

Routine activity theory is another idea that has an impact on the present studies. It is a branch of criminal opportunity theory that focuses on the conditions surrounding these crimes. It was first proposed by Marcus Felson and Lawrence E. Cohen in their 1979 explanation of the variations in the US crime rate between 1947 and 1974. Routine activity theory investigates as terrorism, banditry and kidnapping as an event, closely links to its surroundings, and emphasises its ecological process, which moves the academic focus away from simple offenders (Miro, 2014). According

to Felson and Cohen's argument, crime is on the rise because of the increased opportunities that come with modern society's prosperity. For example, insurgent crimes like terrorism, banditry, and kidnapping are more common in less advanced economies.

Another concept in criminology and sociology which may provide an underpin for this study is the strain theory, the theory holds that social structures inside society may influence criminal behaviour. In 1938, Robert K. Merton developed the strain theory, positing that people are under societal pressure to seek goals that are acceptable to society, even in the face of a shortage of resources. This causes stress, which motivates people to carry out crimes such as terrorism, kidnapping, and banditry in order to secure their financial future (Merton, 1938).

Rational action theory is another theory which may provide a theoretical support for the present study. Rational action theory, often known as choice theory, is a variant of rational choice theory. Amartya (2008) describes the theory as a set of standards that help us understand economic and social behaviour. The notion extends back to the 18th century and may be traced back to Adam Smith, a political economist and philosopher (Boudon, 2003). According to the theory, an individual will undertake a cost-benefit analysis to determine whether a specific choice is appropriate for them (Gary et al., 2000).

The rational choice theory looks at three concepts: the invisible hand, rational actors, and self-interest (Levin and Milgrom, 2004). Sociologists claim that since humans are only motivated by their own self-interest, all human action is logical. It eliminates the possibility of a social transaction, including individuals behaving

purely altruistically. When it comes to terrorism, banditry and kidnapping on interstate roads, people believe that these actions are personal choices that have an impact on the flow of traffic and freight on transport routes.

## **Empirical Review**

### **Assessing the causes of terrorism, banditry & kidnapping on transport network**

Numerous studies have identified factors responsible for terrorism, banditry, and kidnapping across transport networks and society at large. In a study by Ignatius (2020) on kidnapping cases, he compared the cultures of life and death between Boko Haram and Fulani herders. The primary objective was to assess the motives behind kidnappings by both groups, as well as their reasons for attacking communities. The study found that major drivers of kidnapping include poor leadership, inadequate security, high unemployment, and other socio-economic issues. The research concluded that kidnapping has resulted in loss of life, job displacement, and a diminished value placed on human life.

In a separate study, Protus and John (2014) investigated the challenges surrounding abduction and hostage-taking in southeastern Nigeria. Their study aimed to identify the causes of abductions and factors contributing to the growth of the kidnapping industry in the region. The findings revealed that moral decay, unemployment, unequal distribution of development projects, excessive wealth accumulation, corruption by public officials, abandonment of the masses, poverty, and unrealistic expectations placed

on children by parents are major factors driving the rise of kidnapping in Nigeria. The study concluded that the inability of security agencies to locate kidnappers' hideouts hinders the Nigerian Police Force's efforts to eradicate the problem.

Similarly, Eyikomisan et al. (2021) explored the perceived effects of banditry and kidnapping on national development in Nigeria. Their study sought to determine the impact of these crimes on development and the factors fueling them. Results indicated that banditry and kidnapping pose significant threats to national progress, leading to insecurity, economic decline, and psychological distress. The study identified poverty, unemployment, political exploitation, and perceived economic deprivation as the main causes of these crimes.

Mburu (1999) examined the causes, history, and political implications of contemporary banditry in the Horn of Africa, focusing on the cases of Kafagne, Faloul, Ngoroko, and Shifta. The study linked banditry to regional political instability, poverty, and lawlessness, concluding that political fragmentation and unresolved regional disputes have perpetuated banditry, which remains a significant threat to regional security. Abdullahi (2019) also studied rural banditry in West Africa using an analytical approach, focusing on its socio-economic, political, and environmental drivers, along with its cross-border dimensions. The study revealed that rural banditry, driven by resource scarcity, poor governance, and elite complicity, has escalated into a regional conflict, with negative consequences such as youth unemployment, illegal migration, the spread of small arms, and the disruption of agricultural activities.

