PROJECT TITLE:

TREND AND CHARACTERISTICS OF ROAD TRAFFIC ACCIDENTS IN OFFA, KWARA STATE

BY

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CERTIFICATION

This is to certify that this research study was conductedby **KAZEEM ABDULWASIU O.** (HND/23/CEC/FT/0202) and had been read and approved as meeting the requirement for the award of Higher National Diploma (HND) in Civil Engineering of the Department of Civil Engineering, Institute of Technology, Kwara State Polytechnic, Ilorin.

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DEDICATION

I dedicate this piece of workto almighty God who is the fountain of life, knowledge, wisdom and understanding. His grace and mercy has never departed from me. He alone has made this academic endeavor possible.

I also dedicate this work to my family, my loving parents Mr. and Mrs. KAZEEM for their support.

ACKNOWLEDGEMENT

My profound acknowledgement goes to almighty God for his mercy over my academic pursuit, his gift of life and grace to undertake this project.

I am very grateful to my supervisor Engr. A.B. Naallah for his instructive advice, correction, suggestion and moral guidance to make this project a success. I am also grateful to my lecturers, my friends, and all those who have contributed in the success of my academic pursuit.

Lastly, I want to thank my family for their total support over the completion of the project. They are indeed the pillar of strength. It is my earnest prayer that you will reap and enjoy the fruit of your labor. (Amen).

ABSTRACT

This project examines the trend and characteristics of Road Traffic Accidents (RTA) in Offa, highlighting the frequency, causes, and contributing factors. The study analyzes data on accident patterns, vehicle categories involved, and potential risk factors. The findings will provide insights into the nature of RTA in Offa, informing strategies for improvement and mitigation. The project's results can contribute to enhancing road safety measures, promoting responsible driving behaviors, and reducing the incidence and impact of RTA in the region.

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CHAPTER ONE

1.1 INTRODUCTION

Road traffic accidents (RTAs) is any accident involving at least one road vehicle in motion on a public road or private road to which the public has right to access resulting in at least one injured or killed person. (United Nation, European Union and the International Transport Forum at the OECD, 2019). These accidents can be caused by factors like driver error, mechanical failure, weather conditions, road hazards, or poor infrastructure. RTAs are a major public safety issue worldwide and can lead to various types of damage, including property loss and personal injury. Although transportation has liberated man and makes him more mobile, his increasing reliance on vehicular movement has conferred great facilities on him and his activities. The greatest culprit of all the modes of transport is road of which traffic accident is the most disturbing repercussion of its use. Road traffic accident is therefore an issue of great international concern as it has emerged as the single greatest source of death all over the world. In the developing countries where the number of motor vehicles relating to population is generally much lower than in the developed countries, fatalities from automobile crashes are higher. It has been shown, for instance, that accidents in developing countries cost almost one percent of these countries Annual Gross National Product utilizing scarce financial resources they can ill-afford to lose (Akpoghomeh, 1998). Nigeria, with a total land area of 910,771 square kilometers and human population of about 200 million, is the most populous country in Africa, and the 7th most populous nation in the world. Its large land mass and burgeoning population correlate with its high level of vehicular population estimated at over 7.6 million with a total road length of about 194,000 kilometers (comprising 34, 120 km 2 federal, 30,500 Km, State and 129,580 km of local roads). Nigeria ranked as the country with the second largest road network In Africa in 2011. Its population density which varies in rural and urban areas (approximately 51.7% and 48.3% respectively) translates to a population- road ratio of 860 persons per square kilometers indicating intense traffic pressure on the available road network. This pressure contributes to the high road traffic accidents in the country (FRSC, 2012). The Nigeria situation has reached such an alarming proportion even to the point of sheer frustration and near helplessness. Nigeria continues to feature in the bottom half of World Health Organization country rankings of road traffic accidents. The country’s 149th ranking in 2009 out of 178

member states indicates the hazards associated with road transportation in a country that is largely dependent on its road network for economic, social and physical activities. In deed news of road traffic accidents in Nigeria no longer stirs any surprise. What may be shocking, however, is the magnitude of the fatality. Daily, Nigerian Newspapers carry news of road traffic accidents that are considered significant only in severity. Sometimes the papers sum up the number of lives claimed as if they were providing an expenditure account. E.g. "over 100 lives lost to fatal accidents in the Nyanya area in the last one year". Such news indicates that we live in accidents every day. According to Sumaila (2001) road traffic accidents have claimed more lives than deaths resulting from all communicable diseases put together including the dreaded Acquired Immune Deficiency Syndrome AIDS). Thus, the government and people of Nigeria are deeply concerned about the continuing high rate of road accidents and the unnecessary consequential waste of lives and properties. What is worrisome is the fact that road traffic crashes and mortality rates are still high despite various remedial measures taken in recent years to combat the problem.

1.2 TYPE OF MOTOR ACCIDENT

There are three classes of motor accident depending on degree of involvement, damage done, injury sustained and fatally occasioned.

