INFLUENCE OF PUBLIC ENLIGHTENMENT PROGRAMMES OF THE FEDERAL ROAD SAFETY COMMISSION ON COMMERCIAL DRIVERS' BEHAVIOUR IN URBAN CENTRES IN SOUTHWESTERN, NIGERIA

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CERTIFICATION

I certify that this study was carried out by Muhammed Kazeem Abiodun SUNMOLA (Matric No 83632) of the Department of Adult Education, University of Ibadan, Ibadan, Nigeria, under my supervision.

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DEDICATION

This research is dedicated to my late father, Alhaji Mustaphar Oluwasegun Sunmola, who died thirty- one years ago.

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ABBREVIATIONS AND ACRONYMS

ALBON	-	Association of Luxury Bus Owners of Nigeria
BAC	-	Blood Alcoholic Content
DALY	-	Disability-Adjusted Lost Years
FBS	-	Federal Bureau of Statistics
FRSC	-	Federal Road Safety Commission
GDP	-	Gross Domestic Product
GSM	-	Global Systems Communication
NURTW	-	National Union of Road Transport Workers
RTA	-	Road Traffic Accident
RTEAN	-	Road Transport Employers Association of Nigeria
SON	-	Standards Organisation of Nigeria
UN	-	United Nations
WBG	-	World Bank Group
WHO	-	World Health Organisation
WB	-	World Bank

ABSTRACT

Commercial vehicle drivers' behaviour on urban roads serves as the primary cause of most Road Traffic Accidents (RTAs). The Federal Road Safety Commission (FRSC), therefore, through its public enlightenment programmes (PEP) promoted sustainable good driving habits among these drivers. Previous studies on the reduction of RTAs have focused more on the drivers, vehicles, and infrastructural facilities without considerations for the PEP of the FRSC. This study, therefore, investigated the influence of FRSC's public enlightenment programmes on commercial drivers' behaviour (CDB) in urban centres in Southwestern Nigeria.

The descriptive research design was adopted. The multi-stage sampling techniques was used in selecting 1,179 commercial drivers, 100 principal officers' from National Union of Road Transport Workers; 111 Road Transport Employers Association of Nigeria members, 174 Association of Luxury Bus Owners of Nigeria members, who had once attended FRSC's PEP and 20 FRSC's Officials from 28 motor parks in selected centres: Lagos, Akure, Ibadan and Abeokuta. Drivers' Perception of FRSC's Public Enlightenment Programme Inventory (r=0.83), Commercial Drivers Behaviour Inventory (r=0.92); and Commercial Drivers's Compliance Inventory (r=0.88) were used. These were complemented with 12 and six sessions each of Focus Group Discussion and Key Informant Interview with commercial drivers and FRSC officials. Five research questions were answered and two hypotheses tested at $p \leq 0.05$.Data were analysed using descriptive statistics, Pearson's product moment correlation and multiple regression and content analysis.

There was a significant joint effect of PEP on CDB ($F_{(5, 1159)} = 519.53$); and contributing 86.7% to the variance in CDB. The PEP on Radio (β=0.69), motor park rallies and road safety lectures (β=.678), PEP on Television (β=-.251), FRSC's Videos and Films (β=.133) and FRSC's handbills, posters and billboards (β=-.115) contributed to CDB. Also, PEP on Radio (r=.699), motor park rallies and road safety lectures (r=.668), PEP on Television (r=.237), FRSC's handbills, posters and billboards (r=.219) and FRSC's Videos and Films (r=.153) correlated with CDB. Content of PEP (r=.205), delivery strategies (r=.176), quality of resource personnel (r=.152), PEP timing (r=.113) and language of instruction (r=.089); all correlated with CDB. Also personal characteristics of commercial drivers predicted their compliance to PEP ($F_{(9, 1155)} = 449.01$); while experience (β=.211), marital status (β=.144), age (β=-.109), training on driving techniques (β=-.124), frequency of PEP attendance (β=.098), level of education (β=.023) and sex (β=-.015) contributed to compliance with PEP. The commercial drivers revealed that PEP is mostly restricted to the last quarter of the year and, is solely implemented by the FRSC without contributions and assistance from other governmental agencies and private initiatives.

The public enlightenment programmes on radio, motor park rallies and road safety lectures positively influenced commercial drivers' behaviour. There is therefore the need to ensure that these programmes are implemented. Also, the language of instruction must be taken into consideration to cover all stakeholders.

Keywords: Federal road safety commission, Public enlightenment programmes, Commercial drivers' behaviour.

Word count: 454

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The World Health Organisation (WHO) (2002) observes that transportation is a major requirement for the survival of every nation, regardless of its industrial capacity, population, size, and technological development. In essence, irrespective of its forms, methods and means, transportation is indispensable in the socioeconomic life of people (World Bank, 2005). In the light of this, Badejo (2000) asserts that the economic development attained by many nations is often measured by level, attainment and development of its transport infrastructure. Besides, Filani (2002) also observes that without transport, farm produce will not get to the consumers, while interactions will be limited to immediate communities and exchange of goods and services will remain rudimentary and simple. But ironically, death and injury arising from the transportation system, especially road transport, is arguably the most neglected human development challenge, compared to other diseases like tuberculosis, human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) (Oni, 2002, 2004 and 2005).

Admittedly, transportation in general and road transport in particular, is a derivable demand; desired not for its sake, but in meeting the needs of other sectors of the economy. Therefore, it is a sine-qua-non for development and a catalyst that promotes and enhances the efficient flow of the vicious circle of economic development. Succinctly, effective and efficient road safety, as well as its effective management is undoubtedly a means for sustainable development, especially in the area of road traffic crashes and injury prevention. This shows that as useful and wonderful as the transportation system is, it comes with its own side effects. When the roads are not safe, they serve as a stumbling block to human survival (Mabogunje, 2002).

The 2009 Global Burden of Diseases study sponsored by WHO reveals that road traffic crashes assessed in 2000 to be the world's ninth most critical health problem and as at 2008, it has occupied the third position among world known public health problem. This is due to the fact that yearly, an estimated 1.3 million people are killed in road crashes and

up to 50 million are injured worldwide. This figure is expected to increase by 65 per cent between 2015 and 2020 unless there is a firm commitment to curb it (WHO, 2009). Obviously, the rate of mortality in road traffic accident is very high among children and young adults in their prime, who constitute the workforce in many countries (Peden and Krug, 2001; WHO, 2004; Sangers; 2009; Anthony-Albanese, 2010). Worst still, developing countries bear the brunt of the fatalities and disabilities from road traffic crashes, accounting for more than 85 per cent of the world's road fatalities, and about 90 per cent of the total Disability-Adjusted-Lost Years (DALYs) lost due to road traffic injuries (Afukaar, 2003). Significant numbers of road traffic fatalities and injuries can be prevented by addressing the leading causes, which include excess speed, lack of seat-belt and child restraint use; drinking and driving; wrong overtaking; poorly designed and inadequately maintained roads; unsafe infrastructure and vehicles and inadequate trauma care (International Road Federation, 1995; United Nations General Assembly, 1997).

The road traffic injury rate is highest in Nigeria and other African countries with about 28.3 per cent of 100,000 population when compared with 11.0 per cent of 100, 000 population in Europe (WHO, 2009). Besides, Osita (2012) reports that road accidents are the biggest killers of Nigerians, than any other disease. The WHO (2008) is of the opinion that 32,000 Nigerians died yearly on public highways, while the FRSC (2008) reported deaths of 17,000 between 2007 and the middle of the year 2009. It should be pointed out that there are contentious claims over the above reported statistics, the fact remains that many of the road traffic accidents go unreported, as even the FRSC database cannot capture all the accidents on Nigerian roads.

Globally, the annual impact of road traffic accidents (RTAs) on the world's economy is about $500 billion. Out of this, the economic loss of the developing countries is estimated to be in the range of 1.5 to 2 per cent of their Gross Domestic Product (GDP), nearly $100 billion (WHO, 2010 and 2011). Obviously, this is one of the factors responsible for poverty in the developing nations. Also, the FRSC (2005 and 2006) road traffic accident statistics reveals that about 4,120 persons lost their lives while 20,975 others were seriously injured in fatal accidents that involved 11,031 vehicles across the nation. In 2010, a total of 11,341 accidents were recorded with 6,661 deaths and 27,980 people injured (Fidelis, 2010). Economically, during this period, Nigeria lost three percent

of its GDP, equivalent to $6 billion to road accidents and this might become worse by 2020 (FRSC, 2011). As at December 2011, death per 10,000 vehicles involved in road accidents was 161, despite public enlightenment programmes (PEP) put in place by the FRSC to streamline the excesses of all categories of road users, most especially, commercial drivers.

Agunloye (1989), Olatunji (2003); Balogun (2006); FRSC (2007) and Chukwu (2007) as cited by Akinyemi and Onuka (2012) attribute the primary causes of most road accidents to acts of indiscipline which include overloading, reckless driving, impatience, wrong overtaking and ignorance of road traffic rules as well as regulations. According to Chukwu (2007), many drivers overtake either at dangerous bends or on a blind hill. Further, poor visibility was attributed to physiological or neurological factors. As corroborated by Idoko (2010) and Osita (2011), many drivers, most especially commercial drivers, behave irrationally on roads with little or no consideration for other road users. Also, FRSC (2009) identifies human error as a primary cause of road traffic accidents on expressways and public roads in Southwestern zone. Such human errors are hinged on fragrant behaviour of commercial drivers like over-speeding, texting and phoning while driving, drink and drive habits, lack of understanding of the road signs, road marking and symbols, non-challant attitudes towards the use of safety belt by passengers and commercial drivers that ply the expressways. Olanrewaju and Falola (2006) maintain that avoidable and preventable road traffic accidents occur due to lack of observance of all road traffic rules and regulations by commercial drivers. Notably Redelmeier, Tibshiran and Evans (2003) observes that most crashes are unintended, unexpected and could have been prevented by commercial drivers'. In short, road traffic accidents are preventable and avoidable when road traffic rules and regulations are observed.

In response to the United Nations' call for member states to redouble their road safety efforts and intensify public enlightenment programmes for road users, the Nigerian Government through the FRSC, has embarked on aggressive public enlightenment programmes in order to promote sustainable good driving habits among all road users. The sole objective of the enlightenment programmes centers on strict adherence to road traffic rules and regulations, to either prevent or reduce RTAs. Holder (2001) and Ipingbemi (2008) conceptualise public enlightenment programmes in Nigeria as road safety precautions put in place to bring about reduction in high road traffic accidents on Nigerian

roads (expressways) often caused by the commercial drivers' behaviour. In short, a very important strategy of the FRSC is the education of the public on strict adherence to road safety rules and regulations, complemented with subtle enforcement through arrests and fines. Oni (2005) describes the FRSC's public education as the conscious training of all road users, most especially commercial drivers of motor vehicles and motorcycles riders in proper and lawful behaviour on public roads and highways. Ibekwe (2008) opines that the onuses of the FRSC public enlightenment campaigns involve thorough discussions and demonstrations on the knowledge of road traffic laws and highway codes, comprehension of road signs, symbols and traffic signals. In a nutshell, the essential principles of the public enlightenment programmes centers on knowledge of one's responsibilities while driving, respect for other road users, compliance with directives of traffic control officers and finally, encourage concern for the safety of all road users, as well as, proficiency in driving (Heggie 1995; Adams, 2006).

Succinctly, it should be noted that such public enlightenments programmes (PEPs) are meant to address the five pillars of the United Nations' Decade of Action on Road Safety: Road Safety Management; Safer Roads and Mobility; Safer Vehicles; Safer Road Users; and Post-Crash Response (WHO, 2010, 2012 and 2013). Therefore, the major focuses of the public enlightenment programmes of FRSC are meant to correct the commercial drivers' behaviour. Such include unnecessary overtaking and over speeding without due consideration for speed limits and road traffic signs, symbols and markings; drinking and driving; use of cell phones either for texting, making or receiving calls while driving, overloading of vehicle with passengers and loads; over and above, non use of safety belts and car restraints (Ademiluyi, 2007; WHO, 2007).

The FRSC public enlightenment programmes include: the FRSC on radio and television; newspaper advertisements; motor park rallies encompase road safety lectures on road signs, symbols and markings; drivers and vehicle safety standard; defensive driving; the FRSC hand bills, posters and billboards; the FRSC videos and films on use of safety belt and child restraints; as well as; dangerous overtaking, overspeeding and overloading. All these are meant to educate commercial drivers on the dangers inherent in such habits, their capabilities and limitations in the use of motor vehicles and the highways. Badejo (2000), and Ameratunga, Hijar and Norton (2006) summarise road safety publicity

campaign as part of a set of activities put together to raise awareness on pertinent issues or inform road users about new laws, need to change attitudes (for example, improve public acceptance of road safety measures) and to change behaviour, as part of a package of measures (for example, engineering and enforcement related to speeding). Regardless of its forms and methods, they are meant to reduce road crashes to about 50 per cent by 2015 and by 2020 make Nigeria fall within a twentieth safest country in the world (Global Road Safety Partnership, 2001; Osita, 2010 and 2012).

As pointed out by Akinyemi and Onuka (2012), despite concerted efforts of the FRSC as embedded in the various public enlightenment campaigns introduced in an attempt to prevent or reduce carnage on Nigerian expressways, Nigeria is still a terrain with heavy casualty toll. WHO (2009), reveals that 32,000 people die yearly through road traffic accidents in Nigeria, majority of which occur in urban centres while the annual abstract of National Bureau of Statistics (2009) as cited by Osita (2012) further adds that over 30,000 accidents occur yearly on the Nigerian highways and roads claiming or injuring over 35,000 lives and the majority of these occur on major highways in urban centres in the Southwestern, Nigeria. This was corroborated by the declaration of the FRSC (2011) that Lagos, Ibadan, Sagamu, Ilorin, Ogbomosho, Akure, Owo and Ondo expressways are not only deadliest routes in the Southwestern but the most accidents- prone routes in Nigeria. Rhetorically, one begins to wonder if the RTA's occurrence on these routes should be a misnomer; considering the efforts of FRSC since 1988; and why the commercial drivers' driving behaviour have not changed significantly. This has been a major concern for stakeholders in the transportation industry and government at all levels with the hope of finding a lasting solution to multifarious health problems associated with road traffic crashes and injuriesin urban centres in Nigeria and Southwestern in particular (Bolade and Ogunsanya, 1991).

In an attempt to find lasting solution to road traffic accidents and injuries, there have been various studies on the Nigerian transportation system generally which include characteristics of Nigerian drivers (Asogwa, 1980), mass transit accident control (Bolade and Ogunsanya, 1991); spatial analysis of RTAs (Gbadamosi, 1994); alcohol and the RTAs (Odero, 1998); transport challenges (Adeniji, 2000); public transportation and the economy (Badejo, 2000); road transport mortalities (Eke, Efubu and Nwosu, 2000); institutional

framework (Asenime, Okanlawon and Oni, 2006); crash causation (Dike, 2007); road traffic accidents data (FRSC, 2009); current trends of RTAs (Ismaila, Akanbi, Adekunle and Owaba, 2009); road safety efforts (Nnamdi, 2010); FRSC and road safety (Oni 1997, Osita, 2008, 2009, 2000, 2011 and 2012, Nnamdi and Ibe, 2007)); transportation financing, modern and road safety issues (Agwu, 2010), use of safety belt (Oladepo and Onyewa 2011); transport policy and implementation problems in Nigeria (Ogunsanya, 2002, 2003 and 2004) and FRSC public education programmes and drivers habits (Akinyemi and Onuka, 2012).

It should be noted that most previous studies on public transportation specifically have focused exclusively on the vehicle and its associated costs (World Bank, 2005), affordability and level of service (Carruthers, Dick, and Faukar, 2005) as well as on some other indices such as access, waiting and journey time. Similarly, studies on commercial transport in the country have focused on vehicle characteristics, operation and management as well as funding (Adesanya and Adeniji, 1998; Adeniji, 2000; Ogunsanya, 2003 and 2004) and socio-economic characteristics and driving behaviours (Ipingbemi, 2006, 2007, 2008 and 2010). However, to the best of the researcher's knowledge, none of the previous studies specifically have focused on efforts using a multivariate approach to determine the influence of the FRSC public enlightenment programmes on such risk factors that constitute commercial drivers behaviour like overloading, driving under drug and alcohol influence; overspeeding, use of cell phone, non-use of seat belt, drink and drive. Also, none of the previous work examines the influence of the FRSC road safety precautions on commercial drivers' road traffic violations in the area road markings, symbols, light and signs, passenger manifest, tyre and fire extinguisher, and post crash treatment in urban centres in the Southwestern, Nigeria, hence, the need for this study.

1.2 Statement of the Problem

In Nigeria, Road Traffic Accident (RTA) is a major cause of death and disability, despite FRSC public enlightenment programmes. While highly-motorised countries are experiencing more than thirty per cent reduction in road traffic injuries and crashes majority of low and middle-income countries like Nigeria still account for about eighty-five per cent of all road traffic deaths and ninety per cent of the Disability Adjusted -lost

Years (DALYs) worldwide each year. WHO (2009) predicts that by 2020 road trauma will be the world's third leading cause of death and disability, after heart disease and mental depression. Nigeria road traffic crashes (RTC) data rate is 162 deaths per 100,000 population due to unsafe roads in terms of safety facilities, road network and management. Annually, 32,000 people are killed on Nigerian roads (WHO, 2009) therefore mean that nearly eighty-seven people die on daily basis in Nigeria, connoting losing at least three people every hour to avoidable road traffic accidents.

Monetary wise, the Nigerian government, through the FRSC, has spent 7 billion Naira on public enlightenment programmes between 1988 and 2010. (Osita, 2011). Asides, WHO has also spent five million US dollars during the same period in the form of grants and personnel training. Also, the World Bank in 2011 boosted the activities of the FRSC with N1.5b ($10 million) (Osita, 2011), to improve the effectiveness of the FRSC in administrative and logistic platform. Ironically, FRSC (2011) maintains that yearly, about 3billion US dollars (equivalent to N456 billion) are still lost to road traffic accidents on Nigeria's highways (equivalent to three per cent of Gross National Product).

Therefore, it will not be erroneous to conclude that these huge human, material and economic losses inhibit economic development and perpetuate poverty. This therefore raises question of whether the various public enlightenment programmes of the FRSC have any influence on the reduction and prevention of RTAs vis-a-vis the commercial drivers' behaviour on public highways. Can the use of lectures/rallies on road signs, symbols, and markings on RTAs/RTCs ensure congruence between Nigerian drivers' patterns of repeated behaviour and safety on Nigerian roads? If the commercial drivers learn and practice new disposition or attitudes as embedded in the National Highway Code, FRSC's handbills, posters, billboards, would they exhibit good driving behaviour? Would new, invigorated FRSC videos and films, enlightenment programmes help to enhance good driving behaviour, so that thirty per cent reduction in road traffic accidents as embedded in the United Nations Road Safety Decade of Action (2011-2020) as endorsed by 150 countries in Moscow in 2009 and formally declared by the United Nations' General Assembly in March 2011 be a reality. This study, therefore investigates influence of major public enlightenment programmes of FRSC on commercial drivers plying on these FRSC's designated deadliest routes in urban centres (Lagos –Ibadan, Ilorin-Ogbomosho, Ibadan-Oyo, Akure-Ondo–Owo highways) in Southwestern, Nigeria.

1.3 Objectives of the Study

The broad and specific objectives of this study are to:

i. determine the extent to which the FRSC public enlightenment programmes have influenced commercial drivers' behaviour (overspeeding, dangerous overtaking, nonuse of seat belt, use of phone and texting while driving, overloading and lack of observance of road signs/symbols and markings) in urban centres in Southwestern Nigeria,

ii. determine which of the FRSC enlightenment programmes has much effect on the desired change in commercial driver's behaviour;

iii. ascertain the adequacy of the content, language of instruction and quality of resource persons (personnel) of the FRSC public enlightenment programmes in meeting the desired change in commercial drivers'u behaviour;

iv. determine the relationship between the FRSC on radio and television, FRSC motor park rallies, road safety lectures, videos and films, handbills, posters, and billboards on the one hand and commercial drivers' behaviour on the other;

v. ascertain the perception of the commercial drivers about the effectiveness of the FRSC public enlightenment programmes in urban centres in southwestern, Nigeria;

vi. determine the relationship between the personal characteristics of the commercial drivers and compliance to the messages of the public enlightenment programmes of FRSC.

1.4 Research Questions

In order to provide answers to the problems of this investigation, this study will address the following research questions:

RQ_1: To what extent have the public enlightenment programmes of the FRSC influenced commercial drivers' behaviour (overspeeding, dangerous overtaking, nonuse of seat belt, use of phone, overloading and lack of observance of road signs/symbols and markings) on urban cities highways?

RQ_2: To what extent has each of the FRSC's public enlightenment programmes influenced commercial drivers' behavior?

RQ_3 To what extent have language of instruction, delivery strategies, timing and adequacy of contents of FRSC's public enlightenment programmes influenced commercial drivers' behavior?

RQ_4 To what extent have commercial drivers complied with the message of FRSC's public enlightenment programmes?

RQ_5: What is the perception of commercial drivers on the effectiveness of the FRSC's public enlightenment programmes?

1.5 Significance of the Study

The anticipated findings of this study should bring into limelight the strengths of major public enlightenment programmes of the FRSC on commercial drivers' behaviour on major highways in urban centres in the Southwestern, Nigeria. Thus, it will be of immense benefit to transporters, policy makers, and transport administrators in understanding the effectiveness of delivery strategies and channels employed by the FRSC. Also, the expected findings of this research work will invariably help enhance safety awareness, promote understanding of road traffic accidents as a highly preventable health problem and help establish reasons why road safety should top social policy agenda. This is because a reduction in the number of road traffic injuries is one of the necessary conditions for successful socio-economic development, even the achievement of the Millennium Development Goals (MDGs) and, ultimately, for ordinary people to feel safe and secure when travelling by road.

In a related development, road deaths and injuries are sudden, violent, and traumatic, this study will hopefully broaden the horizon of organised labour and road transport unions, like the National Union of Road Transport Workers (NURTW), Road Transport Employers Association (RTEAN), Association of Luxury Bus Owners of Nigeria (ALBON) and private individuals involved in road safety development, to become more efficient and effective in the delivery of road safety development service. Indirectly, it should build effective partnerships and coalitions among road safety practitioners in the country. This is because the growth and development of a nation depend, largely, upon the capacity of its transport system to move persons and goods to desired locations safely.

The expected findings of this study should stimulate interest by exposing the worsening road safety situation and instill a disciplined driving culture among motorists. Better and considerate driving is apt to reduce the number of disasters on the Nigerian highways. Also, the expected findings of this study shall assist in exposing constraints to the accomplishment of FRSC mandate, deepen research in road safety and provide a database for road traffic accidents. Road safety-related data are used by a variety of stakeholders – the police, transport departments, health facilities, and insurance companies, as well as, policy makers and practitioners. Reliable data for a country are important in persuading political leaders that road traffic injuries are a priority issue. These data can also be used in the media to make the general public more aware of legislations and changes in behaviour that will improve their safety. Road traffic crash data are vital to identifying risks, developing strategies and interventions to address those risks, and evaluating the impact of interventions. Moreover, the expected result of this study shall bring to fore socioeconomic effects of road traffic accidents and influence decisions with respect to local legislation and policy makers to ensure safe roads and safe driving culture in urban centres in Southwestern in particular and Nigeria in general (Schopper, Lormand and Waxweiler 2006).

By and large, the expected findings of this study will not only be to improve knowledge about factors contributing to road crashes, but also bring to limelight new and more effective road safety measures and best practices. Invariably, this will form the framework of knowledge on which better policy, resource allocations and decisions can be made to ensure effective use of available resources to combat road traffic accidents and crashes on deadliest routes in Southwestern, Nigeria. Over and above, the expected result of this research work will in one way or the other serve as foci for the realisation of fifty per cent reduction of road traffic accident as embedded in the United Nations Road Safety Decade of Action (2011-2020).

1.6 Scope of the Study

The study focused on the extent to which the major public enlightenment programmes of FRSC had influenced commercial drivers' behaviour in urban centres in Southwestern, Nigeria. This study was delimited to major highways linking Lagos, Ibadan, Abeokuta, Sagamu and Akure. The selection of these urban cities and their highways was based not only on the high volume of traffic and high accident rates, but also because of

urban sprawl and geographical proximities of the cities. According to Ogunsanya (2003 and 2004) and corroborated by Ademiluyi and Gbadamosi (2004), these five cities: Lagos, Ibadan, Sagamu, Abeokuta and Ondo, have the highest amount of vehicles and the largest concentration of highways and road networks in the Southwestern states (Odufuwa, 2003). More importantly, Lagos- Ibadan, Ilorin-Ogbomosho, Akure-Ondo-Owo, Sagamu-Ibadan expressways were described as not only deadliest highways in Southwestern, Nigeria but as the most accidents prone routes in Nigeria (FRSC, 2009).

Admittedly, many of the urban cities in the Southwestern states faces major hurdles when it comes to traffic safety, air quality, and physical inactivity. Observably, more than 90 per cent of road traffic deaths occur in uben centres, where urbanisation is accelerating more rapidly. The proximity of Lagos to seaport and Ogun State to the border of the Republic of Benin may partly be responsible for this development. Essentially, the intrastate and interstate transport services in the Southwestern Nigeria rely heavily on highways in these cities (Mabogunje, 2002; Lagos State Economic Summit Group, 2003; Lagos State Ministry of Economic Planning and Budget, 2004).

Further, the study was restricted to selected principal motor parks designated for commercial drivers plying Lagos-Ibadan, Ilorin-Ogbomosho, and Akure-Ondo-Owo highways in Lagos, Oyo, Ogun and Ondo states whose members (commercial drivers) have been exposed to major public enlightenment programmes of FRSC. The selected motor parks in Lagos State are Oshodi Park; Iyana Ipaja; Ikorodu; Mile 2; Oyingbo; Jibowu; Ketu /Ojota and Agege. Those in Ibadan include Iwo road; Akinyele; New garage; Challenge; Molete; Dugbe; Sango and Oyo. Also motor parks selected in Ondo state are Ondo, Oyemekun, Ilesha, Ado, Freeman, Idanre and Abuja-Kaduna. Lastly, the motor parks chosen in Ogun State are Sango, Idi-Iroko, Kuto, Lantoro, Igbesa, Agbara, Ijebu-Ode and Ilaro. It should be pointed out that this study site and their highways were chosen purposefully, because they are major exit points to Northern, Eastern, and other Western parts of the country. Again, some of these motor parks serve as loading and offloading points for some of the neighbouring West African countries like Ghana, Togo, Benin Republic, and Chad Republic (Oyesiku, 2004). Many transportation devices such as taxis, interstate mini and luxurious buses originate and terminate at these points (Lagos State Metropolitan Transport Authourity (LAMATA), 2010).

Table 1.1. FRSC Approved Motor Parks in Southwestern Nigeria

Lagos State	Oyo State	Ondo State	Ogun State
Oshodi Motor Park	Iwo road Motor Park	Akure- Idanre Motor Park	Kuto Motor Park
Ipaja Motor Park	Akinyele Motor Park	Abuja-Kaduna Motor Park	Sango Motor Park
Ikorodu Motor Park	New Garage Motor Park	Idanre Motor Park	Idi-Iroko Motor Park
Mile 2 Motor Park	Challenge Motor Park	Oyemekun Motor Park	Lantoro Motor Park
Oyingbo Motor Park	Molete Motor Park	Freeman Motor Park	Igbesa Motor Park
Jibowu Motor Park	Dugbe Motor Park	Ado Motor Park	Agbara Motor Park
Ketu/Ojota Motor Park	Sango Motor Park	Akure Motor Park	Ijebu Ode Motor Park
Agege Motor Park	Oyo Motor Park	Ilesha Motor Park	Ilaro Motor Park

Further, the study was restricted to five major or popular public enlightenment programmes of FRSC. These are: FRSC on television; FRSC on radio; FRSC motor park rallies: road safety lectures on road signs, symbols, markings and post crash treatment; FRSC handbills/posters/billboards and FRSC videos and films. Asogwa (1980) and Olaseni (2010) describes all these as "three Es: engineering, education and enforcement".To them, these are cardinal principles which serve as a pivot for the sustainable, efficient road safety and management, irrespective of the country involved.

1.7 Operational Definition of Terms

To avoid ambiguity or misinterpretation of terms, there is need to define each operational term as used in this thesis. This will give room for better understanding of the body of this work.

FRSC Enlightenment Programmes

The combination of all regulatory enforcements employed by the FRSC to protect lives and properties during all phases of road mobility, including periods of distress by accident victims: FRSC on Radio and Television; Motor park rallies and road safety lectures on road signs, symbols, markings and post crash treatment; FRSC Handbills/posters /billboards and FRSC videos and films.

Road Traffic Accidents

Death, injuries, disability sustained or property damage by vehicle occupant(s) in urban centres in the Southwestern, Nigeria

FRSC on Television

Unscheduled road safety, literacy programmes of the FRSC that showcase nitty -gritty of good driving habits as a way of preventing avoidable road traffic accidents on Nigerian roads

FRSC on Radio

Time -to -time road safety tips given by the FRSC to educate road users on road traffic rules and regulations and effects of road traffic accidents

FRSC Rallies

Purposeful/organised lectures, pictorials and demonstrations on overloading, overspeeding, wrong overtaking, drink - drive, post-crash treatment, use of cell phone and road traffic control devices

Commercial Drivers' Behaviour

Regularly repeated habit of drivers: overspeeding, wrong overtaking, non-use of a seatbelt, use of cell phone, drink and drive, disregard for road traffic signs/symbols and markings, while driving

Commercial Driver

Physically and mentally sound person with valid Drivers' license and have been exposed to public enlightenment programmes of the FRSC

Road Safety Campaign

Implementation of well packaged road safety activities designed by FRSC to inform, advise, encourage and persuade road users on good driving habit and reduce human and materials carnage on the highways

Urban Centres

These are Lagos, Ibadan, Sagamu, Abeokuta and Ondo with high vehicular and human movements.

Disability-Adjusted –Life –Years:

A health-gap measure that combines information on the number of years lost from premature death with the loss of health from a disability.

Highways:

Major trunk A roads in urban centres like Lagos- Ibadan, Ondo -Akure, Ibadan-Lagos-Ibadan,Ilorin-Ogbomosho, Ibadan-Oshogbo, Akure-Ondo-Owo, Sagamu-Ibadan, Abeokuta-Ibadan, Lagos –Abeokuta expressways used in this study

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This chapter dwells on a reviewing the literature and theories that are relevant to the study. It examines the major constructs involved in this investigation to bring out their relevance to the present study. The chapter is carried out under the following sub-headings:

2.1.0 Driver and Road Safety Technology

Amazingly, research into driver and road safety technology in developing countries is scarce, compared to the magnitude of the problem, especially in Africa. It has been predicted that by 2020, road traffic injuries will rank as high as third among causes of death and disability-adjusted life years lost (WHO 2005). The road traffic mortality rate is highest in Africa; 28.3 per cent per of 100,000 people compare with 11.0 per cent in Europe (Afukaar, 2003). WHO (2005) reveals that pedestrians accounted for between 41 per cent and 75 per cent of all road traffic deaths in developing countries. In Africa, pedestrians and passengers of public transportation are the most affected (Nantulya and Reich, 2002). They represent 80 per cent of all road traffic deaths. For instance, pedestrians alone accounted for 55 per cent of road traffic deaths in Mozambique between 1999 and 2004 and accounted for 46 per cent of road traffic deaths in Ghana between 1994 and 1998 (Akers; Krohn; Lanza-kaduce and Radosevich, 1979).

Contrary to the road traffic situation in Nigeria, the road traffic situation in many highly- motorised nations of member states of the Organisation for Economic Co-operation and Development (OECD) is encouraging with about a 21 per cent reduction in overall road fatalities. Interestingly, many of these countries (Sweden, the Netherlands and the United Kingdom) had already achieved major reductions as early as 1990 (Ibrahim, 2012). In short, road traffic deaths decline by about thirty percent in high-income or industrialized countries such as Western-Europe, Japan, Australia, and New Zealand, but the reverse is the case in low-income and middle-income countries like Nigeria (Ismaila; Adekunle and Charles, 2009). The attainment of 10 to 30 per cent road traffic accidents (RTAs) reduction rate of these countries was possible due to adoption of a systems approach to road safety, which addresses the road, the vehicle and the user to effectively tackle road traffic injuries. Also, RTAs responsibilities were shared between governments, industry, non-governmental organisations (NGOs) and international agencies. Most importantly, commitments and input from all the relevant sectors, including those of transport, health, education and law enforcement were incorporated in all road safety plans and programmes (David, 1999; Dike, 2007; Dedoukou and Daniel, 2008).

However, the severity of road traffic crashes is greater in Africa than anywhere else, because of the poor transport conditions such as lack of use of seat belts, overloading, and

hazardous vehicle environment (Elvik, 2001; Peden, Scurfield and Sleet, 2004; Chukwu, 2007). Also, it should be noted that the evaluation of influence of the FRSC's road safety campaign is vital to determine whether various road safety programmes work, to help refine programme delivery, and to provide evidence for the continuation of the programme. The evaluation will not only provide feedback on the effectiveness of a programme but will also help to determine whether the programme is appropriate for the target population, whether there are problems with its implementation and support, and whether there are any ongoing concerns that need to be resolved as the programme is implemented (Jacobs and Baguley, 1995).

As earlier advocated, road safety in Africa is part of the broader development process. The situation is particularly worrisome in this continent because of the combination of incompatible road users, poor vehicle condition, under-developed infrastructure, lack of risk awareness, and ineffective enforcement that is jeopardised by corruption and bribery (Khayesi, 1997; David, 1999; Peden 2001; Daramola, 2003; Osita, 2012). Further, Commons (2001) posit that the road transport system, which happened to be the dominant form of inland transportation and carries more than 95 percent of passengers was not accorded the right recognition, especially in the area of road traffic safety.

Driver and road traffic safety technology or education is a normative enterprise growing out of man's problems (Okoko, 2006). These problems arise from improper co-ordination among the three big traffic elements: namely the driver (human), the highway and the motor vehicle (Olanrewaju and Falola, 2007). Research evidence indicates that the human element is responsible for 80 to 85 per cent of all road traffic accidents. Traffic violations, driving while intoxicated and lack of driving courtesy are the results of human actions. Unsafe highway and road conditions cause about 10 percent of all traffic accidents while mechanical deficiencies are responsible for nearly 5 per cent of all traffic problems (Okanlawon and Oni 2002; Agwu 2010).

According to Falola (2007) and Osita (2009 and 2011), the primary function of driver and traffic safety education is to help drivers and other individuals to use motor vehicles safely and efficiently. It achieves this function by co-coordinating properly, the three big traffic elements. Driver and Traffic Safety Education are important because it will educate all road users with respect to their capabilities and limitations in the use of motor

vehicles, the automobiles – their capacities as well as their limitations while on the highways (Wakama and Oyeyemi, 2003). The knowledge of these three traffic elements will make road users to become better and considerate. This is because better and considerate driving is apt to reduce the number of disasters on the Nigerian highways (Oni and Oliver, 2002; Odey, 2005).

In a related development, Odufuwa (2003) and Olaseni (2010) added that driver and traffic safety education will not only equip all road users, but open doors to new careers or vocations they would never have conceived of without such education. From all these inferences, it could be deduced that the growth and development of a nation depends, largely, upon the capacity of its transport system to move persons and goods to desired locations safely (Sanni and Ipingbemi, 2007 and 2008).