The cumulative impact of terrorism, banditry, and kidnapping is the creation of a climate of fear, the obstruction of economic development, worsening poverty, weakened political structures, and harm to societal well-being. Empirical studies, such as those by Bashir and Mustapha (2022), Olajojo and Awoniyi (2022), Chukwueme et al. (2019), and Beetsch et al. (2021), highlight the detrimental effects of these activities on socio-economic stability, economic growth, Gross Domestic Product (GDP), and government functions in northern Nigeria. Addressing these issues requires a comprehensive approach, including security reforms, economic development initiatives, and community involvement.

#### ***Impact of crimes on road transport operation.***

Crimes such as terrorism, banditry, and kidnapping significantly impact the efficiency and performance of transport operations. The efficiency or performance of a transporter is a measure of how well goals are achieved, reflecting the level of output generated with minimal inputs. As noted by Sickles and Zelenyuk (2019), efficiency generally refers to the ability to achieve a desired result with the least amount of waste, expenditure, or unnecessary effort. In road transport, performance is often linked to financial outcomes, such as the number of seats sold. Criminal activities like terrorism, banditry, and kidnapping on transport networks can deter customers from purchasing bus tickets, leading to a decrease in revenue per mile due to reduced patronage. Empirical studies by Ajiboye et al. (2023) found that interstate motor park operators have reported a decline in customer patronage,

which, in turn, decreases transportation revenue. Transporters often respond by reducing services to cut operating costs (Konecny and Bridzikova, 2020). In response to safety concerns, some transport operators may alter their routes or offer feeder services to avoid dangerous areas.

The effects of terrorism, banditry, and kidnapping include longer waiting times at transport terminals for vehicles to fill up and extended travel times due to military checkpoints, which are inconvenient for travelers (Juergen et al., 2006; Kachele et al., 2001). Longer waiting times delay vehicle departures, and passengers who endure extended wait periods may become dissatisfied with the transport system. Fear instilled in passengers also discourages travel to certain regions, contributing to these delays. Additionally, prolonged wait periods result in inefficiency for transport providers, many of whom may go days without scheduling trips due to low demand. Ajiboye et al. (2023) noted that insurgency has negatively impacted interstate transport operations, causing longer waiting times and fewer passengers.

Criminal activities also lead to the loss or damage of vehicles. Abdullahi (2023) found that fewer vehicles are available for interstate transport due to theft or destruction caused by attacks. Vehicle turnaround times, a key performance metric, are also affected. Thomas (2023) emphasizes that shorter turnaround times are preferable for any industry, as they allow transport operators to prepare for the next journey more quickly. However, insurgency has increased vehicle turnaround times due to longer lines at checkpoints or news of road attacks.

Moreover, terrorism, banditry, and kidnapping generate fear among travelers, preventing them from going about their normal activities. Daniel (2020) demonstrated that terrorist attacks frequently target cross-border travel and transportation infrastructure, exacerbating instability in northeastern Nigeria. As a result, passengers are often reluctant to travel for fear of being attacked. Okunola (2009) found similar evidence, showing that commuters are afraid to travel along the Ibadan-Sokoto transport corridor due to armed robbery and kidnapping. Adewumi et al. (2015) studied the perceived risk of crime at transit hubs in Nigeria, indicating that crimes such as banditry, kidnapping, and terrorism tend to occur more frequently at night, with higher crime rates on weekends (52%) and holidays (62%) compared to weekdays (48%) and non-holiday periods (38%).

Passenger safety is compromised in regions where terrorism, banditry, and kidnapping are prevalent. Okoli and Okpaleke (2014) demonstrated that banditry poses a severe threat to public safety and national security in Nigeria. Additionally, the level of risk exposure varies across regions. Purokayo and James (2020) studied transport safety concerns in Nigeria's six geopolitical zones, revealing significant differences in risk exposure. The North-West, North-Central, and South-West zones exhibited higher risks due to factors such as poor roads, road obstructions, kidnapping, poorly maintained vehicles, overloading, speeding, and other reckless driving practices.