1.2.1 FATAL ACCIDENT: An accident is said to be fatal when it result in death of person using road (passenger, drivers, cyclist or pedestrian).

1.2.2 SERIOUS ACCIDENT: Accidents may not be fatal but serious enough to cause damage or injury to the person in the vehicle or to those within the vicinity.

1.2.3 MINOR ACCIDENT : When damage cause by the vehicle is slight or no damage is caused at all or when there is no injury sustained to any person it's consider minor accident.

1.3 HISTORY OF FEDERAL ROAD SAFETY CORPS

Responding to the colossal damage to lives and properties, the Nigeria Army embarked on Road Safety Training program among its officers and men. By 1972, they started yearly road safety awareness campaign. Efforts were also made by the Nigerian Police through the motor traffic division (MTD) to fight the precarious dimension in road traffic accident. Furthermore, the National Road Safety Corps was established in 1974 under the auspice of the Federal Ministry of Works, while in 1977 the Oyo State Government established the Oyo State Road

Safety. All these efforts were indication that there were need not only to make our road safe but also the dare need to saddle an organization with such responsibility.

Therefore, by February 18th, 1988, the Federal Road Safety Corps (FRSC) was established as a paramilitary organization via Decree No 45 of 1988 as amended by Decree 35 of 1992, referred to in the statutory books as the FRSC Act Cap 141. Laws of the federation of Nigeria (LFN) 1990. This Act was amended and passed as FRSC Establishment Act in 2007 with the responsibility for traffic management, preventing and minimizing accident on the highways, the regulation of traffic offences and clearing of obstructions on any part of the highways and educating drivers, motorist and other members of the public generally on the proper uses of highways and for other related matters to safety on the highways.

1.3.1 STATUTORY FUNCTIONS

- Making the road safe for all road users.
- Designing and producing driver's license and vehicle number plates.
- Preventing and minimizing road traffic accident.
- Clearing of obstructions on the highways.
- Providing prompt attention and care to victims of road traffic accident.
- Cooperating with agencies and group engaged in road safety activities to prevent road traffic accident on the highway.
- Determining and enforcing speed limit for all categories of roads & vehicles.

1.4 CAUSES OF ROAD TRAFFIC ACCIDENT

There are three major causes of road traffic accident;

a).Human factors, (b) Mechanical factors, (c). Environmental factor

HUMAN FACTORS

Man plays major determining roles in the causation of road traffic accident such as: "dangerous driving", "drunkenness", "wrongful over taking", "poor road maintenance culture" etc.

MECHANICAL FACTORS

This is due to poor vehicle maintenance which lead to damage that may eventually show up while the vehicle is in motion. Some factors that can give way to mechanical failure include the following: "malfunctioning engine", "brake failure".

ENVIRONMENT FACTORS

This include bad roads, poor weather and night traveling.

1.5 AIM AND OBJECTIVES OF THE STUDY

The aim of this project is to investigate the trend and characteristics of road traffic accident in Offa, Kwara State. The objectives are to;

- Analyze the trend of RTAs in study region.
- Determine the most accident-prone locations and time.
- Examine contributing factors to RTAs (road conditions, vehicle type, driver behavior).

1.6 JUSTIFICATION OF THE STUDY

This study will provide valuable insight for policymakers, transportation planners, and public health officials to develop targeted intervention and strategies to reduce RTAs in Offa.

1.7 SCOPE OF THE STUDY

This study will focus on Offa town covering past event on RTAs from period of 2019-2023. (5 years)

CHAPTER TWO

LITERATURE REVIEW

2.1 CONCEPTUAL FRAMEWORK

2.1.1 HISTORICAL PERSPECTIVE OF FEDERAL ROAD SAFETY CORP (FRSC)

Federal Road Safety Corps (FRSC 2007), the issue of road safety became a greater concern to the federal government in 1974 when the federal high way commission was established under the supervision of the Nigerian Police Force. However, road safety corps under the administration of Brigadier General Jemibiwon, the member of the corps was called the Majamajas despite the success; it was abolished by the Shagari's regime in 1980. Road accidents are primarily a health problem and in addition to causing human suffering, the cost of accident makes demand on resources which are already several strained.

World Health Organization (WHO 2018a) current research shows that Nigeria head thirty-seven of other countries in road accidents and fatality rates of the thirty-eight countries in the basis of death per 10,000 vehicles. The United State of American was the least (i.e, 38th) position while Nigeria head with Ethiopia and Malawi coming second and third respectively. Death resulting from accident in Nigeria is about twenty-five times that of the United State of America, it has therefore, become incumbent on FRSC to ensure that adequate research is conducted into the field of road accident and reducing the level of accidents and injuries.