2.1.1 Concept of Road Safety

Road safety is used widely in the context of protection from personal harm, while traveling on the road. Road safety is a strategic response to risk associated with road traffic crash. Lawal (2008) describes it as freedom from danger and situations that can cause harm, injury or health-related problems. It is a protection against injury and traumatic issues (Balogun, 2006). Road traffic safety deals with how to reduce road traffic crashes and accidents and their consequences. Lack of meaningful interaction between the three road traffic elements: the driver, vehicle and the road, leads to road traffic accident (Sunmaila, 2004; Sunmola, 2012).The magnitude and trend of road traffic crashes and injuries worldwide is heartbreaking. The rising tide of this global problem has continued to outstrip efforts to curtail it. Road traffic crash is presently the 11th leading cause of death and it may rise to 3rd position by 2020 (WHO, 2008). In 2008, one person is killed in less than two hours, and one road traffic crash occurs every 58 minutes. Also, 54 deaths occur in every 100,000 population (Baum, 2003; Balogun, 2006; Belin, 2012).

Road traffic crash (RTC) at first seemed relatively unimportant in Nigeria and most developing countries when compared to problems associated with hunger, education, finance and economic problems. In fact public ignorance of the causes of road traffic crashes was palpable, as people continually attributed causes of road carnage to either the will of God or evil spirit, while ignoring the prevalent human errors and mechanical angles

to it. Perhaps the first effort by the Africa continent to address the issue of safety on the highway was the organisation of the 1st African Road Safety Congress in Nairobi in 1984 (Nwaegbe, 2008). Olagunju (2001 and 2009) reveals that chances of a vehicle killing a road user in Nigeria were 47 times higher than in Britain. Since then rather than limiting road safety to university research, the continent at the Governmental level has continued to show greater interest and involvement in road safety issues across the social and educational strata. The scientific method of public enlightenment programmes centres on '4E' approach. This comprises of:

i. **Enforcement of traffic laws**:

The first phase of the road safety approach is the enforcement of road traffic rules and regulations. This include looking for defect in driver behaviour, vehicle, road way, taking appropriate actions like impoundment, arrest, fines, drivers' license seizure, towing of vehicles and supervising traffic rules and highway codes. The lead agency and other law enforcement agencies have a great task to implement all road traffic rules that will promote good and responsive driving behaviour among commercial drivers and other road users.

ii. **Education of road user**:

This aspect of road crash phase is paramount to a sustainable road traffic policy; promote good driving habits among commercial drivers' in the Southwestern, Nigeria. This involves the use of the media (print and electronic), motor park rallies, road crash films, literature materials (Highway Code literacy, hand bills, and posters), introduction and establishment of road safety volunteer clubs in schools and incorporation of safety as a subject in school curriculum. Proper education of the road users is a veritable tool that will ensure a reliable road safety policy that will engineer a drastic reduction in the level of road traffic accidents.

iii. **Environment:**

Environment is one of the road traffic accident risk factors. Environment entails adequate advice on safe road design, congestion, and smoke emission in an attempt to promote defensive driving among commercial drivers and other road users. Globally, defensive driving, comprehension of road traffic signs, symbols and markings by all categories of road users are crucial to a sustainable road traffic policy. Road safety

component in road design will help to promote a reliable road safety policy that guarantees reduction in the high spate of road traffic accident on the highways.

iv. **Engineering**:

The last stage has of the scientific method of PEP has to do with conduct of safe audit; assess crash potential of roads and black spot and the various crash phases: the pre-crash, crash and post crash phases. Pre-crash phase is characterized by heavy drinking of all sort of herbal mixtures, alcoholism; poor eyesight; sensitivity; aggressiveness; deficiency in highway and road design. It should be noted that the objective of pre-crash phase is promote abstinence from all forms of alcoholism and avoidance. Crash phase is characterized by all circumstances internal or external to vehicle, which in case of crash determine the possibility of injury, nature and severity such as existence of sharp ridges, guard rails and protrusions which cause injury to pedestrians and vehicle occupants when road traffic accidents occur. The objective of road safety here is injury prevention through safe crash design of doors, seat belt, and airbags. Also, the post-crash phase is meant to provide prompt attention to save road accident victims and those that sustain minor injuries. This is a step that promotes severity reduction, which necessitates the use of ambulance, communication gadget and first aid equipment that make it possible to give prompt rescue operation to road traffic accident victims.

2.1.2 The FRSC Public Enlightenment Programmes

The continuous increase in the trend of road traffic accidents on daily basis led to the establishment of the Federal Road Safety Commission, in 1988 vide Decree 45 of 1988 as amended by Decree 35 of 1992 and re-amended in 2007 (FRSC Act Cap 141, Law of the Federal Republic of Nigeria). The mandate of the FRSC includes, ensuring enforcement of road traffic laws, collecting road accident statistics, revising road traffic legislations, promoting road safety education, ensuring adequate provision of medical facilities to victims of road traffic accidents, undertake research in road safety and co-ordination of all road safety activities. Further, Sunmaila (1992 and 2004) and Egunjobi (2000) jointly add that FRSC also has the statutory responsibility of improving road safety and by implication, reducing road transport accidents and keep avoidable crashes off public roads.

According to Ipingbemi (2008) and Osita (2010), public enlightenment programmes of FRSC are road safety precautions put in place to bring about reduction in high road traffic accidents in Lagos, Ogun, Ondo and Oyo states and Nigeria in general. Globally, all public enlightenment programmes regardless of its forms and methods, basically centres on strict adherence to road traffic rules and regulations, target at protecting passengers, the vehicle, pedestrians, commercial drivers and other road users (Holder, 2001; Hill, 2008). As rightly put by Daramola (2003) and Ackaah and Adonteng (2011), public enlightenment programmes serve as the bedrock of sustainable road traffic activities in any nation, regardless of the industrial attainment or country involved. Dixey (1999) and Oni (2004) describe FRSC public education as the conscious training of all road users, most especially drivers of motor vehicles and motorcycles in proper and lawful behaviour on public roads and highways. The onus of the FRSC public campaign involves thorough discussions on road traffic laws and Highway Code, comprehension of road signs and traffic signals. Other cardinal principles of the FRSC public campaigns centre on knowledge of one's responsibilities while driving, respect for other road users, respect for traffic control officers and their directives, and finally encouraging concern for the safety of all road users and proficiency in driving. It is traffic education deficiencies that have been responsible for the road transport problems in Nigeria (Oni, 2000 and 2002; Oladimeji and Onyema, 2011).

Research evidence indicates that the human element is responsible for 80 to 85 percent of all traffic accidents. (Oni and Okanlawon, 2010; Oni and Olagunju, 2011). FRSC (2005) and Owaba (2009) summarise the road safety publicity campaign as part of a set of activities that aim to promote safe road use. Road safety campaigns are designed to create awareness of an issue or to inform (for example, about new road safety laws), to change attitudes (for example to improve public acceptance of road safety measures). Mackay (1997) maintains that public enlightenment programmes on road safety are meant to change behaviour, as part of a package of measures (for example, engineering and enforcement related to speeding). It is evident that the three golden rules form the bases for any road safety policy with regard to the behaviour of road-users: keep your speed down, wear your seatbelt, do not drink and drive and the need for them to be obeyed (National Highway Traffic Safety and Administration, 2006).

Various radio and television lectures on road safety precautions, as well as, jingles cum newspaper advertisements form the bulk of the corps' enlightenment via mass media.

Other innovative varieties include public enlightenment programmes at motor parks, churches, mosques, and community gatherings. According to Eke, Etubu and Nwosu (2000), most of the FRSC activities are done in conjunction with public or private organised sector, especially with the banking and manufacturing industries like Nigerian Breweries, Dunlop PLC and First Bank PLC, Diamond Bank PLC, and Chevron. Regardless of its form and method, they are meant to reduce road crashes to about 50 per cent by 2015 and by 2020 make Nigeria the 20th safest country in the world (Osita, 2008 and 2011).

Adeniji (2000) further emphasises that the roas safety campaign is important to lift the profile of a road safety problem, say speeding, as a legal or criminal issue and to make commercial drivers aware of the risk of prosecution. For example, the publicity about the number of deaths and injuries caused by speeding, combined with information about how low speed reduces the number of deaths and injuries, may change attitudes to speeding or make low speed limits and stiff penalties for infringements more acceptable. Similarly, Kessides (2006) opines that the link with law enforcement is essential: the fear of being caught and penalised for traffic offenses appear to be a more powerful motive for reducing speed than the fear of being involved in a crash.

Asides, Hananiya (1996) and Global Road Safety Partnership (2001 and 2004), state emphatically that the various road safety publicity programmes are part of a set of activities put in place to promote the safe road use, create awareness of road accident threats and vulnerability of certain road users, to educate road users as to what constitutes safe road user behaviour. Ademiluyi and Gbadamasi (2004) describe the FRSC public enlightenment campaign as a package of measures to change commercial drivers' attitudes and inform road users of changes in road traffic regulations. In Nigeria, the major components of the public enlightenment programmes (PEP) of the FRSC include:

(i) FRSC on television
(ii) FRSC on the radio
(iii) FRSC motor park rally/lectures on road signs/symbols/markings and defensive driving
(iv) FRSC handbills/posters and billboards, and
(v) FRSC safety campaigns in videos and films on the use of seat belt and child restraints, dangerous overtaking, over speeding and overloading.

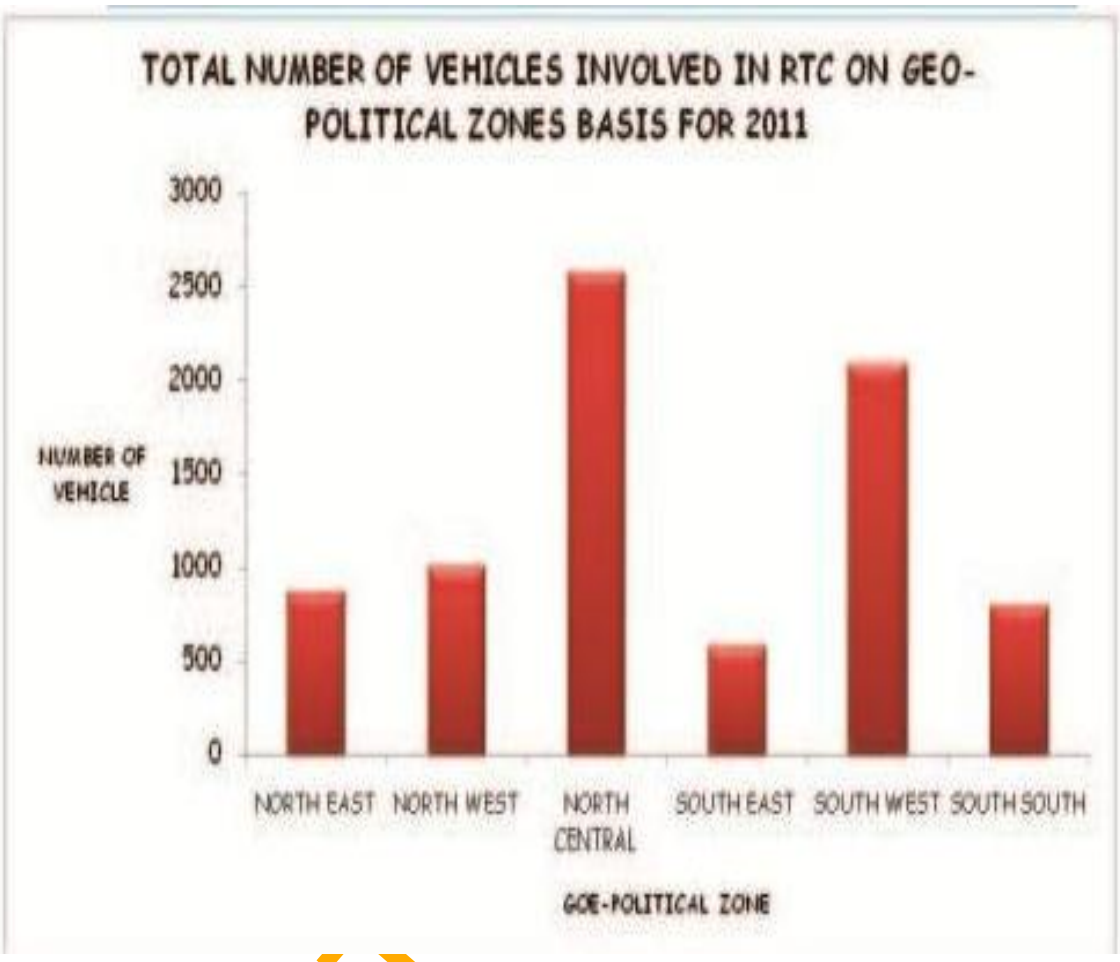

Fig. 2.1. Total number of vehicles involves in RTC on geo-political zones

Source: *FRSC Annual Report*, 2011.

Figure 2.1 above shows differences in number of vehicles that were involved in road traffic accident (RTC) on the six geographical zones in Nigeria. The figure 2.1 reveals that the North-central zone experienced the highest number of road traffic accident in the year under review. This is followed by the Southwestern zone, and the least being South-eastern geographical zone. It therefore means that both South-west and North-central zones are the most road traffic accident prone and deadliest zones out of the six geopolitical zones in Nigeria. According to Oyeyemi (2014), deficiency in commercial drivers' behaviour accounted for most of the road traffic accidents on the highways.

2.1.3 The FRSC Mass Media Campaign and Commercial Drivers' Behaviour

The FRSC as a lead agency as far as road safety is concerned with Nigeria employs mass media campaign extensively as a means of promoting road safety issues. Accordingly, Franley (2001) and Dike (2001), emphasise that mass media campaigns have a role to play in road safety, but are unlikely to produce a large behavioural change in isolation. Mass media campaigns therefore play a supporting role in other campaign activities (for instance enforcement). One of the channels adopted by the FRSC to educate commercial drivers and other road users is the mass media (print and electronic). Road safety via mass media plays a valuable role in improving road safety by promoting safe behaviour. According to Ogunsanya (2002 and 2003) and as corroborated by Olaseni (2010), mass media are used extensively as a means of promoting road safety issues by the FRSC. Also, Road Peace (2006) maintains that road safety campaign through mass media is an efficient means to enhance road safety precautions, promote a safer driving behaviour among different categories of road users.

Meanwhile, it should be noted that, the multi-various campaigns of the FRSC on road safety on the television, radio and newspaper advertorials place much emphasis on good driving habits among commercial drivers and road users. The major message is not only through the jingles, but through lectures on good driving habits, patience while driving, and application of road sense while on the highways. On Television stations, FRSC officials more often than none, give road safety lectures on such risk factors: speed, drink-drive, seat belt, distractions, overtaking, Highway Codes and socio-economic effects of road traffic accidents and interpretation of road signs, symbols and markings. One of such jingles on radio goes thus:

Onímó□tò ro□ra sáré o (2 xs)
È□mí ò láàrò□
Asúré tete ò ko□já ilé
Arìngbè□rè□ ò ní sùn só□nà.

Driver reduce your speed (2xs)
Life has no duplicate
Speeding driver will not go beyond the destination
Neither will speed compliant driver sleep on the road.

In order to complement this on television, pictures of past scary accident scenes are relayed on the screen for viewers to appreciate and more importantly to remold bad driving habits prevalent among commercial drivers plying the highways.

The content of the FRSC road safety campaigns on television mostly during the "Ember" months (September, October, November and December) and other periods centres on road safety tips, demonstration of proper application of fire fighting equipments as required by Road Traffic Laws. Though statutorily, it is mandatory for the owners of the vehicles (private or commercial) to have approved vehicle fire extinguisher, but many drivers are not knowledgeable about its application during emergency (Osita 2009). Also, Filani (2002) and Okanlawon and Oni (2006) point out that during most demonstrations; commercial drivers were made to realise they are not to be panic whenever a fire occurs. In Lagos State, for example, motorists and other road users were empowered by virtue of Lagos State Security Trust Fund to call toll free Number `767` or `112` during any emergency. It should be noted that these two lines are hot lines direct to emergency service units in Lagos State so as to, receive prompt attention from relevant agencies.

2.1.4 The FRSC Don't Drink and Drive Campaign and Commercial Drivers' Behaviour

The contribution of alcohol to an increased risk of road traffic accidents has been well established and has received international attention for many years (Emejor, 2010). In a similar manner, Fildes, Rumbold and Leening (1991) observe that experimental study and epidemiological surveys, undertaken in a number of industrialized countries have documented consistent and convincing evidence of the direct dose-response relationship between increasing blood alcohol concentrations (BACs) in a motor vehicle driver and the increasing risk of his/her involvement in a road accident. Osinubi (2003) and Osita (2010) identify negative impacts of alcohol and hinge it on blackouts, euphoria, poor co-ordination, balance impairment, poor judgments, and impaired memory. Over the last decade and on realisation of the increasing importance of RTAs as a cause of morbidity, mortality, disability and economic loss, international attention has focused in developing policies and strategies for the prevention of injuries and fatalities resulting from alcohol-impaired driving (Fidelis, 2010; Fleiter and Watson, 2008).

In an attempt to discourage alcoholic consumption among commercial drivers, most industrialised nations have consequently introduced new legislations, intensified enforcement of drinking and driving laws, and also increased research in alcohol-related traffic crashes. However, due to the diversity in demographic structure, socio-cultural characteristics, levels of economic development, as well as road transport infrastructure and

traffic mix, the direct transfer of countermeasures successfully applied in the Western world to developing countries may not be appropriate or feasible (Okoko, 2006). Also, studies carried out by the Transport Research Board (TRB) 1991; WHO, 2002 and 2004; World Bank, (2004 and 2005), reveal the increasing importance of RTAs as a major cause of death and a significant public health problem in developing countries, unlike highly motorized or industrialized countries where the impact is less. Also, it was revealed that little information is available on the extent of the contribution of the various risk factors (WHO, 2004). For instance, the relationship between road traffic injuries and alcohol consumption has scarcely been examined objectively in Third World countries. Osita (2012) further suggests that through application of research experiences of industrialized countries, developing countries should endeavour to examine and prioritise the extent of influence of the various country-specific RTA risk factors, and to generate data appropriate for developing as well as monitoring targeted traffic injury prevention interventions.

In line with the Road Safety Act (2004 and 2007), the FRSC embark on 'Don't Drink and Drive' campaign in an attempt to further build-up towards ensuring a zero tolerance level in road traffic crashes across the country, especially during the last quarter of the year. This campaign is carried out to ensure strict compliance with traffic rules and regulations among road users in the country, as part of measures to stem the tide of road crashes that occur during the months of September, October, November and December. It should be noted that this campaign takes place in major motor parks across the country. Don't drink and drive campaign is part of the FRSC advocacy in collaboration with Guinness Nigeria Plc and the Nigerian breweries Plc. The primary objective of this campaign is to discourage the habit of drinking and driving among commercial drivers, and reduce incidence of alcohol-induced road crashes in urban centres in the Southwestern states and Nigeria in general.

The FRSC Annual Reports (2004, 2005 and 2008) reveal that the campaign strives to promote responsive drinking of alcohol among categories of road users, create awareness about the drastic effects of alcohol on the traffic conduct of every commercial driver when taken above recommended limit. In such forum, total abstinence from all forms of intoxicants and stimulants such as '*Ògógóró', 'pàrágà', 'Shine-shine'* and such herbal mixtures like '*àgúnmu'*, '*pakurumo*□', which negate safe use of the highways are advocated. However, the lecture on the dangers of drink-drive is followed by free distribution of handbills to the commercial drivers that participated in the road safety

lecture series. In most cases, this is normally complemented with film show on the dangers of drink-drive. As follow up, FRSC officials on patrol also carry out 'stop and test' exercise on commercial drivers with the sole aim of determining the BACs level (Osita, 2010). To carry out this exercise, the FRSC officials on patrol employs the use of breathalyzers to determine the BACs level of drivers randomly but in most cases, commercial drivers are asked to walk on a straight line (Agwu, 2010). Though, FRSC allowed only 80mg/100mls, equivalent to 0.08 per cent (a bottle of beer) of BAC, at the same time, the FRSC frown at alcohol because it affects vision, judgment, reduces coordination and slows down reaction. Not only this, it reduces driving ability even when taken below the legal limit (S.10 (4), FRSC Act, 2007).

Table 2.2. Behaviour Modification by Alcohol Consumption on the Body Performance

No. of bottles	Percentage Concentration of blood BAC (g/100ml)	Behaviour Effects on the body
1.	0.01- 0.02	• Slight behaviour • Increase in heart and respiration rates • Decrease in various brain centre functions • Inconsistent effects on behavioural task performances • Decrease in judgment and inhibitions • A mild sense of elation, relaxation and pleasure
2.	0.03-0.06	• Feeling of warmth and mental relaxation • Physiological sedation of nearly all systems • Decreased slowed reactions, impaired coordination, and reduced muscle strength • Reduced ability to make rational decisions or exercise good judgment • Increase in anxiety and depression • Decrease in patience
3.	0.07-0.09	• Exaggerated emotion and behavior or noisy or gloomy • Dramatically slowing of reactions • Impairment of balance and movement • Impairment of some visual functions • Slurred speech • Vomiting, when BAC is reached rapidly
4.	0.1-0.12	• Clumsiness, working in uncoordinated movement • Severe sensory impairment, including reduced awareness of external stimulation • Severe motor impairment, frequently staggering or falling
5.	0.12-0.60	• Gross intoxication • Non-responsive stupor • Loss of consciousness • Anaesthesia comparable to that for surgery • Death (for many) • Unconsciousness • Cessation of breathing • Death, usually due to respiratory failure

Source: Highway Code (FRSC, Revised edition, 2009).

Over the past few decades, many industrialised countries have been successful in reducing the number alcohol related road crashes. As proffered by Adalemo (2005), information about these experiences can be used to guide programmes in low and middle-income countries where alcohol is often an important risk factor for road traffic crashes. However, it must be recognised that low and middle-income countries today face additional problems on their roads, meaning that these lessons cannot be simply transferred between countries, but will need to be adapted to suit different contexts. Road crashes involving drinking and driving as noted by Oni (2004) and Ibekwe (2008) are a feature of the road-injury profile in many countries, and alcohol consumption appears to be an element of road user behaviour that is very difficult to address. Apart from the adverse influence of alcohol as a contributor to road crashes, Steg (2006) further stresses that the presence of alcohol in the body of a road crash victim adversely affects the diagnosis, management, and treatment of injuries. Similarly, Murray and Lopez (1999) and World Business Sustainable Development (2001) opine that countries looking for sustainable solution to tackle this problem should consider the experiences of other countries where crashes involving drinking and driving have been reduced substantially.

2.1.5 The FRSC Anti-Speeding Campaign and Commercial Drivers' Behaviour

Speeding (i.e. driving above the speed limit) and inappropriate speed (driving too fast for the conditions, which relates to the driver, vehicle, road and traffic mix rather than the speed limit) are almost universally recognised as major contributory factors in the number and severity of traffic crashes (World Disaster Report, 2000). In Nigeria, speed limits or speed management is set for different forms of road transportation to prevent and reduce road traffic accidents (Federal Office of Statistics, 2001). Speed management plays a key role in the management of drivers' speed: involves a wide range of measures including setting and enforcing speed limits, engineering measures designed to reduce speeds, and public education and awareness campaigns. Excessive and inappropriate speed by commercial drivers is the most important factor contributing to the road traffic problem faced by many countries (WHO, 2008, 2009 and 2012). The International Road Federation (1995) adds that the higher the speed, the greater the stopping distance required, and hence the increased risk of a crash. According to Cunard (2009), as more kinetic energy is absorbed during a high-speed impact, there is a high risk of injury should a crash occur.

Admittedltly, speed management is a very important tool for improving road safety but improving compliance with speed limits and reducing unsafe driving speeds are not easy task. In a related development, Corbett (2001) and Kessides (2006) add that many commercial drivers do not recognise the risks involved and often the perceived benefits of speeding outweigh the perceived problems that are associated with it. Lagos Economic Summit Group (LESG) (2003) maintains that the management of speed remains one of the biggest challenges facing road safety practitioners around the world and calls for a concerted, long-term, multidisciplinary response. Reducing motor vehicle speed in areas where the road user mix includes a high volume of vulnerable road users such as pedestrians and cyclists is paramount, especially in urban centres (Luoma and Rama, 1998; Lagos State Metropolitan Transport Authority, 2010).

Table 2.3 FRSC Approved Stopping and Braking Distance for Vehicles

Speed km/h	Thinking Distance Meter	Braking Distance Meter	Overall Stopping Distance Meter
20	5	5	10
40	10	12	22
60	16	30	46
80	22	50	72
100	27	65	92

Source: Nigeria Highway Code, 2009.

As could be seen in table 2.3, the FRSC stipulates both the stopping and braking distance for different speed limits as approved for a variety of vehicles. The safe rule is never to get closer than the overall stopping distance shown in table 2.3. The stopping and braking distance is set to prevent sudden use of brake system by commercial drivers, as this could cause physical or emotional damage to both the vehicle and unbelted passanger. The FRSC facilitators during motor park rallies not only expose commercial drivers and other participants to series of safety lecture on the need to obey stopping and braking rule, but also made to watch a corresponding documentary on road safety precautions. Also, the FRSC also advitise and publisise the approved speed limits, stopping and braking distance on radio, television and on the pages of newspapers.

Table 2.4 FRSC Approved Speed Limit for Different Vehicles (km/hr)

Vehicles	Build-up-Areas	Highways	Expressways
Private cars	50	80	100
Taxis/Buses	50	80	90
Tankers/Trailers	45	50	60
Motorycle	50	50	Not allowed
Towing vehicle	45	45	45
Towing Vehicle (Not Towing)	50	60	70

Source: FRSC Act 2007; Nigeria Highway Code, 2008.

By and large, the FRSC as the lead agency put in place minimum and maximum speed limit as stipulated in the FRSC Act for different categories of road vehicles. Tables 2.2 and 2.3 show various jurisdictions' default speed limits (where applicable) that apply to different types of vehicles travelling on three different types of road. Actual speed limits may range beyond these values. Speeds are listed in kilometers per hour. The enforcement tolerance is specified in km/h above the stated limit. Admittedly, this is another safety measure adopted by FRSC as a measure to prevent road traffic crashes and injuries on highways, but the law imposes maximum speed of 100 km/ph for any vehicle in Nigeria. At the same time, 'common sense' often dictates lower speed limits. For instance, on wet or slippery roads or when visibilty is unclear as a result of smoky exhausts of other vehicles, harmattan dust or in foggy weather. In such circumstances, common sense needs to be applied. That is, two second rules.

2.1.6 The FRSC Campaign on Safety Belt and Commercial Drivers' Behaviour

The literature has shown that the safety belt (seat belt) is the single most effective feature in a vehicle to reduce the severity of injury to the vehicle occupants that results from road traffic crashes (Sleet and Clemente, 2006). Article 7 of the Vienna Convention on Road Traffic of 1968 states: "The wearing of safety belts is compulsory for drivers and passengers of motor vehicles, occupying seats equipped with such belts, save where exceptions are granted by domestic legislation." The legislation for compulsory wearing of seat belt was first introduced in the State of Victoria, Australia in 1971 (Rutledge, 1993). Today, the entire developed and developing countries of the world, including Nigeria have

laws enforcing the wearing of seat belts (Ackaah and Adonteng, 2011). By and large, safety belt (SB) use prevents and reduces the severity of injuries during motor vehicle crashes, and its use is influenced by the perceived risk inherent in any journey (Watson, 2004; Oladimeji and Chika, 2011).

However, it should be pointed out that various FRSC activities on radio, television, pages of newspapers and at motor parks and terminals cover campaign on safety belt. Safety or seat belts are basically meant to increase public awareness on the fact that seat belts can prevent serious injury and death and to increase awareness that every driver and passenger is safer with a seatbelt. It is also meant to encourage people to purchase vehicles with safety belts fitted and use them, convey the message that use of a seat-belt is now mandatory; inform people that safety belt use is now being enforced, and to explain the penalties and lastly, to ensure the enforcement of the seatbelt laws by all road safety related law enforcement agencies in Nigeria (Adesanya and Adeniji, 1998; and Adeniji 1987 and 2000).

Mabogunje (2002) maintains that safety belts are a secondary safety device that not only prevent sudden or unexpected ejection from the vehicle in an impact, but also reduces the risk of contact with the interior of the vehicle or reducing the speed of such impacts. It also serves as a cushion that reduces shock on the wearer by restraining the vehicle occupant to their seat, whenever road traffic accidents occur or when the driver suddenly applies the brake. In a similar manner, the American College of Emergency Physicians (2001) as cited by Nnadi and Ibe (2007) and Nwaegbe (2008) suggest that safety belts are the most effective means of reducing deaths and serious injuries in traffic accidents. They also calculate that 75 per cent of all vehicle occupants ejected from a vehicle in an accident die as a result of not using safety belts. Seat-belts provide the greatest protection against ejection in a crash. Air bags are an active, high-energy device commonly designed to act as a supplementary measure to the performance of a seatbelt. In a related development, Milne (1985) and Ademiluyi (2007) explain that if an occupant is unrestrained, or the vehicle has an airbag installed, but no safety belt, it is possible that the occupant come in contact with the airbag before it has fully inflated.

Increasing motorisation worldwide has brought increases in crashes and injuries to vehicle occupants, particularly in low- and middle-income countries (Oyesiku, 2002 and

2004; Oyeyemi, 2003). Zegeer and Bushell (2012) add that one of the most effective measures to protect occupants from injury in the event of a crash is the fitment and use of seat-belts and child restraints. Eghaghe (2010) stresses that seat belts as well as crash helmets are proven to save lives and reduce injury severity, and all vehicle occupants should be appropriately restrained when travelling in a motor vehicle. Adams (2006) and Olagunju (2009) observe that seat belts and child restraints are a secondary safety measure; though effective, they do not reduce crash risk, for which other primary safety measures are needed, particularly to protect vulnerable road users (Belin, 2012).

2.1.7 The FRSC Campaign on Cell Phone and Commercial Drivers' Behaviour

Nasar, Hecht and Werner (2008) have established that distraction, no matter how little is a risk factor as far as road traffic accident is concerned. This explains why the FRSC included the campaign against the use of cell phones by the commercial drivers, while behind the wheels. The FRSC campaign also covers the use of hands free, all cell phone connections to car stereo speakers or even the attachment of the television screen or ipad to the vehicle dashboard. According to Labaika, Ege and Oni (2005), texting or phone call while driving more often than not lead to unnecessary distractions. Pacione (2002) and Oni (2008 and 2011) explain that texting while driving covers any act of composing, sending, or reading short text messages, email, or making other similar use of the internet on a mobile device (pinging or face-booking) while operating a motor vehicle, such as an automobile and truck. The use of the phone while driving prevents responding correctly to road signs, symbols and markings, detecting hazards while eyes are off the road (Stigson, Krafft and Tingvall, 2009; Tutu, 2007).

At motor parks, on radio and television stations, and through the printing and distribution of handbills, the FRSC personnel educate commercial drivers on the negative effects of the use of cell phones while driving. The practice has received so much attention since 1999 when the use of the Global Communication System (GSM) phones became rampant in Nigeria. Also, Section 4; subsection z (ff) of the FRSC Act of 2007, prohibits making or receiving phone calls while driving. The enforcement through the arrest and imposition of fines on erring commercial drivers form part and parcel of the FRSC activities on the highways (Oyeyemi, 2003 and 2014).

2.1.8 The FRSC Motor Park Rally and Commercial Drivers' Behaviour

This is one of the FRSC popular road traffic accident prevention strategies that take place at various designated motor parks, mostly during the festive periods: during Easter, Muslim festivals, Christmas, New year, and the months of September, October, November and December. During this period, the FRSC personnel carry out rigorous road safety campaigns at designated motor parks and terminals that are approved and accredited by the States ministry of transportation, in order to reduce many road traffic accidents usually associated with months ending with 'ember', and to sensitise motorists on the need to be safety conscious. However, road auto accidents assume more agonising dimension during the last two months of every year. The months of November and December usually witness heavy vehicular movement of people, either for cultural or social and religious activities. Okanlawon and Oni (2005) maintain that people travel to their various towns and villages to celebrate *Sallah*, Christmas or New Year with their loved ones, but many of these people have their dreams short-lived as a result of road crashes and injuries. Eke, Etubu and Nwosu (2000) further add that most of the road traffic accidents occur because of bad driving and unnecessary haste that usually characterises the period. No doubt, Nigerian roads are in a deplorable state, but the consequence of bad driving habit is enormous. According to the FRSC Annual Report (2009), many Nigerians have lost their loved ones during this period. Some highways, including Abuja-Lokoja road, Benin-Onitsha, and Lagos-Ibadan, among others, are notorious for daily occurrences of heavy casualties. For instance, FRSC resource personnel have carried out such safety programmes, at various times, like: "Operation Eagle Eyes", "War Against Overloading and Non-Use of Seat Belts", "Operation Zero Tolerance: Sanctity of Life" were introduced and taken to major motor parks by the public education department of the FRSC. Anyaoku (2009) observes that Nigerian roads are slaughtered slabs where precious and productive lives are lost.

By and large, the underlying philosophy behind each of the road safety intervention programme is to ensure, if possible, zero road traffic crash, injury and death throughout the period. Its objective also includes controlling and reducing traffic congestion. At this juncture, it should be pointed out that all road safety activities at the motor parks are carried out with the cooperation of the road safety franchised departments of NURTW, ALBON, RTEAN and a few commercial drivers. The FRSC personnel

delivers lectures on various road safety tips on methods of enforcement of road traffic rules and regulations, over-speeding, dangerous driving, road traffic signs, over-loading, lane indiscipline, non-use of passengers' manifest and safety belts, safety helmet violation, use of cell phone while driving, route violation, drunk-driving, number plate violation. Each of the road safety lectures are carried out FRSC facilitators simultaneously at motor parks accredited by the FRSC. It should be noted that an average of 1.9million Nigerians travel on a weekly basis via the 1,392 registered motor parks (Osita, 2012). In short, major road safety component of the FRSC activities at motor parks and terminals include:

(a) Overloading:

In line with FRSC Act (2007), the FRSC officials carry out campaign activities at motor parks and terminals in an attempt to discourage any form of overloading (human and load). The public education department of the FRSC officials in conjunction with executives and selected members of the NURTW, RTEAN, and ALBON finalise arrangements for road safety lectures, film show and drama sketch bordering on road traffic accident prevention, and pictoral demonstrations on the socioeconomic effects of overloading, the vehicles' and its occupants. The lecture is preceded with road safety films showing danger inherent in the subject matter to the participants. Road safety handbills are later distributed to drivers, cyclists and other road users in the vicinity. Also, this effort at the motor parks is followed by placement of advertorials on the pages of newspapers on the need to desist from any form of overloading and the dangers inherent in such a habit. Meanwhile, fines are imposed on errant drivers and other road users who either carry load indiscriminately or carry more than the stipulated number of passengers. Falola (2007) maintains that overloading of vehicles (with either loads or passengers) by the commercial drivers in the Southwestern Nigeria is a major cause of road traffic crashes and injuries.