Despite the extensive literature on the impact of terrorism, banditry and kidnapping on transport operations performance, there is a gap in research

specifically focused on how crimes such as kidnapping, banditry, and terrorism affect transport operations in North-Central Nigeria. This study aims to fill that gap by investigating the influence of these crimes on transport operations in the region.

## **Theoretical Framework**

The current study is grounded in Event System Theory. Broad (1933) defines an event as any occurrence that can have either a positive or negative effect on society or individuals. In the context of this research, terrorism, banditry, and kidnapping are considered events that significantly affect the performance of transport operators. These criminal activities influence key aspects of transport operations, including turnaround time, revenue, waiting times, driving routes, vehicle availability, and driving schedules along transport networks. As such, it is posited that these events have a direct and substantial impact on the performance of transport operators in North Central Nigeria.

## ***Research design & procedures for data collection***

The present study utilises a descriptive research design to describe the features of the study populations. The study utilises seven days for data collection at each of the major interstate motor parks (i.e., Abdulsalam Motor Park in Minna, Lokoja Mega Terminal, Benue Links, and Central Garage in Nasarawa) in the aforementioned state.

## ***Population and sampling method***

The study comprises interstate road transport operators across north-central Nigeria (i.e., Nasarawa, Kogi State, Benue State, and Niger State). The study

purposely administered 200 copies of questionnaires across the motor park using random sampling techniques.

### Research instrument

The questionnaires used for the study consist of two parts. The first part looked at the socioeconomic and demographic features of the interstate transport operators. While the second part captured the influence of the crime i.e., terrorism, banditry and kidnapping on the performance of transport operators.

### Validity and reliability test

To validate the internal consistency of the questionnaire used in the study, a pilot survey was conducted by distributing 10% of the questionnaires to road transport operators across motor parks. The operators were asked to rate the extent to which they agreed on the impact of crimes on drivers' performance. Cronbach's alpha was then employed to assess internal consistency, using two-tailed hypotheses in SPSS. The results, as shown in Table 1, indicate a high internal consistency for the research instrument, with values ranging from 0.78 to 0.88. According to Cho (2016), a Cronbach's alpha value between 0.70 and 0.80 indicates a higher internal consistency.

Table 1: Results of the internal consistency test

s/n	Study variables	Cronbach's Alpha	Comments
	Reduction of revenue	0.82	Very good
	Reduction in the sale of ticket	0.84	Very good
	Decreased vehicle turn-around time	0.79	Good
	Fear and anxiety reduce the rate of plying the road	0.85	Very good
	Change of driving route	0.81	Very good
	Time wastage due to military checkpoints	0.83	Very good
	Inability to cover the operating cost	0.80	Very good
	Loss of quality personnel	0.78	Good
	Late night travels due to scarce passenger	0.86	Very good
	Loss of Vehicles due to damage/destruction during attacks	0.88	Very good

Sources: Authors' investigation (2024)

### Method of analysis

The gathered data was analysed using frequencies, percentages, and charts. The hypothesis was tested using t-test statistics.

## RESULTS & DISCUSSION

### Socioeconomic features

Figure 1 depicts the ages of interstate transport operators. According to the data, 57 operators are between the ages of 30 and 40; 41 are between the ages of 41 and 40; 22 are between the ages of 19 and 29, and just 18 are over the age of 51. Based on this data, the author concludes that the bulk of the transport operators are young.



