

**EVALUATION OF FEDERAL ROAD SAFETY COMMISSION PUBLIC
ENLIGHTENMENT PROGRAMME IN SOUTH-WEST, NIGERIA**

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ABSTRACT

The Federal Road Safety Commission was established to curtail the high rates of accident and loss of lives on Nigerian roads. The commission aimed at educating road users on road safety. However, studies show that the rates at which accidents happen on roads are still seemingly high. Thus, the study evaluated the FRSC public education (PE) programme to determine its effectiveness in fostering road safety consciousness in the drivers. The study also investigated road users' perception of the effectiveness of the PE programme and the concomitant constraints.

The study adapted an *ex post facto* design, using Stake's Countenance of Educational Evaluation (also known as Antecedent, Transaction and Outcome) as the evaluation model. Simple random sampling technique was used to select six local government areas namely: Oshodi/Isolo, Amuwo odofin, Ikeja, and Ibadan North, Ibadan North East and Oluyole of Lagos and Oyo states respectively. A total of 510 drivers, 420 commuters and 100 FRSC staff were selected using multi stage, purposive and simple random sampling techniques. Five validated instruments were used to collect data: Drivers' Perception of FRSC Public Enlightenment Programme Questionnaire ($r=0.82$), Commuters' Perception of FRSC Public Enlightenment Programme Questionnaire ($r=0.75$), FRSC Staff Perception of the Programme Questionnaire ($r=0.77$), Drivers' Observance of Road Traffic Rules and Regulations Checklist ($r=0.78$) and Knowledge of Highway Traffic Code Assessment Test ($r=0.82$). Eight research questions guided the study. Data were analysed using, Percentages, Pearson Product Moment Correlation, t-test and ANOVA at 0.05 level of significance.

The results showed that only 32.5% of the sampled drivers have high knowledge of the Highway Code (Lagos 34.14%, Oyo 31%) and there is no significant difference in the level of knowledge of drivers from the two states ($t=1.51, df 498, p>0.05$). Sampled drivers and commuters indicated that FRSC public enlightenment programme has brought significant improvement to road traffic situation ($t=41.38, df 919, p<0.05$) while 67% of the Commission's staff indicated that inadequate fund and equipments among others, are constraints hindering proper achievement of the programme's objectives. Drivers who attended driving schools differ significantly in their knowledge of the Highway Code compared to those who did not ($t=25.58, df 498, p<0.05$). Drivers who attended driving schools have higher knowledge. There was also correlation between commercial drivers' level of knowledge of Highway Code and their behaviour on the road ($r=0.19; p<0.05$). Drivers differ significantly in their knowledge of the Highway Code by type {commercial, hired private and private owner drivers} ($F_{(2,497)}=52.95, p<0.05$). Private owner drivers have the highest knowledge followed by the private hired drivers.

FRSC Public Enlightenment Programme objectives have not been effectively achieved. Some acts of indiscipline such as reckless driving, over speeding are still very common on the road. Drivers have little knowledge of road signs. Thus, more intensive enlightenment campaigns should be carried out, the programme should be adequately funded, necessary equipment should be provided and drivers should be regularly retrained. Model driving schools should also be established for training and retraining of drivers before issuance and renewal of driving licences respectively.

Key words: Accident, Road safety, Road traffic indiscipline, public enlightenment, Highway traffic code

Word count: 497

CERTIFICATION

I certify that this work was carried out by Toyin Funmilola AKINYEMI (115063) in the International Centre for Educational Evaluation (ICEE), Institute of Education, University of Ibadan, Nigeria.

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DEDICATION

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ABBREVIATIONS/ACRONYMS

FRSC: Federal Road Safety Commission.

RTA: Road Traffic Accident.

NRSC: National Road Safety Commission.

OYSRSC: Oyo State Road Safety Commission.

CEO: Chief Executive Officer.

HAPC: Highway Accident Prevention Committee.

RSC: Road Safety Committee.

ATO: Antecedent, Transaction and Outcome. (Countenance of Education Evaluation Model)

P.E.: Public Education/Enlightenment

WHO: World Health Organisation

RTMC: Road Traffic Management South Africa.