(b) Driving Under Special Conditions and Defensive Driving

Ross, Beguley, Hills and Silcock (2006) maintain that one of the contributory factors to road traffic accidents in developing countries like Nigeria is lack of defensive driving techniques. Driving in the rain is always poses a safety challenge to commercial drivers. Rain affects the roads, vehicle, and vision. Driving under an unusual or emergency situation like night time driving, driving under the sun glare, driving in the fog or smoke

requires extra care, concentration, discipline and consideration (Elvik, 2001). Having realised the adverse effects of climate on road traffic accidents, the FRSC at motor parks and terminals carry out thorough discussions on methods and means commercial drivers can successfully drive vehicles during special conditions. Lectures and demonstrations are given on the disadvantages of night driving, driving in the rain, driving in Harmattan haze, driving in misty or foggy weather and driving in a convoy. During motor park rallies, commercial drivers are drilled on how to drive safely and put through other things a defensive driver must take note before embarking on any journey. Some of the safety tips to adhere to while driving in the rain include turning on the headlights, so as to improve vision, keeping a safe distance from the vehicle ahead, reduce speed because it takes longer to stop in wet weather, use of good or threaded tyres and watching out for brake lights of vehicles ahead. The FRSC facilitators encourage commercial drivers to dislike driving at night, check the threading of their of tyres because properly maintained tyres provide the added grip needed on wet roads, replace old and brittle wiper blades and pull off the road when other vehicles cannot be seen at a safe distance, especially, when there is a thunderstorm, heavy downpour of rain or foggy weather. In summary, this aspect of the FRSC public enlightenment programmes centre on light, road, vehicle and weather conditions. Fidelis (2010) and Ibrahim (2012) maintain this aspect of the campaign or lecture on this topic always emphasis on 'never to claim the right of way because it may claim lives'. The lecture series on this subject is usually rounded off with film shows and drama sketches on various topics taught during the lecture series.

(c) Post Road Use Activities and First Aid Kit

The WHO (2004) describes injury as sudden event or sequence of events that is unpredictable and beyond the control of the victim. Public enlightenment campaigns of the FRSC at motor parks also cover the responsibilities of co-road users in the event of road traffic crashes, first aid and causality handling. Going by the FRSC campaigns, every road user must have basic knowledge of the first aid. As rightly put by Mock (2002); Ameratunga, Hijar and Norton (2006), first aid is meant to save life, prevent injuries from becoming worse, prevent permanent disability and discomfort and promotes recovery by relieving pain as fast as possible. The FRSC personnel normally complement this with a demonstration on how to apply each of the first aid items to different categories of injuries,

especially broken bones and other multiple injuries sustained by the victims as a result of burns, scalds, fractures and dislocations, coupled with the precautions to be taken by a first aid responder. Post road use activities and lectures of the FRSC also made it mandatory for all commercial drivers to be fully equipped with skills and techniques that could help them respond appropriately when road traffic accidents happen. Secondly, the FRSC personnel give lectures on first aid, so that commercial drivers can give simple first aid treatment, to an injured person before the arrival of the FRSC rescue team or transfer of the road traffic accident victims to the nearest FRSC mobile clinic, private or government hospital.

Aside the fact that it is prescribed in the Nigeria Highway Code (2008), it is mandatory for all commercial drivers to have first aid kit in their vehicles, which must contain absorbent cotton, adhesive tape, sterile gauze of various sizes, roller bandage, triangle bandages, aromatic spirits and iodine, tourniquet, elastic bandage, blankets, splints, safety pins, hand brushes, hot water bottle, small bath towel, ice bag, pillow, petroleum jelly, antibacterial soap, latex gloves and facial masks and hydrogen peroxide. Fildes, Langford, Andrea and Scully (2005) add measuring spoon, analgesic tablets like panadol and aspirin, antibiotic ointment, antiseptic, eye dropper, plastic cup and hand bowl. It should be pointed out that the FRSC personnel at the motor parks and terminals always rounds off the programme with a drama sketch on how to give post crash treatment to road traffic accident victims.

(d) Basic Vehicle Check and Fire Prevention Drill

Also, it should be noted that activities of the FRSC at the motor parks centre on safety lectures on basic vehicle checks that the commercial drivers must take into consideration on a daily basis. Every vehicle must carry a pair of "Warning Triangle". The warning triangle also called C-caution is a reflector made of fibre glass. A vehicle could suddenly break down along the road and other road users need to be warned that a vehicle has broken down. One of the warning triangles is placed at the front and the back of the vehicle, to warn other road users that, there is a breakdown of vehicle ahead. According to Asenime, Ege, and Oni (2005 and 2006) other areas covered by the FRSC road safety lectures include basic checks on vehicle radiator water, engine oil, battery and tyres.

Odufuwa (2008) and Agwu (2014) reveal that asides the FRSC education on how drivers should carry out daily vehicle and safety parade on vehicles (checking of water, oil,

fan belt and vehicle tyres), the brake, lights, wipers, horn and battery inspection are not left out. These are spelt out in the National Road Traffic Regulation (FRSC, 2004). Also, commercial drivers are taught how to extinguish different classes of fire. Oxygen, heat and fuel form what is called the FIRE TRIANGLE. The demonstration shows the required fire extinguisher for different forms of fire. Class A fire involves freely burning materials (wood, paper, textile). To quench this class of fire, water in the form of jet or spray is required. Class B type of fire as opined by Osita (2009 and 2010), involves flammable substances like petrol, paint, grease. To put off this class of fire requires the use of liquid foam extinguisher, Dry-Chemical Powder (DCP), Carbon-Dioxide or dry sand. Class C types of fire (involving liquefied petroleum like propane, Butane etc.) are tackled with DCP and Carbon Dioxide fire extinguishers. Lastly, Class D type of fire (involving metals: Magnesium, Zink) attracts DCP fire extinguisher.

Statutorily, a vehicle is required to carry a fire extinguisher because motorists can experience avoidable fire accidents any time on the road. Fire may arise from damaged vehicles but the situation can be saved with the use of fire extinguishers. Basically, there are two types of fire extinguishers and each vehicle is required to carry at least one. The two types of fire extinguishers are the dry powder and the BCF-Liquid gas. Each vehicle is expected to carry required number and size. It should be noted, however, that a multipurpose fire extinguisher is preferable. The prescribed units and sizes are as follows:

Table 2.5. The FRSC Approved Fire Extinguishers for Vehicles

VEHICLES	UNIT REQUIRED	SIZE (kg)
Articulated	2 units	9 kg
Lorries	2 units	6 kg
Luxury buses	2 units	6 kg
Medium buses	1 unit	2 kg
Light goods Vans	1 unit	1 kg
Taxis	1 unit	1 kg
Cars	1 unit	1 kg

Source: Records from FRSC Planning, Research and Statistics, 2011.

(e) Safety Lecture on Spare Tyre, Wheel Spanner and Jack

Obviously, tyre establishes the primary contact between vehicle and the road. The FRSC activities at the motor parks and terminals also cover commercial drivers' education

on the importance of plying on the road with good tyres and dislike use of used, tredless or expired or imported (*Tokunbo)* ones, how to decode the four digits and other information on the tyre as it relates its capacity in terms of weight and air. The first two digits refer to the month, while the last two digits means the year of production. By international standard, every tyre expires after four years of its production.

On different occasions at the motor parks and terminals, even on radio and television the FRSC facilitators educate commercial drivers on the need to prepare for unforeseen circumstances. A tyre could get damaged due to bad roads, get pierced and deflated by sharp objects like nails or due to leakages. When this happens, a motorist could get stranded at odd times. To avoid this, every vehicle must carry a spare tyre. The air pressure in the spare tyre, just as in all tyres, should be at maximum stability and road-holding. While under-inflated tyre can cause tyre burst so also over-inflated tyre wear rapidly in the center of the thread. This can cause damage to tyre casing. In the event of a deflated or flat tyre, a jack is needed to change the tyre. So, a jack, either hydraulic or manual is one of the gadgets every vehicle must have. The jack is to lift and suspend the vehicle to enable commercial drivers change the punctured tyre. On the other hand, jack and wheel spanner go hand-in-hand. While the jack lifts and suspends the vehicle, the wheel spinner is used to unscrew wheel knots and tighten them as the need arises. (Arosanyi and Ipingbemi 2009)

(f) In-car safety:

Murray and Lopez (1996) maintain that vehicle safety features, regardless of its maker or type, fall into two categories: primary and secondary safety features. While primary safety features aim to prevent road traffic accident occurrence, for instance, good brakes and tyres, secondary safety features aim to prevent or minimise injury to a vehicle occupant once the accident has occurred (side impact protection systems, airbags, safety belt).

The Organisation for Economic Cooperation and Development (1997) as cited by Osita (2010) reveals that the aims and objectives of road safety lectures on in-car features at the motor parks are meant to raise commercial drivers' awareness of the existence of inbuilt safety devices, highlight the consequences of non-use of in-car safety devices, encourage the use of in-car safety devices; and highlight the benefits of using in-car safety device available for use to all occupants of the vehicles, in case of any emergency. As

earlier mentioned, seat-belts are a secondary safety device with a number of objectives. These include: preventing ejection from the vehicle in an impact; reducing the risk of contact with the interior of the vehicle or reducing the speed of such impacts; give the necessary support by restraining the vehicle occupants into their seats. The Commission for Road Safety (2006) maintains seat-belts are the most effective means of reducing deaths and serious injuries in traffic accidents. They also calculate that 75 per cent of all vehicle occupants ejected from a vehicle in an accident die as a result of not using the seat belt. As corroborated by Broughton (1990); Bylund, Bjornstig, (2001) and Carruther, Dick and Faikar; (2005), seat-belts provide the greatest protection against ejection in a crash. Air bags are an active, high-energy device commonly designed to act as a supplementary measure to the performance of a seatbelt.

Over and above, public enlightenment programmes of the FRSC in the year 2012, with the support of commercial drivers and other road users was able to reduce crashes by 30 per cent and fatality by 20 per cent in the urban centres in Southwestern (Agwu, 2012). According to Agwu (2012), FRSC public enlightenment programme on good safety road measures is one of the strategies to achieve the United Nations Decade of Action on Road Safety.

(g) FRSC Procedure for Drivers License Issuance and Renewal:

The public education department of the FRSC also includes advocacy on new methods of drivers' license procurement or renewal, during the motor park rally. The FRSC facilitators explain each step, one after the other. Such includes:

Renewal of Drivers License

Step 1: Apply online at https://www.nigeriadriverslicence.org, print out the form and bank teller or appear in person at Driver License Centre (DLC)

Step 2: Pay the License fee online or at the designated Banks

Step 3: Present your form to the Board of Internal Revenue Officer or VIO at the DLC for endorsement

Step 4: Proceed to the Federal Road Safety Corps Officer at the DLC for Biometric Data Capturing

Step 5: Collect a temporary drivers' license that is valid for 60 days.

Obtaining New Driver's License

Step 1: Attend a training session at any FRSC accredited driving school.

Step 2: The Driving school will present you to the VIO for driving test

Step 3: Pass the driving test and the VIO will issue you a Certificate of Proficiency

Step 4: Apply online at https://www.nigeriadriverslicence.org**,** print out the form and bank teller or in person at Driver License Centre DLC

Step 5: Pay the License fee online or at the designated Banks

Step 6: Present your form to the Board of Internal Revenue Officer or VIO at the DLC for endorsement

Step 7: Proceed to the Federal Road Safety Corps Officer at the DLC for Biometric Data capturing

Step 8: You will be given a temporary driver's license that is valid for 60 days.

2.2 Road Transport Safety Standardization Scheme (RTSSS)

Road transportation has become a dominant mode of transportation in Nigeria with patronage cutting across individual commuters, private, and corporate organizations. The restrictive nature of the water ways, coupled with the near collapse of the rail system, coupled with high cost of air travels have further exerted a lot of pressure on the road, as over 75 per cent of the total movements in the country are made by road. As a result, there is a corresponding increase in RTCs, while many people have been sent to their early graves; many have become bedridden with millions carrying the scars of injuries sustained from road crashes.

In order to promote professionalism in transportation industry, the FRSC as the lead agency introduced Road Transport Safety Standardization Scheme as embedded in the National Road Traffic Regulations (NRTR) (2004) Section 115 in pursuant to Sections 5 and 10 (10) of the FRSC (Establishment) Act 2007 which provides for the establishment of safety units by all transport operators so as to bring professionalism into the industry, promote and develop rapid safe, efficient and convenient fleet transportation system in the country. Also, RTSSS helps to gather information for regulation, certification, monitoring and encourage better operations of all registered transport companies in Nigeria. It is mandatory for all fleet operators private and corporate transport companies with five or

more vehicles to be properly registered to give room for best service delivery; enhances safety, fleet maintenance, longevity, sustainability of fleet operations and fuller lives for all Nigerians.

The FRSC Transport Standardization Officers (CTSO) in all the field commands in collaboration with the various stake holders in transport industry like Nigeria Association of Road Transport Owners (NARTO), ALBON, NURTW and RTEAN and commercial drivers give comprehensive lectures on successful application and implementation of the RTSSS at motor parks and terminals nationwide. RTSSS is a road transport regulatory policy which stipulates minimum safety requirements for all fleet operators: organisations, Ministries, Departments and Agencies as well as companies and other road transport owners with a minimum of five vehicles in their fleet. The concept and the implementation of the scheme address pertinent road safety issues on fleet operators, drivers and vehicle safety standard.

In order to ensure effective implementation of the scheme, operators of moter vehicles are mandated evolve a standard approach that will encompass the basic elements, namely: the art of effective administration, the roadworthiness of vehicles and the supervision of drivers. Though fleet operators provide essential services, either as commercial ventures to maximize profit, or as welfare, they are nevertheless bound to build confidence in their clients as well as operate within prescribed and regulated operational standards for harmony. The policy mandates for all fleet operators centres on the following:

(i) Establishment of a fully functioning Safety Units:

In line with the RTSSS, this unit must be headed by qualified, competent and experienced Safety Managers who are expected to be adequately knowledgeable about the intricacies involved in the National Road Transport Regulations and other requirements such as vehicle mechanics, route knowledge, vehicle and passenger documentation, drivers' training and discipline as well as law enforcement and operators' relations. These are to ensure smooth operation of the fleet. All drivers must also undergo periodic visual acuity tests.

(ii) Provision of a standard terminus and registered office:

As a rule, all fleet operators must provide a standard terminus for both the passengers, their fleet, register with the Corporate Affairs Commission (CAC) and must have a registered office in locations that will not lead to traffic problems like congestion or obstruct free flow of vehicle or causes obstructions to other road users in the vicinity.. These will not only make room for safe alighting and boarding but also encourage accessibility of location for all purposes. Also, there must be a standard recruitment, training and retraining of drivers' policy, as well as drivers' certification programme for its drivers in addition to educational attainment and to ensure that they conform to the relevant provisions of section 23-52 of the National road Traffic Regulations, 2004, which stipulates conditions for issuance, and guidelines for continued holding of drivers' licence. This section also provides for categories of licence, usage of vehicles as well as conduct of drivers. Employers or operators must not use a driver who has invalid licence or whose licence is suspended, revoked or cancelled, or is disqualified from driving. Non-qualified drivers should not be engaged by the operators. Training and re-training of drivers ascertain the continuous capabilities of driver, as well as their conformity with the dynamism of their professional so as to eliminate deficiency resulting in avoidable hardship both for the operators and passengers. Ignorance of the law remains no excuse. All drivers are expected to go through yearly refresher courses to enhance their competency. Yearly returns on Drivers Training must be forwarded to FRSC.

(iii) Operation of comprehensive vehicle maintenance policy:

This is in line with provisions of RTSSS policy vis-à-vis provision for fleet operators' vehicle safety standards which encompasses all components of the vehicle and must ensure proper functioning of all parts. Such parts must be in conformity with body specifications and accessories. Also, all fleet operators must enforce mandatory rest hours for drivers and no driver is expected to drive beyond nine hours within 24 hour. Aside this, all vehicles for night travels must have two drivers and all fleet vehicles must be equipped with first aid bags. Commercial drivers must also maintain a Log Book.

(iv) Application of the approved Passengers' Manifest:

This is in line with the National Road Traffic Regulation, 2004 Section 51(5) which makes it compulsory for all passengers to give the correct information about them for

documentation, or be refused entry into the vehicle. Operators are expected to write on their vehicles contact telephone numbers preferably, those of the Safety Managers for feedback from the public especially on the conduct of their drivers. All fleet operators must maintain records on drivers, vehicles and road traffic crashes and submit same to relevant agencies. This will not only enhance crash records in Nigeria for national planning purposes, but equally assist operators for drivers' disciplinary purpose as well as determination of their continuous suitability. This will also assist in keeping abreast of vehicle maintenance needs and suitability for continuous service.

(v) Provision of recovery vehicles and well designed Emergency Evacuation Plan:

These are essential in view of the need for prompt recovery of vehicles from the highways in case of breakdown of crash this will also help to ameliorate the suffering of victims through prompt evacuation of crash victims for medical attention, whenever the need arises. Evacuation plan could involve collaboration with other companies or operators, as the nearest operator on hand arrangement could assist in evacuating broken down vehicles and evacuate passengers. Also, fleet operators must ensure safety of lives of all passengers and properties at the terminals and while travelling. As a result, fleet operators must encourage collaboration with law enforcement agencies to foster a synergy between the operators and enforcers, help to reduce road traffic breaches (RTB). The purpose of coordinated co-operation is to ensure effective understanding and application of all road traffic laws.

In view of the above analysis, the cardinal principle of all road safety lectures at the motor parks and terminals are to promote good driving culture among commercial drivers, so as to reduce to the barest minimum, incidence of road traffic crashes and injuries on highways

2.2.1 The Federal Road Safety Commission

Historical Background

Efficient transportation remains a critical factor to the economic and social prosperity of any nation. It is in this regard that articulating an all inclusive, people oriented and sustainable modes of transportation becomes imperative. History of road safety is not a new concept in Nigeria. Ever since Nigeria became a British Protectorate in 1925 the issue

of road safety did not receive government attention until the Central Government of Nigeria set up a Road Board in 1960, this was followed by the establishment of the Traffic Police Unit in 1972. The first deliberate policy on road safety took place in 1974 with the creation of the National Road Safety Commission (NRSC) by the then Federal Military Government and was placed under the supervision of the Federal Ministry of Works from 1974 to 1988. In spite of the 14 years that the NRSC existed and operated, the Nigerian highways became progressively dangerous as the lives of road users were lost through preventable road crashes.

In 1977, the Military Administration in Oyo State established the Oyo State Road Safety Corps (OSRSC), which made some local significant improvement in road safety and road discipline in the State. This lasted till 1983 when it was disbanded by the Federal Government. As stated earlier, prior to the establishment of the Federal Road Safety Commission in 1988, there was no concrete and sustained policy action to address the Road Safety question. Earlier attempts in this direction were limited to discrete and isolated attempt by private individuals and some states in Nigeria. Notable was the effort of Shell Petroleum Development Company of Nigeria (SPFCN) between 1960 and1965; the efforts of the Nigerian Army in the training of its officers and men on road safety in the early 70's. The Nigerian Army started the First Public Road Safety Campaign in 1972 when it initiated an annual Road Safety Week (FRSC, 2005 and 2007).

Disturbed by the unpleasant trends on the nation's traffic system often resulting to an upsurge in road traffic accidents, the Federal Government initiated a search for a credible and effective response to this challenge. On February 18th 1988, the Federal Military Government established the Federal Road Safety Commission through Decree No. 45 of the 1988 as the lead government agency on road safety matters; vide Decree No 45 of 1988 as amended by Decree 35 of 1992. The Federal Military Government appointed Professor Oluwole Soyinka as the pioneer Chairman of the Commission. While Decree 45 of 1988 restricted FRSC operations to Federal highways; Decree 35 of 1992 expanded its jurisdiction to cover all public highways in the country and also empowered the personnel of the corps to bear arms. Decree 35 of 1992 changed the designation of the Chief Executive Officer from Director of Organization and Chief Executive (DOACE) to Corps Marshal and Chief Executive (COMACE) as well as creation of corps out of the

Commission. Both decrees were cited as the FRSC Act (CAP 141) Laws of the Federation of Nigeria (LFN) 1990. This was recently repealed and reenacted as the FRSC (Establishment) Act, 2007. The essence of the 2007 enactment was to capture current issues and broaden the Commission's mandate to holistically address issues bordering on road traffic administration and safety management in Nigeria. The Commission is saddled with the responsibility of organising, administering, and making road safety administration policies in Nigeria and statutorily placed under the Presidency.

The vision and policy statement of the FRSC is to eradicate and create safe monitoring environment through the FRSC (Establishment) Act 2007, other traffic laws and quality management system (QMS) standards with a view to continually improving its mode of operations in Nigeria. The mission is to strictly regulate, coordinate and enforce road traffic regulations through: sustained public enlightenment; effective patrol operations; robust data management; prompt rescue services; improved stakeholders cooperation and improved vehicle administration.

In line with the FRSC Act cap 141 Laws of the Federation of Nigeria (LFN) passed by the National Assembly as Federal Road Safety Commission (Establishment) Act 2007. The functions of the Commission generally relates to making the highway safe for motorists and other road users, The FRSC is statutorily required to recommend works and devices designed to eliminate or minimize accidents on the highways and advising the Federal and State Governments including the Federal Capital Territory Administration and relevant governmental agencies on the localities where such works and devices are required, and educating motorists and members of the public on the need to observe all road traffic rules and regulations so as to bring about reduction and prevention in road traffic crashes and injuries on the highways. In particular, the Commission is charged with the responsibilities for:

- Preventing or minimizing accidents on the highway;
- Clearing obstructions on any part of the highways;
- Educating drivers, motorists and other members of the public generally on the proper use of the highways;
- Designing and producing the driver's license to be used by various categories of vehicle operators;

- Determining, from time to time, the requirements to be satisfied by an applicant for a driver's licence;
- Designing and producing vehicle number plates;
- The standardization of highway traffic codes;
- Giving prompt attention and care to victims of accidents;
- Conducting researches into causes of motor accidents and methods of preventing them and putting into use the result of such researches;
- Determining and enforcing speed limits for all categories of roads and vehicles and controlling the use of speed limiting devices;
- Cooperating with bodies or agencies or groups in road safety activities or in prevention of accidents on the highways;
- Making regulations in pursuance of any of the functions assigned to the Corps by or under this Act.
- Regulating the use of sirens, flashers and beacon lights on vehicles other than ambulances and vehicles belonging to the Armed Forces, Nigeria Police, Fire Service and other Para-military agencies;
- Providing roadside and mobile clinics for the treatment of accident victims free of charge;
- Regulating the use of mobile phones by motorists;
- Regulating the use of seat belts and other safety devices;
- Regulating the use of motorcycles on the highway;
- Maintaining the validity period for drivers' licences which shall be three years subject to renewal at the expiration of the validity period; and
- In exercise of the functions, members of the Commission shall have power to arrest and prosecute persons reasonably suspected of having committed any traffic offence.

However, it should be noted that the traffic situation before the establishment of the FRSC in Nigeria could be best described as chaotic, unpredictable and indeed dangerous as characterised by unprecedented wave of road traffic accidents with attendant colossus of human and material losses. Within this era, public awareness and interest in road matters

was minimal. There was uncoordinated and haphazard licensing of drivers and vehicles as well as absence of good driving culture. Deliberate policies and concerted efforts enforcing regulations were lacking. Osita (2009) add that the production of multiple licenses was rampant due to lapses in licensing administration and collapse of driver testing systems and procedures in Nigeria. Aside, Daramola (2003) add that there was collapse of vehicle inspection programme. In addition, there was massive importation of second-hand vehicles and this lead to annual increases in vehicle population. In addition, enforcement of road traffic laws faced dangerous threat as there was duplication of functions in road traffic administration and enforcement by multiple agencies like The Nigeria Police and Vehicles Inspection Officers (V.I.Os) that were established by different states government. Worse still, the continued dangerous trend of road traffic accidents in Nigeria which placed the nation as one of the most notorious road traffic accidents prone countries worldwide, only second to Ethiopia. Between 1970 and 1980, Nigeria recorded 317,838 road crashes and 65,972 deaths. In view of foregoing, the FRSC therefore is a child of necessity.

Table 2.6 Summary of Reported Road Traffic Crashes Trends in Nigeria before 1993

Year	Fatal	Serious	Minor	Total Cases	Number Killed	Number Injured	Total Casualty
1960	826	9065	4239	14130	1083	10216	11299
1961	193	9982	5788	15963	1313	10614	11927
1962	1263	9159	5895	16317	1578	10341	11919
1963	967	6918	11950	19835	1532	7771	9303
1964	911	7371	7645	15927	1769	12581	14350
1965	1029	7762	8113	16904	1918	12024	13942
1966	1680	5600	6270	14000	2000	13000	15000
1967	1560	5200	6240	13000	2400	10000	12400
1968	459	5865	5839	12163	2808	9474	12282
1969	1559	5199	6230	12998	2347	8804	11151
1970	1999	6666	7991	16666	2893	13154	16047
1971	129	8098	8518	17745	3206	14592	17798
1972	2782	9275	11130	23187	3921	16161	20082
1973	2981	9275	11925	24844	4537	18154	22691
1974	3467	11557	13869	28893	4992	18660	23652
1975	2834	9446	11331	23651	5552	20132	25684
1976	905	17352	19624	40881	6761	28155	34916
1977	4242	14140	17334	35351	8000	30023	38023
1978	4333	14444	17334	36111	9252	28854	38106
1979	3513	11708	14050	29271	8022	21203	29225
1980	1856	14855	15427	32138	8736	25484	34220
1981	4053	13510	16214	33777	10202	26337	36539
1982	4451	14838	17805	37094	11382	28539	39921
1983	3853	12844	15412	32109	1046	26866	37328
1984	4467	10557	13868	28892	8830	23861	32691
1985	3597	11991	14380	29978	9221	23853	33074
1986	3022	10075	12091	25188	8154	22176	30330
1987	3385	11286	13544	28215	7912	22747	30659
1988	607	885	680	2172	9077	24413	33490
1989	612	690	452	1754	8714	23687	32401
1990	6140	8796	6998	21934	8154	22786	30940
1991	6719	8982	6845	22546	9525	24508	34033
1992	6986	9324	6554	22864	9620	5759	15379
1993	6735	8443	6281	21459	9454	24146	33600

Source: Federal Road Safety Commission Highway Code (2004)

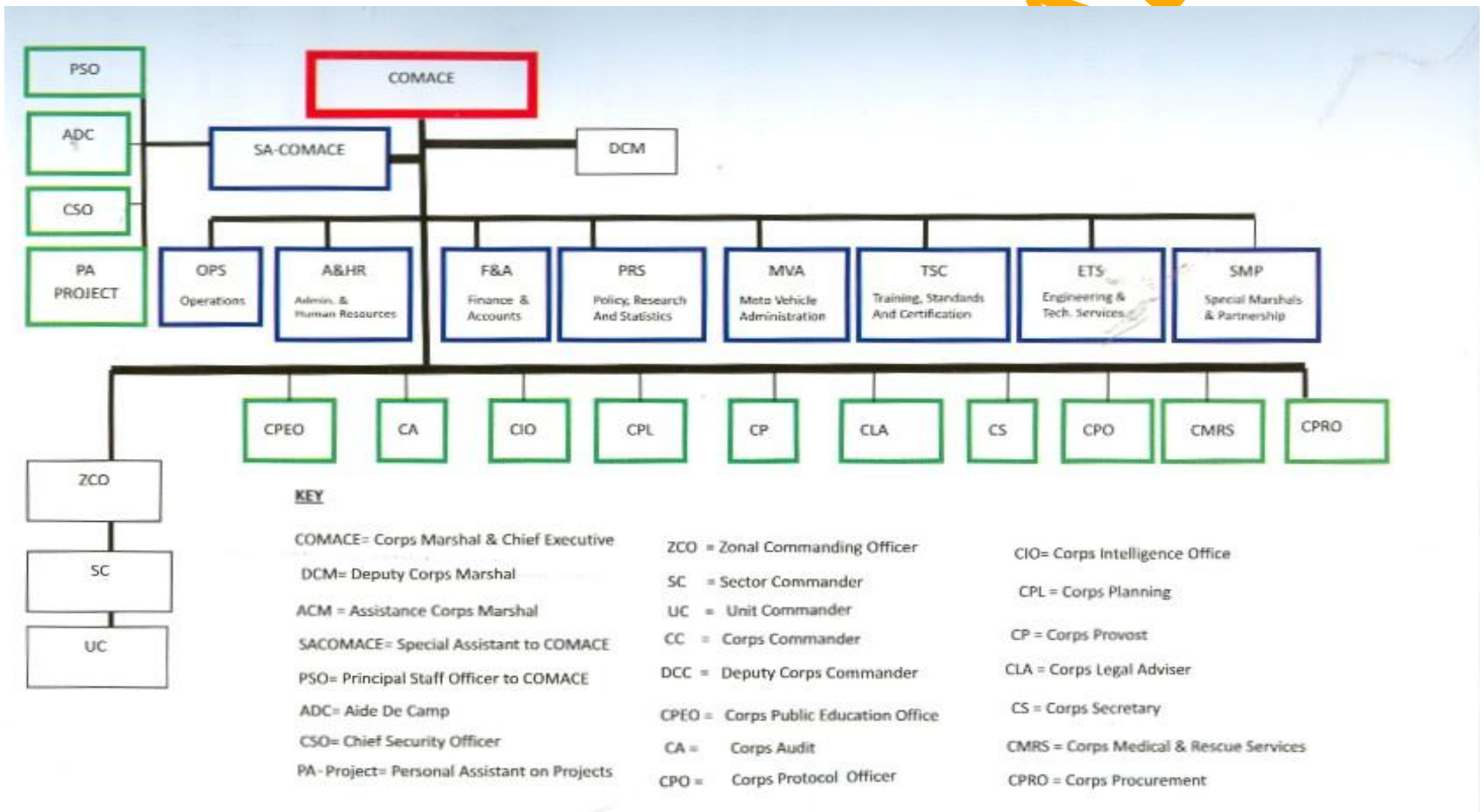

Fig. 2.2. General organisation and administration of the FRSC

Source: FRSC Annual Report, 2008

At inception, there were five Zonal Commands located in Aba, Abuja, Benin, Ibadan and Kaduna which were responsible for coordinating the activities of the Commission in the various states. The Commission had its Headquarters and Annexes in Ibadan and Lagos respectively. In 1994, both the Headquarters and Annexes were closed and moved to the National Headquarters in Abuja. The Commission had its first National Headquarters at Ibadan, later at Gbagada, Lagos but later moved to Abuja in 1992. At the moment, FRSC has 8 Departments, 12 Corps Offices and command administrations as follows: 12 Zonal commands, 37 Sector commands, and 175 Unit commands. Although, the chronology of FRSC also showed that the Commission was merged with Nigeria Police in 1999 but demerged in the year 2003. The FRSC is currently headed by Boboye Olayemi Oyeyemi, who took over from Ositadinma Benjamin Chidoka, whose title is the Corps Marshal and Chief Executive (COMACE), the highest rank in the Corps ranking system. The FRSC as a lead agency in road safety and administration in Nigeria operates a three-tier system: the regular marshal, special marshal and road safety clubs.

2.2.2 Structure of the FRSC

Regular Marshals

Regular Marshals are uniformed personnel in the Federal Road Safety Commission. The services of a regular marshal are permanent, receives monthly salary /allowances, and pensionable unlike Special Marshal whose services are voluntary in nature. The 'Regular' as the name implies, indicates that the marshal is duty bound to be regular in the discharge of its statutory duties. One of the primary features of a regular marshal is that they serve as a public relation officer. In order words, they portray the image of the Commission to the public.

Table 2.8. The FRSC Regular Marshal Rank Structure

S/N	ABBREVIATION	FULL MEANING
1	ARC	Assistant Route Commander (Entry Point)
2	DRC	Deputy Route Commander
3	RC	Route Commander
4	SRC	Superintendent Route Commander
5	CRC	Chief Route Commander
6	ACC	Assistant Corps Commander
7	DCC	Deputy Corps Commander
8	CC	Corps Commander
9	ACM	Assistant Corps Marshal
10	DCM	Deputy Corps Marshal
11	CM	Corps Marshal

Source: FRSC Annual Report, 2010

Table 2.9. The FRSC Zonal and Sector Commands.

S/N	FRSC ZONAL COMMANDS	SECTOR COMMANDS (STATE LEVEL)
1	ZONE RS_1	KASTINA, JIGAWA, KANO and KADUNA STATES
2	ZONE RS_2	OGUN and LAGOS STATES
3	ZONE RS_3	GOMBE, ADAMAWA and TARABA STATES
4	ZONE RS_4	PLATEAU and NASARAWA STATES
5	ZONE RS_5	EDO, DELTA and ANAMBRA STATES
6	ZONE RS_6	CROSS RIVER, RIVERS and BAYELSA STATES
7	ZONE RS_7	NIGER STATE and FEDERAL CAPITAL TERRITORY, ABUJA)
8	ZONE RS_8	KWARA, EKITI and KOGI STATES
9	ZONE RS_9	ENUGU, EBONYI, ABIA and IMO STATES
10	ZONE RS_{10}	SOKOTO, ZAMFARA and KEBBI STATES
11	ZONE RS_{11}	OYO, OSUN and ONDO STATES
12	ZONE RS_{12}	YOBE and BORNO STATES

Source: FRSC Annual Report, 2010.

Special Marshals

The Special marshals are the volunteer arm of the FRSC created by the same FRSC Statue: Act Section 10 (1) CAP 141 Laws of the Federation 1990… "the Corps" which shall consist of such number of uniform and non-uniform members as may be determined, from time to time, by the Commission". Special Marshals are men and women of means, with proven integrity in society, and able to influence their immediate environment (work place/community) in favour of the course of road safety. The Act empowers the Special Marshals to carry out patrol and other activities that ensure good road usage on the highways. Just like the regular marshals, they can arrest, book traffic offenders and prosecute road traffic offenders. Also, a special marshal must have a personal serviceable vehicle; must be a licensed driver; must not have any record of criminality and must have a visible means of livelihood.

Table 2.10. FRSC Special Marshal Rank Structure

S/N	STATUS	ABBREVIATION	FULL MEANING
1		RMAIII	Road Marshal Assistant III (Entry Point)
2		RMAII	Road Marshal Assistant II
3		RMAI	Road Marshal Assistant I
4	Junior Marshals	SRMA	Senior Road Marshal Assistant
5		DCRMA	Deputy Chief Road Marshal Assistant
6		CRMA	Chief Road Marshal Assistant
7	Non-Commissioned Officers (NCOs)	MI-III	Marshal Inspector III
8		MI-II	Marshal Inspector II
9		MI-I	Marshal Inspector I
10		SMI	Senior Marshal Inspector
11		PMI	Principal Marshal Inspector
12	Senior Non-Commissioned Officers (SNCOs)	ACI	Assistant Chief Inspector
13		DCI	Deputy Chief Inspector
14		CI	Chief Inspector

Source: *FRSC Annual Report*, 2010.

2.2.3 Administration of Special Marshal

The Department of Special Marshals and Partnership under the leadership of Assistant Corps Marshal (ACM) coordinates all the activities of the Special Marshals. There are four levels of Special Marshal Administration.