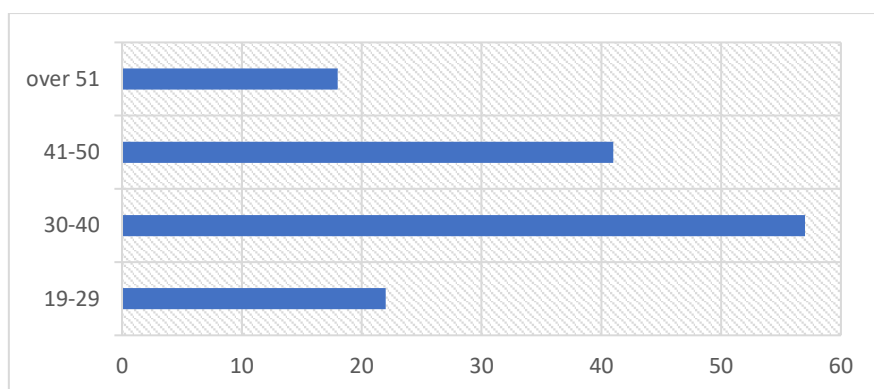


Figure 1: Age of the operators

Sources: Authors' survey (2024)

Figure 2 displays the marital status of interstate transport operators. According to the investigation, 58% were married, 31% were single, and only 11% were divorced. According to this data, married people dominate interstate transportation operations in north-central Nigeria. And

because they are married, they are more responsible, and there is a possibility that they will not use the transport network, which has a high crime rate. Reducing transport services in crime hotspots has a direct impact on the performance of operators along that route.

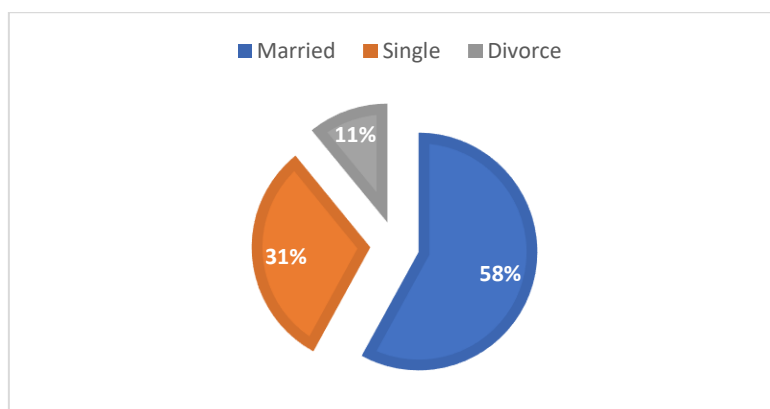


Figure 2: Marital status

Sources: Authors survey (2024)

Figure 3 shows that the majority of interstate transport operators have a West Africa Examination Council (WAEC) certificate, while 27% have a primary

school leaving certificate, 19% have a National Certificate of Education (NCE)/National Diploma, and only 9% have a Higher National Diploma (HND)/Bachelor of Science (Bsc).

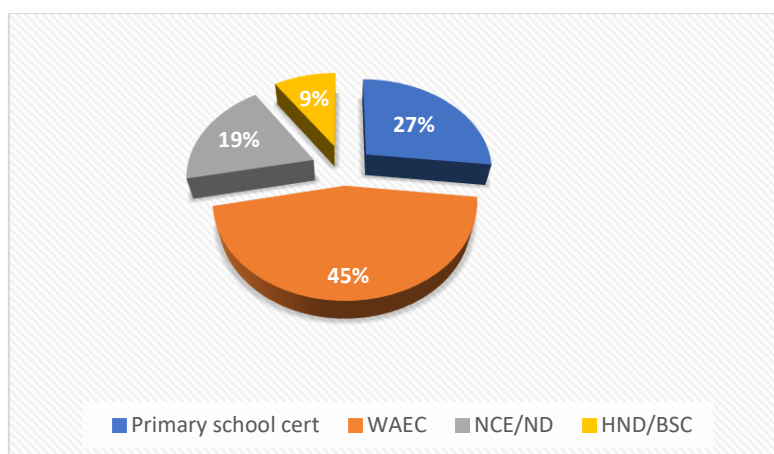


Figure 3: Educational qualification

Sources: Authors' survey (2024)

Figure 4 shows that 56 interstate transport providers earn between N21,000 and 40,000; 38 earn between 41,000 and 60,000; 33 earn less than N20,000; and just 11 earn more than N61,000. This analysis

indicates that interstate transport operations are profitable, and in the absence of crime on the transportation network in northcentral Nigeria, the routes will attract more operators plying the route.