Ezenwa (1986) revealed that "the road fatalities for three decades since Nigeria's Independence, 1960-1969, 1970-1979, 1980-1989, 1990-1999, 2000-2001 are staggering a total of 18,749 persons killed on Nigeria roads in the first decades after independence. In the same periods, 104,835 persons were injured. The figure for the second decades 1970-1979 are 57,139 killed and 209,809 injured while for the third the tools have increased to 78,783 killed and 677,180 causalities while the fourth and fifth decades it claims 83,502 lives and living 690,132 injured and 82,881 lives and 740,053 with various degree of injuries respectively across the nation. This record consists of 321,054 lives lost on the major and minor roads and living 2,421,289 with various degree of injuries, averaging 11.7% for deaths and 88.30% for injured people. Safety can be perceived, managed and discussed from various points of view. This is true, but in Nigeria, the most disturbing parameter is, what's the guarantee of people moving from one place to another safely? Federal Road Safety Corps (FRSC 1989)

subsequently, this frightening phenomenon has to put under control, therefore on 28th of February 1988 the federal government under General Ibrahim BadamasiBabangida regime established the Federal Road amended by decree 35 of 1992. The first chairman of the commission was Wole Soyinka and OluAgunloye was the first Marshal and Chief Executive.

2.1.2 THE FUNCTIONS OF ROAD SAFETY CORPS

From the FRSC website (2018) the functions of the road corps include:

- To enforce discipline, law and order on our roads.
- Conducting adequate researches into use the result of such researches.
- Educating drivers, motorist and other members of the public on the proper use of the highway.
- Preventing or minimizing accident on the highways.
- Clearing obstruction on any part of the highway.
- Ensuring strict compliance with all road safety regulations and measures.
- Making adequate provision for medical facilities at convenient places all over the country to render a first aid treatment to people who suffer injuries from accidents.
- To guide prompt attention and care to victims of accident.
- Determining and enforcing speed limit for all categories of vehicles plying the highways.
- For the unification of new number plate and national driver's license.
- Co-operating with bodies or agencies or groups of accident in road safety protocols or in the precaution on accident on highway.
- Making regulation in pursuance of any of the functions assigned to the corps by or under this decree.
- To create awareness for the road user about rules and regulation on the road traffic.

2.1.3 THE ROAD TRANSPORT SYSTEM

Federal Road Safety Corps (FRSC 2017) this includes three main components: the road users, the vehicles and the road itself. The road users includes the pedestrians, the vehicles-drivers, the vehicle includes the bicycles, cars, lorries and buses. The roads are the paths the vehicles move along. The components and their interaction always have either positive or negative effect on the safety of lives and property on the roads.

For example, National Bureau of Statistics (NBS 2018) first quarter, stated that a total of 8,466 Nigerians got injured in the road traffic accidents recorded. And 7,773 of the 8,466

Nigerians that got injured, representing 92 percent of the figure which are adults, while the remaining 693 Nigerian representing 8 percent of the figure which are children. 6,394 male Nigerians, representing 76 percent, got injured in road crashes in the first quarter of 2018, While 2,072 female Nigerians, representing 24 percent got injured. The bureau stated that a total of 1,292 Nigerians got killed in the road traffic accidents recorded in the first quarter of

2018. "1,186 of the 1,292" Nigerians that got killed, representing 92 percent of the figure, are adults while the remaining 106 Nigerians, representing 8 percent of the figure are children From the adults figure 1,008 male Nigerians, representing 78 percent, got killed in road accidents, while 284 female Nigerians, representing 22 percent got killed in same first quarter of 2018". "Estimated vehicle population in Nigeria as at Q1 2018 was put at 11,653,871 with the total population of the country puts at 198,000,000 in 2018. Nigeria's vehicle per population ratio is put 0.06. According to NBS, data on the category of vehicles involved in road accidents in the first quarter of 2018, reflected that 60.3 percent of vehicles are

Commercial (2,330), 38.30 percent are private (1,480), 1.35 percent are government (52) and the diplomat with two (2) vehicle involved".

Balogun&Abereoje (2009) statistically, private vehicles are more vulnerable to accident than commercial motorists. Road accidents occurs daily in Nigeria killing an average of 14 persons, it also indicated that 80% of the victims are male and fall within the productive labour force of between 20 and 50 years of age also in its survey. Human error was found to be responsible for over 80% of road accident. Recklessness and lawlessness have been shown to be one of the major causes of road accident.

Balogun et al (2009) believed that for every accident that occur, the victim must have committed the offence more than 100 times uncaught. He corroborate this by positing that one driver out of every six on the express way in Nigeria is a drunkard. It is also believed that up to 38% of the licensed drivers in Nigeria as at 1995 consume alcohol/drugs. The potential for an accident is however as stated earlier on a function of the three component of the road traffic system. Identified the various components of the road traffic system as the road environment, the vehicle (mechanical) and the road users (human) and are operationally interrelated. Thus defer in any of

the three main components could cause an imbalance in the system which leads to malfunctioning. The result of which is an accident.

2.1.4 ROAD TRAFFIC ACCIDENT

From the FRSC website (2018) road traffic accidents occur when a vehicle collides with another vehicle, pedestrian, animal, road debris, or other stationary obstruction, such as a tree or utility pole. Worldwide, road traffic accidents lead to death and disability as well as financial cost to both society and the individual involved. There is generally increasing incidence, morbidity and mortality rates of road traffic accidents. People are injured in road accidents everyday more so in developing countries like Nigeria. The problem is that the enormity of the problem is not appreciated and enough preventive measures are not taken.