1. **Unit Level**: The Unit Command is the grass root level of the Commission. Special Marshals at this level are coordinated by a Special Marshals Unit Coordinator who is responsible to the Unit Commander. Like any other level, there could be more than one Special Marshals Unit in the Command with at least fifteen members in each Unit.
2. **State / Sector Level:** At the Sector level, the Special Marshals are coordinated by the State Coordinator who is responsible to the Sector Commander. The jurisdiction of the State Coordinator covers all the Special Marshals at the Unit and State levels.
3. **Zonal Level:** The Special Marshals in each zone are coordinated by a Zonal Coordinator who is responsible to the Zonal Commanding Officer. Where there are no Zonal Special Marshals; the Commanding officer administers the Special Marshals through the respective Heads of Special Marshals in the Command.
4. **National Level:** This is the management body of the Special Marshals, at the National Level; the Special Marshals are headed by the National Coordinator who is responsible to the ACM (SM). He oversees the affairs of the Special Marshals at the National Level. He liaises between the Special Marshals and the management of the Corps. The National Executive Council (NEC) is made up of 15 members: the National Coordinator, 12 Zonal Coordinators are members and two ex-officio (who are past National Coordinators). They can vie and hold the underlisted six offices. The NEC holds meeting biannually with the Corps Marshal presiding and the ACM SMP, ACM Operations, Corps Intelligence Officer, Personal Staff Officer to COMACE in attendance. The six offices in the NEC are: National Coordinator, Deputy National Coordinator; National Secretary; Assistant National Secretary; National Treasurer and Public Relations Officer.

The strength of Special Marshals as at December 2011 was 14,168 in all the 12 Zonal commands of the Commission, but in line with the recommendations of the NEC of the Special Marshals, the management team approved the recommendation for the increase in the number of the Special marshals. Little wonder then, that the strength of the Special Mashals increased to about 30,000 by the end of December 2012. With this approval, membership of Special Marshals has been able to spread across the country to the grassroots and to include all professions. The Special Marshals are covered by an insurance policy in case they die or sustain serious injuries, while on duty. They are also protected by immunity provision in the Act. By this immunity clause, the Special Marshal is shielded from liability for any act validly done by him while on duty on the route to which he is assigned.

2.2.4 Functions of Special Marshals

- Monitor road users and Road Marshals with a view to providing constructive feedback to the Commission.
- Patrol the highways and control traffic on group basis.
- Participate in research activities relevant to road safety.
- Organize, sponsor or participate in workshops, public enlightenment programmes and play active role during Road Safety Campaigns.
- Organize and encourage Road Safety Clubs.
- Perform any other functions as may be assigned from time to time by the Corps Marshal and Chief Executive (COMACE).

2.2.5 Appointments of Patrons and Honourary Special Marshals:

In an attempt to receive both administrative and technical supports from state government in each states of the Federation, the FRSC confer the title of Patron of Special Marshal on all Executive governors and they continue to hold this post even after the expiration of their tenure in office. This conferment can only be performed by Corps Marshal and Chief Executive officer of the FRSC.

The FRSC Board in line with the recommendation of the FRSC management team confers on some very important, highly placed individuals the position of Honourary

Special Marshal, in recognition of their notable and outstanding contribution to road safety activities. Such individuals do not need to apply; their contributions/position determines their eligibility. Each state of the Federation has three slots for Honourary Special Marshals in a year.

2.2.6 Patrol Operations of the Special Marshals:

In line with the guidelines and code of conducts of the Special Marshals, they must go out on patrols in groups on the days agreed by the group. The take-off point of patrols must be the Command office where they are issued with the Notice of Offence booklets and routes to cover. Special Marshals can book road traffic offenders and even prosecute in a law court. At this juncture, it should be noted that Special Marshals place much emphasis on public enlightenment of the road users. As a rule, all Special Marshals on duty must be kitted with the prescribed regalia and identity cards. The regalia are blue with reflective tape/material by the side and round the middle. It has a face cap with an arm band. The arm band and uniform carry the personal identification number of each Special Marshal. In the event of any Special Marshal leaving the outfit, he/she must surrender his kits and identity card to the Commanding Officer. If the Kit or identity card is lost or stolen, the Special Marshal has to make out an affidavit and apply for a replacement.

2.2.7 Workshops, Conferences and National Submit of the Special Marshals:

Special Marshals organize annual enlightenment programmes with a view to create more awareness on road safety and enlighten members on new approaches, strategies and new road safety laws; increase their effectiveness and build their capacity. At the state level, Special Marshals plan and execute annual workshop for their members with the support of the Command. Common events at the workshops are public enlightenment programmes for members, presentation of papers on relevant issues bordering on best road safety practices by the FRSC facilitators. Also, the Special Marshal organises conference in the 3rd Quarter of the year at the Zonal level. Here, Special Marshals from the component states that make up the Zone come together to brainstorm on road safety challenges and road safety papers based on the selected theme are presented by stakeholders and relevant agencies.

National summit is a national event that is planned and organized by Special Marshals during the 4th Quarter of the year. It basically centres on review and assessment of previous year's road safety efforts and brainstorm on how to chart a new course of action for better performance or introduction of new concept for better service delivery in the coming year. It should be noted that resolutions reached at the Summit help in the policy formulation of road safety policy in the country, as it relates to road traffic accident prevention and reduction.

As stated by Oyeyemi (2012), all the activities of the Special Marshals have brought the awareness of road safety issues to most segments of the society because their membership cuts across every sphere of human endeavours. Also, quarterly and annual activities of the Special Marshalss have greatly complemented the efforts of the Regular Marshals, especially in the areas of patrol operations, traffic control, and public enlightenment. The Special Marshals have also made tangible contributions to the operation of the FRSC through donation of vehicles and patrol equipments, as well as sponsorship of public enlightenment programmes of the FRSC.

2.2.8 Road Safety Clubs

The third-tier of the FRSC is the road safety clubs comprises of youths in schools and colleges. They are organized into road safety clubs at the primary, secondary, tertiary levels and National Youth Service Corps members, who are on one-year compulsory service after university graduation levels. Unlike the Regular and Special Marshal, they do not patrol the highways. Rather, they are encouraged to imbibe road safety culture from an early age and they demonstrate these in their school activities. The Federal Road Safety Commission (FRSC) has further developed road safety educational curricula for various grade levels and is presently working with the Ministry of Education to make it a national programme.

The Road Safety Club (RSC) is an arm of the Federal Road Safety Commission which derives its functional powers from the FRSC Establishment Act 2007 with the following responsibilities among others. The roles and responsibilities of the road safety clubs include:

- Educating motorist and members of the public on the importance of discipline on the highways
- Controlling traffic on the highways

- Recommending measures, works and devices designed to eliminate or minimize crashes on the highways
- Organizing Quiz and Debates on Road Safety-related issues among schools.

The National Youth Service Corps Road Safety Club (NYSCRSC) is a Community Development (CD) programme for Youth Corpers during their one year service and this has been a partnership between the FRSC and NYSC over a long period of time. Over the years, corps members have participated, contributed and developed a passion for promoting road safety ideals. Many have gone on to become Special Marshals or joined the Commission as regular marshals.

2.3 FRSC Administration

Federal Road Safety Corps is statutorily placed under the Presidency with the Office of the Secretary to the Government of the Federation (SGF) as the supervising authority. The Governing Board has the responsibility of policy making, and administration of the Federal Road Safety Commission. The FRSC management is however, empowered with the day to day running of the Commission under the Corps Marshal and Chief Executive. Decree 45 of 1988, which provides for the establishment of the Federal Road Safety Commission Governing Council. Currently, the FRSC board is headed by Mr Felix Chukwu as Chairman, while Mr Boboye Oyeyemi (COMACE); Mr Jackie Umoru; Alhaji Ahamadu Gambo; Mrs Maryam Gwaram; Dr Aminu Bello; Senator Dahiru Gassoi; Honourables Emmanuel Egwu and Yinka Taiwo are members. Also, all the Heads of Department by virtue of their position are members of the management team.

The FRSC currently has its Corporate Headquarters in Abuja with the Corps Marshal and Chief Executive. A number of specialized Units known as Corps Offices and departments are created for effective performance. Such department includes Operations, Logistics, Planning, Research and Statistics; Motor Vehicle Administration; Special Marshals; Finance and Accounts; Administration and Supply and Training Department. Also, the FRSC Special Units are Corps Rescue Office, Corps Intelligence Office; Corps Legal Office; Corps Secretary; Corps Audit; Corps Public Education Office; Corps Provost and Corps Protocol Office. Further, it has Road Safety Clubs in some primary and secondary schools in many urban centres and volunteer members of the National Youth Service Corps (known as NYSC Road Safety Club).

2.3.1 Operations Department (OP):

Operations department is one of the major eight departments in the FRSC. The Department has the responsibility for the overall coordination of the entire Commission's operational activities. This, it does through the issuance of guidelines that coordinate various field commands activities in the country. The specific functions of operations department include the following

a. Initiation of operational policies and plans for the Commission.
b. Supervision of the activities of all Zones, Sectors and Unit Commands.
c. Coordination of all operational activities of the Commission
d. In conjunction with Corps Marshal and Chief Executive's office, it deals with correspondences from various tiers of government both within and outside the country which are of operational nature.
e. Carry out prompt removal of obstructions on the highways.
f. Conduct Special Mobile Courts for traffic offenders, nationwide.
g. Interface with other agencies, organizations and government at all levels for the promotion of road safety in Nigeria.
h. Establishment of database for all fleet operators in Nigeria.
i. Reviewing and producing FRSC's notice of offence document..
j. Carry out any other duties as may assign by the Corps Marshal and Chief Executive.

2.3.2 Administration and Human Resources Department (AHR):

The administration and human resources department is divided into three major sections, each headed by a head of section: personal, administration and pension and insurance sections. Further, the sections are sub-divided into units headed by heads of units, who are supported by staff officers. The department is responsible for the management of marshals' records, recruitment promotion and appointment. The department also manages staff pensions as well as group personal accident insurance schemes for both regular and special marshals. The department manages the National Housing Fund Scheme for staff contributors to make maximum utilization of the inherent benefits of the scheme. According to FRSC Annual Report (2008 and 2013) the staff strength of the Commission that was 12,498 increases geometrically to 18,294 in 2012.

2.3.3 Policy, Research and Statistics Department (PRS):

The policy, research and statistics department is responsible for policy formulation and evaluations, conducting researches with the aim of utilizing the findings for effective and efficient performance and achievement of the goals of the Commission. This department serves as the think-tank, repository of data and knowledge using information and communication technology (ICT) to ensure robust data management, policy and analysis, inter-governmental relation for the achievement of the Commission's corporate goals. Other auxiliary responsibilities include collection, collation and processing of data from field commands to ensure quality control of all information and data emanating from the Commission, custodian of records of personnel, result of researches and other related traffic matters, ensure effective management of the FRSC library service, anchoring of the international conferences, seminars and workshops.

In order to promote for effectiveness of these schedules, the department is structured into sections and units. The policy section supervises policy, bilateral, monitoring/ evaluation, operations organization and management research (OOMR) units, while the research section oversees research, statistics, library services and data support services (DSS) units.

2.3.4 Motor Vehicle Administration Department (MVA):

The motor vehicle administration department (MVA) is saddled with the responsibility of initiating and implementing safe driving culture. The department is structured to cover the national vehicle identification scheme (NVIS); enhanced national drivers license scheme (ENDLS); NDL system maintenance; monitoring/ audit trail; motor vehicle registration scheme (MVRS); MVA data and general administration. In the area of ENDLS, the FRSC had a tripartite arrangement with other agencies like States Vehicle Inspection Offices and board of internal revenue. In line with this arrangement, FRSC is concerned with the design and production of NDL. The MVRS unit is charged with the distribution of base stock to all FRSC information processing centers (IPC) nationwide. It also addresses the true ownership of vehicles nationwide using the proof ownership certificates (POC). It also looks into matters of common interest with other stakeholders like boards of internal revenue in the various states of the federation (BIR) and VIO.

While the MVA monitoring unit initiates and carries out monitoring of FRSC information processing centers (IPC), number plate replacement centers, the MVA data unit is vested with the collation based on the information in the monthly reports from FRSC information processing centre's nationwide.

2.3.5 Training, Standards and Certification Department (TSC):

The department is headed by an assistant Corps Marshal. The department of training, standards and certification prior to march 2008 was known as department of training and supervised the Road Safety Academy in Jos and Training School in Mubi. This department is set up to bring about a well motivated, skilled, agile, knowledgeable and efficient workforce that is trustworthy, reliable but also dependable and appreciable in contemporary world best practices in road traffic administration. The department is also saddle with the responsibility to evolve for the Commission the desired capacity building through the use of standards and certifiable modules, thereby becoming the proposed vehicle that will bring about improved quality of members of the Corps and by extension a healthy and visionary organisation one of envy among peers internally and in the comity of nations. So far, the department has trained many marshals; resuscitated the introduction of road safety education into the curricula of primary and junior secondary schools and draw up driving schools standardization programme to ensure that driving schools conform to the guidelines of modern day driving culture.

2.3.6 Engineering and Technical Services Department (ETS):

The engineering and technical services department is one of the eight departments in the FRSC which is saddle with the responsibility of providing technical services for the Commission. The department is administratively divided into two sections: the technical and engineering sections. Technical section is headed by HOS technical and the section handles the estate development, estate administration and estate maintenance. Also, the engineering section is headed by HOS engineering and is charged with the electrical maintenance; vehicle maintenance; transport vehicle administration; utilities and fire/safety of the Commission. It should be noted that these two sections report directly to the deputy corps marshal (DCM).

2.3.7 Special Marshal and Partnership Department (SMP):

The special marshal and partnership department was established in 2003 and saddled with the responsibility of forging alliances, cooperation and partnership with individuals and corporate bodies, government and non-governmental organizations (NGOs). Special marshals' programmes and activities have been part and parcel of the Commission since inception of the organization. Interestingly, the Commission is the only government agency that has been working hand with the largest and formidable volunteer force known as Special Marshals.

The department sources and maintains partnership with stakeholders on road safety matters. The special marshals' enrolment has increased from 7,000 to 12,000 members as at December, 2008. The department instituted surveillance to ensure that the conduct of special marshals on the highway is in accordance with the operational guidelines.

2.3.8 Finance and Accounts Department (FA)

The department of finance and accounts has two sections: finance and accounts which are separately headed by heads of section. The department is basically assigned with the function on managing the financial portfolio of the Commission. Other essential services rendered by the department include, receipt of contract registration fees from prospective contractors, compilation and payment of monthly allocation subjects to the approval of COMACE, electronic payment of staff salaries and allowances and payment of contractors. The department also manages the database of FRSC wage bills and liaises with the Federal Ministry of Finance on the running cost, such as overhead, capital and personnel.

2.4. FRSC Offices

2.4.1 Corps Planning Office (CPO):

Corps planning office was established in 2008 and directly placed under the supervision of the office of the COMACE. The office is charged with the responsibilities of determining development plan (rolling, medium and perspective) and prepares the Commission's budget in conjunction with other relevant departments. Corps planning

office is also responsible for monitoring and evaluation of FRSC activities and plan implementation. It supervises the secretariat of tender board and ensures regular organization of conferences and seminars. Corps planning office sorts and monitors the performance and efficiency target for the department and corps offices.

2.4.2 Corps Legal Advicer (CLA)

The FRSC was established under a legal framework based on cap 141 Laws of the Federation of Nigeria 1990 which incorporated the enabling decree No. 45 of 1988 as amended by decree no. 35 of 1992. This degree No.35 of 1992 has been replaced by the FRSC (Establishment) Act of 2007 signed into law on 25th May 2007. The FRSC as a legal entity operates according to the law establishing it, the constitution of Nigeria 1999 and any other law and regulations relevant to the operation of the Commission. In other to ensure that the Commission operates on the path of the law, a legal unit was established in 1995.

Ther legal office drafts all contractual and tenancy agreements involving the Commission and contractors including landlords; defends the Commission in mobile Courts and also prosecutes traffic offenders in court. The legal officers liaise with external solicitors retained by the commission and other law enforcement agencies like the Nigeria Police Force, Armed Forces, Vehicle Inspection Officer (VIO), Ministry of Justice, National Assembly, and Office of the Head of Service of the Federation, Civil Service Commission, and Human Rights Commission.

2.4.3 Corps Intelligence Office (CI):

The corps intelligence office was established in 1996 following the restructuring of the Commission in other to enhance her responsiveness to the statutory functions. Corps intelligence office is charged with the responsibility of gathering and processing of intelligence valued reports in the drive towards stabilizing the FRSC system for effective performance of its statutory duties. Its security role revolves around the evolvement of effective machinery for the protection of life, property, information and checking developments that have the capacity of threatening a peaceful environment needed for the pursuit of lawful duties. The detail of the corps intelligence functions revolve around investigation; monitoring; surveillance and vetting; information gathering threat assessment and inter-security agency liaison.

2.4.4 Corps Provost Office (CP):

Contextually, the corps provost office is one of the key corps offices directly answerable to the corps marshal and chief executive (COMACE). The provost office serves as the watch dog of the Commission. The Corps office ensures the security of FRSC property and its personnel in all formations; maintain discipline in accordance with the regulations; investigation and prosecution of cases of all alleged misconducts as may be directed by COMACE; prevention and detection of crimes; enforcement of law and other amongst members of corps in line with FRSC regulations and condition of service; conducting search on persons suspected of having committed an offence within FRSC premises.

2.4.5 Corps Audit Office (CA):

Corps audit office is also under the Corps Marshal and Chief Executive's direction. The corps audit office actively supports and strengthens the entire FRSC by ensuring that resources are used for the purpose for which they were meant for. The Corps audit office strives to add value and improves FRSC operations and programmes through internal audit system. The corps internal audit is expected to prepare a routine reports on FRSC activities both on a comprehensive and exceptional basis; monitors the performance of the FRSC system by examining estimates and by use of testing controls effects correction on invoice over contracts, procedures, human resource matters and cash/stock management.

2.4.6 Corps Public Education Office (CPE):

In view of the need for effective road traffic management and prevention of road traffic crashes on Nigeria roads, the public education office was established to ensure effective public education and sensitization of drivers, motorists and other road usher on the proper use of highways. The basic function of the office is to create awareness on safer road use among categories of road users through TV and Radio programmes, jingles, motor parks rallies and use of posters; handbills, advertorials in the newspapers; facilitate internal dissemination of information among members of staff; and manage the corporate image of the Commission and serve as a feedback medium between FRSC and the public. The public education office serves as a bridge between the Commission and the public such as the stakeholders (transport unions, government and corporate agencies). The Corps public education office strives to achieve a synergy in safety management by performing all

public relations function in an attempt to build a healthy environment for effective service delivery and sustainable growth. The office equally performs press relations to ensure that mutual and cordial relationship exists between the FRSC and the various media organization. This is done through press invitation, placement of press statements, TV and radio jingles, organizing press luncheon, media facility tour. These entire steps are taken to ensure that FRSC programmes and activities receive adequate publicity.

2.4.7 Corps Medical and Rescue Services Office (CMRS):

The corps medical and rescue services office was established from the merger of the former corps rescue and the clinic unit of former administrative and supply department. The office is charged with the supervision and co-ordination of activities of the medical centers at the headquarters, zonal clinics, mobile clinics on the highways; collate information on road traffic crashes; number of hospitals and health centre's nationwide; coordinates emergency services and rescue programmes with relevant organization like National Emergency Management Agency (NEMA) and the Nigerian Civil Defence and Security Corps and other stakeholders.

2.4.8 Corps Protocol Office (CPO):

Corps protocol office is the image of the FRSC. Protocol office plays a great role in receiving dignitaries and entertaining people during all social activities of the FRSC. The protocol office organise and prepare venues for all official functions and ceremonies; prepare protocol lists of VIP's and label seats for guest in order of precedence; determine protocol procedures during functions; arrange logistics for courtesy calls, tours and travels; prepare itinerary for courtesy calls and travels; arrange passage for foreign tours through embassies, Consular offices and foreign affairs department for the FRSC staff and process international passport, Visa and other airport protocol services and arrange entitlement for all official trips.

2.4.9 Corps Secretary's Office (CS):

In conjunction with the relevant departments, the corps secretary's office deploys officers for effective manpower utilization. The corps secretary's office gathers, collates and analyzes statistics on the Commission's manpower requirements; provides

administrative, technical and secretarial service for FRSC staff optimization project; make projections for manpower plans using indicators like educational qualification, area of specialization and work experiences of staff as a guide. The Corps secretary's office also provides all secretariat needs of both the special marshals and the regular marshal.

2.4.10 Corps Procurement Office (CPO):

The procurement office was created in July, 2008 as a result of federal government directives and the enactment of the public procurement Act, 2007. The present corps procurement office was excised from the former administrative, supply and tenders board section. The corps procurement office is responsible for the collection and compilation of various needs of the corps for management considerations; it undertakes timely and periodic market survey of the various needs of the corps in order advice management accordingly; advertises for tenders from contractors on the basic need of the corps in order to award them; ensures that contracts are given out in compliance with the public procurement Act, 2007; accepts any procured or supplied store items into the store. The Corps procurement also ensures that the store items supplied, awarded or purchased directly meet the basic specification of the corps; updates inventory of items in offices and official residences and update records of goods or issued out to various commands.

2.5 FRSC Standard Approaches to Enforcement of Road Safety Regulations

The FRSC officials, as well as, the special marshals use public enlightenment and persuasion before proceeding to enforce regulations and punish road traffic offenders. However, to enforce the various safety laws and regulations, the organisation carries out regular highways patrol. It should be noted that, when enforcing, the corps marshals operate on the legal maxim that "ignorance is not an excuse" (David, 1999). Thus, it is not open to any erring driver to plead 'I do not know' or 'I am ignorant'. Regular patrols on the highways are focused on surveillance, rescue and enforcement. According to Nutbeam (2000), surveillance is carried out on the road to identify pot holes or black spots and make recommendations to the appropriate government agency for rectification. Surveillance tends to check the excesses and corrupt practices of the Commission's personnel while on duty that is, policing the police man (Jacobs, 2000).

In addition, it should be noted that during rescue operations, the FRSC marshals on duty evacuate road traffic accident victims with serious injuries to the nearest hospital for medical attention while the ones with minor injuries are given first aid. For the enforcement aspect of the operations on the highway, the approaches vary in accordance with the nature of the traffic offence. The penalties are clearly spelt out in the offence sheet, given to the offender after being properly filled in by the road marshal. As could be seen in Table 2.10, the penalties in terms of fines are indicated on the offence sheet and such range from N2, 000 to N50, 000. Each road traffic offence attracts different points and equivalent monetary fines. Usually a document (say, drivers' licence) is seized from the offender until he/she pays the fine into the designated bank account before it is released. However, there are some penalties for certain offences that are not stated but are determined by a court of law (mobile court), when the need arises.

2.5.1 FRSC and I.C.T Based Road Safety Initiatives

In order to encourage good driving habit among commercial drivers and other road users, the FRSC evolves all kinds of measures, activities, operations, awareness and regulatory enforcements aimed at the protection of lives and properties during all phases of road mobility, including periods of distress. However, it should be noted that the prevention and reduction of road fatalities is the target of road safety. As a result, special attention is usually given to the vulnerable group: Learner drivers, commercial drivers, and children, pedestrians: (disabled and physically challenged). Generally speaking, the FRSC relies on Information and Communications Technology (ICT) to retrieve, analyze, store, process, transmit, secure and intelligently interpret digital data either in storage or in transit with a view to foster road safety technology. This fusion has so many segments including digital storage, Database Management Systems (DBMS), networking, data security, fibre optic transmission, VSAT connectivity, WI-MAX networks, mobile electronics, plasma sensitivity, Enterprise Resource Planning (ERP), disaster recovery, software engineering and most importantly the internet and its web component: Page (www.frsc.org). The FRSC in conjunction with a few reputable mobile network providers employ the use the electronic call (e-call) services. This is a communication system that designates a unique telephone number (often toll-free) exclusively for reporting emergencies and distress conditions. The

FRSC integrated e-call into a web-based road safety portal to give it wider access beyond the bounds of the cellular network's coverage area. To enhance operational and rescue capabilities, the corps commissioned the Call or Data Centre in December 2008 which linked all offices, field commands, patrol vehicles and relevant hospitals through the use of Close User Group (CUG).

The CALL and DATA CENTRE have the following features: 0700 CALL FRSC or "0700-2255-3772" Vanity number Switchbox software for routing calls from the public. END server for Driver's License information. As at 2009, the server hosted 3.2 million records Real-time data collection and Security storage centre for: No. 45 V-SATs up and running across FRSC formations nationwide (RSHQ, IPCs, Zonal and Sector commands). In Lagos state for instance, FRSC in collaboration with other security and safety agencies with the support of Lagos State Government and Security Trust Fund liaised with all GSM operators like Airtel, MTN, Starcomms, and Etisalat approved toll- free call on numbers: either '767 or 112', even short message service (SMS) through phone number: 080 7769 0362 is available free of charge. Presently FRSC has 263 V-sat through which her offices across the country are linked together for all administrative and communication needs (Olagunju, 2001; Okanlawon and Oni 2006).

According to Oni and Okanlawon (2010), the FRSC has deployed technology to collate and manage data for effective motor vehicle administration. Also, the FRSC built and maintained driver databases which currently have information on 3 million drivers nationwide. Electronic capturing of offenders since 2005 has provided vital records for about 2 million offenders. Furthermore the ongoing exercise has captured 1.4 million offenders, while new offenders are being captured through banks. The register is available for profiling, insurance and license revocation. For effective operational planning, 667 parks are currently placed on daily surveillance. Further, Oni (2011) reveals that between 01 January 2010 and 24 September 2010, 42,377,635 passengers travelled from these 667 monitored parks. In addition, 3,403,897 vehicles travelled from these motor parks. Information about motor parks is shared and is useful to the State Security Services and the Police for crime detection and prevention. In the same vein, information on tankers and trailer drivers are shared with other agencies for background checks.

Table 2.11 FRSC Road Traffic Offences and Penalties

S/N	OFFENCE (S)	CODE	POINTS	PENALTY (NAIRA)
1.	Assaulting Marshal on Duty	AMD	10	10,000
2.	Attempting to Corrupt Marshal on Duty	ATCM	10	10,000
3.	Caution Sign Violation	CSV	3	3,000
4.	Construction Area Speed Violation	CASV	3	3,000
5.	Dangerous Driving	DGD	10	50,000
6.	Do Not Move Violation	DNM	1	2,000
7.	Drivers Licence Violation	DLV	10	10,000
8.	Driving Under Alcohol/Drug Influence	DAD	5	5,000
9.	Driving with Wornout/Without Spare Tyre	TYV	3	3,000
10.	Excessive Smoke Emission	ESE	5	5,000
11.	Failure to Cover Unstable Materials	FCM	5	5,000
12	Failure to Fix Flag on Projected Load	RFV	3	3,000
13.	Failure to Move Over	FMO	3	3,000
14	Failure to Report Accident	FRA	10	20,000
15.	Fire Extingisher Violation	FEV	3	3,000
16.	Inadequate Construction Warning Sign	ICW	-	50,000
17.	Light Violation	LSV	2	2,000
18.	Hospital Rejection of Accident Victim	HRAV	-	50,000
19.	Medically Deficient Vehicle	MDV	5	5,000
20.	Obstructing Marshal on Duty	OMD	2	2,000
21.	Operating Vehicle with Forged Documents	OVFD	10	20,000
22.	Overload Violation	OLV	10	10,000
23.	Passenger Manifest Violation	PMV	10	10,000
24.	Riding Motorcycle Without Safety Helmet	RMH	2	2,000
25.	Road Obsruction Violation	ROV	3	3,000
26.	Road Marking Violation	RMV	5	5,000
27.	Route Violation	RTV	5	5,000
28.	Seat Belt Violation	SBV	3	3,000
29.	Speed Limit Violation	SLV	3	3,000
30.	Unauthorised Removal of Road Sign	RTRS	5	5,000
31.	Underaged Driving/Riding Violation	UDRV	2	2,000
32.	Use Of Phone while Driving	UDRV	2	2,000
33.	Vehicle Licence Violation	VLV	3	3,000
34	Vehicle Number Plate Violation	NPV	3	3,000
35	Windscreen Violation	WSV	2	2,000
36	Wrongful Overtaking	WOV	3	3,000
37	Other Violation/Offences (……)	OVO	3	2,000

Source: FRSC Act, 2007 Sections 10 (4), 28 (2), and NRTR 2010 Section 143

2.5.2 FRSC Affiliations, Collaborations and Associations

Road Safety Officers Wives Association

The Road Safety Officers Wives Association (ROSOWA) is an Association which comprises of all women married to Officers of Federal Road safety Commission (FRSC) in Nigeria. Federal Road Safety Commission is a Federal Government Agency charged with the responsibility of maintaining safety on Nigerian roads. All women married to male Officers, are therefore, automatic members of the Association. The Objectives of the association are:

- Promoting unity amongst members of the Association and the general public by being our sisters' keepers, irrespective of religion, tribe, especially in time of need and sorrow.
- Assisting in self help cooperative projects such as cooperative ventures, loan scheme (pay as you can) and establishment of Day Care Centres.
- Enhancing welfare activities like Home Management, Vocational Training and Health Care.
- Carrying out philanthropic activities such as visiting and donating to Motherless Babies Homes, Remand Homes, Prisons, the less privileged, hospitals and disabled persons.

Non-Governmental Organisations (NGOs)

Arrive Alive Road Safety Initiative (AARSI), is one of the duly accredited by the FRSC. It is a non-governmental organization with the fundamental objectives of saving lives through enhancements of road safety awareness and ultimately road safety culture among the citizenry. The AARSI is committed to the awareness, adoption and observance of global road safety practices towards reduction of the huge annual losses in human and material resources through road traffic accidents. The AARSI carry out road safety activities through a combination of policy and legislative reform, advocacy and the execution of road safety actions, in collaboration with appropriate Government Agencies. The AARSI road safety activities are funded by the private sector, donor agencies and the international road safety community. Apart from the fact that members pay annual subscriptions and tax themselves to implement identified road safety projects, AARSI is

currently co-sponsored by the following reputable organizations like Chevron Nigeria Limited; Zenith Bank Plc; First Bank of Nigeria Plc and Diamond Bank Plc. It should be noted that the chairman and chief executive members of these banks formed the executive arm and Board of Trustees of this NGO.

Also, it should be noted that several stakeholders have partnered with AARSI from the developmental stages to the present project implementation stage. Key participants include: Federal Road Safety Commission (FRSC), Lagos State Transportation Management Authority (LASTMA); Lagos Metropolitan Area Transport Authority (LAMATA); Victoria Island and Ikoyi Residents' Association (VIIRA). Also, the Road Safety Officers' Wives Association (ROSOWA), The Nigerian Army; The Nigerian Police Force, Change Agents; Treasures Microfinance Bank and the various commercial motorcycle riders unions have all collaborated with the AARSI to carry out one road safety programme at one time or the other.

The AARSI was formed based on the discovery high road traffic accident rate on the highways. In 2004, an estimated 5,000 lives were lost from road crashes on Nigerian motorways. This number more than tripled dramatically in 2006, with an estimated 16,000 people killed as a result of road crashes. Low awareness of road safety behavior among road users; poor road conditions; inadequacies in the enforcement and limited laws were some critical factors responsible for these unnecessary deaths. The main focus of the AARSI is to address road safety from multiple angles and reaching all road users including pedestrians.

The main objectives of AARSI include the following:

- To contribute significantly to reducing road traffic fatalities and injuries in Nigeria.
- To collaborate with Government, its agencies and stakeholders to support or oppose any legislative actions that may affect Road Safety in Nigeria.
- To provide services or assistance to persons or groups concerned with Road Safety in Nigeria.
- To partner with available skilled professionals towards the achievement of the ideals of AARSI.
- To make "Road Safety" a watchword of every household in Nigeria.

The high priority focus areas for road safety actions based on impact assessment are motorcycle (Okada) safety; pedestrian safety; hot spot remediation; speeding management and impaired driving. The overall goal of this initiative is the prevention of the unacceptably high rates of motor vehicle crashes and fatalities in Nigeria. AARSI intervention plan was developed using a more holistic approach based on:

- Public outreach and education
- Safety enforcement
- Safety legislation and advocacy
- Safety engineering and road improvement

In Lagos state alone, the AARSI has successfully repaired Osborne road bend in Ikoyi, Ogudu Junction, along Oworonsoki/Toll Gate expressway, the Anthony link road and Keffi Street in Ikoyi. The AARSI also procured of Breathalyzers and trained FRSC and LASTMA officials, so as to prevent drinking and driving behavior prevalent among commercial drivers and enforce the Don't-Drink-and-Drive law. Asides, the NGO procured and distribute crash helmets to commercial Okada riders, held several pre-sensitization workshops for road safety programmes involving NURTW, ALBON, RTEAN and selected senior drivers in commercial banks. Also, the organization has successfully established Road Safety Clubs in 10 secondary schools in Victoria Island and Ikoyi. By and large, the AARSI has been able to build collaborative mechanisms with other stakeholders particularly law enforcement agencies in each state of the Federation.

Asides NURTW, RTEAN, AARSI and ALBON, the FRSC also collaborate with other stakeholders in the manufacturing and extractive industries with a view to build a synergy between the vehicle operators and regulatory agency. The purpose of coordinated co-operation is to ensure meaningful understanding and application of road traffic laws and regulations. The FRSC also collaborate with other stakeholders in order to achieve corporate objectives, which are to guarantee better understanding of pertinent issues bordering on road safety precautions. Such collaboration exist between FRSC and Anambra Motor Manufacturing Company, Chartered Institute of Logistics and Transport, Dangote Group of Companies; Federal Ministry of Health; Federal Ministry of Information; Federal Ministry of Justice; Federal Ministry of Transport; Federal Ministry of Works, Housing and Urban Development; Federal Roads Maintenance Agency; National

Automotive Council; National Insurance Commission; Nigeria Building and Road Research Institute; Nigerian Red Cross; Nigerian Medical Association; Nigeria Union of Local Government Employees; Nigerian Institute of Transport Technology; Standards Organisation of Nigeria; The Nigerian Police and World Health Organisation.

2.5.3 Road Network and Status of Highways in Nigeria

Nigeria is a large country with the longest network of roads than any other country in Africa. Road statistics in Nigeria as at 2011 showed a total of 198,000km, comprising 34,123 kilometers (km) of Federal roads linking every part of the country. There are 34,300km of states' roads and 185,000km of Local Council roads (Oni, 2011). Aside, more than a half of the registered vehicles in the country rely heavily on fairly imported vehicles. Increases in vehicular ownership coupled with the deteriorating road transport infrastructure, obviously explain the recent increase in the number of road mishaps in the Nigeria. Following 1982 National Council of Commissioners for Works Meeting held in Minna, Niger State, a survey on the state of highways in the country was conducted between 10th and 13th December 2002 by the Federal Ministry of Works and Housing (FMWH) to gather pertinent information on road construction, infrastructure and maintenance in Nigeria and also to do an on-the-spot assessment of the state of roads nationwide. Osinubi (2003) and Olatunji (2008) maintain that the survey was conducted along the six geopolitical zones of the country revealed that most of the roads, especially in the south-south zone is in very poor condition, and require complete rehabilitation. The state of Nigerian roads has remained poor for a number of reasons. The problem centres on poor quality roads, resulting from faulty designs, laid gutters and very thin coatings that are easily washed away by floods and hardly withstand heavy traffic. Secondly, funding of road maintenance has been grossly inadequate. For instance, between 1999 and 2002, less than 10 per cent of funding request made by the FMWH for road maintenance was appropriated. Even at this, only about 53.5 percent of the appropriation was released. Collections from toll gates across the country shows ₦569.29 million, ₦700 million and ₦779.84 million in 2000, 2001 and 2002 respectively. Toll gate collections were much higher than the total funds released for maintenance. Thirdly, there is the excessive use of the road network due to the underdeveloped state of waterways and the poor state of the railways, which serve as alternative transport modes to transport bulky goods, which are not good for road haulage.