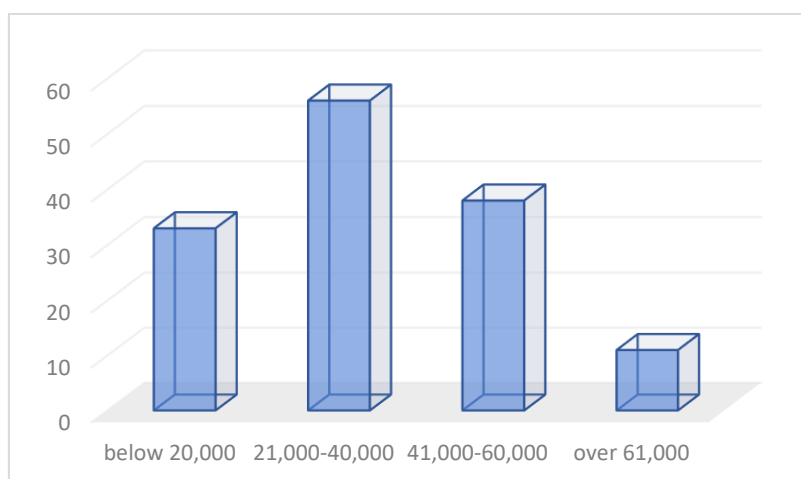


Figure 4: Income of transport operators

Sources: Authors' survey (2024)

Figure 5 depicts the years of driving experience of interstate transport operators in north-central Nigeria. The data shows that the bulk of the operators had 11 to 15 years of driving experience, 41 had 6 to 10 years of experience, 24 had more than 16

years of driving experience, and only 18 had less than 5 years of driving experience. Because the bulk of the operators had 11 to 10 years of driving experience, it indicates that they are knowledgeable of the many types of crime along the transport route in the interstate road of northcentral Nigeria.

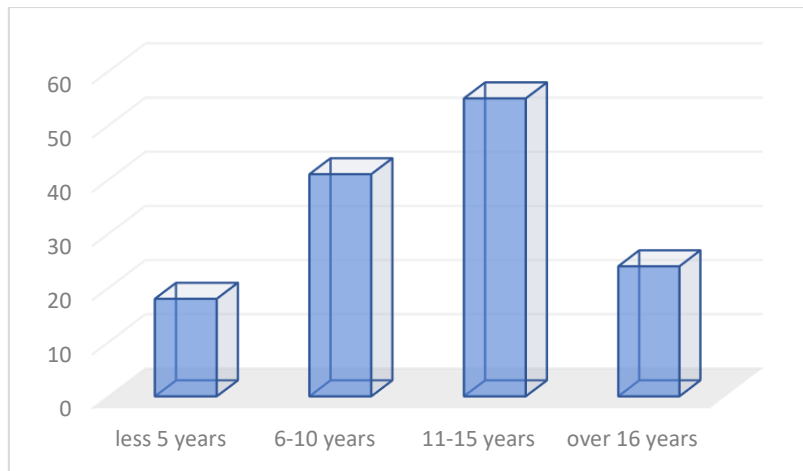


Figure 5: years of driving experience

Sources: Authors' survey (2024)

Figure 6 depicts a study of the various kinds of crime that interstate transport operators have encountered throughout their travels along the interstate transportation route. According to the findings, more than half of

the interstate operators in northcentral Nigeria have experienced armed robbery along the route, 42% have experienced kidnapping along the transport route, and just 5% have experienced banditry in some town along the route.