2.1.5 CAUSES OF ROAD TRAFFIC ACCIDENT

Federal Road Safety Corps (FRSC 2017) stated that the causes of road traffic accidents are multi-factorial. These factors can be divided broadly into driver factors, vehicle factors and roadway factors. Accidents can be caused by a combination of these factors. Driver factors solely contributes to about 57 per cent of road traffic accidents and 93 per cent either alone or In combination with other factors, driver factors in road traffic accidents are all factors related to drivers and other road users. This may include driver behavior, visual and auditory acuity, decision making ability and reaction speed.

Drug and alcohol use while driving is an obvious predictor of road traffic accident, road traffic injury and death. Speeding, travelling too fast for prevailing conditions or above the speed limit, is also a driver factor that contributes to road traffic accidents. The risk of being injured increases exponentially with speed much faster than the average speed. The severity of injury depends on the vehicle speed change at impact and transfer of kinetic energy. Though vehicles travelling slower than average speed are also at increased risk of road traffic accidents, most involve speed too fast for the conditions.

Vehicle factors can be divided into vehicle design and vehicle maintenance. Some safety features of vehicles like seatbelts and airbags are likely to reduce the risk of death and serious injuries. A well-designed and maintained vehicle is less likely to be involved in accidents. If the brakes and tires are good and the suspension well-adjusted, the vehicle is more

controllable in an emergency and thus, better equipped to avoid accidents. Road design and maintenance is also a factor that contributes to road traffic accidents. The causes of road traffic accidents are not just human error or driver negligence.

Some factors such as vehicle licensing, vehicle inspection, land use in the immediate vicinity of the road traffic regulation and its enforcement are directly related to these three components. Therefore, the purpose of road transport system is to find ways whereby the three components can be properly coordinated in order to promote safety on the road.

2.2 EMPERICAL REVIEW OF ROAD TRAFFIC ACCIDENT IN NIGERIA

Ezenwa (1986) identified eras within which road accidents became obvious. According to them, the period between 1940 and 1950 marked a proportionate increase of road accidents. The trend declined between 1950 and 1970 which could perhaps be attributed to increased public awareness on road safety and measures of preventing road accidents. The third era ranges between 1970 and 1980, this period witnessed increasing decline in road traffic accidents in spite of growth in vehicle traffic. However, this view has changed especially in Nigeria where there is an increase in the rate of road accident almost on daily basis. Also, he emphases on road safety campaign programmed, enforcement of road safety rules and regulation, the proper placement of road traffic signs, the use of traffic patrol teams, incentives by vehicles insurance companies in form of non-accident bonus on vehicle insurance premium. In Nigeria, the incident of accident cases is quite alarming; a total of 32000 Nigerians lost their lives in 2006 as a result of road traffic accident. Eke et al, (2009) A total of 22467 and 34641 accident cases where recorded in 2007 and 2008 respectively out of which 4673 and 6661 persons lost their lives respectively.

Adenomon et al (2007) Investigated trend of Road Accident Cases in Nigeria using annual data from 1995 to 2015, collected from Federal Road Safety Corps (FRSC) website.

Agbeboh&Osabuomen-Irabor (2013) obtained the trend of accident in Kogi State from January 1997 to December 2010 using moving average method to examine the seasonal variation. They found monthly increased in the accidents rate in Kogi State.

2.3 THEORETICAL FRAMEWORK

2.3.1 DISTRIBUTION OF ROAD TRAFFIC ACCIDENTS

Federal Road Safety Corps (FRSC 2017) stated that the occurrence of road traffic accidents can involve any or a combination of some of the following itemized below:

i. Truck/trailers:-they are automobiles that are meant for conveying goods and services.

ii. Water and fuel tankers: meant for conveying liquid and gaseous substances.

iii. Heavy duty equipment:-such as caterpillar and tipper and bulldozers used by construction companies.

iv. Motor cars/vehicles:-these are small or medium sized vehicles that plight the road that are basically meant to convey human beings.

v. Buses:-the main and the luxurious buses for conveying personnel.

vi. Animals:-e.g. herd of cattle and other animals.

vii. Motorcycles and bicycles.

viii. Pedestrians:-these are persons walking along the road.

2.3.2 TYPES OF ROAD ACCIDENT

Federal Road Safety Corps (FRSC 2017), classified road traffic accident (RTA) into three (3) these are fatal, serious and minor road traffic accident:

- **FATAL ROAD TRAFFIC ACCIDENT**

This type of accident involves sometimes only one car and sometimes two cars and also involves loss of lives and properties.

- **SERIOUS ROAD TRAFFIC ACCIDENT**

This type of accident does not involve the loss of lives, but those involved are seriously injured and hospitalized.

- **MINOR ROAD TRAFFIC ACCIDENT**

This is the type of accident were the victims sustain minor injuries and there is damage of the vehicle.