The report showed the status of the federal roads in each of the six geographical zones thus:

South-South Zone:

The zone is made up of Akwa Ibom, Cross River, Edo, Delta, Bayelsa and Rivers States. It has a total Federal highway network of 4,150.89Km. The roads in this zone are in fairly good condition as it benefited immensely from the current rehabilitation and expansion programme. However, the states in the zone were evenly favoured as the bulk of the projects that have been completed are in Bayelsa, Edo, Delta and Rivers. At the same time, Akwa Ibom and Cross River state were not that favoured.

South-East Zone:

The states within the South-East geopolitical zone are Anambra, Enugu, Ebonyi and Abia. The total road network in the area is 3,121 Kilometers of Federal highways. The survey revealed that most of the roads are in very poor condition with potholes, gullies and erosion affecting them. The bad conditions of the roads are attributed to a long period of neglect, about 30 years. In this zone, there are Owerri-Onisha highway, Abakaliki-Enugu road, and Enugu-Onitsha, Owerri-Umuahia and Urnuahia-Bende road. As a result, traffic flow on highway is very slow and unsafe. A ride through most of the road takes about 5 to 6 hours on a very bad day and peel-offs that need to be refilled will make traffic flow better.

South-West Zone:

Oyesiku (2002) as cited by Ipingbemi (2010) maintain that the transportation system in the Southwest geopolitical zone of Nigeria is about the best developed in the country. The most dominant form of transport in the southwest is road transportation, which presently is in poor condition. The zone consists of Lagos, Oyo, Osun Ondo, Ekiti, and Ogun states. The road network in the area is 4,161.06Km of Federal highways. A few of the federal roads in this zone include Lagos-Ibadan road, Ibadan-Ife road; Benin-Lagos road; Lagos-Badagry Expressway and Ibadan-Ilorin road; Ibadan-Ikire-Gbongon-Ife-Ilesha-AKure road; Victoria-Island-Lekki-Epe-Ajah road; Lagos-Okokomaiko-Badagry road; Iyana-Iba road; Lagos-Epe-Victoria-Island road; Ikorodu-Lagos road; Dodan barrack road; Obalende- Apongbon road and Lagos-Anthony- Jibowu- Yaba- Oyingbo-Iddo.

Also, there is Lagos-Sangrouse-Golden Gate-Boudillon-Falomo road; Ozumba-Mbadiwe- Onikan-Nitel road; Adeola Odeku- Idumagbo and Sanusi Fafunwa road; Lagos-Ibadan road; Lagos-Ojota-Maryland road; Alapere-Mile 12- Ikorodu road; Lagos- Badagry-Apapa-Kirikiri road; Okota-Iponri-Ijora road; Lagos- Iyana-Ipaja-Akowonjo road; Lagos-Abeokuta road; Lagos-Mushin-Oshodi-Apapa-Ikeja-Lagos; Sagamu-Benin-Ibadan road; Lagos-Agbara-Atan, Ota-Ifo-Alakuko-Sango road. It should be noted that majority of these roads are dual carriage highway with potholes, ditches and peel-offs that need to be repaired to make traffic flow better. Adalemo (2005) reveals that the total road network of Lagos extends to 5,180 kilometers, of which 591 kilometers (11.4 per cent) are federal roads, 2,743 kilometers (53 per cent) are state roads, and 1,846 kilometers (35 per cent) are local government roads.

North-West Zone:

The zone consists of Kaduna, Jigawa, Kano, Katsina, Kebbi, Sokoto and Zamfara States. The total road network in this Zone is 6,363.4Km. The Federal roads in this area include Kano-Katsina road, is a single lane road of 156Km, Katsina-Funtua road, Zamfara-Sokoto road, the Sokoto-Argungu-Kebbi road, Kano-Wudil, Lamba-Kuchni-Kazauro road, Kankia-Dutsinma-Safana-Batsari-Katsina road and the Malunfashi-Dabai-Day road The report revealed that these roads have many potholes and large stretches caused by erosion owing to lack of gutters. For instance the Kusada and the Tsanyawa areas of Katsina and Kano respectively have potholes of about 1 Km each. Other roads in need of maintenance are located around Rimi and Shanono Local government Areas of Katsina and Kano states, respectively. Also observed was the presence of casual layers filling some potholes with sand and wheat grass. Further, Funtua-Yankara-Tsafe-Gusau-Zamfara road can be regarded as a death-trap road because it is in a very deplorable state. There was also the presence of casual labourers along the roads trying to make the road motorable.

North-East Zone:

The states in the zone are Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe. Here, the total road network is 6,787.9km. Virtually all the Federal roads in the zone are in state of disrepair and require urgent maintenance work, especially Bauchi-Gombe-Yola; Bauchi-Tafa-Balewa Langtang and Bauchi-Ningi roads.

North Central Zone:

There are six states in the North Central zone namely: Niger, Kwara, Plateau, Benue, Nasarawa, and Kogi. The Federal Capital Territory, Abuja is also in the zone. The total Federal road network is 9,756Km. Such include the Abuja-Minna road, Abuja-Keffi road; Keffi-Gubi-Akwanga road; Keffi-Nasarawa road; Kefi-Laminga road Akwanga-Markurdi road; Abuja-Jos road; Abuja-Ilorin road and Lokoja-Ilorin highway. The study revealed that Abuja-Minna road had uncountable potholes and requires major construction work. Also, Suleja to Mokwa the road can be referred to as a death trap for motorists, as it is adorned by potholes. Abuja-Keffi road is an old road with minor potholes, which appear to be poorly maintained. Presently, dualisation work is being carried out along the road with a record of about 40 per cent completion.

Further, Akwanga-Markurdi roads, the Akwanga to Lafia route are dangerous road with very sharp bends. The worst of the route is from Lafia to Markurdi, which about 90km; it has so many gully-like potholes. Abuja-Jos roads, the Akwanga-forest are a narrow single lane with potholes. The road network between Abuja and Ilorin can be described as being fair. Abuja to airport junction is dualised and well maintained. However, from Airport to Lokoja is a single lane road littered by potholes. On this route is the Murtala Muhammed Bridge, which is infested with potholes. The Lokoja-Ilorin highway which was constructed years ago, has gone very bad, potholes are encountered almost every kilometer thus making travelling on this road unsafe.

From the foregoing, it will not be erroneous to state that bad roads contributed to road traffic accidents. This is because bad roads tell on the condition of the vehicles, especially in the area of tears and wears. Be that as it may be, WHO (2009) and Oni (2011) established the fact that human error accounted for 85 per cent of the road traffic accidents. Also, 10 per cent and 5 per cent causes of road traffic accidents are attributed to mechanical and environmental factors respectively. When the roads are good, it reduces the severity of road traffic crashes and injuries on the road.

2.5.4 Road Traffic Control Devices (RTCDs)

Globally, road traffic control devices are part of road infrastructures: signs, symbols and markings mainly developed in line with 1968 Vienna Convention on Road Signs,

Symbols and Signals. Road traffic control devices are put in place at strategic places to regulate and control road traffic by providing crucial information about the road and its environment to all categories of road users. Road traffic signs support safe drive; but the success depends on their comprehensibility by the commercial drivers. Road traffic signs are the most effective when they command attention, convey a clear and simple meaning and give adequate time for proper use. Road markings such as pavement markings and traffic signals are the oldest and most vital part of the highway system. Dewar, Kline and Swanson (1994) opine that they provide a means of communicating important information about the roadway to commercial drivers. Road traffic control devices rely on signs, colours, shapes, symbols and words to convey information. At the same time, road traffic signs cannot effectively serve their intended purposes if drivers do not understand the information concerning safe driving behaviour that is encoded in the signs.

Road traffic control devices are basically durable items used to control traffic and create awareness to commercial drivers and other road users, such could either be permanent or temporary. Examples include road traffic signs, road symbols and road markings. Also, it should be pointed out emphatically that virtually all road traffic control devices are important and ability to decode each road traffic device determines safety on the road. Al-Madani (2000), Sanni (2005) and Steg (2006) describe road traffic control devices as life saving equipments. Oladimeji and Onyema (2011) further describe them as the life wire of every road users.

Road Traffic signs:

Ford and Picha (2000) describe road traffic signs as road infrastructure erected by the side of road to provide information to commercial drivers and other road users. With traffic volumes increasing over the last eight decades, many countries have adopted pictorial signs or otherwise simplified and standardised their signs road safety signs to facilitate international travel where language differences would create barriers, and in general to help enhance traffic safety. Such pictorial signs use symbols (often silhouettes) in place of words and are usually based on international protocols. Such signs were first developed in Europe and have been adopted by most countries to varying degrees (Wolff

and Wogalter, 1998). The earliest road signs were milestones, giving distance or direction and give warning of potential hazards ahead.

Pre-industrial signs were stone or wood, but with the development of Darby's method of smelting iron using coke, painted cast iron became favoured in the late 18th and 19th centuries. Cast iron continued to be used until the mid 20th century, but it was gradually displaced by aluminum or other materials and processes, such as vitreous enameled and/or pressed malleable iron, or (later) steel. Since 1945 most signs have been made from sheet aluminium with adhesive plastic coatings, these are normally retro reflective for nighttime and low-light visibility. Before the development of reflective plastics, reflectivity was provided by glass reflectors set into the lettering and symbols (Almadani and Janahi, 2002).

The Vienna Convention on Road Traffic is an international treaty designed to facilitate international road traffic and to increase road safety by standardising the uniform traffic rules among the contracting parties. This convention was agreed upon at the United Nations Economic and Social Council's Conference on Road Traffic (October 7, 1968 - November 8, 1968) and took place in Vienna on 8 November 1968. It came into force on 21 May 1977. This conference also produced the Vienna Convention on Road Signs and Signals. As at 30th June 2004, 52 States, including Nigeria had signed the Vienna Convention on Road Traffic Treaty.

Article 2 of the 1977 Vienna Convention classified all road signs into a number of categories (A - G):

- A – Danger warning signs
- B – Priority signs
- C –Prohibitory or restrictive signs
- D – Mandatory signs
- E – Information, facilities, or service signs
- F – Direction, position, or indication sign
- G – Additional panels

a. Road Traffic Signals:

All power – operated devices (except signs) for regulating, directing or warning motorists or pedestrians are classified as road traffic signals. In general, a traffic signal is installed at an intersection specifically either to improve overall safety or to reduce average travel time through an intersection and consequently increase capacity. Also, there are two types of signals: Signal by hand and signal by light. The hand signal is used by the traffic officer to control movement of different categories of vehicle; same applies to commercial drivers to communicate with vehicle coming behind, to avoid accident. Also, light signal is shown by traffic (control) light, special touches (used mostly at night) and direction indicator (trafficator) fitted in the vehicle are also used. The purpose of hand or light signal is to direct or communicate with other motorists, encourage orderliness and avoid cohesion on the road. Globally, traffic lights are usually in three different colours:

1. Red – meaning stop
2. Amber – meaning ready to stop or go as the situation may be
3. Green – meaning go

Warning sign:

A road traffic warning sign is a type of traffic sign that indicates a potential hazard, obstacle or condition requiring special attention on the road that may not be readily apparent to a driver. In most countries, they usually take the shape of an equilateral triangle with a white background and a thick red border. However, the colour of the background and the colour and thickness of the border vary from country to country. In Nigeria, just like in the People's Republic of China, warning signs appear with a black border and a yellow background (Parham, Womack and Hawkins, 2003; Nwosu, 1989). Warning signs in some countries have a diamond shape in place of the standard triangular shape; general warning signs are used in instances in which the particular hazard, obstacle or condition is not covered by a standard sign. According to Womack, Guseman and Williams (1981), warning signs usually comprise an exclamation mark on the standard triangular sign with an auxiliary sign below in the local language identifying the hazard, obstacle or condition in Europe. In countries using diamond-shaped signs, the explanatory language is written directly on the diamond-shaped sign, although it may contain only a general warning such as "Caution".

a. Regulatory signs (Prohibitory)

Al-Madani and Al-Janahi (2002) maintain that these are signs that are used to prohibit certain manoeuvres or some types of traffic. Such signs centers on speed limit, overtaking, parking, right, and left or U-turn and wrong way. Amongst one of the most familiar signs, this sign is used where parking should be prohibited. Usually shown as a red diagonal inside a blue circle with a red ring in Europe and parts of Asia, and a 'P' in a red circle with a either "No Parking, Right or Left Turn, U Turn"

b. Mandatory sign:

Mandatory signs are road signs which are used to set the obligations of all traffic which use a specific area of road. Unlike prohibitory or restrictive signs, mandatory signs tell traffic users what it must do, rather than must not do. Most mandatory road signs are circular, may use white symbols on a blue background with white border or black symbols on a white background with a red border, although the latter is also associated with prohibitory signs (Razzak, 2005).

Mandatory road signs can be used to allocate certain areas to specific vehicles. The Vienna Convention explicitly mentions sidewalk/footpaths, cycle paths and bridleways, but bus lanes, taxi lanes, and tracks can also be designated with mandatory signs. When a specific area of roadway is designated with a mandatory sign specifying a vehicle type, all traffic of this type must use this area, if possible. These signs can be combined by putting one pictogram above the other. If the pictograms are side-by-side however, with the sign divided by a white vertical line, each type of vehicle must stay within the lane indicated by the sign. A red line through a mandatory sign indicates that a vehicle of a specific type is prohibited from entering the designated area. A typical example is the BRT lanes in Lagos state. However, it should be noted that every driver plying the road is expected to decode the meaning of mandatory signs.

c. Bilingual sign:

United Nations Centre for Human Settlement (1998) shows that a bilingual sign (or, by extension, a multilingual sign) is the representation in bilingual regions or at national borders or where there is a relevant touristic or commercial interest like airports, rail stations, seaports, border checkpoints, tourist attractions, international itineraries panel usually a traffic sign, a safety sign, an informational sign of texts in more than one language. The use of bilingual signs is usually reserved for situations where there are international institutions.

d. Road Markings and symbols:

Road markings are lines and symbols drawn on the road mostly in urban centres either to show the number of lanes on a given road or where a commercial driver is expected to stop for another road user. Also, it specifies where and when to overtake other vehicles and the lane to use in turning (Ibekwe, 2008).Such road markings include zebra crossing, cross – walks, central line, edge lines, diagonal line and pavement message. Road Safety Symbols include delineator, clone, speed bump and light baton.

By and large, as pointed out by Idoko (2010), the recurring auto accidents in Nigeria appear to have fall short of solution, in spite of the concerted efforts of the FRSC on the commercial drivers to reverse the trend. According to FRSC statistics, 10, 781 persons lost their lives in road traffic accidents between 2008 and 2009 on Nigerian highway and majority in the Southwestern zone. In 2011, about 48, 955 sustained various degrees of injuries while about 24,120 persons lost their lives in fatal accidents that involved 21,431 vehicles across the nation. As stated earlier, road auto accidents assume more agonising dimension during the last two months of every year and the New Year. In the area of arrest of road traffic offenders, a total of 293, 268 road traffic offenders were arrested within the period under review for various offences ranging from overloading, overspeeding and non-use of seatbelt. Moreover, the FRSC raked in the sum of N795, 399,714.95 million from fines between January and June 2010 as against N565, 236,233.80 million generated within the same period in 2009. This represents 30 per cent increase in fines collection as a result of improved enforcement, efficient fine collection method and no-waiver policy introduced by the Corps. To date, the FRSC data base has captured 1,408,797 traffic offenders with an average of 5000 offenders involved weekly.

Although, the FRSC re-strategized its operation by injecting operational logistics: patrol cars, ambulances, motorbikes, establishment of additional unit commands, and road side clinics in identified crash-prone areas, in an attempt to achieve the Accra Declaration of 30 per cent reduction in road traffic accident rate, road traffic accident situation is still pathetic and chaotic in the Southwestern in particular and Nigeria in general. In the year 2011, the FRSC's RTC records showed that while 4,765 people were injured another 17,464 road traffic accident victims were treated at the FRSC road side clinics. Also, out of

the 12,591 RTC that involved commercial buses between 2007 and 2010, about 5,828 persons were killed while 5,582 persons were injured and 27,791 sustained various degrees of disabilities.

2.5.5 Best Road Safety Practices

The French Government under President Jacques Chirac gave road safety the required government recognition and this facilitated the major efforts made by the French population as a whole, which mobilised to reduce death and destruction it faces on the roads. These efforts achieved great results because they are supported by a genuine refusal to accept road accidents fatalistically and a determination to overcome all-too-frequent indifference and resignation. The mobilization of the French Government and the relevant institutions, particularly civic organizations, together with a strong accident prevention and monitoring policy, reduced traffic fatalities in France by 70%, from 7,242 in 2002 to 1,732 in 2003.

In 2003, the newly formed Government of the Kenya's National Alliance Rainbow Coalition under the leadership of Mwai Kibaki took up the road safety challenge and focused on specific measures to curtail the prevalent disregard of traffic regulations and mandating speed limiters in public service vehicles. The Government also launched a six-month Road Safety Campaign and declared war on corruption, which contributes directly and indirectly to the country's unacceptably high levels of road traffic accidents (Zaza and Sleet, 2001). The road traffic accidents reduced from 500 per 10,000 populations in 2000 to 60 per 10,000 in 2005.

A major contribution to road crashes reduction in Vietnam to reduce deaths and injuries, protect property and contribute to sustainable development was carried out by the Government of Vietnam by Mr Phan Van Khai, Prime Minister, established the National Committee on Traffic Safety in 1995. In 2001 the Government promulgated the National Policy on Accidents and Injury Prevention with the target of reducing traffic deaths to 9 per 10,000 vehicles. Government initiatives to reduce traffic accidents include issuing new traffic regulations and strengthening traffic law enforcement. In 2003, the number of traffic accidents was reduced by 27.2per cent over the previous year, while the deaths and injury rates declined by 8.1per cent and 34.8 per cent respectively (Setty 2002; Silveira, 2005).

The Thailand Government regarded road safety issue as epidemic and accorded it high priority in the national agenda. The Thai Government promoted multi sectoral collaboration and established a Road Safety Operations Centre encompassing the different sectors of the country and comprising the government agencies concerned, NGOs and civil society. The Centre received the cooperation of the Prime Minister, Thaksin Shinawatra to undertake many injury prevention initiatives, including a "Don't Drink and Drive" campaign as well as a campaign to encourage motorcyclists to wear safety helmets and to engage in safe driving practices. Such campaigns were not only backed up with good public relations and education but also stringent law enforcement measures (Schopper, Lormand and Waxweiler, 2006).

As in other Latin American countries, there is a growing awareness in Brazil as to the urgency of reversing prevailing trend in road traffic accidents. The Brazilian Government under the leadership of the Brazilian President Luis Inácio Lula da Silva, through the Ministry of Cities, has put considerable effort into developing and implementing road security, education campaigns and programmes that emphasise citizen involvement. As part of this endeavour, Brazil adopted a new road traffic code that has brought down the annual number of road deaths by about 5.000.

The Costa Rican experience of promoting road safety was notable. In Costa Rica, traffic crashes and their consequences are clearly a public health problem. They are the leading cause of violent deaths, the leading cause of death in the 10 to 45 years age group, and the third leading cause of years of life lost due to premature death. The cost of traffic crashes to the country amounts to almost 2.3% of Gross Domestic Product (GDP). Because of the seriousness and complexity of the road safety problem, a set of coordinated interventions, cutting across many sectors and disciplines were formulated and implemented through the National Road Safety Council (NRSC), attached to the Ministry of Public Works and Transport. A national road safety plan, aimed at reducing the mortality rate by 19 per cent during the period, 2001 to 2005, is being implemented, providing for action in the fields of traffic laws, police surveillance, education, infrastructure and research. The NRSC, being the lead road safety agency, compiled systematic data on road traffic crashes and on the victims, especially in the areas of the safety of road travel to and from schools; risk behaviour among drivers and pedestrians; the

wearing of safety-belts; the vulnerability of road users visiting health centres; safety audits of roads, the identification of high-risk crash sites, the financial costs and on economic consequences of traffic crashes (Setty, 2002).

Apart from the fact that new road safety laws that protected pedestrians were made, new laws were introduced to make the wearing of safety-belts by drivers and passengers compulsory. Also, the police stepped up operations to check for excess alcohol among drivers, to control speeding and to check on the wearing of seat-belts. Asides, commercial drivers were mandated to undergo medical examination so as to ascertain their mental fitness. In the area of public enlightenment, campaigns emphasised the importance of observing speed limits and wearing seat-belts, and discourage drinking and driving, in support of police enforcement campaigns especially during festive periods.

In the area of infrastructure**,** under Costa Rica's road safety plans, new infrastructure were put in place to protect vulnerable road users, including pedestrian bridges, cycle tracks and protective railings and pavements along dangerous portions of roads. New and better road signs and traffic lights were installed at strategic locations.

2.5.6 Empirical Studies

At this juncture, it should be noted that some relevant studies have been surveyed in which road safety measures in general and public enlightenment programmes of FRSC in particular were examined have been adequately highlighted .

At national and international levels, various studies have found out that public enlightenment programmes have played a significant role in educating all road users with respect to their capabilities and limitations in the use of motor vehicles, the automobiles – their capacities, as well as, limitations and the highways on which they operate. The knowledge of these three traffic elements will make them good and considerate road users (Tay, 2001). Ameratunga, Hijar, and Norton (2006) summarise road safety publicity campaign as part of a set of activities put in place to raise awareness about new road safety laws, change attitudes (for example to improve public acceptance of road safety measures). Studies undertaken by Olanrewaju and Falola (2006) and Osita (2011) reveal that drivers' education is a normative enterprise that grew out of man's problems. These problems were attributed to improper coordination among the three big traffic elements: namely the driver

(human), the highway and the motor vehicle. Research evidence from American Automobile Association (1988) and UNDP (1994) indicate that the human element is responsible for 80 to 85 per cent of all traffic accidents.

Traffic violations, driving while intoxicated and lack of driving courtesy are the results of human actions. Unsafe highway and road conditions cause about ten per cent of all traffic accidents while mechanical deficiencies are responsible for nearly five per cent of all traffic problems. Also, commercial drivers' education has helped drivers and other individuals to learn how to use motor vehicles safely and efficiently. Public enlightenment programmes are important because it educates all road users (Thorton and Rossiter, 2007. Better and considerate driving is apt to reduce the number of disasters on the highways (Santa and Cochran, 2008). As rightly pointed out by Odufuwa (2011) the FRSC's public enlightenment programmes have not only equipped road users but opened doors to new careers or vocations they would never have conceived of without such education. According to Tay (2001) and Daramola (2003), the growth and development of a nation depends, largely, upon the capacity of its transport system to move persons and goods to desired locations safely.

Speed management is important in addressing road safety problems. WHO (2008 and 2009) maintains that speed is an important risk factor. The speed at which a vehicle travels determines the severity of the injury in any road traffic accident. The effect on crash risk comes mainly via the relationship between speed and stopping distance. The higher the speed of a vehicle, the shorter the time a driver stop and avoid a crash, including hitting other road users. Key measure to manage speed is setting speed, its enforcement and implementing traffic-calming measures. Also, impairment by alcohol is an important factor influencing both the risk of a road traffic crash as well as the severity and outcome of injuries that result from it. Alcohol consumption results leads to impairment, which increases the likelihood of a crash because it produces poor judgement, increases reaction time, lowers vigilance and decreases visual acuity. Alcohol consumption is also associated with excessive speed. Other risk factors include inadequate enforcement of traffic laws; unsafe driving practices; driver distraction, including (mobile phone use); vehicle condition and defects: brakes, lighting and windscreen. Admittedly, most studies agreed that public enlightenment programmes on road safety are meant to change behaviour, as part of a

package of measures (for example engineering and enforcement related to speeding). It is evident that the three golden rules form the basis for any road safety policy with regard to the behaviour of road-users (keep your speed down, wear your seatbelt, don't drink and drive) and the need for them to be obeyed.

On the relevance of cars' in-built safety mechanisms like seat-belt is the single most effective feature in a vehicle to reduce the severity of injury to the vehicle occupants that results from road traffic crashes. Increasing motorisation worldwide has brought increases in crashes and injuries to vehicle occupants, particularly in low- and middle-income countries. One of the most effective measures to protect occupants from injury in the event of a crash is the fitment and use of seat-belts and child restraints (WHO, 2010 and 2012). They are proven to save lives and reduce injury severity, all vehicle occupants should be appropriately restrained when travelling in a motor vehicle. Seat-belts and child restraints are secondary safety measure; though effective, they do not reduce crash risk, for which other primary safety measures are needed, particularly to protect vulnerable road users. Anyaoku (2009) as corroborated by Osita (2011) shows that though, majority of vehicles are fitted with seat-belts, not all occupants use them, even, the use of seat-belts and child restraints is still low. More needs to be done to convince political leaders, police authorities, individual drivers and passengers that seat-belts provide essential protection from injury and can reduce the consequences of a crash. Another contradicting research work carried out by Odeleye (2000) as cited by Idoko (2010) shows that seat-belts and child restraints may produce injuries. Although a seat-belt holds the body in place on the seat, it cannot prevent the head from being thrown around during a collision. A belted vehicle occupant can sustain a neck injury and the place where the seat-belt makes contact with the body during a collision may also result in minor injuries such as bruising ("the seat-belt sign") or more serious problems such as broken ribs. Wikipedia (2010) adds that this notwithstanding, the injuries that the belted occupant would have sustained had they been unbelted would have been much more severe. Children who are restrained in the rear of a vehicle with two-point lap belts can, under certain circumstances, sustain abdominal or lumbar spine injuries during a collision – the so called "seat-belt syndrome". Although most new vehicles are now equipped with three-point lap and diagonal seat-belts in all seating positions to prevent this problem, it is important that emergency personnel recognise incidents where occupants have used lap belts (mechanisms of injury).

2.6 Theoretical Framework

Glanz, Rimer and Lewis (1997) describe theory as a set of interrelated propositions including concepts that describe, explain, or predict a phenomenon. In this case, the phenomenon of interest is human behaviour, specifically injury-related behaviour (e.g risk behaviours and safety practices). Theories are important not simply because they help to understand causes of problems but because they also allow us to identify mechanisms of change, determine why programmes succeed or fail, and, perhaps most importantly, guide us to build better prevention programmmes. Selection of the most appropriate theory is situation-specific and depends on the specific audience, the setting, and the characteristics of the behaviour to be changed (Brown, 2001; Sleet and Clemente 2006).

The notion of generality or broad application is important thus, theories are by their nature abstract and not content or topic specific, though various theoretical models of health behaviour may reflect the same general ideas, each theory employs a unique vocabulary to articulate the specific factors considered to be important. Wikipedia, the free encyclopedia describe behavioural change theories as systematic attempt employed to explain the reasons behind alterations in individuals' behavioural patterns. These theories cite environmental, personal and behavioural characteristics as the major factors in behavioural determination. In recent years, there has been increased interest in the application of these theories in the areas of health, education, transport, criminology, with the hope that understanding behavioural change will improve the services offered in these areas (Bandura, 1977; Baum 2003). For easy analysis and understanding of the issue at stake, this aspect of the study will cover only three behavioural theories that are relevant to the study. The theories include Social Cognitive Theory, Theory of Reasoned Action and Theory of Planned Behaviour.

2.6.1 Social Cognitive Theory

This is a term often used interchangeably with Social Learning Theory. It emphasises the learner having knowledge, motivation, outcome expectancy and self-efficacy. The theory stemmed out of work in the area of social learning theory proposed by N.E. Miller and J. Dollard in 1941. Their proposition posits that if one were motivated to learn a particular behaviour, that particular behaviour would be learned through clear

observations. By imitating these observed actions, the individual observer would solidify that learned action and would be rewarded with positive reinforcement .The proposition of social learning was expanded upon and theorised by Canadian psychologist Albert Bandura. Albert Bandura (born December 4, 1925, in Mundare, Alberta, Canada) is a psychologist and the David Starr Jordan Professor Emeritus of Social Science in Psychology at Stanford University. Over a career spanning almost six decades, Bandura has been responsible for groundbreaking contributions to many fields of psychology, including social cognitive theory, therapy and personality psychology, and was also influential in the transition between behaviorism and cognitive psychology.

The theorists most commonly associated with social cognitive theory are Albert Bandura and Walter Mischel. Albert Bandura is known as the originator of social learning theory and the theory of self-efficacy, and is also responsible for the influential 1961 Bobo Doll experiment (Bandura, 1989). Application of this theory will help understand the influence of the FRSC public enlightenment programmes on the commercial drivers and help give clue to how best to implement a sustainable road safety programme, so as, to reduce high spate of road traffic accidents in the urban centres in the Southwestern, Nigeria.

2.6.2 The Theory of Reasoned Action (TRA)

The theory of Reasoned Action as cited by Malott (2008) was developed by Ajzen in 1975. This assumes individuals consider behaviour's consequences before performing the particular behaviour. As a result, intention is an important factor in determining behaviour and behavioural change. According to Icek Ajzen, intentions develop from an individual's perception of behaviour as positive or negative with the individual's impression of the way the society perceives the same behaviour. Thus, personal attitude and social pressure shape intention, which is essential to performance of a behaviour and consequently behavioural change. This theory will help to efficiently implement road safety precautions put in place by FRSC to checkmate the excesses of commercial drivers' behaviour like overspeeding, drink and drives, non-challants attitudes towards adherence to road traffic rules and regulations, and, at the same time, promote safety on the road. Application of this theory will help to adequately evaluate the influence of the FRSC public enlightenment programmes on the commercial drivers in the Southwestern in particular and Nigeria in general.

2.6.3 The Theory of Planned Behaviour (TPB)

In 1985, Ajzen expanded upon the theory of reasoned action, formulating the Theory of Planned Behaviour, which also emphasises the role of intention in behaviour performance but is intended to cover cases in which a person is not in control of all factors affecting the actual performance of a behaviour (speeding behaviour, careless overtaking, smoking behaviour, and loss of adequate concentration while driving). In short, this theory posits that the incidence of actual behaviour performance is proportional to the amount of control an individual possesses over the behaviour and strength of the individual's intention to performing the behaviour. Ajzen further hypotheses that self-efficacy is important in determining the strength of the individual's intention to perform behaviour.

By and large, the theory of planned behaviour is a theory about the link between attitudes and behaviour. Little wonder that the theory will help understand the rationale behind commercial drivers' behaviour and formulate the best approach (strategies) to road traffic accidents prevention and reduction in the urban centres in the Southwestern, Nigeria.

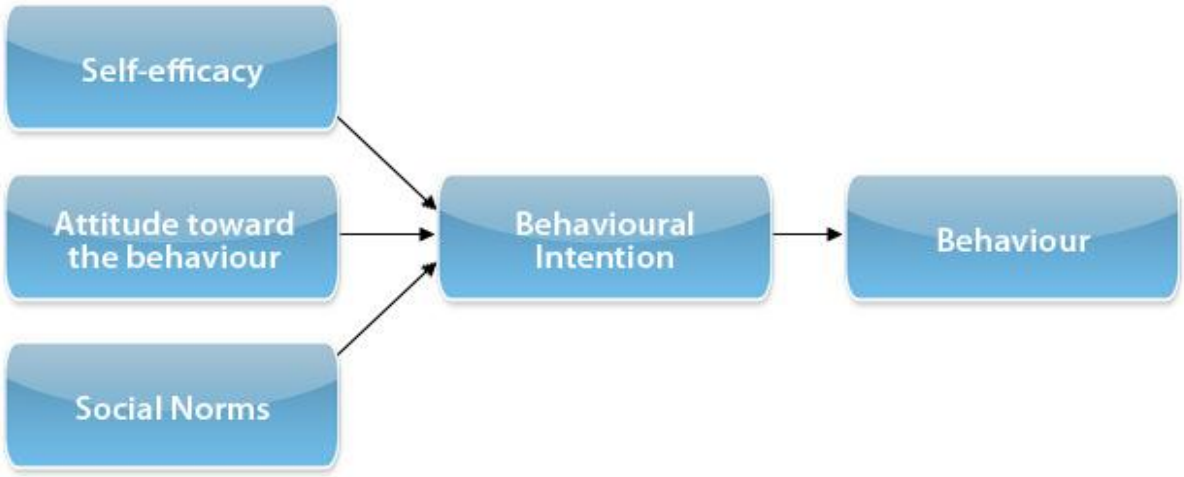

Figure 2.3. Theory of planned behaviour

Source: Beckman (2007), Action-control: from cognition to behaviour, pp. 20

However, it should be noted that behavioural change theories have potential applications in many areas. Prominent areas of application include healthcare, education, and criminal and energy consumption behaviour. These issues are important to societal

functionality and policy-making. Also, behavioural change theories have gained recognition for their effectiveness in explaining health-related behaviours and providing insight into methods that would encourage individuals to develop and maintain healthy lifestyles. Application of the behavioural theories as far as road traffic accident prevention and reduction is concerned will not be an exception. Application of such theories will help promote healthy driving habits among commercial drivers and other road users. In addition, behavioural change theories can be used as guide in developing effective road safety strategies in an attempt to promote good driving habits among commercial drivers and reduce carnage on the highways. As stated by Balogun (2006) and Baluja (2010), since the goal of public education of FRSC is behavioural change, the understanding of behaviour afforded by behavioural change theories provides insight into the formulation of effective teaching or delivery methods that tap into the mechanisms of behavioural change.

Further, Mills (2000) and Tsoumakas (2008) noted that any meaningful road safety intervention that will change commercial driver's behaviour must focus on reducing drivers' perceived ability to drive within stipulated speed limit. This can only be achieved by educating commercial drivers about stopping distances and enforcement, changing their positive attitude towards speeding by making them more aware of the potential and negative consequences of doing so. Also, theory of planned behaviour address the interaction between individuals and their environments and provide insight into the effectiveness of education programmes given a specific set of predetermined conditions, like the social context in which a programmes will be initiated (Armitage Conner, 2001; Lattal and Chase, 2003; Moxley 2004).

On the contrary, behavioural change theories are not universally accepted. One of the criticisms is that the theories lay emphasis on individual behaviour and there is a general disregard for the influence of environmental factors on behaviour. Secondly, some theories were formulated as guide to understanding behaviour while others were designed as frameworks for behavioural interventions and the theories' purposes are not consistent. All the same it should be noted that such criticism illuminates the strengths and weaknesses of the theories, showing there is room for further research into behavioural change theories (Akers and Jensen, 2003; Baum 2005; Baluja 2010).

At this point it should be pointed out emphatically that this research shall rest on the theory of planned behaviour. The reasons for this are not farfetched. In the interest of promoting good driving behaviour, this theory has numerous implications before any meaningful assessment on the influence of the FRSC's public enlightenment programmes could be made. Firstly, it will be a useful tool to describe the consequences of bad driving behaviour and can effectively increase the appropriate behaviour and decrease inappropriate ones. Armitage and Conner (2000) and Ipingbemi (2008) maintain that theory of planned behavior has gained recognition for its possible effectiveness in explaining health-related impacts of road traffic accidents and providing insight into methods that would encourage individuals to develop and maintain good driving habit. Further, Gbadamosi and Gazzanga (1994) were of the opinion that specific health application of this theory include the development of a sustainable public enlightenment programmes capable of promoting safe and defensive driving with a view to reduce carnage in the urban centres in the Southwestern, Nigeria. In view of this, any successful research on the various FRSC public enlightenment programmes must rest on theory of planned behavior (Belin 2012; Bhatia, Tej, Ritchie and William 2006).