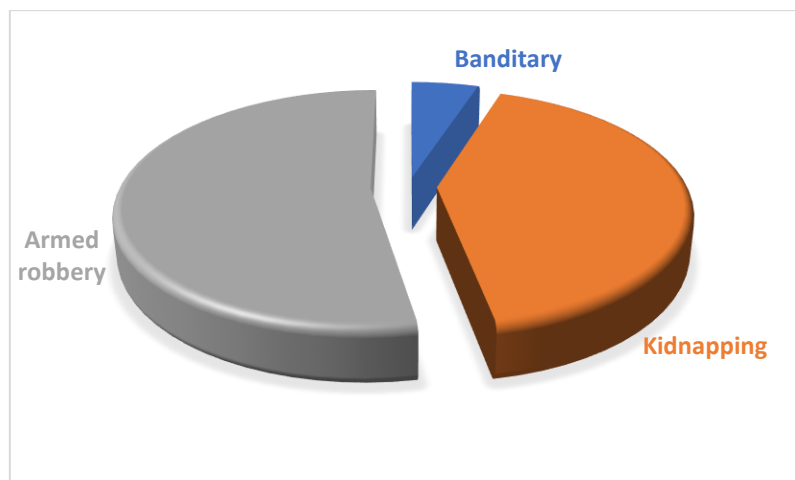


Figure 6: Types of crime experience

Sources: Authors' survey (2024)

Figure 7 depicts how transport operators respond when approaching a crime hotspot along an interstate transport route. According to the analysis, around 56%

express fear, 31% say they are somewhat afraid, and only 13% say they are not fearful of travelling along the transportation network.

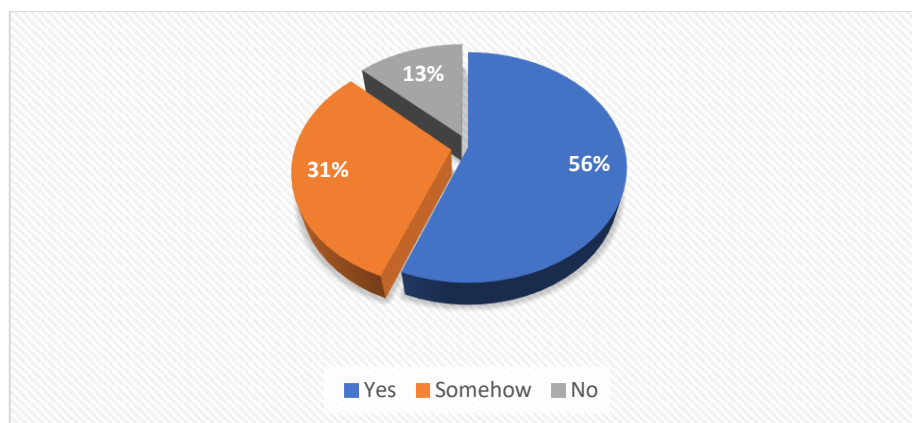


Figure 7: How transport operators respond?

Sources: Authors' survey (2024)

Figure 8 depicts a study of the motor parks from which operators operate. The investigation revealed that 45 operators who participated in the poll are from Lokoja mega terminal, 39 operators stated they

operate from Central Motor Park Lafia, 34 operators agreed to operate from Abdulsalam Motor Park in Minna, and only 20 operators operate from Benue Link Motor Park.

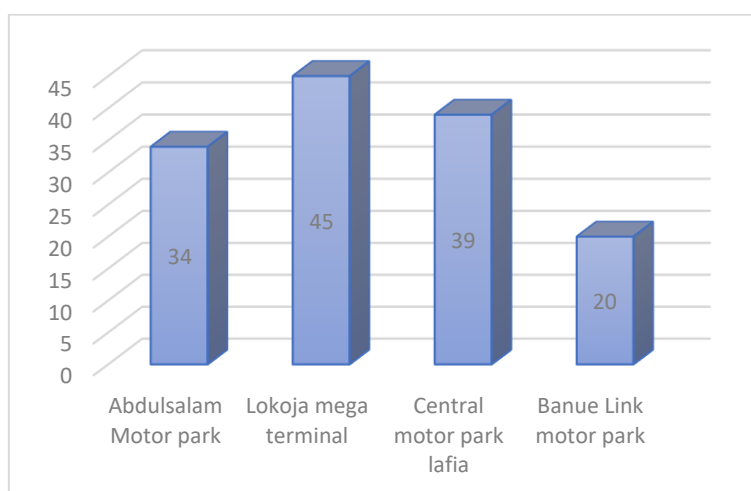


Figure 8: Interstate motor parks  
Sources: Authors' survey (2024)