2.4 CAUSES OF ROAD TRAFFIC ACCIDENT

The cause of road traffic accidents (RTAs) can be broadly categories into three major groups, they are as follows; human errors, vehicle condition and environmental condition.

HUMAN ERROR: Human error is the most prevalent cause of RTA on Nigerian road. This include the state of mind the driver, his driving competence, social problems, tiredness, youthful exuberance on observance of road traffic signs, excessive speeding, wrong overtaking, impatience, over-confidence, dependence on Charm (road accident immunity delusion syndrome (RAIDS) which plays on the aid of the drivers that accidents can happen to others but not to him. Any one of this or a combination would cause distraction or under pressure on the driving capacities which leads to a faulty application of the driving controls and eventual loss of control and a resultant to accident.

VEHICLE CONDITION: The condition of the vehicle is a key aspect in avoiding RTAs, worn-out tyre, worn out brake pads and lining, defective foot and hand brake mechanism, incomplete wheels nuts, defective navigation, defective wheel alignment, crack windscreen, absence of mirrors, defective side mirror, thus leading to road traffic accident.

ENVIRONMENTAL CONDITION: Environment condition refers to as negative and unpleasant road, bad road condition due to poor maintenance may result to unwary road users, pitted and pot-holed roads, absence of road signs and markings and other road facilities, sharp curve, inclement weather (heavy rainfall, fog and mist), wind, earthquake, and animal movement constitute cause of road traffic accident.

2.4.1 EFFECT OF ROAD TRAFFIC ACCIDENT

The World Health Organization (WHO, 2018a) yearly, “the lives of approximately 1.35 million people are cut short as a result of a road traffic accidents. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury. Road traffic accidents injuries cause considerable economic losses to individuals, their families, and to nations as a whole. These losses arise from the cost of treatment as well as lost productivity for those killed or disabled by their injuries, and for family members who need to take time off work or school to take care for the injured. Road traffic accidents cost most countries 3% of their gross domestic product.

The World Health Organization (WHO, 2018b) propose that “Road Traffic Accidents (RTAs) now represent the eighth leading cause of death globally. They claim more than 1.35 million lives each year and cause up to 50 million injuries. And, the fact is, every one of those deaths and injuries is preventable”. Road traffic accidents have ever become a major problem in road transportation.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research methodology used to collect and analyze secondary data on trend and characteristics of road traffic accidents in offa. The purpose of this study is to examine the trend and characteristics of road traffic accidents, and to identify the factors contributing to these accidents.

3.2 RESEARCH DESIGN

This study employed descriptive research design, which involved the analysis of secondary data on road traffic accidents. The design was chosen because it allow examination of trend and characteristics of road traffic accidents over a period of time.

The following will be covered; descriptive of the research area, method of data collection, source of data, and data analysis method.

3.3 SOURCE OF DATA

The method of data collection adopted for this research work is secondary data. The secondary data deals with consulting past records of the required information from the Federal Road Safety Corps (FRSC).

3.4 DATA COLLECTION METHODS

The data collection methods used in this study included;

- Documentary analysis: The study involved the analysis of documents and reports from the FRSC.
- Literature review: A review of relevant academic journals and publications was conducted to obtain information on the trend and characteristics of road traffic accidents.

3.5 DATA ANALYSIS METHODS

The data analysis methods used in this study included;

- Descriptive statistics: The study involved the use of descriptive statistics, such as frequencies, percentages, and means to analyze the data.

• Trend analysis: The study involved the used of trend analysis to examine the trend and characteristics of road traffic accidents over a period of time