Moreover, it is undeniable that road users play an essential role in regulating road traffic system. It therefore follows that the study of their behaviour and the underlying psychological mechanisms is fundamental in any research aimed at increasing system reliability. Research into road user behaviour logically falls within the theoretical framework of Human Sciences. It is aimed at developing our knowledge of this behaviour and its main determinants, internal (specific to the individual) and external (linked to the physical and social environmental characteristics in which the individual develops his activity). Again, this theory has been applied to sexuality education as well as many other areas of health education, including tobacco use prevention, substance abuse prevention and violence prevention. Therefore, its application in the area of road traffic accident prevention and reduction should not be an exception. Since theory of planned behavior aims to change behaviour in participants, it is a good fit for prevention-based road safety research (Dhliwayo 1997; Elvik 2009).

Commons (2001), and Akinyemi and Onuka (2012) maintain that human attitudes or behaviour constitute major risks factors as far as road traffic accident is concerned. Therefore, meaningful change in human attitudes and behaviour towards observance of road traffic rules and regulations will drastically bring a drastic reduction in number of road

traffic injuries, disability and death associated with road collisions. Invariably this will encourage a good and sustainable driving culture and make the roads safer in urban centres in the Southwestern in particular and Nigeria in general.

2.6.4 Constructing a Framework for Improved Safety Behaviour among Commercial Drivers in Urban Cities in Southwestern Nigeria

Arising from the three theories adopted for this purpose of this study, the researcher attempt to construct a road safety behaviour model for commercial drivers in urban centres in the Southwestern, Nigeria. The road safety model is constructed in order to show clearly the relationship and interdependency among nucleus of the three theories, the FRSC public enlightenment programmes, commercial drivers behaviour and the unconsciousness of having a zealous and improved safety in urban roads in Nigeria.

Table 2.12 A Road Safety Model for a Sustainable Road Traffic accident Prevention and Reduction

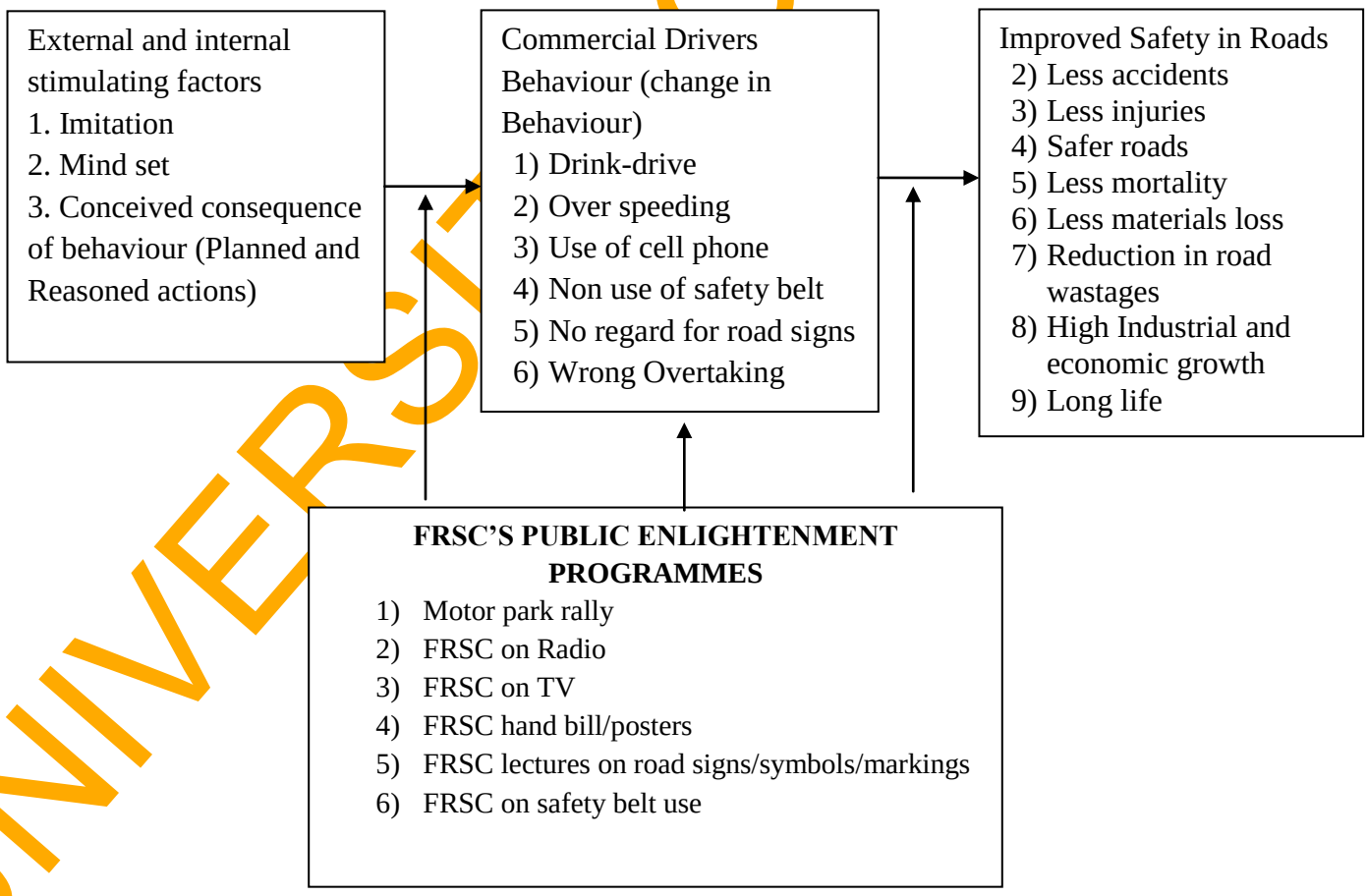

Fig. 2.4. A self-designed Road Safety Model.

The road safety model above represents a road safety system approach to sustainable road safety practices, recognises importance of transport to society, and advances the view that travel should be safe for all road users as they interact with roads and vehicles to facilitate movement. The road safety model, focus on elimination of fatal crashes and reduction of serious injuries through provision of a safe transportation system that addresses risk factors: (ovespeeding, overtaking, drinking and driving, distractions, and nonuse of seatbelt) and the RFSC road safety intervention programmes related to commercial driver behaviour, vehicles and the road in an integrated manner, allowing for more effective prevention measures. The outcome of good driving behaviour translates to reduction and prevention of human and material wastages on the roads.

2.6.5 Appraisal of literature

The introductory part of this chapter reviewed relevant literature to the research. Obviously, there is vast literature on the Nigerian transportation system generally, especially in the area of transport challenges. Mostly, they examined the various road traffic accidents countermeasures employed by the FRSC, in carrying out the different public enlightenment programmes, which centres on good driving habits among commercial drivers. Such programmes include FRSC on radio and television, motor park rally of the FRSC, FRSC handbills, posters, lectures on road safety measures to tackle such problems like overspeeding, dangerous driving, overloading, drink and drive and other forms of distractions that make road traffic accidents unavoidable, unpredictable and unpreventable among commercial drivers that ply the selected routes. Also, majority of the literatures reviewed revealed the historical background of FRSC vis-à-vis the chronology of road traffic accidents before the establishment of FRSC, the road signs, symbols and markings. Also, the literature showed the status of the major highways in Nigeria and the three relevant theories to the study: social cognitive theory, theory of reasoned action and theory of planned behavior, but the latter was adopted for this study. The theory was adopted because it will help to give a meaningful assessment on FRSC public enlightenment programmes, be a useful tool to describe the consequences of bad driving behaviour and effectively increase the appropriate behaviour and decrease inappropriate ones. This is because human attitudes or behaviour constitute major risks factors as far as road traffic accident is concerned. According to Akpabio (2011) the second stem from the

fact that behavioural change theories have gained recognition for their possible effectiveness in explaining health-related issues (Campaign on abstinence from sex before marriage and HIV/AIDS). Thus, it will provide insight into methods that would encourage individuals to develop and maintain good driving habit. Specific health applications of behavioural change theories include the development of public enlightenment programmes that promote safe and defensive driving with a view to reduce carnage on Nigerian roads. In view of this, any successful research work on the various FRSC public enlightenment programmes must rest on behavioural change theories.

In summary, a comprehensive literature consulted showed that pedestrians and vehicle passengers accounted for 41 per cent and 75 per cent of all road traffic deaths in developing countries and victims mostly in their prime. In Africa, pedestrians and passengers of public transportation are the most affected (WHO, 2012). They represented 80 per cent of all road traffic deaths. As mentioned earlier, the severity of road traffic crashes is much greater in Africa than anywhere else, because of the poor transport conditions such as lack of use of seat belts, overloading and environment (Peden, Scurfield and Sleet, 2004). It is glaring that literature reviewed will serve as a veritable tool to critically examine the influence of various public enlightenment programmes of the FRSC on commercial drivers' behaviour plying the highways in the major urban centres in the Southwestern, Nigeria.

2.6.6 Hypotheses

The following hypotheses are stated as preliminary or tentative explanations for the relationships between the independent and dependent variables; empirically tested and serving as anchor for this study.

Ho[1] There is no significant relationship between FRSC's public enlightenment programmes and the adequacy of the content, timing and commercial drivers' behavior.

Ho[2]: There is no joint effect of independent variables (FRSC enlightenment programmes on television and radio, FRSC's motor park rallies and road safety lectures, FRSC's videos and films and FRSC's handbills, posters and billboards) on commercial drivers' behaviour.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The research design adopted for the study is the descriptive survey research design of the *ex post facto* type. This design is deemed appropriate for this study because it enabled the researcher collect data using the survey technique. Besides, it helped to explain, determine and ascertain the effectiveness of the FRSC public enlightenment programmes in combating road traffic accidents (RTAs) without having any control over the independent variables that had occurred earlier. This design is concerned with the establishment of relationship that exist between variables, opinions held by a group of commercial drivers, determination of processes ongoing and effects that are evident.

3.2 Population

The target population for this study comprised commercial drivers, principal officers of National Union of Road Transporter Workers (NURTW), Road Transport Employers Association (RTEAN), and members of Association of Luxury Bus Owners of Nigeria (ALBON) in the twenty eight selected motor parks in Lagos, Ibadan, Abeokuta and Ondo, as well as the public education department of the FRSC in the four urban centres. This was estimated to be six thousand, three hundred and sixty-five (6, 365) and 20 FRSC officials.

3.3 Sample and Sampling Technique

The multistage sampling technique was adopted in selecting the respondents for this study.

Stage 1: The purposive sampling technique was used to select seven motor parks from each of the four urban cities; making a total of 28 motor parks.

Stage II: The stratified sampling technique is used to divide the population sample into four categories: commercial drivers, NURTW, RTEAN, and ALBON in each of the 28 motor parks.

Stage III: The snowball technique was used to select commercial drivers who are bonafide members of NURTW and ALBON and had at one time attended any of the public enlightenment programmes of the FRSC. In total, 4,694 commercial drivers with valid drivers' license were used as respondents.

Stage V: The simple random sampling technique was used to select officials of the NURTW, ALBON and RTEAN in each of the 28 motor parks used for this study. In total, 389 NURTW; 441 RTEAN, 699 ALBON officials were used as respondents for this study. Altogether, 1,564 (that is, 25 percent of each of each group) respondents covered as the study's sample.

Table 3.1. Population and Samples Size of the study

Motor Parks	**Commercial Drivers**		**Officials of NURTW**		**RTEAN**		**ALBON**		**TOTAL Population**	**Total Samples**
Lagos:	Population	25% Samples Chosen	Population	25% Samples Chosen	Population	25% Samples Chosen	Population	25% Samples Chosen		
Oshodi	141	35	16	4	35	9	48	12	240	60
Iyana Ipaja	190	9	13	3	30	8	72	18	305	76
Ikorodu	110	27	11	3	42	11	38	9	201	50
Mile 2	200	50	14	4	19	5	47	12	280	70
Jibowu	241	60	15	4	19	5	41	10	316	79
Ketu/ Ojota	310	78	15	4	15	4	45	11	385	96
Agege	75	19	18	5	14	4	28	7	175	44
Ibadan: Iwo Road	215	54	12	3	12	3	19	5	258	65
New garage	128	32	15	4	11	3	16	4	170	42
Challenge	182	46	18	5	13	3	12	3	225	56
Molete	160	40	15	4	15	4	15	4	205	51
Degbe	101	25	16	4	12	3	26	7	155	39
Ojoo	104		13		12		29		158	
Moniya / Akinyele	163	41	18	5	12	3	30	8	223	56
Abeokuta: Kuto	111	27	11	3	13	3	21	5	156	39
Sango	204	51	12	3	14	4	40	10	270	68
Idiroko	162	41	13	3	13	3	19	5	207	52
Lantoro	100	25	14	4	11	3	14	4	139	35
Igbesa	205	51	12	3	12	3	11	3	240	60
Agbara	123	31	11	3	14	4	14	4	162	41
Ijebu-ode	134	34	10	3	10	3	12	3	166	42
Ilaro	104	26	13	3	12	3	14	4	143	36
Ondo: Ondo Town	252	63	14	4	11	3	13	3	290	73
Abuja/ Kaduna	262	66	11	3	12	3	14	4	299	75
Idanre	124	31	11	3	13	3	12	3	160	40
Oyemekun	156	39	12	3	11	3	13	3	192	48
Freeman	143	36	12	3	12	3	12	3	179	45
Ado	162	41	13	3	11	3	12	3	198	50
Ilesha	132	33	11	3	11	3	14	4	168	42
Total	**4,694**	**1174**	**389**	**97**	**441**	**110**	**699**	**175**	**6,365**	**1,564**

Source : Sunmola 2013

3.4 Instruments

The major instruments used for the study were three sets of questionnaires titled: Drivers' Perception of FRSC Public Enlightenment Programme Inventory (DPFPEPI), Commercial Drivers Behaviour Inventory (CDBI) and Drivers' Compliance with Road Traffic Rules and Regulations Scale (DCRTRRS).These questionnaires complemented the Focus Group Discussion (FGD), Key Informant Interview (KII), as well as, secondary data from the files, records and archives of the FRSC.

3.4.1 Drivers' Perception of FRSC Public Enlightenment Programme Inventory (DPFPEPI)

This self-designed questionnaire was prepared in such a way to facilitate seeking information on the perception of commercial drivers on the strength and content of the public enlightenment programmes of the FRSC. Apart from the fact that they are the main recipients of the programmes, this category of the road user stands a better chance to give better judgments on the activities of the FRSC. Asides, they have participated at one time or the other, in the various road safety precautions initiated and implemented by the officials of the FRSC at different motor parks. Again, they ply the expressway at least two times a week and their driving habits formed the main focus of the various road safety programmes at motor parks. The validity was done on the content and construct of the questionnaire by experts and peer group review, especially from the departments of Adult Education, Urban and Regional Planning, University of Ibadan as well as, the candidate's supervisor. Asides, facilitators at Drivers Institutes, Lagos, and Ministries of Transport and Urban Development in Lagos, Ogun, Oyo and Ondo states were involved in the validity of the questionnaire. The validation process assisted in modifying some of the questions to suit the set objectives. The reliability of the questionnaire was done using pre-test method, conducted on sample commercial drivers at Oshodi motor park, Lagos. The data of the test was analysed using Pearson Product correlation. The r-value of the instrument is 0.83.This shows the instrument is reliable.

3.4.2 Commercial Drivers' Behaviour Inventory (CDBI)

This is another self-designed questionnaire prepared to elicit information on major habits of commercial drivers while on highways. This questionnaire is relevant because it

allows a better understanding of commercial drivers behaviour on the highways with a view to reduce the spate of road traffic and antecedent carnage on the expressways in the Southwestern, Nigeria.

The supervisor validated the content and construct of the questionnaire. So also, the road safety department of NURTW, ALBON and RTEAN that have franchise with the FRSC commands within the jurisdiction of this study, public education department of the FRSC were involved in the validation of the instrument. This validation process assisted in modifying some of the questions to suit the set objectives. Further, a pilot study was carried out on a few commercial drivers fined by FRSC officials along Lagos-Ibadan expressway at the FRSC offices at Ojodu and Ojota. The data of the test was analysed using Pearson product correlation. The r-value of the instrument was 0.92. This shows the instrument is reliable.

3.4.3 Drivers' Compliance and Road Traffic Rules and Regulations Scale (DCRTRRS)

This questionnaire is designed and used to extract information from the respondents, evaluate the perceived influence of the major public enlightenment programmes of the FRSC on commercial drivers' behaviour, so as to promote a disciplined driving culture among road users and prevent road traffic accidents on the expressway in the Southwestern, Nigeria. This instrument is important in the sense that it brought to limelight the level of compliance of the commercial drivers to the various road safety messages/measures as planned and executed by the FRSC at different motor parks and other channels.

With the help of the officials of the public education department of the FRSC and the supervisor, Motor Traffic Department (MTD) of the Nigerian Police, the questionnaire was validated. This validation process helped in making necessary adjustment on some of the questions to suit the set objectives. Further, a pilot study was carried out on a few commercial drivers that were fined by FRSC officials along Lagos-Ibadan expressway at FRSC's offices at Ogere-Remo and Ibadan old tolls-gate. The data of the test was analysed using Pearson product correlation. The r-value of the instrument was 0.88. This shows that the instrument is reliable.

3.5 Focus Group Discussion (FGD)

Oral interview and FGD was used as a veritable tool for direct contact with the commercial drivers, executive arms of NURTW, RTEAN, and ALBON. The FGD meeting was held in the twelve selected union offices as agreed with the researcher and trained assistants. The researcher received the cooperation and assistance of the FRSC franchise units of the executive arms of the NURTW, RTEAN and ALBON. Also, it should be noted that the open ended structured interview schedule and Focus Group Discussion were developed to elicit information from the participants. The FGD afforded the participants an in-depth opportunity to express their minds about the FRSC public enlightenment programmes. By and large, FGD centres on key risk factors like speed, alcohol, hard drugs and herbal mixtures like *paraga, alomo, shine-shine* and *opa eyin*, distractions, stimulants, as well as, frequency of each of the FRSC programmes were discussed with the participants in each of the sessions held with the commercial drivers' unions.

Table 3.2: FGD Schedule and Guide

Motor parks	Location of FGD	No. of Session	Date of FGD	No. of members per Session
Lagos: Oshodi	Lastma yard, Oshodi	1	7/12/12	6
Ojota/Ketu	Ojota main park, Ojota	1	13/3/13	6
Mile 2	Union's office, Alakija	1	13/4/13	6
Ibadan: Iwo Road	Union's office, Olomi office	1	16/4/13	6
New Garage	Union's office, New Garage	1	18/4/13	6
Moniya/Akinyele	Union's office, Moniya	1	19/4/13	6
Abeokuta: Kuto	Union's office, Kuto Garage	1	28/4/13	6
Sango	Union's office, Sango	1	30/4/13	6
Ilaro	Union's office, Ilaro	1	7/5/13	6
Ondo: Ondo	Union's office, Ondo	1	8/5/13	6
Abuja-Kaduna	Union's office, Ado Ekiti	1	9/5/13	6
Oyemekun	Union's office, Oyemekun	1	11/5/13	6

3.6 Key Informant Interview (KII)

Information elicit with KII on the FRSC officers at Public Education Department (PED) in different commands and units in Southwestern, Nigeria. It was used to ensure that some relevant information that may not be captured by the survey technique is captured through mutual interaction of the researcher with the respondents, irrespective of the gender involved. The KII was conducted with the aid of ICT gadgets (tape recorder to store and camera snap shots) were used to complement note taking.

3.6.1 KII Sub-themes

(i) Opinions about effectiveness of FRSC public enlightenment programmes.

(ii) Frequency of the FRSC's programmes with the participants.

(iii) Perceptions about each of the FRSC programmes among commercial drivers.

(iv) Popularity and efficiency of the FRSC programmes on the participants' behaviour.

(v) Evaluation of the content, timing and language of instruction of facilitators.

(vi) Opinion of the commercial drivers about the effectiveness of FRSC's programmes.

(vii) Quality of the FRSC personnel carrying out public enlightenment programmes.

3.6.2 Procedure for Data Collection

Following the acceptance of the letter of introduction issued by the department to the researcher, by the respondents, the three structured questionnaire totalling, 1,592 were administered, but only 1,564 (99 per cent) were successfully retrieved. By implication, only 1,564 were used for data analysis. This was carried out with the trained research assistants, who were versatile in data collection strategies.

Table 3.3 Breakdown of Returned Questionnaires.

S/N	Motor Parks (State Level)	No Administered	No Recovered	Percentage
1	Lagos	398	390	24.25
2	Oyo	398	391	24.47
3	Ondo	398	392	26.75
4	Ogun	398	391	24.47
	Total	1,592	1,564	99%

Source: Author's Field Surveys, 2013

Table 3.3 shows variation in number of questionnaire administered on the respondents (1,592) and the number recovered (1,564) from the selected motor parks in each state. In Lagos state, 390 questionnaires recovered out of 398 administered, making 24.25% of total sample size used for this study. Again, a total of 391 (24.47%) questionnaires were recovered from the 398 questionnaires administered on the respondents in Oyo state. Also, out of 398 questionnaires administered in selected motor parks in Ogun and Ondo states, 392 (26.75%) and 391 (24.47%) of the total respondents were recovered. In all, a total of one thousand five hundred and sixty four (1,564) questionnaires were recovered from the respondents out of one thousand five hundred and ninety two (1,592) questionnaires administered. Therefore, a total of 1,564 respondents were sampled and analysed for the study. In Table 4.1, it is evident that the number of the questionnaires recovered from the respondents is 99%; unrecovered ones have no significant effect on the findings.

The administered questionnaires were given to experienced data analysts to analyse. In all, a total of four months was spent on the administration of instruments, FGD and KII. The data collection took so much time because of the nature of the research topic, being public health problem. The second stems from the vast study area covered by the research work.

3.6.3 Procedure for Research

The researcher visited the selected motor parks in the Southwestern Nigeria for the purpose of familiarisation with the key officials and members of the road transport organized unions: NURTW, RTEAN and ALBON. The objectives of the study were made known to them. This initial contact made it possible for the administration of the questionnaires on the commercial drivers and the cooperation received during the FGD sessions.

3.6.4 Data Analysis

Data is the cornerstone of all road safety activities, essential for the diagnosis of the road crash problems and for monitoring road safety efforts. It is important to identify the categories of road users involved in crashes, what manner and behaviour patterns lead to crashes and under what conditions crashes occur, in order to focus on safety activities.

The data collected were analyzed using descriptive statistics of simple percentages, frequency, counts for the demographic information on the respondents; while multiple regression analysis, was used for objective (i); Pearson's Product Moment Correlation for objectives (ii), (iii), (iv), and t-test for objective (v) and (vi). Besides, content analysis was adopted for the qualitative data collected through the use of FGD and KII sessions.

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CHAPTER FOUR

RESULTS AND DISCUSSION OF FINDINGS

This chapter deals with the analysis of data collected and discussion of the findings based on the hypotheses formulated and research questions raised for the study. Part 'A' of the presentation centres on demographic data of the respondents. These include gender, age, highest educational background, frequency of the use of the road, driving experience, marital status, occupation and frequency of exposure to the FRSC public enlightenment programmes. The findings are presented in tables, followed by their interpretations. Part 'B' of this study set out to determine the extent to which FRSC public enlightenment programmes have influenced the commercial drivers' behaviour vis-à-vis road traffic accidents prevention and reduction in the urban centres in the Southwestern Nigeria. The results of the study were presented based on the hypotheses generated and the research questions raised.

PART A

Demographic Characteristics of the Respondents

The characteristics of the respondents for the study is one of the basic requirements for understanding issues on the influence of the FRSC's public enlightenment programmes on commercial drivers in the Southwestern, Nigeria. The characteristics will provide the demographic elements that define the appropriateness of the respondents for the study. Therefore, it is imperative to know the age distribution of the respondents as shown in figure 4.1

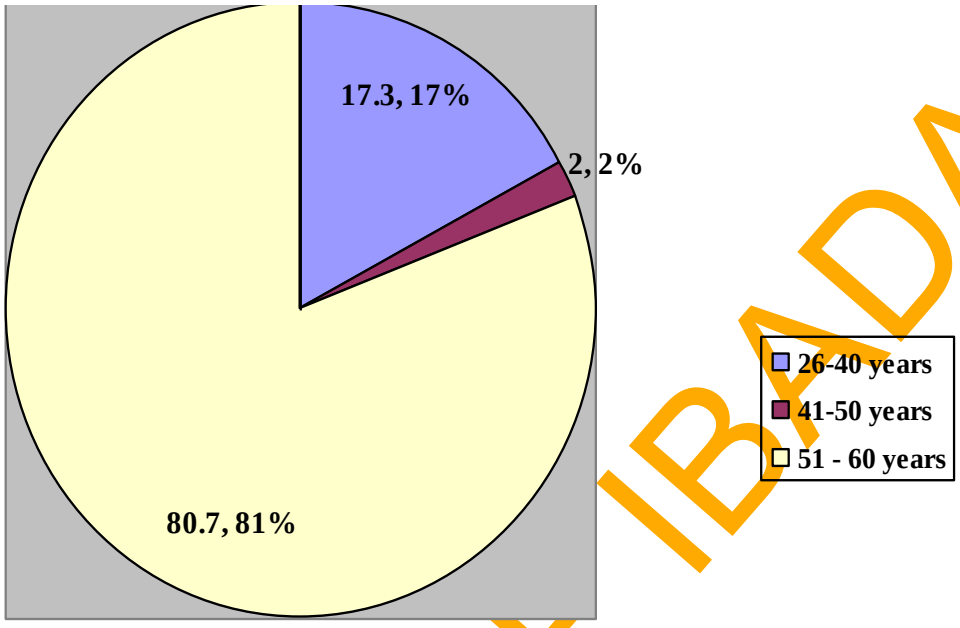

Figure 4.1: Distribution of Respondents by Age

Interpretation and Discussion

Figure 4.1 reveal that there is variation in the age distribution of respondents that ply federal highways and public roads in the urban centres used for this study. The table reveals that 1,264 (80.7%) of the sampled population, which form the majority of the respondents fall within the age of 26 and 40 years of age, 268 (17.3%) of the respondents fall within the age of 41-50 and lastly 24 (2.0%) of the respondents falls within 51 and 60 years of age, irrespective of gender. It is also evident that majority of the respondents used for this study took part in the public enlightenment programmes of the FRSC; in their productive age, shows heavy presence of youths in the driving profession. Available statistics shows that majority of road traffic accident victims (mostly commercial drivers) in developing countries are in their productive age. As pointed out by Peden, Mcgee and Krug, 2004; WHO 2004; Sanger 2009 and Anthony-Albanese, 2010, the rate of mortality in road traffic accident is very high among children and young adults, who constitute the workforce in many countries. Osita (2012) further corroborates this and maintains that developing countries like Nigeria bear the brunt of the fatalities and disabilities from road traffic crashes, accounting for more than 85 per cent of the world's road fatalities, and about 90 percent of the total Disability-Adjusted -Lost Years (DALYs) lost due to road traffic injuries.

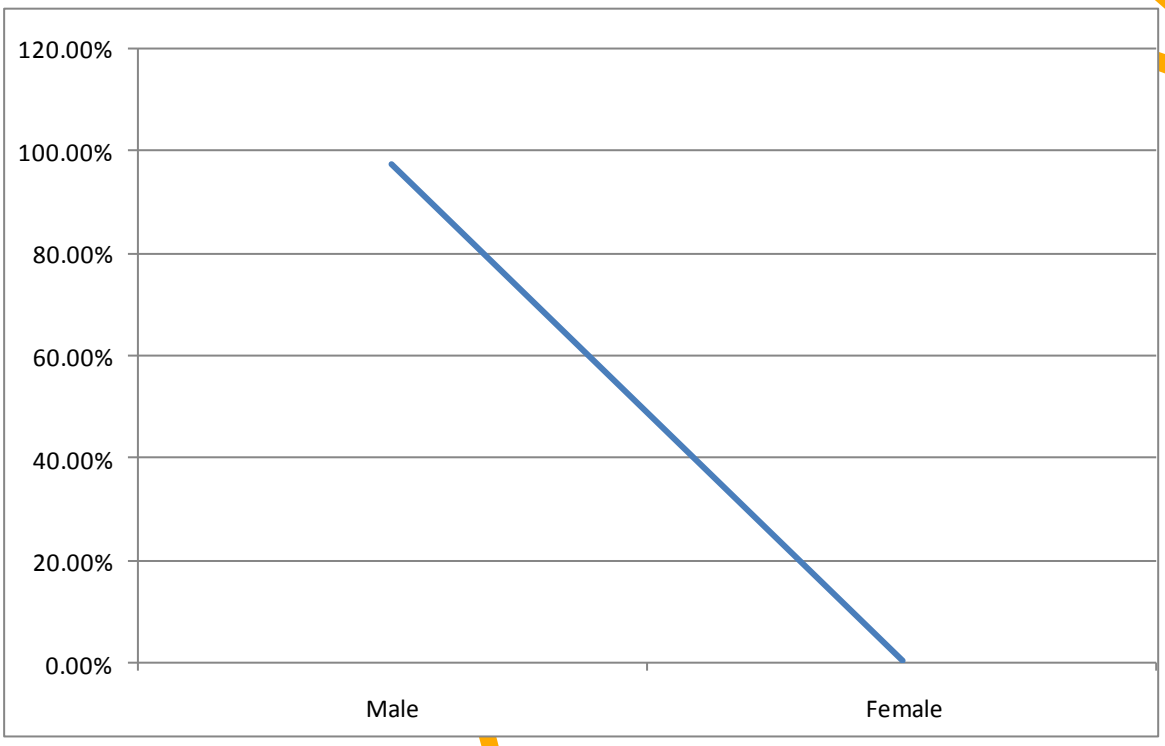

Figure 4.2 Respondents by sex

Interpretation and Discussion

Figure 4.2 shows high concentration of males in driving profession. There are more males respondents 1,560 (97.70%) than 4 females (0.30%) respondents. This result is evident in the population of male respondents in all the selected motor parks that formed the population of this study. This may not be unconnected with the rate at which unemployed youths move to urban centres in search of work. Apart from the fact that large sample of the respondents were males, confirms that commercial driving is largely men's job. This finding does not in any way show deprivation of women in driving profession, rather culture play a significant role in the sex structure of commercial drivers. The status symbol of women have a better explanation, as no woman would want to be called a commercial driver because commercial driving is considered to be a menial job, reserved mostly for thugs. Literature search reveals that, it is difficult for women to challenge traditional gender roles, explains the reason why only few women were only found in the driving profession and exposed to the various public enlightenment programmes of the FRSC.

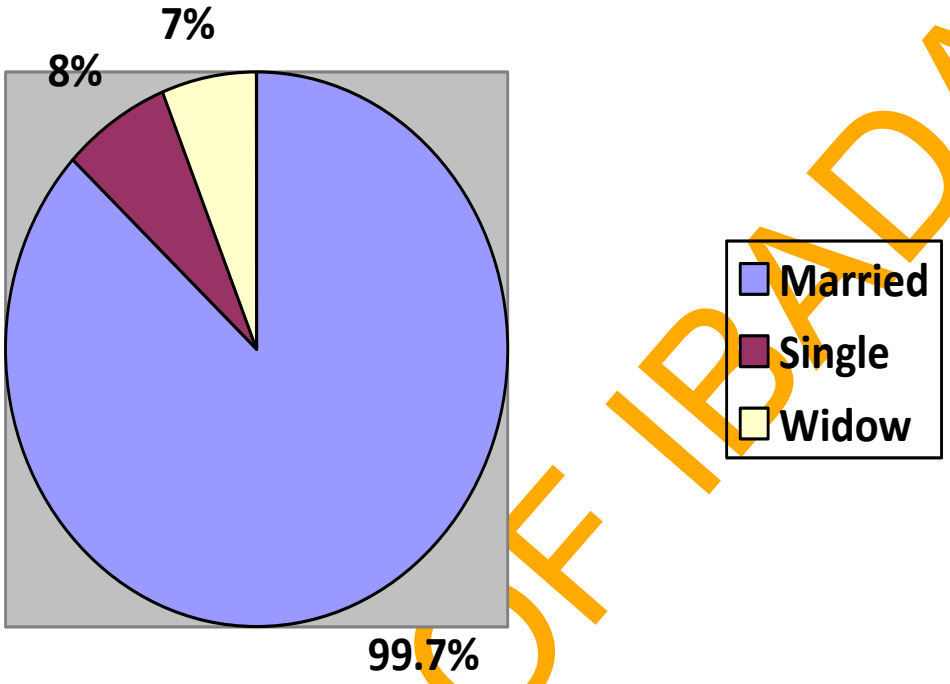

Figure 4.3: Respondents by Marital Status

Interpretation and Discussion

Figure 4.3 shows distribution of respondents by marital status. From figure 4.3, it shows that married respondents constitute as high as 1,549 (99.70%) of the sampled population, followed by 8 (15%) respondents that are single. The least respondents are the widows 7 (0.14%). The table reveals that driving profession is dominated by men fold and not female gender friendly. The high incidence of 'married' respondents might not be unconnected with the cultural values attached to being married makes one to have high sense of responsibility. A high percentage of married drivers are expected because most of them are school drop-out. As earlier pointed out by WHO (2008 and 2010); Osita (2008 and 2009) majority of the road traffic accidents victims are male adults in their prime.

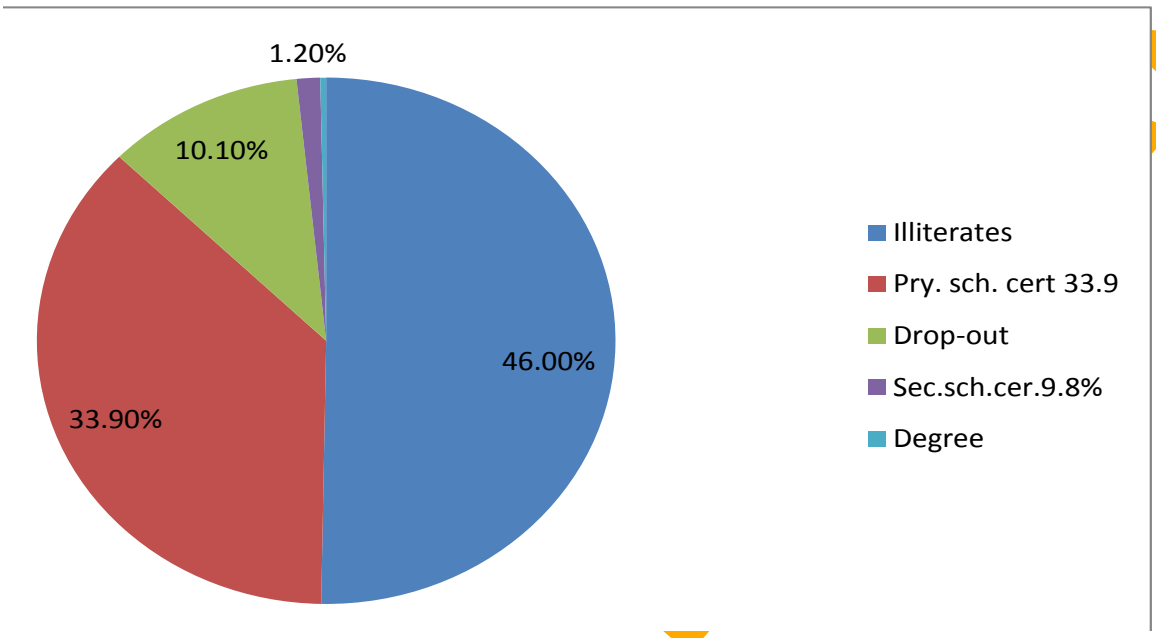

Figure 4.4: Respondents by Educational Attainment

Interpretation and discussion

From figure 4.4, it is evident that respondents have different educational qualifications. Majority of the commercial drivers' totaling 712 (46.0%) have no formal education and 160 (10.1%) are drop-out from primary schools. Also, 532 (33.9%) possess primary six school certificates, 156 (9.8%) possess secondary school certificates, it is also glaring that only 4 (0.3%) had tertiary education. Directly or indirectly, the finding shows there is inverse relationship between level of education and cases of road accidents. In summary, majority of the respondents in the Southwestern are illiterates, given that most of them were drop-outs. Osita (2011) observed incidence of illiterates and school drop-outs among sampled commercial drivers in the study area. It therefore implies that commercial drivers lack the required educational standard that will make them competent to identify and interpret road traffic signs, symbols and markings on the highways. The implications of Figure 4.4 is that only a few of the respondents will sufficiently understand the content of the public enlightenment programmes of the FRSC, going by the language of instruction (English Language) employed by the FRSC facilitators. This is not a healthy situation because beneficiaries of any programme must comprehend the messages of any meaningful public enlightenment programme, for it to be effective, meaningful and sustainable. Communication is only effective when the speaker and receiver understand eachother.