### Analysis of the impact of crime on interstate transport operators' operations

The analysis of the impact of crime on interstate transport operations is shown in Table 2. Table 2 records that 43.1% of interstate operators agreed that there is a reduction in revenue, 12.3% of the operators strongly agree that they face the

problem of revenue reduction, 26.4% disagree that they experience revenue reduction, 10.0% strongly disagree that they experience revenue reduction, and only 8.2% of the operators were moderate in their view of whether they experience revenue reduction. The higher proportion agrees that crime negatively impacts operators' revenue. These findings are in

line with Ajiboye et al. (2023) work whom posited that insurgent activities like banditry and kidnapping reduces drivers' profits.

Similarly, the analysis of the reduction in the sale of tickets shown in Table 2 recorded that the majority of the interstate transport operators agree that they experience a reduction in the sale of tickets; 17.8% of them strongly agreed; 14.2% disagree that they experience a reduction in the sale of tickets; and 3.7% strongly disagree that they witnessed a reduction in the sale of tickets. This analysis indicates that the frequent occurrence of crime on the interstate transport network in north-central Nigeria may result in a loss of revenue due to passengers' fear of travelling along the route (Daniel, 2020). Transport operators make more revenue when more bus tickets are purchased.

Also, the analysis of decreased vehicle turn-around time in Table 2 shows that more than half of the interstate operators agree that there is a decreased vehicle turn-around time, 16.0% are moderate in their opinion, and only 5.2% strongly agree that there is a decreased vehicle turn-around time. Crimes like armed robbery and kidnapping on the road transport network prevent the free flow of vehicles. Motorists and operators are forced to park until the perpetrators vacate the road network before they can pass. This will increase the travel time and make it difficult for the vehicle to return to prepare for the next trip.

The analysis of whether fear and anxiety reduce the rate of plying the road shown in Table 2 indicates that 51.7% of operators agree they don't longer ply certain interstate transport routes due to fear and anxiety, 25.0% strongly agree, 13.2% were

moderate in their view, and 10.1% disagree that despite the fear and anxiety, they didn't reduce the rate at which they ply the route. In addition to the analysis in Table 2, 46.9% of the interstate transport operators agree that they change their driving route due to crimes, 28.7% disagree that despite crimes on the interstate transport route, they didn't change their driving route, 18.0% strongly disagree as to whether they change their driving route, and only 6.4% of them were moderate in their opinion. This outcome enables the author to conclude that the majority of interstate transport operators in north-central Nigeria change their driving routes due to crime along the transport network.

Similarly, the analysis of the time wastage due to many military checkpoints is shown in Table 2. From the analysis, 43.4% of operators agreed that there is time wastage due to military checkpoints, and 30.1% strongly agreed that time wastage occurs due to the many military checkpoints. 14.5% of operators disagreed, and only 12.0% were neutral as to whether time wastage was due to military checkpoints.

Furthermore, Table 2 showed that 39.7% of the interstate transport operators agree that they were unable to cover the operating cost, 31.3% disagree that they were unable to cover the operating cost, 11.1% strongly agree, 9.7% strongly disagree that they are unable to cover the operating cost, and only 8.2% of them were moderate in their view of whether they cover the operating cost or not. Moreover, Table 2 recorded that 41.9% of the operators agree that they have loss quality personnel due to crimes on the road, 33.0% disagree that they have loss quality personnel due to crime, 9.6% were moderate, 8.0% strongly disagree that they have loss quality personnel due to crime,

and only 7.5% strongly agree that they have loss quality personnel due to crime on

interstate transport roads in the North Central Nigeria.