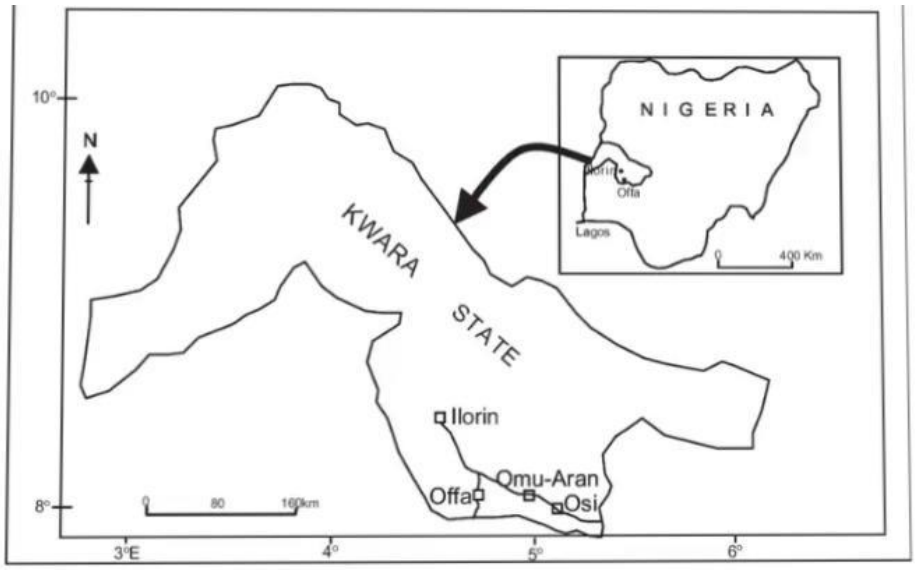
3.6 DESCRIPTION OF RESEARCH AREA

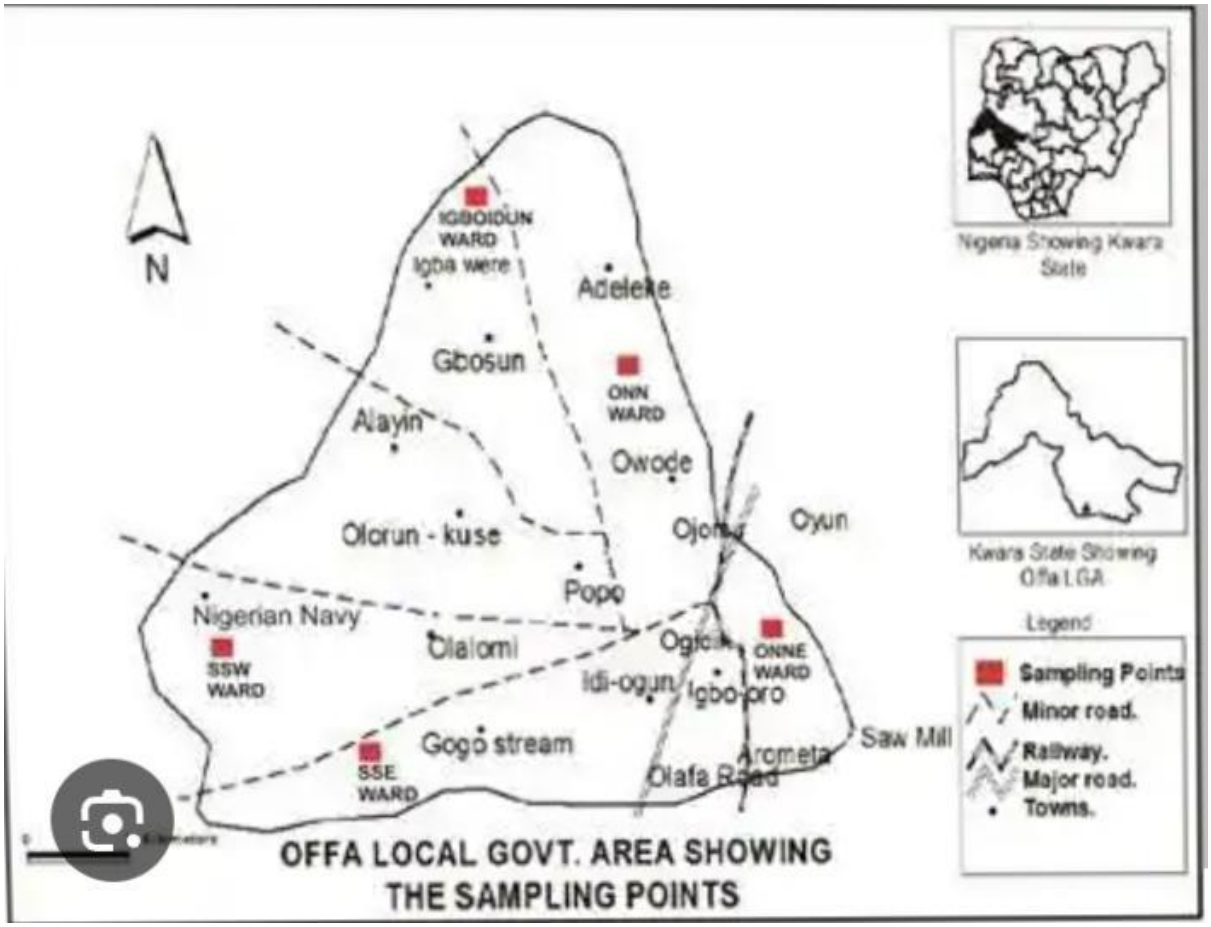
The study is to be carrying out in Ilorin,Kwara State. The case study area is chosen to be Offa Route, located in the north-central part of the country. The city is a major commercial and industrial hub, with rich cultural heritage and history. Offa is strategically located at the intersection of major highways, making it a critical transportation hub in Nigeria.

Latitude 8° 8’ 34” north

Longitude 4° 41’ 17” east

Elevation 443 meters (1453 foot)

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SSW WARD
Idi-ogun
Igbo-oro
Gogo stream
SSE WARD
Aromeja
Saw Mill
Olafa Road
OFFA LOCAL GOVT. AREA SHOWING THE SAMPLING POINTS
Nigeria Showing Kwara State
Kwara State Showing Offa LGA
Legend
Sampling Points
Minor road.
Railway.
Major road.
Towns.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents and analyzes the data collected on road traffic accidents (RTAs) in Offa Kwara State. The data focuses on accident trend over a five year period, the frequency and severity of accidents, causes, and type of vehicles involved. The findings are presented using tables and a chart to facilitate.