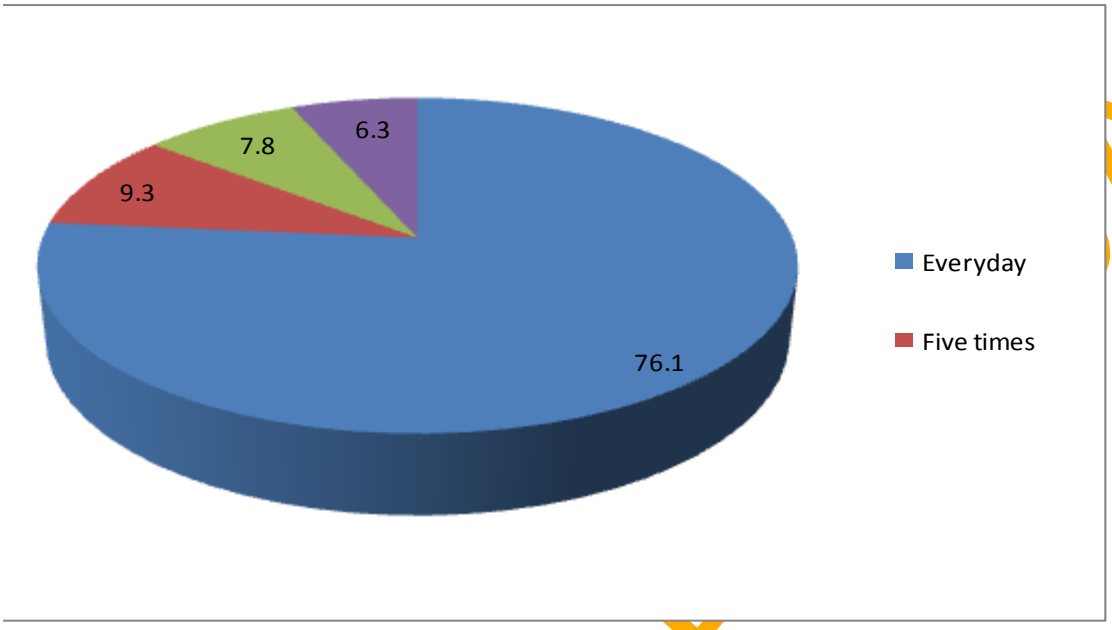

Figure 4.5 Respondents Frequent use of Road

Interpretation and Discussion

Figure 4.5 shows variation in respondents' use of road on weekly basis. The table reveals that 100 (6.3%) of the respondents use the road once a week; 124 (7.8%) ply highways four times per week; 148 (9.3%) respondents use the road five times per week, while majority of the respondents 1,184 (76.1%) use it every day. From Figure 4.5, it could be deduced that majority of the respondents (76.1%) used for the study actually ply the roads on daily basis. This, by implication means that their responses should be held in high esteem. As earlier mentioned, road transportation and vehicles provide the highest level of mobility in Nigeria, especially in the Southwestern, Nigeria. Again, majority of the respondents ply on daily basis because most passengers consider air transport unfavourable and the only alternative means is road transport, since railway transport has collapsed. Nnamdi and Ibe (2007) maintain that 90 per cent of Nigerians travel by road, for social and economic reasons (Osita, 2004).

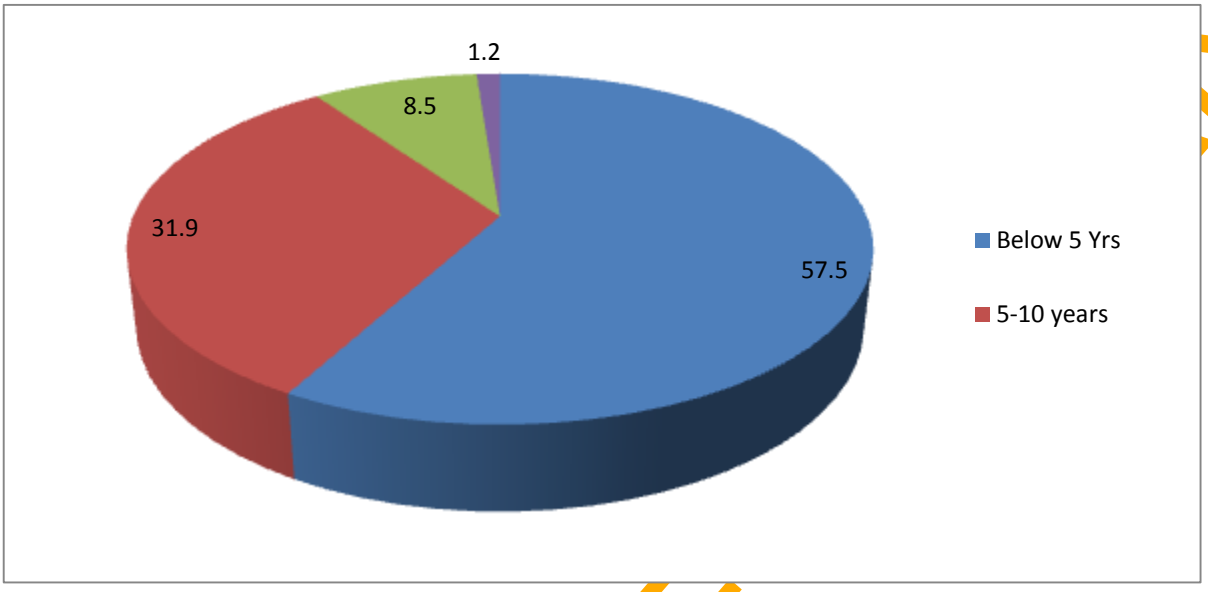

Figure 4.6: Respondents by Driving Experience

Interpretation and Discussion

From Figure 4.6, it could be deduced that 229 (57.5%) of the respondents have less than five year driving experience, 127 (31.9%) of them had driving experience of between 5 and 10 years, 34 (8.5%) of them have driving experience of between 10 and 20 years, while 8 (2.0%) have driving experience of above 21 years and above. By implication, it means, majority of the commercial drivers are very young in terms of driving experience, which corroborates the WHO (2008) report that most road accident victims are very young, even with less than ten years driving experience. Little wonder then that Oni (2009) attributes most of the road traffic accidents to lack of required five years driving experience on the parts of the commercial drivers. Further, Osita (2013) and Okoko (2006) maintain that most of the commercial drivers did not pass through approved driving school, constituting cog in the wheel of progress, as far as attainment of meaningful reduction in the road traffic accident is concerned. This, they attribute to the fact that most of the commercial drivers find themselves in the driving profession by accident, compel by the desire to eke out living from it. Asides, majority of the commercial drivers in the Southwestern are either stark illiterates, or drop out from secondary schools. By inference, a better understanding of the FRSC public enlightenment programmes coupled with the language of instruction, channels and strategies adopted by the FRSC personnel rest on

good educational background, at least, ability to read and write. The implication of Figure 4.6 is that only a few of the respondents will understand the messages of the public enlightenment programmes of the FRSC, going by the language of instruction (English Language) employed by the FRSC facilitators.

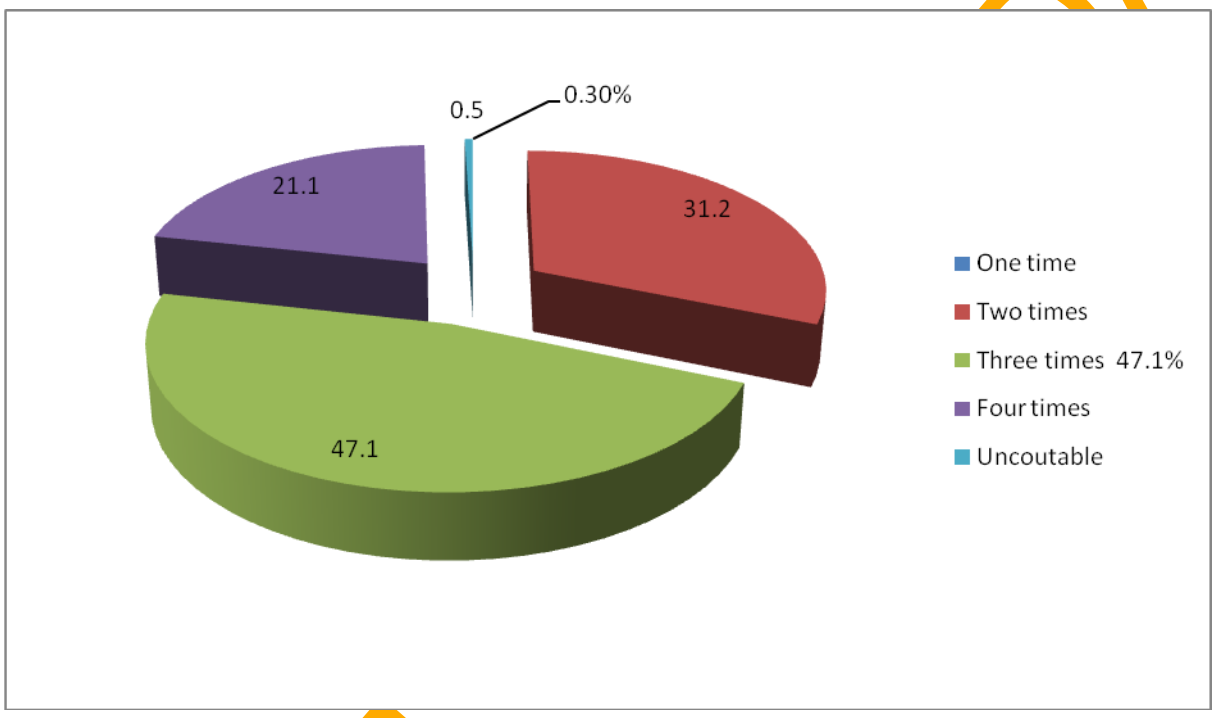

Figure 4.7: Distribution of Respondents by Frequency of Exposure to FRSC Programmes

Interpretation and Discussion

Figure 4.9 reveals variation in respondents' exposure to public enlightenment programmes of the FRSC. It is evident that the highest respondents sampled for this study was 728 (47.1%) and were exposed to public enlightenment programmes of the FRSC three times. Also, 496 (31.2%) out of the total respondents were exposed to the public education programmes of the FRSC two times. Also, only 330 (21.1%) experienced the FRSC public enlightenment programmes on two occasion. Further, 4 (0.5%) of the respondents took part in the public enlightenment programmes only one time while 6 (0.5) took part in the public enlightenment programmes on uncountable times at designated motor parks. At this juncture, it should be noted that public education programmes of the FRSC should take place every now and then. This step will make it possible for commercial drivers to partake in the FRSC public enlightenment programmes on regular basis.

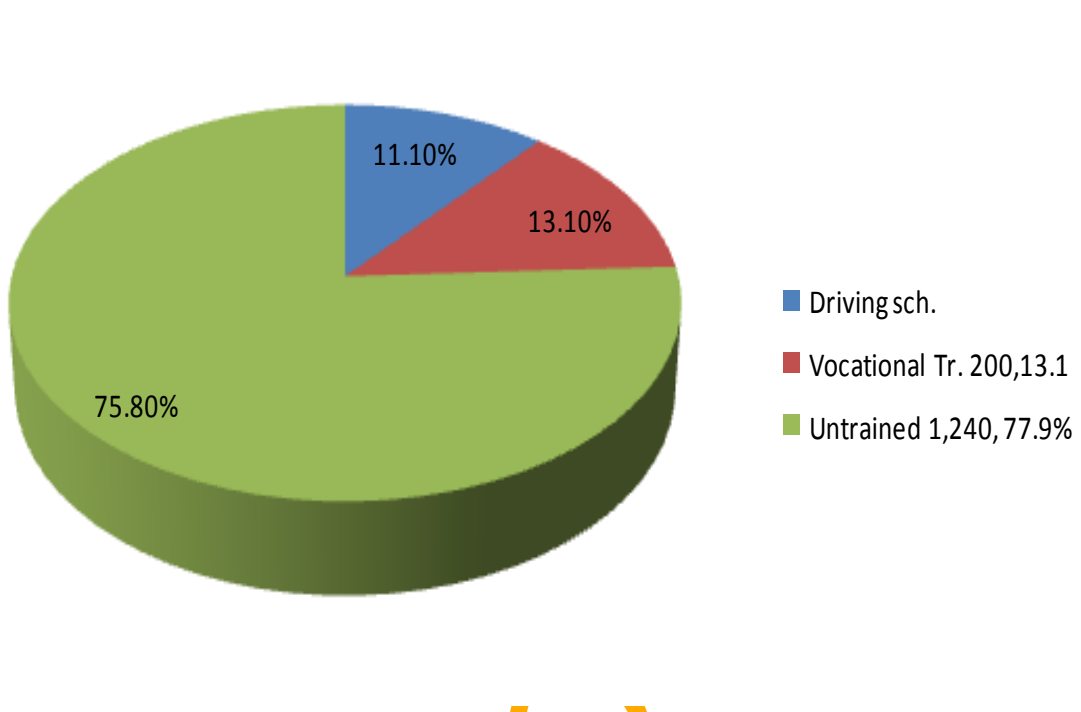

Fig. 4.8 Distribution of Respondents by Training.

Figure 4.8 show the distribution of the respondents in terms of their training. It distinguishes the difference between those who are professional drivers and those who are not trained drivers. It shows that only 176 (11.1%) of the respondents sampled for this study were driving school trained drivers. Equally, 200 (13.1%) of the sample size had other vocational training or experience different from driving. Majority of the respondents, numbering 1,240 (77.9%) neither have driving school training nor have any other vocational experience. This latter category finds themselves in driving profession by accident, to eke out living.

PART B

This study set out to determine the extent to which FRSC public enlightenment programmes have influenced the commercial drivers' behaviour, against the background of road traffic accidents prevention and reduction in the urban cities in the Southwestern Nigeria. The results of the study were presented based on the hypotheses generated and the research questions raised.

Influence of the FRSC Public Enlightenment Programmes on Commercial Drivers Behaviour Vis-a-vis Road Traffic Accident Prevention and Reduction in urban centres in the Southwestern, Nigeria

Table 4.1 as well as the discussions provided explanations for the understanding of data collected on objective 1 and the research question one (RQ1) which states that: to what extent have the public enlightenment programmes influence commercial drivers behaviour on urban centres highways.

Table 4.1: Relative Effect of Independent Variables on Commercial Drivers' Behaviour.

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	β		
(Constant)	-1.992	2.545		-.783	.434
FRSC Enlightenment Programmes on Television	-.465	.047	-.251	-9.827	.000
FRSC's Motor Park Rallies and Road Safety Lectures	1.015	.030	.688	33.970	.000
FRSC's Public Enlightenment Programmes on Radio and television	775	.024	.678	31.652	.000
FRSC's Videos and Films	.204	.036	.133	5.610	.000
FRSC's Handbills, Posters and Billboards	-7.714E-02	.014	-.115	-5.513	.000

Interpretation and Discussion

Table 4.1 indicated variation in the participating respondents' degree of agreement to the selected indicators of commercial drivers' behaviour, that is, risk factors. Such risk factors include wrong overtaking, dangerous driving, overspeeding, and use of cell phone, overloading; drinking and driving. The table further showed significant influence of public

enlightenment programmes of the FRSC on the level of compliance to the corrective measures as embedded in the PEPs of the FRSC that foster good and harmonious use of road devoid of road crashes and injuries.

Further, the Table 4.1, showed that there was a relative effect of independent variables (FRSC PEP on Television, FRSC Motor Park Rallies and Road Safety Lectures, FRSC PEP on Radio, FRSC's Videos and Films and FRSC's Handbills, Posters and Billboards) on commercial drivers behaviour and therefore had significant effects on commercial drivers behaviour in the Southwestern, Nigeria. ($F(5,392) = 519.531$; $R = .932$, $R^2 = .869$, Adj. $R^2 = .867$; $P < .05$). About 87% of the variation in Commercial Drivers' Behaviour was accounted for by the independent variables.

FGD session at Kuto, Ojota/Ketu and Oyemekun Motors Park revealed that appreciable effect was recorded on commercial drivers' behaviour. One of the respondents at Oyemekun Park commented on the commercial drivers' compliance to FRSC's campaign on overspeeding, drink and drive, and use of cell phones while driving said:

> *Yes, public education programmes have helped a lot in the area of road traffic accident reduction. Commercial drivers are now conscious of their limitations on the highways and this has brought about reduction in material and human wastages on the roads.*

When asked to comment on the effects of drink and drive programme of the FRSC on commercial drivers, he said:

> *That was another success story. Commercial drivers have realised the gravity the road traffic accident and its consequences on their immediate family. FRSC programmes discouraged many driver from drinking alcoholic drink and other herbal mixture before they handle steering.*

Another respondent at Kuto Motor Park subscribed to the view expressed by respondent at Oyemekun motor park .The respondent a Kuto motor park said:

> *Majority* of *Commercial drivers no longer drink 'Ògógóró' before they embark on any journey and this helped them to adhere strictly to speed limit rule and obey other road traffic rules and regulations most especially during festive periods*

Also one respondent during KII at FRSC office, Ibadan revealed that:

> *The FRSC campaigns are meant to remind commercial drivers and passenger about their rights and limitations on the road. The FRSC campaign team also enlightened passengers on the need to ensure that drivers avoid overloading, because they are also a stakeholder.*

When asked about the compliance to the FRSC PEP. He said that:

> *In fairness to many commercial drivers, they have realised their mistakes because there was reduction in the number of road traffic offenders.*

Further, the result in Table 4.1 showed relative contribution of each of the independent variables on the dependent variables: FRSC Enlightenment Programmes on Television (β = -.251, P <.05); FRSC's Motor Park Rallies and Road Safety Lectures (β = .688, P <.05); FRSC's Public Enlightenment Programmes on Radio (β = .678, P <.05); FRSC's Videos and Films (β = .133, P <.05) and FRSC's Handbills, Posters and Billboards (β = -.115, P <.05) on commercial drivers' behaviour. Aside the fact that each of the independent variables show the relevance of the FRSC public enlightenment programmes, each of the major components of the public enlightenment programmes have helped to reduce road traffic accidents on the expressways in the Southwestern states in particular and Nigeria in general. Osita (2010) maintains that fines on commercial drivers' plying highways in urban cities in Southwestern on overspeeding, dangerous driving, drinking and driving has reduced from 5,230 in 2008 to 820 in 2009. This, he attributed to Operation Zero Tolerance and aggressive highway patrol and motor park rallies.

In a related development, the findings indicated that activities of the FRSC on television had meaningful impacts on the commercial drivers' behaviours in Southwestern, Nigeria. Further, this result shows that FRSC's activities helped in the reduction of road traffic accidents on the expressways in the Southwestern states Nigeria. Again, this finding supports Thorton and Rossiter (2007) that public enlightenment programmes via mass media have played significant role in public education to commercial drivers' vis-à-vis their capabilities and limitations in the use of motor vehicles on the highways. In addition, Tay (2001) contends that the knowledge of the three traffic elements will make them good and considerate road users. In a similar manner, Ameratunga, Hijar, and Norton (2006) reveal that road safety publicity campaign has not only helped to create awareness about

new road safety laws, but also encouraged public acceptance of road safety measures. Further, Oni (2009) and Osita (2011) admit that drivers' education is a normative enterprise developed because of improper coordination among the three big traffic elements: commercial driver (human), the highway and the motor vehicle.

As earlier mentioned, human element accounted for about 85 per cent of all road traffic accidents. Traffic violations, driving while intoxicated and lack of driving courtesy are the products of human actions. Unsafe highway and road conditions cause about 10 per cent of all traffic accidents while mechanical deficiencies are responsible for nearly 5 per cent of all traffic problems. Accordingly, Dike (2007) and as corroborated by Fidelis (2010), mass media campaign have a major role to play in road safety but are unlikely to produce large behavioural change in isolation. Mass media campaigns therefore play a supporting role to other campaign activities (for instance enforcement). To effectively educate commercial drivers and other road users, especially in terms of improving road safety and promoting safe behavior, the influence of print and electronic cannot be underestimated. In short, mass media road safety campaigns, is considered as an efficient means to enhance road safety, mainly by promoting a safer driving behaviour (Ogunsanya, 2003; Olaseni, 2010).

At this juncture, it should be noted that, the multifarious campaign of FRSC on road safety on the television, radio and newspaper advertorials place much emphasis on good driving habits among commercial drivers and road users. The major message is not only through the jingles but through lectures on good driving habit, patience while driving, and application of road sense while on the highways. On Television stations, FRSC officials more often than not, give lectures that educate road users on the need to observe road traffic rules and regulations, socio-economic effects of road traffic accidents. Pictures of past scary accidents scenes are relayed on the screen for viewers to appreciate and more importantly, to remould bad driving habits prevalent among commercial drivers plying the highways.

A respondent during the focus group discussion at Mile 2 Motor park maintains that the various programmes of the FRSC via mass media are not only effective but significant and meaningful. He was however quick to add that the timing for FRSC's programmes on

air are always the problem. Again, when asked to comment on the timing and content of the FRSC public enlightenment programmes, he said:

> *FRSC programmes on road safety are good but timing is the problem. We do not have time to stay at home to watch television and we prefer to entertain our passengers with latest music while driving. But I enjoy motor park rally of the FRSC during 'ember' months. But it is better everytime.*

When asked if he will quit driving, if he sees another job, the respondent replied:

> *No, I live driving profession, more than any other job.*

When asked about the frequency of such programmes on air, another respondent during KII sessions at FRSC office at Ojodu said on condition of anonymity said:

> *FRSC activities on air are occasional, not always. Our activities take place during festive periods when traffic will be heavy. Department of public education give road safety tips on good driving habits to promote discipline driving.*

When asked about why FRSC programmes on safe driving comes up only during festive periods. He said

> *FRSC budget cannot accommodate the air time bill and we do not have steady corporate sponsorship either. Again, FRSC do not have enough budget allocation to finance road safety activities, even that of the road safety clubs*

Notably, the activities of the FRSC campaigns on television mostly take place during the "Ember" months and other festive periods. The focus is on safety tips, demonstrations on the proper application of vehicles' fire fighting equipments as required by Road Traffic Laws. Though, it is required of the owners of vehicles (private or commercial) to have approved vehicles fire extinguisher, many drivers are not knowledgeable about the application during emergency period. The findings also in line with Filani 2002 and Okanlawon and Oni 2006 note that during most demonstrations; drivers were encouraged to summon courage whenever fire occurs. In Lagos State for example, motorists and other road users were empowered by virtue of Lagos State Security Trust Fund to call toll free Number "727" or "112". It should be noted that these two lines are hot lines directly to emergency service units in Lagos State, for prompt attention from relevant agencies.

Effects of each of the Public Enlightenment Programmes on Commercial drivers' Behaviour

Table 4.2 provide explanations for objective 2, anchored on research question two and hypothesis two which states inter-alia that: to what extent has each of the public enlightenment programmes have influenced commercial drivers behaviour

Table 4.2: Correlation matrix showing effects of each public enlightenment programmes (FRSC radio and television, FRSC video and films, handbills, billboards and posters, motor park rally and road safety lectures) on Commercial Drivers' Behaviour .

	Commercial Drivers' Behaviour	FRSC Enlightenment Programmes on Television	FRSC's Motor Park Rallies/Road Safety Lectures	FRSC's Public Enlightenment Programmes on Radio	FRSC's Videos/Films	FRSC's Handbills/ Posters and Billboards
Commercial Drivers' Behaviour	1					
FRSC Enlightenment Programmes on Television	.237**	1				
FRSC's Motor Park Rallies/Road Safety Lectures	.668**	.170**	1			
FRSC's Public Enlightenment Programmes on Radio	.699**	.425**	.129*	1		
FRSC's Videos/Films	.153**	.628**	-.007	.255**	1	
FRSC's Handbills/Posters and Billboards	.219**	.018	.482**	.029	-.059	1
Mean	89.0402	56.7990	66.1709	54.2965	68.4598	37.4975
S.D	9.6144	5.2012	8.4174	6.5151	6.2892	14.3902

Interpretation and Discussion

Table 4.2 shows the relative contributions of each of the independent variables on the dependent: FRSC Enlightenment Programmes on Television (β = -.251, P <.05); FRSC's

Motor Park Rallies and Road Safety Lectures (β = .688, P <.05); FRSC's Public Enlightenment Programmes on Radio (β = .678, P <.05); FRSC's Videos and Films (β = .133, P <.05) and FRSC's Handbills, Posters and Billboards (β = -.115, P <.05) on Commercial Drivers' Behaviour.

From the above Table 4.2, it could be deduced that each of the independent variables have contributed to a lot to road traffic accident prevention and reduction in urban centres in Southwestern, Nigeria. This finding reveals that FRSC's motor park rally had the greatest impact on the commercial driver's behavior in the southwestern, Nigeria and the least, the FRSC's handbills and billboards. The finding corroborates Osita (2011) that FRSC's safety campaigns, especially motor park rally, has helped to reduce road traffic accident for about 30 percent in 2012. During the KII session with the ALBOAN executives at Oyemekun park, Akure one of the respondents said:

> *FRSC's motor park rally stands out among other road safety precautions organised by the FRSC programmes.*

When asked why, he said:

> *The participants were able to have direct contact with the FRSC officials, able to ask pertinent questions about driving profession and the programme is well loaded with visual and audio videos and films that advocate safety practices.*

A respondent during FGD session at Idi-Iroko, Sango also uphold this view and adds that:

> *Motor park rally affords commercial drivers to refresh their memories about safe driving habits. Also, motor park rally addresses road traffic accident risk factors like overspeeding, wrong vertaking, distractions and driking and driving and night driving.*

A respond during FGD session at New Garrage, Ibadan prefers motor park rally to other road safety channels because:

> *Motor park rally is a forum for cross fertilization of ideas because commercial drivers use the medium to ask questions on road safety, especially during and after demonstrations on first aid, use of fire extinguisher, post crash treatment to road traffic accident victims.*

This finding supports Ogunsanya (2003) and Olaseni (2010) posit that mass media campaigns are used extensively as a means of promoting road safety issues by the FRSC. Osita (2012) reiterated that the level of road traffic accidents in the Southwestern states

reduced drastically from 13,000 in 2008 to 2, 200 in the year 2012. In short, mass media road safety campaigns are considered an efficient means to enhance road safety, mainly by promoting a safer driving behaviour.

Also in Table 4.2, showed significant relationships between commercial drivers' behaviour and FRSC public enlightenment programmes on Television and radio, motor park rallies and road safety lectures; FRSC's videos and films as well as FRSC's handbills, posters and billboards.

During the FGD session s with the officials of the ALBOAN at Mile 2, one of the respondents remarked that motor park campaign team also enlightened passengers on the need to ensure that drivers avoid over loading as they are also stakeholders. Another respondent insisted that:

> *They paid for safe journey and not crashes; we do tell them that if any driver tries to overload his vehicle, passengers have the right to say no.*

Also, the view of a respondent at FRSC office at Akure Command on condition of anonymity was similar to what another respondent at Ilaro motor park said that:

> *The use of cell phones, smoking and overtaking at a bend or on a slope are not allowed while driving, adding that drivers were also advised to always fasten their seat belts while driving.*

This finding is in line with the remark made by Mr Agwu Jonas that with the support of commercial drivers and other road users, road crashes were reduced to 30 percent and fatality by 20 percent in 2012. According to him, public enlightenment programme on good safety measures is one of the strategies to achieve the United Nations decade of action on road safety and should be geared towards realising year 2014 target of 30 per cent reduction in deaths on the roads. He states that using and perfecting this strategy of advocacy without enforcement would help change the indifferent attitude of Nigerians as it has been identified as the major cause of road traffic accidents in the country.

Relative Effects of FRSC's Language of Instruction, Timing, Adequacy of Content and Delivery Strategies of PEP on Commercial Drivers' Behaviour

Table 4.3 provide explanations for objective 3, anchored on research question three and hypothesis one which states inter-alia that: to what extent have language of instruction, timing, adequacy of content and delivery strategies of public enlightenment programmes influenced commercial driver's behaviour.

Table 4.3. Relative Effects of FRSC's Language of Instruction, Timing, Adequacy of Content and Delivery Strategies of PEP on Commercial Drivers' Behaviour

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	β		
(Constant)	-1.992	2.545		-.783	.434
FRSC's adequacy of content	.775	.024	.678	31.652	.000
FRSC's channels and strategies	1.015	.030	.688	33.970	.000
FRSC's timing	.204	.036	.133	5.610	.000
FRSC's Language of instruction	-7.714E-02	.014	-.115	-5.513	.000

Table 4.3 shows the relative contribution of each of language of instruction, timing, channels and strategies and adequacy of public enlightenment programmes to achieve the desire effects on the commercial drivers' behaviour: Adequacy of the content of the FRSC's programmes Lectures (β = .678, P <.05); FRSC's channels and strategies (β = .688, P <.05); timing of the FRSC's programmes (β = .133, P <.05) and FRSC's language of instruction (β = -.115, P <.05) on Commercial Drivers' Behaviour.

Interpretation and Discussion

As shown Table 4.3, there is a positive significant contribution of the timing, adequacy of contents, language of instruction and channels and strategies of FRSC's public enlightenment programmes on commercial drivers' behaviour : Adequacy of the content of the FRSC's programmes Lectures (β = .678, P <.05); FRSC's channels and

strategies (β = .688, P <.05); timing of the FRSC's programmes (β = .133, P <.05) and FRSC's language of instruction (β = -.115, P <.05) on commercial drivers' behaviour. Hence, timing and adequacy of content, language of instruction, channels and strategies of FRSC's public enlightenment programmes influenced commercial drivers' behaviour. Also, it should be noted that there is variation in their contribution, the fact still remain they have all contributed to the expected change in commercial drivers' behaviour. As earlier mentioned, the FRSC carried out motor park rallies at designated motor parks but such road safety activities only took place during festive periods: Easter, Muslim festivals, Christmas, New year as well as 'ember' months-September, October, November and December. The FRSC embarked on this venture to reduce accidents usually associated with months ending with" ember", and to sensitise motorists on road safety practises. The areas covered include: risk factors like over speeding, use of seatbelt, alcohol, defensive driving and drama sketch on socioeconomic effects of road traffic accident. This result is in agreement with the findings from FGD session at NURTW office at New garage, Ibadan. When asked question on the timing of the FRSC's public enlightenment programme, A respondent said:

> *Here in our motor park rally takes place during festive periods and we always enjoy it. FRSC officials use English language during the programme. But, drivers will enjoy it more if they can use Yoruba language. Also, this kind of programme should take place every time, not only during festive period, when many commercial drivers will be able to take part in the programme.*

Also, it should be noted that above response is line with the work of Okanlawon and Oni (2005) reveals that commuters travel to their various towns and villages to celebrate Sallah, Christmas or New Year with their loved ones. Eke, Etubu, and Nwosu (2000) further add that road traffic accidents occur due to bad driving habits inherent in commercial drivers. Agwu (2014) maintain that, FRSC achieves road traffic crash reduction in the year 2013. He further add that the FRSC achieve its 2013 strategic goals of reducing fatality by 30 percent and road crashes by 20 percent in line with United Nations Decade of Action for Road Safety (2011-2020) and the Accra Declaration of year 2007.

KII session that took place at the FRSC's office at Ojodu, an informant, on condition of anonymity, said:

> *Over the years, FRSC has carried out different road safety programmes like, "Operation Eagle Eyes", "War Against Over-loading and Non -Use of Seat Belts" , "Operation Zero Tolerance" Operation Zero Tolerance: Sanctity of Life" were introduced and taken to major motor parks by the FRSC. The effect of this campaign is that many drivers are conscious of their limitations on the road.*

The work of Agunloye (1989) corroborates this finding when he maintains that there is improvement on commercial drivers' behavior. The main trust of motor park rallies centres on total adherence to road traffic laws and regulations, in an attempt to bring road traffic crash, injury and death associated to this period of the year to the barest minimum. The content of the FRSC lectures on various road safety tips and enforcement of road traffic rules and regulations on risk factors like over-speeding, dangerous driving, light traffic signs, over-loading, lane indiscipline, non-use of passenger manifest and belts, safety helmet violation, use of cell phone while driving, route violation, drunk-driving, number plate violation in all the 1,392 motor parks in Nigeria is yielding good result (Osita, 2012).

Also, the Secretary of NURTW (Akure Branch) during the KII session highlighted the major components of the FRSC's motor park rally. When asked about the relevance of the FRSC motor park rally, he said

> *Motor park rally is about overloading, driving during raining season, defensive driving, and First aid treatment, apart from advertorials on the pages of newspapers. Though, there is need for improvement.*

The RTEAN Chairman during FGD session at Kuto office comments on the competence of the FRSC personnel. He said:

> *The FRSC officials are competent. They always demonstrate the use of different categories of fire extinguishers to the participants. FRSC normally complemented this with demonstration on how to apply each of the first aid items to different categories of injuries. This has greatly assisted our members.*

A respondent at Iwo road motor park comment on the strategies and channels employed by the FRSC. He said:

> *The strategies are okay. The officials should pay more attention on motor park rallies, because it is better in terms of timing but officials should use local language. This is better for commercial drivers*

In conclusion, the timing of the rallies and adequacy of the content language of instruction and channels and strategies employed by the FRSC contributed significantly to the change in commercial drivers behavior in the southwestern, Nigeria. in line with the Global Road Safety International (GRSP, 2004) which maintained that vehicle safety features regardless of its maker or type are either meant to prevent road traffic accident or minimize injury to a vehicle occupant once the accident has occurred (side impact protection systems, airbags, seat belt).

Perception of the commercial drivers on the FRSC's Public Enlightenment programmes

Tables 4.4, 4.5 and 4.6 offer explanations for objective 5, anchored on research question 5, which states that: there is no joint effect of independent variables on commercial drivers' behaviour.