Table 2: Respondents distribution on the influence of crime on operators' operations

S/n	Criterion	(%)				
		SA	A	M	D	SD
1	Reduction of revenue	12.3	43.1	8.2	26.4	10.0
2	Reduction in the sale of ticket	17.8	64.3	0.0	14.2	3.7
3	Decreased vehicle turn-around time	5.2	78.8	16.0	0.0	0.0
4	Fear and anxiety reduce the rate of plying the road	25.0	51.7	13.2	10.1	0.0
5	Change of driving route	0.0	46.9	6.4	28.7	18.0
6	Time wastage due to military checkpoints	30.1	43.4	12.0	14.5	0.0
7	Inability to cover the operating cost	11.1	39.7	8.2	31.3	9.7
8	Loss of quality personnel	7.5	41.9	9.6	33.0	8.0
9	Late night travels due to scarce passenger	22.1	57.5	3.5	10.9	6.0
10	Loss of Vehicles due to damage/destruction during attacks	4.8	63.1	1.7	30.0	0.0

Sources: Authors investigation (2024)

Moreso, Table 2 recorded that 57.5% of operators agree that they engage in late-night travel due to scarce passengers, 22.1% strongly agree, 10.9% disagree that they engage in late-night travel due to scare passengers, 6.0% strongly disagree, and only 3.5% were moderate in their view. Finally, Table 2 reveals that 63.1% of the operators agree that they lost vehicles due to damages or destruction during attacks, 30.0% disagree that they lost vehicles due to damage, 4.8% strongly agree, and only 1.7 were moderate in their view of whether they lost vehicles due to damages from attacks.

## Hypothesis

H01 there is no statistically significant to the influence of crimes on interstate transport operation in the Northcentral Nigeria.

The outcome of the hypothesis tested is shown in Table 3. From the analysis, the criteria were reduction of revenue (0.000), reduction in the sale of tickets (0.000), Reduced vehicle turn-around time (0.000), fear and anxiety reduce the rate of plying the road (0.000), change of driving route (0.000), time wastage due to many military checkpoints (0.000), inability to cover the operating cost (0.000), loss of quality

personnel (0.000), Late-night travel due to scarce passengers (0.000) and loss of vehicles due to damage or destruction during attacks or theft (0.000) are all less

than P-value 0.05. indicating that there is a statistically significant influence of crimes on interstate transport operations.

**Table 2: Output of the One-Sample Test**

	Test Value = 0					
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Reduction of revenue per miles	41.326	137	.000	3.531	3.718	3.946
Reduction in the sale of ticket	40.168	137	.000	3.765	3.234	3.694
Reduced vehicle turn-around time	39.169	137	.000	3.607	3.472	3.777
Fear and anxiety reduce the rate of plying the road	35.207	137	.000	3.856	2.158	3.559
Change of driving route	33.543	137	.000	3.832	2.188	3.626
Time wastage due many military checkpoints	32.992	137	.000	3.854	3.335	3.593
Inability to cover the operating cost	28.518	137	.000	3.909	3.682	3.978
Loss of quality personnel	26.231	137	.000	3.113	3.179	3.323
Late night travels due to scarce passenger	23.875	137	.000	3.347	3.666	3.846
Loss of Vehicles due to damage/destruction during attacks or theft	19.452	137	.000	3.984	3.585	3.725

Sources: Authors' survey (2024)

## CONCLUSIONS

The study examined the effect of crime on interstate road transport operations in north-central Nigeria. The study concluded that crime on the interstate transport network in north-central Nigeria has caused a reduction in transport operators' revenue. Also, the study enables the authors to conclude that crime has resulted in a reduction in sales tickets and a decrease in vehicle turnaround time. In addition, the study outcome enables the authors to conclude that there is a statistically significant influence of crime on interstate transport operations in north-central Nigeria. It is therefore important to note

that improving the safety of life and property on the road transport network motivates transport operators to use the road, particularly if the road is profitable. The study recommends that:

1. The government of Nigeria, through her relevant agency, should ensure the safety of citizens as well as deploy security personnel at crime hotspots. This act alone can give a sense of safety to both passengers and operators in the transport network.
2. Modern technology should be employed in combating crimes by Nigerian security agents.

3. Crime perpetrators should be given capital punishment to deter them from attacking both passengers and operators on the transport network.
4. The government of Nigeria should encourage the retraining of the Nigerian security forces in handling issues relating to crime on transport networks.

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