4.2 Trend of Road Traffic Accidents in Offa (2019-2023)

Shows the yearly frequency of reported data of road traffic accidents in Offa from 2019-2023.

Table 4.1: Trend of Road Traffic Accidents in Offa

Year	Number of Accidents
2019	14
2020	23
2021	18
2022	19
2023	19

From Table 4.1, there is a noticeable upward trend in the number of road traffic accidents over the years, with 2020 recording the highest number of accidents, with decrease in years 2022 and 2023 but still follow the ladder of highest number of Accidents and year 2019 with the lowest records of number of accidents.

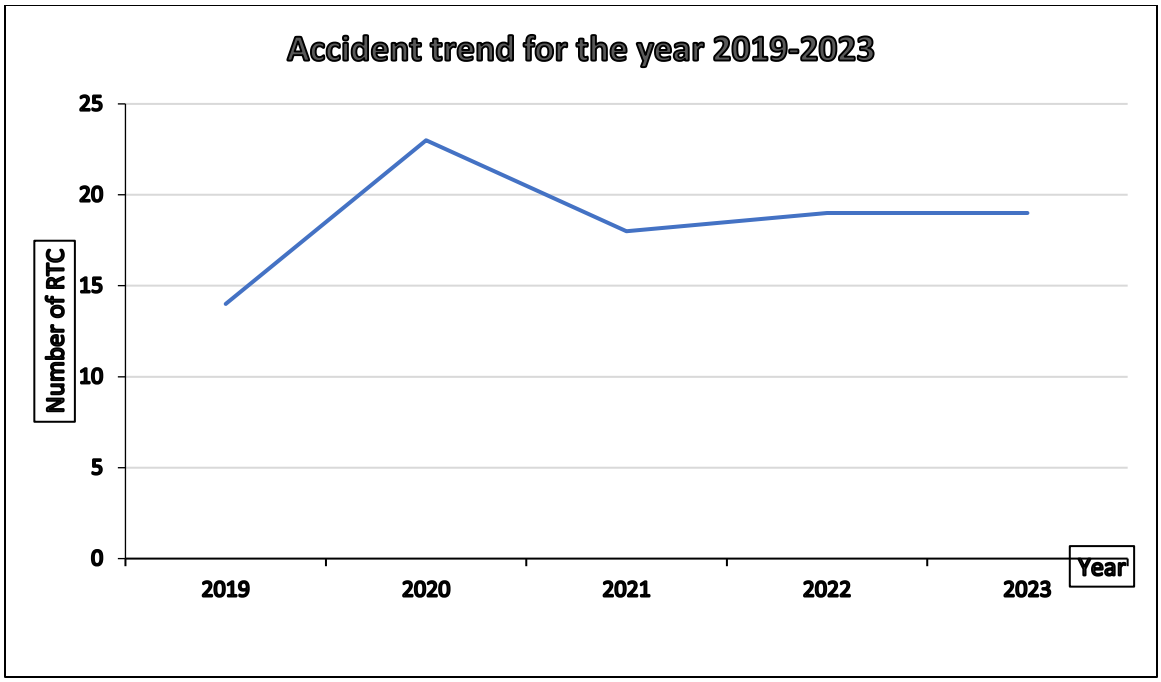

Figure 4.1.1: Graphical Representation of Accidents Trends.

The line chart shows the accidents trend, indicating a rise in year 2020 and decrease in year 2021with constant rate in year 2022 and 2023.

4.3. Causes of RTAs in Offa ***Table 4.2 shows the causes of road traffic accidents in Offa from 2019-2023***

Year	SLV	TBT	LOC	MDV	WOT	BFL	DOT	DGD	BRD	DUI	SPV
2019	1	2	5	1	1	0	3	3	0	0	1
2020	0	0	20	1	0	0	2	2	0	1	11
2021	0	1	4	2	2	0	1	1	0	0	11
2022	2	0	8	2	2	0	0	0	0	0	15
2023	2	0	13	0	0	0	0	0	0	1	12
Total	**5**	**3**	**50**	**6**	**5**	**0**	**6**	**6**	**0**	**2**	**50**

Table 4.2 present the yearly breakdown of identified causes of road traffic accidents in Offa, Kwara State from 2019 to 2023. Each column represents a specific accident cause, indicated by a standard abbreviation. The totals at the bottom summarize the overall frequency of each cause over the five year period.

- **LOC (Loss of Control)** and **SPV (Speed Violation)** are the leading causes of accidents, each accounting for 50 incident across the five years.

  Loss of control refers to a situation where a driver is unable to steer or control their vehicle safely, often due to:

  Vehicle malfunction: brake failure, tire blowout, or other mechanical issues.

  Driver error: distraction, fatigue, or poor driving skills.

  Road conditions: slippery roads, uneven surfaces, or obstacles.

  Speed violation refers to exceeding the designated speed limit on a particular road or area, which can increase the risk of accidents and severity of injuries.