Table 4.4. Perception of the commercial drivers on the effectiveness of the FRSC's Public Enlightenment programmes

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	31.885.645	20	6377.129	519.531	.000
Residual	4811.712	1,570	12.275		
Total	36697.357	1,592			

$R = .932$, $R^2 = .869$, Adj $R^2 = .867$

Interpretations and Discussions

Table 4.4 showed the perception of the respondents on the effectiveness of the public enlightenment programmes of the FRSC in the Southwestern Nigeria. Majority of the respondents were of the view that the FRSC PEPs were effective because they have contributed to the desired change in the commercial drivers' behaviour. The FRSC PEPs there contributed significantly to the road traffic accident reduction

This finding was in line with the view expressed by one respondent during the FGD session at Ojota Motor Park. When asked to comment on the effectiveness of the FRSC PEPs as it relates to reduction in road traffic accident, he said:

> *FRSC public enlightenment programmes have helped to educate commercial drivers on road signs, symbols and markings. The programmes have helped to even educate commercial drivers on their rights and limitations while driving and showed consideration to other road users*

Table 4.5: Relative effect of independent variables (FRSC PEPs on Television and radio, Motor Park Rallies and Road Safety Lectures, Videos, Films, Handbills, Posters and Billboards) on Commercial Drivers' Behaviour

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	β		
(Constant)	-1.992	2.545		-.783	.434
FRSC Enlightenment Programmes on Television	-.465	.047	-.251	-9.827	.000
FRSC's Motor Park Rallies and Road Safety Lectures	.775	.024	.678	31.652	.000
FRSC's Public Enlightenment Programmes on Radio	1.015	.030	.688	33.970	.000
FRSC's Videos and Films	.204	.036	.133	5.610	.000
FRSC's Handbills, Posters and Billboards	-7.714E-02	.014	-.115	-5.513	.000

Interpretations and Discussions

Table 4.5 showed significant contributions of each of the PEPs of the FRSC on the desired change in the commercial driver behaviors. It should be noted that motor park rallies contributed to the change in commercial drivers' behavior and contributed to reduction in the spate of road traffic accident in the Southwestern Nigeria. The PEPs of the FRSC, therefore have great impact on the commercial drivers. Also, this finding was in line with the view expressed during FGD session by one of the respondents at Freeman Park, Akure. When asked to rate each of the FRSC PEP, he said:

> *Motor park rally contributed a lot to the positive change in commercial drivers' behavior and this has helped to reduce road traffic accidents on the road.*

Also, when asked to comment on the relevance of the FRSC PEP, he said

> *All the FRSC programmes are relevant and important when it comes to road traffic education and safety precautions*

Also, a respondents during the FGD session with ALBON executives at Jibowu motor park maintained that:

> *All the public enlightenment programmes of the FRSC have done A lot in reshaping commercial drivers behaviour , especially in The area of lane discipline and and overspeeding*

Table 4.6. Correlation matrix showing relationship between the PEPs of the FRSC on Radio and Television, Motor Park Rallies and Road Safety Lectures, Videos/Films and Handbills/Posters, Billboards and Commercial Drivers Behaviour

	Commercial Drivers' Behaviour	FRSC Enlightenment Programmes on Television	FRSC's Motor Park Rallies/Road Safety Lectures	FRSC's Public Enlightenment Programmes on Radio	FRSC's Videos/ Films	FRSC's Handbills/Posters and Billboards
Commercial Drivers' Behaviour	1					
FRSC Enlightenment Programmes on Television	.237**	1				
FRSC's Motor Park Rallies/Road Safety Lectures	.668**	.170**	1			
FRSC's Public Enlightenment Programmes on Radio	.699**	.425**	.129*	1		
FRSC's Videos/Films	.153**	.628**	-.007	.255**	1	
FRSC's Handbills/Posters and Billboards	.219**	.018	.482**	.029	-.059	1
Mean	89.0402	56.7990	66.1709	54.2965	68.4598	37.4975
S.D	9.6144	5.2012	8.4174	6.5151	6.2892	14.3902

Interpretations and Discussions

Table 4.6, showed significant relationship between Commercial Drivers' Behaviour and FRSC PEP on Television, FRSC's Motor Park Rallies and Road Safety Lectures, FRSC's Public Enlightenment Programmes on Radio, Commercial Drivers' Behaviour and

FRSC's Videos and Films and FRSC's Handbills, Posters and Billboards on commercial drivers behaviours in the Southwestern Nigeria. By and large, all FRSC PEPs contributed significantly to road traffic accident reduction in Southwestern Nigeria. Therefore, the FRSC PEPs are vatal tools that can bring about a positive change in commercial drivers behaviour.

This finding was in line with the viev expressed by one respondent during KII session at FRSC office, Oshodi. He said:

> *Though there is need to introduce additional public enlightenment programmes but all the existing road safety packages are sacred to the realization of road traffic accident reduction in the Southwestern Nigeria.*

Also, this finding was in line with the comment made by a respondent at Ijebu- Ode motor park during the FGD session. When asked to comment to comment on the relevance of the public enlightenment programmes of the FRSC. He said:

> *All the FRSC programmes are relevant to road safety precautions.They are fundamental to road traffic accident prevention and reduction.*

In a related development another respondent at Kuto motor park during the FGD session share a similar view on the relevance of all tha public enlightenment programmes of the FRSC. When asked on the relevance of the FRSC public programmes, he said:

Personal Characteristics, Compliance and Commercial Drivers Behaviours

The tables 4.7 and 4.8 offer explanations for objective 7, anchored on research question 4, which states that: there is no relative effect of independent variables on personal characteristics of the commercial drivers on compliance to the messages of the FRSC.

Table 4.7. Relative effect of Personnal characteristics (Age, Sex, Road User's Frequency of Road per Week, Road Users Driving Experience, Marital Status, Level of Education, Occupation and Frequency of Exposure to FRSC Programmes) on Compliance to the Messages of the FRSC

Model	Unstandardized Coefficient		Standardized Coefficient	T	Sig.
	B	Std. Error	B		
(Constant)	102.859	13.963		7.366	.000
Age	-2.129	1.968	-.090	-1.082	.280
Sex	-12.209	11.177	-.056	-1.092	.275
Road User's Frequency of Road per Week	.183	.752	.016	.244	.808
Road Users Driving Experience Training of respondents	.695	1.306	.047	.532	.595
Marital Status	.313	.010	.010	.138	.890
Level of Education	3.052	.044	.044	.848	.397
Training	-.223	-.023	-.023	-.325	.746
Frequency of Exposure to FRSC Programmes	.390	.024	.024	.342	.732
	.416	.028	.028	.496	.620

Table 4.8 Effects of Independent Variables On Compliance to PEPs of the FRSC

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	483.116	9	53.680	.449	.907
Residual	46336.683	388	119.424		
Total	46819.799	397			

$R = .102$, $R^2 = .010$, Adj $R^2 = -.013$

Interpretations and Discussions

Tables 4.7 and 4.8 showed joint effect of personal characteristics of respondents (Age, Sex, Road User's Frequency of Road per Week, Road Users Driving Experience, Marital Status, Level of Education, Training and Frequency of Exposure to FRSC Programmes) on Compliance to the Messages of the FRSC was not significant ($F(9,388) = .449$; $R = .102$, $R^2 = .010$, Adj. $R^2 = -.013$; $P > .05$). About 1% of the variation in Compliance to the Messages of the FRSC was accounted for by the independent variables. In like manner, table 5.17 showed joint effect of independent variables (FRSC Enlightenment Programmes on Television, FRSC's Motor Park Rallies and Road Safety

Lectures, FRSC's Public Enlightenment Programmes on Radio, FRSC's Videos and Films and FRSC's Handbills, Posters and Billboards) on Commercial Drivers' Behaviour was significant (F (5,392) = 519.531; R = .932, R^2 = .869, Adj. R^2 = .867; P < .05). About 87% of the variation in Commercial Drivers' Behaviour was accounted for by the independent variables. Invariably, it shows that various public enlightenment programmes of the FRSC have direct impacts on the commercial drivers' behaviours and contributed a lot to reduction in the road traffic accidents in the urban cities in the Southwestern.

Also, it should be noted that this findings were corroborated by an FGD session with the officials of NURTW at Mile Two Motor Park where relevance of the various programmes came to limelight. The respondents acknowledged the relevance of the FRSC road safety efforts: organised rallies at motor parks and series of lectures for road users, especially the commercial drivers whose attitude change is recorded positively during and after the show. Further, a corps has this to say on the effect of using rallies, films, videos and the likes on the drivers' behaviour:

> *Yes, it has really contributed a lot. You know when we talk about crash reduction and most especially people watch films and video of various crashes, it changes their mood and probably has effect the right attitude we want in them. Here, we don't just talk like 'we recorded five road accidents last year and three this year'. We look into other things. The person you have just spoken to about road accident is looking sober and will be very careful on the road. Probably, you have saved his life. Even that time you were using to talk to him could be the time he will use to imbibe the culture of obeying safety rules and avoid getting to certain dangers ahead. Also, offenders are forced to visit the office and made to watch film and videos on road traffic accidents In some cases at the rallies, we show the films and videos of series of accidents and allow participants to comments on the degree of effect of the accidents on the victims and their relatives.*

Both drivers and passengers were being sensitized to the need to adhere to road traffic rules and regulations.

> *We carry out the enlightenment campaign from 9.30 a.m. to 7.30 p.m. every day, most especially during festive periods*.

The campaign exercise was aimed at reminding drivers and passengers about some road safety tips they must have forgotten. The FRSC campaign team also enlightened passengers on the need to ensure that drivers avoid over loading as they too are

stakeholders. In a related development, the work of both Dike (2007) and Fidelis (2010) corroborated this finding. Admittedly, mass media campaigns have a role to play in road safety though they are unlikely to produce large behavioral change in isolation. Therefore, it means that mass media (print and electronic) campaigns therefore play a supporting role in conjunction with other campaign activities (for instance enforcement). One of the successful channels adopted by FRSC to educate commercial drivers and other road users is the mass media .According to Ogunsanya (2003) and as corroborated by Olaseni (2010), mass media campaigns are used extensively as a means of promoting road safety issues by the FRSC. Osita (2012) reiterated that the level of road traffic accidents in the Southwestern states reduced drastically from 3,000 in 2008 to 1, 200 in the year 2012.In short, mass media road safety campaigns, is considered as an efficient means to enhance road safety, mainly by promoting a safer driving behaviour.

Also, it should be noted that the multi-various campaign of FRSC on road safety on the radio and the content of the videos and films on road safety place much emphasis on good driving habits among commercial drivers and other road users. The major message is not only through the jingles but through lectures on good driving habit, patience while driving, and application of road sense while on the highways. On Television stations, FRSC officials more often than none, give lectures that educate road users on the need to observe road traffic rules and regulations, socio-economic effects of road traffic accidents. Pictures of past scary accidents scenes are relayed on the screen for viewers to appreciate and more importantly to remold bad driving habits prevalent among commercial drivers plying on the highways. But the response of one of the respondents during FGD session at Oyemekun Motor Park was different. When asked about the impact of the FRSC activities on Television and Radio, he said:

> *The activities of FRSC on Television and radio is good obviously drivers hardly have time to watch television, they are always on the road and they hardly listen to the FRSC Road safety messages on radio, instead, they play highlife music to entertain themselves as well as, the passengers*

When asked about the effect of the FRSC programmes on the behaviours of the commercial drivers vis-à-vis road traffic accidents prevention and reduction in the urban cities in Southwestern. The respondent replied that:

The programmes have helped a lot. The programmes have helped to remind drivers about the dangers inherent in over speeding, overloading and more importantly in texting and making telephone calls while behind the wheel.

However, another respondent at Kuto Main Park shared a different view on this matter during the FGD session at the union office. He responded that :

What concerns loaders (agbèrò) with overload .

The assertion derived from the comment above was that the *agbèròs (motor park loaders)* care less about the consequence of overloading of vehicles, asides; the commercial drivers are at the mercy of the *agbèròs*, who can easily gang up against their smooth operation. FRSC PEP accounted for about 87 per cent change in Commercial Drivers' Behaviour. The independent variables therefore are relevant and useful instrument in achieving a sustainable road traffic policy. Invariably, it shows that various public enlightenment programmes of the FRSC have direct impacts on the commercial drivers' behaviours and contributed a lot to reduction in the road traffic accidents in the urban cities in the Southwestern, Nigeria.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusion, recommendations and suggested areas for further studies, as well as limitations to the study.

5.1 Summary

The primary purpose of this study is to determine the influence of the public enlightenment programmes of the FRSC as the road safety lead agency on commercial drivers' behaviours, in relation to road traffic accidents prevention and reduction in urban cities in Southwestern, Nigeria.

This is with the view to establish the strengths as well as weaknesses and determine the extent to which the public enlightenment programmes put in place have influence on commercial drivers behaviours in an attempt to promote good, successful and sustainable road traffic practices that will either prevent or reduce the rates of carnages on the expressways in urban cities in Southwestern, Nigeria. This study is presented in five chapters. Chapter one focused on the introduction, including background to the study, statement of the research problem, objectives, and research questions, significance of the study, scope and operational definitions of terms.

Chapter two was on the literature review and theoretical framework. The literature review covers comprehensive review of relevant literatures on each of the public enlightenment programmes of FRSC put in place to promote good and sustainable road safety practices as well as reduce carnage in urban cities in Southwestern, Nigeria. Literatures on channel and strategies adopted by FRSC, as well as the empirical studies were covered. The theoretical framework provided propositions on which the study were premised; and the conceptual model used was predicated on the theoretical framework. The three theories reviewed were behavioural change theories: social cognitive theory, theory of reasoned action and theory of planned behaviour. These theories were used but theory of planned behavior was adopted to explain the reasons behind alterations in commercial drivers' behavioural pattern. The chapter is concluded with the appraisal of literature and the hypotheses formulated for the study.

Chapter three dealt with research methodology which comprised the research design, study population, sample and sampling techniques, research instruments, validity and reliability of instruments, procedure for administration of questionnaire and method of data analysis.

Chapter four presented the findings and discussions. The data were analysed using descriptive statistics of simple percentage and inferential statistics of ANCOVA, mean, standard deviation Schleft Hoc were used to answer research questions and to test the hypotheses of the study at .05 alpha level.

The major findings show there was a relative significant contribution of each of the independent variables on dependent variables on compliance to the messages of the FRSC. It therefore means various programmes of the FRSC have direct bearing on commercial drivers' behaviours in the urban cities and invariably helped reduce road traffic accidents. Secondly, the results show there was a positive significant relationship between timing and adequacy of contents of FRSC's public enlightenment programmes and commercial drivers behaviour, hence, timing and adequacy of contents of FRSC's public enlightenment programmes influenced commercial drivers' behaviour and helped reduce road traffic accidents

Further, there was a positive significant relationship between FRSC's public enlightenment programmes vis-a-vis language of instruction, delivery strategies and commercial drivers' behaviour which helped reduce road traffic accidents

In addition, the results also show that majority of the respondents, 76 per cent used the road on daily basis, while 31 per cent ply the roads five times a week, 25 per cent used the roads three times a week and 2 per cent of the respondents used the roads once a week. Also, the result also show that 57.5 per cent of the respondents had less than 5 years driving experience, 31.9 per cent of the respondents had between 5 and 19 years of driving experience while 8.5 per cent had between 11 and 20 driving experience and only two per cent had above 21 years driving experience.

Further, the results also show that majority of the respondents (46 per cent) were illiterates without access to formal education; 10 per cent were drop-outs while only 33 per cent possessed primary six school leaving certificates, 9 per cent possessed Senior Secondary School Certificates and only one per cent possessed degree certificate. Training-

wise, majority of the respondents, that is, 77 per cent did not pass through government approved driving school while 11 per cent of the respondents found themselves in the driving profession by accident. Further, the result shows that only 11 per cent of the respondents passed through government approved driving school. On a last note, the results also show that majority of the respondents, 97 per cent had been exposed to the various enlightenment programmes of the FRSC, which helped to reduce road traffic accidents

5.2 Recommendations

This study dwells on a number of policy implications that has to do with the implementation of sustainable road traffic accident precautions that will promote good driving culture among commercial drivers and other road users in the Southwestern, Nigeria should be replicated in other parts of the country. Unarguably, transportation is a major requirement for survival of every nation and indispensable in the socio-economic life of people, but at the same time, effective and efficient road safety and management is undoubtedly a means for sustainable development, especially in the area of road traffic crashes and injury prevention.

In view of the importance and relevance attached to the traffic education as a veritable tool that can guarantee a sustainable road safety in the Southwestern and other parts of the country, hence, there is need to make recommendations in line with the findings of this research. Such recommendations include:

1. To foster marriage between the three major cardinal principles of road safety: road engineering, education and enforcement, FRSC's public enlightenment department must collaborate with other relevant government agencies, especially the highway division of the federal and states ministry of works, and engage print and electronic media houses to disseminate safe road safety practices that will foster harmonious relationship between the vehicle, the driver and the road. To provide a lasting solution to road traffic accidents in the urban cities in Southwestern, all hands must be on deck.
2. There is need for installation of additional road traffic signs, symbols and markings at strategic places on the expressways, to promote good driving culture among

commercial drivers and help reduce high of road traffic accidents in the urban cities in Southwestern, Nigeria.

3. Also, Government at various levels should encourage private individuals and other stakeholders who share the goals of road safety to help infuse transport education through demonstrations; lectures on road safety measures that promote good driving habit among commercial drivers and other road users. Road safety is a serious issue and must top political agenda. Asides, various levels of Government through the ministries of Education should enforce the inclusion of road safety education in the curriculum of school children from kindergarten to high school and establishment of a well funded children road safety clubs should be encouraged.

4. Given the critical importance of road transport in the Nigerian economy and the need to safeguard the lives of those travelling on the roads, FRSC as a matter of urgency should organise continuous or monthly motor park rallies for commercial drivers, since majority of the commercial drivers are stack illiterates, not only during the 'ember' months since road traffic accidents occur on daily basis. This step will avail majority of the commercial drivers in the urban cities in Southwestern states to take part in the public enlightenment programmes on regular basis. This step will promote professionalism.

5. To address the problem of high level of illiteracy among commercial drivers, there is need for FRSC and other stakeholders in transport industry to put in place Continuing Professional Development (CPD) programme for commercial drivers'. Also, issuance of valid drivers' license should be for those who have attended any of the FRSC accredited driving school. This step will not only address the needs of commercial drivers but also enable commercial drivers to decode road safety signs, symbols and markings; and have a better understanding of messages of FRSC public enlightenment programmes. In a related development the public education department of the FRSC should ensure that resource personnel's language of instruction must be the language majority of the participants understand (local language). This is because teaching adults involves the use of local language of the immediate community. Communication is only effective when the receivers understand the message. Therefore, the use of English language as language of

instruction should be discouraged during and public enlightenment programmes. Aside, better equipped driving schools should be established and regular routine check should be carried out on the existing ones to ensure that minimum standard is maintained.

In conclusion, application of these recommendations will address the five pillars of the United Nations Decade of Action on Road Safety: Road Safety Management; Safer Roads and Mobility; Safer Vehicles; Safer Road Users and Post-Crash Response. Then, reduction in road crashes to about 50 per cent by 2015 and 2020 will make Nigeria the 20th safest country in the world will be a reality.

5.3 Contributions to Knowledge

The essence of carrying out any research work is to extend the frontier of knowledge. This study therefore was carried out with a similar objective, especially in investigating the influence of public enlightenment programmes on commercial drivers' behaviours that often led to high spate of road traffic accidents on the expressways in urban cities in the Southwestern, Nigeria.

The study has scientifically extended the frontier of knowledge in the following ways:

1. The study revealed that public enlightenment programmes are potent and essential tools in ensuring behavioural changes among commercial drivers.
2. The study provided more information on the importance of public enlightenment programmes of the FRSC.
3. Motor park rallies, road safety lectures, road safety handbills, as well as, road safety bill boards are also very essential in ensuring effective public enlightenment programmes for commercial drivers.
4. Radio, television, video, films and other ICT gadgets are veritable tools in efficient and sustainable public enlightenment programmes that will bring about change in commercial drivers behaviours.
5. Language of instruction, quality of resource persons, content adequacy, as well as, the channels and delivery strategies are vital in ensuring successful implementation of public enlightenment programmes for commercial drivers.

6. Commercial drivers' behaviour like drink and drive, over-speeding, use of cell phone either to receive, make or texting while driving, non -use of safety belt for both drivers and other vehicle occupants are major stumbling blocks to sustainable road safety programmes in Nigeria.
7. Driving as a profession is dominated by men fold and majority of the commercial drivers are not only in their productive age and had less than 5 years of driving experience but also did not pass through government approved driving school. Road safety issue is a serious matter that deserve political will of all levels of government, so that high spate road traffic accident in the urban cities in the Southwestern can be drastically reduced to the barest minimum.

5.4 Limitations to Study

A study of this nature will naturally face some challenges especially while on the field. The initial uncooperative behaviour majorly of garage boys and a handful commercial driver who demanded for money before the research assistants and the researcher could administer the questionnaires. Ultimately, the motor park officials appealed to their members to cooperate with the researchers. Also, movement of the researchers was another constraint because the study covered major cities in the Southwestern states, Nigeria. Aside, the commercial drivers wasted a lot of time because of the nature of their job. It took so much time before the questionnaires could be administered on those that have been exposed to public enlightenment programmes and another setback had to do with interpretation of the questionnaires in local language because majority of them are illiterates. However, it is pertinent to remark that all identified problems did not have any negative effect on the findings of the study as the results are authentic, cogent and empirical and could be generalized for the whole of Southwestern states.

5.5 Suggestions for further Studies

The main thrust of this study centres on commercial drivers' behaviour in the urban centr in the Southwestern, Nigeria. It is therefore necessary to sustain the efforts needed to influence commercial drivers' behaviour in order to achieve improved road safety in

Southwestern, Nigeria following best global road safety practices. Through research, relevant data and vital information for road safety, planning, new strategies for solving road safety problems are evolved. In view of this, the following suggestions are made for further research.

The study was carried out in the urban cities in the Southwestern; same could be replicated in other geographical zones in Nigeria, to discover if the results and findings can be used to generalize. In short, the study should be replicated in other geographical zones. The Continuing Professional Development (CPD) needs of commercial driver can dictate the content of future driver training programmes to be put in place by the FRSC and other relevant agencies. Also, attempt should be made to examine influence of FRSC PEP on pedestrians in subsequent research work on road transportation in the Southwestern, Nigeria. Relevant research is a useful instrument of a change in transportation system of a country. The question of when and how does the drivers start to manifest the impact of PEP in their professional lives is another question that can be answered by another research in this area.

5.6 Conclusion

The public enlightenment programmes of the FRSC on radio and television, motor park rallies and road safety lectures on risk factors: wrong overtaking, drinking and driving; overloading, post crash treatments, use of cell phones while driving, speed limit violation positively influenced commercial drivers' behaviour in the Southwestern, Nigeria. There is therefore the need to ensure that these programmes are continuosly implemented. Also, the language of instruction must be taken into consideration to cover all stakeholders.

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APPENDICES
DEPARTMENT OF ADULT EDUCATION
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APPENDIX I

Dear Respondent,

This questionnaire is designed to assess the commercial drivers' perception based on their exposures to five major public enlightenment programmes of FRSC vis-à-vis their behaviours on the major highways in urban cities in Southwestern Nigeria. The questionnaire is merely for academic or research purposes; hence, it has no any implication in the respondent. Your cooperation, sincere and honest response to each of the item is therefore essential.

Thank you.

Commercial Drivers' Perception Of Frsc's Public Enlightenment Programme Inventory (CDPFPEPI)

Instruction:

Please, indicate your response by Ticking (✓) the relevant option.

SECTION A: SOCIO- DEMOGRAPHIC INFORMATION

(1) **Age Distribution of respondent**

Age Range

18 – 25	( )
26 – 40	( )
41 – 50	( )
51 – 60	( )
60+	( )

(2) **Sex Distribution of Respondent**

Sex

Male	( )
Female	( )

(3) **Road user's frequency of use of road per week**

One time ( ) Two times ( ) Three times ( )

Four times ( ) Six times ( ) Everyday ( )

(4) **Road Users Driving Experience**

Experience, Yr

< 5 ( )

5 – 10 ( )

11 – 20 ( )

21 – 30 ( )

> 40 ( )

(5) **Marital Status**

Married ( )

Single ( )

Widowed ( )

(6) **Level of Education**

Illiterate ( )

Drop-out ( )

Primary Six School Certificate( )

Secondary School certificate ( )

OND ( )

HND ( )

1st Degree ( )

(7) **Training**

Trained Driver (part time /Full time) ( )

Vocational Training ( )

Untrained driver ( )

(8) **Frequency of exposure to FRSC programmes**

One time ( ) Two times ( ) Three times ( )

Four times ( ) Six times ( ) Uncountable times ( )

A = AGREED

SA = STRONGLY AGREED

D = DISAGREED

SD = STRONGLY DISAGREED

S/N	Opinions	Level of Agreement			
		SA	A	D	SD
1	FRSC Public Enlightenment programme through print media (news papers advertorials, hand bills, and posters,) is most effective				
2	Most commercial drivers listen to or watch FRSCs programmes on radio and television				
3	The timing for FRSCs activities on air is okay				
4	The content of FRSC's motor Park rally is sufficient to reduce and prevent road traffic accidents				
5	FRSC Public Enlightenment programme through electronic media (radio, television, videos and films) is most effective to promote good driving culture among commercial drivers				
6	FRSC Public Enlightenment programme through print media (news papers advertorials, hand bills, and posters,) to promote good driving culture among commercial drivers				
7	FRSC public education via mass media has helped reduce RTAs in major cities in Southwestern Nigeria				
8	The content of the FRSC programmes failed to incorporate successful road safety practices in other country.				
9	Public educational programme of FRSC on safety belt is sufficient to promote good driving culture among commercial drivers				

10	Motor park rallies (lectures/ films on defensive driving, speed limit, drink-driving, road signs, symbols, markings, phoning/ texting while driving) of FRSC are most effective and popular among drivers.				
11	Delivery Strategies and channel employ by FRSC should be redesigned				
12	Motor park rallies have helped to reduce RTAs on the Highways in urban cities in the southwestern states				
13	Motor Park rallies have made great impact on the commercial drivers behavior on the highways				
14	Application of fines as a corrective measure for road traffic offenses have helped to educate and reduce RTAs.				
15	The FRSC personnel are competemt enough to carry out the educational progammes				
16	FRSC should improve on the public enlightenment programmes more so, it lacks local content				
17	FRSC's public enlightenment programmes have helped to reduce RTAs				
18	FRSC's road safety measures have effects on accidents and injury prevention on the highways				
19	FRSC's campaign on use of cell phone is most effective				
20	Most FRSC intervention programmes have outlived their usefulness				
21	Commercial drivers do not appreciate FRSC's public enlightenment programmes				
22	FRSC's public enlightenment programmes should incorporate individual and private road safety initiatives				
23	FRSC public enlightenment programme lacks human touch				

24	Use of Breathalyzer to defect drunk driver is adequate and effective.				
25	The road traffic signs on the Highways are quite adequate (Mandatory, Information Direction, symbols Markings)				
26	There is change of attitude after FRSC's public enlightenment programmes of FRSC at motor parks				
27	. Most drivers sees FRSC motor park rally as a jamboree				
28	FRSC demonstrations on Post accident care is adequate				
29	There is adequate awareness about road safety measures of FRSC among drivers and other users.				
30	Road safety Act should be revised to meet up with modern reality				
31	The content of the motor rallies is adequate.				
32	The recipients received FRSC programmes with mixed feelings.				
33	There is adequate awareness about road safety measures of FRSC among drivers and other users				
33	There is a change of attitudes among drivers after listening to road safety public enlightenment programmes on radio				
34	Various educational progammes (safe and defensive driving, road signs and symbols, safety tips) of FRSC on radio are adequate to combat RTAs				
35	FRSC should use local language to deliver public enlightenment programmes on road safety				

APPENDIX II

COMMERCIAL DRIVERS' BEHAVIOUR INVENTORY (CDBI)

S/N	Opinions	Responses			
		A	SA	D	SD
1	Most drivers do not comply with the use of safety belt rule				
2	Most drivers hardly stop for passengers to ease themselves while on the highways				
3	Most drivers' belief road traffic accidents are preventable				
4	Most drivers are underage				
5	Most drivers now have valid driver's license				
6	Most drivers do not obey speed limit rule				
7	Drivers still indulge in dangerous overtaking/ reckless driving on public roads / highways				
8	Most drivers are overage				
9	Drivers' attitudes has never changed				
10	Most drivers still involve inroad traffic accidents				
11	Most Accidents victims are in their productive age				
12	Most drivers can now decode road signs, symbols and markings				
13	Most drivers now pass through standard driving school training before driving				
14	Most drivers still receive or make phone calls while driving				
15	Majority of the drivers take sedatives or smoke cigarette while driving				
16	Most drivers cannot drive at night				
17	Most drivers have sight problems				
18	Most drivers listen to music instead of listening to radio stations while on the Highways				
19	Most drivers parked their vehicle indiscriminately on the Highways				
20	Most drivers dislike FRSC enforcement strategies on the Highways				
21	Most drivers see presence of FRSC officials on the Highways as a threat				
22	Reduction in road traffic accidents is possible.				

23	Most drivers have good manners or human relations with passengers				
24	Most drivers do not involve in road rage				
25	Most drivers engage in one- way driving during any traffic Jam on the highways				
26	Most drivers take stimulants to increase alertness and hard drugs as buffer for staying awake all night				
27	Most drivers are not educated enough to ply on the highways				
28	Whenever there is road traffic accident, most driversdo not stop to give first aid crash treatment to victims				
29	There is no change of attitudes whenever drivers see any road traffic accident on the highways				
30	Most drivers believe that road signs and symbols are not strategically located				
31	Most Drivers vehicles' are not in good condition before drivers put them on the road and head lights and wipers functional				
32	Most drivers do not cooperate with FRSC officials on the highways				
33	Most drivers do not always put other road users into consideration while driving				
34	Most drivers still have a stop over to consume alchohol on the Highways				
35	Most drivers do not use light indicators before turning or change lane				
36	Most drivers do not have lane discipline				
37	Most drivers do not drive with compulsory road safety tools like Jack, Fire extinguisher, extra tyre, C-Caution				
38	Most drivers truly insured their vehicles				
39	Most drivers hardly rest check their vehicle before embarking on a journey.				
40	Most drivers consume alcohol above BAC level before driving				
41	Most drivers easily get distracted while driving				

APPENDIX III

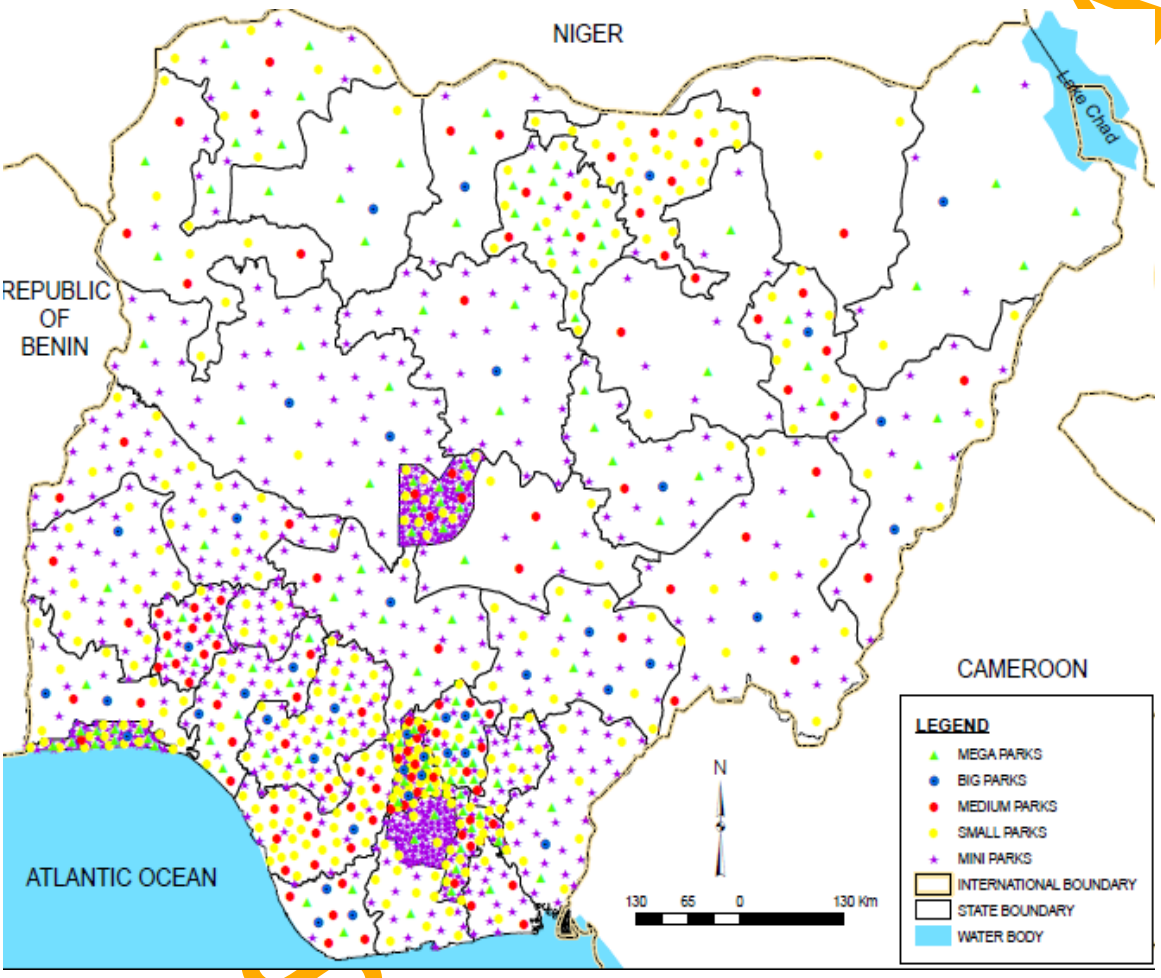
COMMERCIAL DRIVERS' COMPLIANCE INVENTORY (CDCI)

S/N	Opinions	Level of Agreement			
		A	SA	D	SD
	Indicators of influence of Public Enlightenment Programmes				
1	Commercial drivers' now use safety belt.				
2	Commercial drivers' now decode road signs/symbols and markings				
3	Most drivers' now belief road traffic accidents are preventable				
4	Most drivers are no longer underage				
5	Most drivers now have valid driver's license				
6	Most drivers now obey speed limit rule				
7	Drivers no longer indulge in dangerous overtaking.				
8	Old drivers no longer drive vehicles on the highways				
9	Drivers now listen to FRSC programmes on radio				
10	Drivers now watch to FRSC programmes on television				
11	Drivers are now well informed on road safety issues				
12	Drivers can now comprehend content of hand bills				
13	Drivers now attend standard driving school				
14	Most drivers no longer use cell phone while driving				
15	Commercial drivers do not take sedatives or smoke				
16	Majority of Commercial drivers no longer drive at night				
17	Drivers no longer consume alcohol above BAC level				
18	Drivers can now use first aid kits during emergency				
19	Drivers now use light indicators efficiently				
20	Commercial drivers now dislike drink and drive habit.				
21	Drivers now watch road safety films and videos				
22	Drivers now see FRSC official as partner in progress.				

23	Drivers now assist accident victims				
24	Drivers now have valid driver's license				
25	Drivers now obey traffic rules and regulations				
26	Drivers no longer take stimulants and hard drugs				
27	Drivers now carry out proper check on their vehicles				
28	Drivers now drive with compulsory road safety tools				
29	Drivers have change of attitudes after motor park rally				
31	Drivers now ply with extra tyre, C-caution and jack				
32	Drivers cooperate with FRSC officials on the highways				
33	Drivers now put other road users into consideration				
34	Drivers no longer get distracted while driving				
35	Drivers now observe lane discipline				

APPENDIX IV

Snapshot of Spreads of Approved Motor Parks in Nigeria



Source: FRSC Archives, (2011)