  Speed violations can be caused by:

  Reckless driving: intentionally driving at excessive speeds.

  Distracted driving: failing to notice speed limits or road conditions.

  Lack of awareness: unfamiliarity with speed limits or road conditions.

- **MDV(Mechanical Deficient Vehicle),DGD(Dangerous Driving)**, and **DOT(Dangerous Overtaking)** with reported (6 cases) respectively.

  Mechanical Deficient Vehiclerefers to a vehicle with faulty or worn-out parts, such as:

  Brake problems: faulty brakes or worn-out brake pads.

  Tire issues: worn-out or damaged tires.

  Steering problems: faulty steering system or worn-out parts.

  Suspension issues: worn-out or damaged suspension system.

  Dangerous Driving refers to reckless and irresponsible driving behaviors, such as:

  Speeding: excessive speeding or racing.

  Tailgating: following too closely.

  Weaving in and out of lanes: reckless lane changes.

  Ignoring traffic signals: running red lights or stop signs.

  Dangerous Overtaking refers to passing another vehicle in a reckless or irresponsible manner, such as:

  Overtaking on blind curves: passing on curves with limited visibility.

  Overtaking on narrow roads: passing on roads with insufficient space.

  Overtaking without sufficient clearance: passing without enough space or time.

- **WOT (Wrong Overtaking)** and **SLV (Sign Light Violation)** with (5 cases), respectively play a smaller but still notable role.

  Wrong overtaking refers to passing another vehicle in a manner that is unsafe or against traffic rules, such as:

  Overtaking on the wrong side: passing on the left side when it's not allowed.

  Overtaking without checking blind spots: failing to check for other vehicles or pedestrians.

  Overtaking in no-overtaking zones: passing in areas marked as no-overtaking zones.

  Signal light violation refers to failing to follow traffic signals, such as:

  Running red lights: entering an intersection when the light is red.

  Ignoring yellow lights: failing to slow down or stop when the light turns yellow.

  Disregarding pedestrian signals: failing to yield to pedestrians or ignoring pedestrian signals.

- **TBT (Tire Burst)** with 3 cases reported. Tire Burst also known as a tire blowout, is a sudden and rapid loss of air pressure in a tire, often caused by:

  Over inflation: excessive air pressure.

  Under inflation: insufficient air pressure.

  Tire damage: punctures, cuts, or wear.

  Overloading: excessive weight or load.

- **DUI (Driving Under Alcohol/Drug Influence)** with 2 reported cases.DUI referring to operating a vehicle while impaired by:

  Alcohol: exceeding the legal blood alcohol concentration (BAC) limit.

  Drugs: prescription medications, illicit substances, or other substances that impair driving abilities.

- **BFL (Brake Failure)** and **BRD (Bad Road)** reported zero cases, which may suggest;
  - Underreporting of these causes.
  - Improved road infrastructure or vehicle inspection and maintenance
  - Misclassification into broader categories like LOC.

4.4. Vehicles categories involved in RTAs

Table 4.3 shows types of vehicles and their frequency involved in road traffic accidents.

Year	Car	Motorcycle	SUV	Minibus	Pick-up	Trailer	Truck	Tricycle
2019	7	7	1	3	0	0	0	0
2020	10	8	0	7	1	1	1	1
2021	4	17	1	4	1	1	2	0
2022	6	18	4	0	1	1	1	0
2023	7	21	0	2	1	1	0	1

Table 4.3present the vehicle categories Involved in road traffic accidents Offa. Motorcycle has the highest frequency of RTAs within the year of studywith highest number of motorcycle involved in year 2023,(21 cases), Car comes second in the ranking with 34 cars involvement and year 2020 with highest car involved (10 cars). Minibus with 16, SUV with 6, Pick-up, Trailer, Truck with 4 involvement respectively and Tricycle with the lowest involvement with 2.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The research project titled trend and characteristics of road traffic accident was carried out to determine the factors and characteristics of road traffic accident. RTAs data show category of vehicle involve, driver's behavior and casualty details.

Chapter one of the study comprises background of the study, statement of the problem, aim and objectives of the project, scope of the project. Chapter two discussed relevant literature review from different scholars, Global,Intercontinental and regional trends of road traffic accident. Chapter three deals with methodology. Chapter four of the study comprises of data presentation and analysis carryout in the course of this research project while chapter five is the last chapter but not the least constitutes summary, conclusion and recommendations.

5.2 CONCLUSION

- A significant number of accidents occur on roads, resulting in injuries and fatalities.

- Major causes include losses of control and speed violation.
- Motorcycles, cars, all contribute to RTA, withmotorcycles being the most frequent vehicle category involved.

5.3 RECOMMENDATIONS

- All unworthy vehicles should not be allowed to ply highways unless proper evidence of repairs is provided.
- The traffic signs and codes should be placed in strategic areas to instruct road users.
- Severe punishment should be enacted for traffic law violator, especially drunkenness, excess speeding and overloading
- The Federal Government should establish driving school to educated drivers especially on the usefulness of road signs and to improve their skills.

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