G.R.S.P.A: Global Road Safety Partnership of South Africa.

U.N.E.C.A: United Nation Economic Commission for Africa.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Road is an important means of land transportation throughout the world and it is the most important mode of transportation in Nigeria because more people use it than any other means of transportation. According to Ahmed (2008), the absence of full functioning railway and water transport system today makes about ninety percent (90%) of passengers and goods to be carried on roads in Nigeria, while Odeleye (2000) asserts that road transport helps to promote and engender easy mobility of people and goods from one place to another.

As important as road transportation is, Rodigue and Slack (2007) submit that it is beset with countless number of problems in many developing countries. These range from roads in dangerously poor condition, road unworthy vehicles, drunk and uncaring drivers, and careless pedestrians (Rodigue and Slack, 2007). It is also observable by any careful and interested Nigerian that many people have been involved and are still being involved in needless mishaps on Nigeria road owing to the uncaring attitude of drivers and bad status of roads.

Some of the available literature revealed that prior to the establishment of the Federal Road Safety Commission (FRSC), road traffic situation in Nigeria was chaotic, unpredictable and dangerous (Akwanya, 1989; Yakassai, 1998; Oyeyemi, 2003; FRSC, 2007; Ahmed, 2008). According to Oyeyemi (2003), acts of indiscipline were very glaring on most Nigerian roads and highways and many drivers were very inconsiderate and discourteous on roads. He further stated that many drivers had no regard for human lives and they knew nothing more than the rudiments of moving vehicles and hooting their horns ostensibly to attract the attention of passengers. Chukwu (2007) corroborated this when he submits that Nigerian roads were at that time dominated by abundant combination of largely illiterates, inexperienced and overconfident drivers. In addition, there was uncoordinated and haphazard licensing of drivers and vehicles, and there was also absence of good driving culture (FRSC, 2007).

Almost everybody disobeys traffic rules and regulation. Hence, the pedestrians on their own part do not make use of the pedestrian ways where available. According to Maduagwu (1998), the pedestrians' bridges and ways are usually occupied by petty traders or lunatics and the limited spaces on the roads are shared by pedestrians,

motorcyclists and animals with the moving vehicular traffic. Osagie (1998) buttressed this when he stated that roads and highways in Nigeria are jointly used by motor vehicles, motor cycles, bicycles and animals being moved from one place to the other, thereby causing traffic bottleneck which often resulted in congestion on roads. Congestion occurs when traffic is not able to flow freely. According to Oni (2010), human factor contributes largely to congestion on roads. These include the driving skills of drivers, compliance of road users to traffic regulations, attitude of traffic enforcing officers, general awareness and level of literacy. He further stated that road space reduction and obstruction owing to breakdown of vehicles also contribute significantly to congestion and accidents in many cities in Nigeria. It can therefore be predictable that the consequence of this is a serious road traffic accident.

Road traffic accident is a serious problem all over the world in terms of human, health and death and its economic implication (Wetteland and Lundebye, 1997). According to a team of experts (2011), among the accidents resulting from the development of air, land, sea and river transport, road traffic accidents predominate both in respect of their frequency and seriousness and in terms of human and economic cost. The researchers found out that road traffic accident have affected the economic fortunes of many nations and individuals. Road accident constitutes a major cause of accidental death in the developing world and it has been described as major cause of death and disability globally with a proportionate number occurring in developing countries (Eke 2000). In their study, Aworemi, Abdul-Azeez and Olabode (2010) discovered that increase in the number of vehicles in developing countries has brought about dramatic increase in the proportion and absolute number of road traffic fatalities in a number of developing countries. They therefore, concluded that injuries from road traffic accidents (RTAs) are the most significant problems, so much so that motor vehicle related mortality has been described as a disease of development.

According to Wetteland and Lundebye (1997), road accidents have affected the economic fortunes of nations and individuals, while Eke (2000) submits that road accident is the second largest cause of death for economically active people in many countries. This was corroborated by Peden, McGee and Krug (2004) when they stated that road accident and injuries was found by the World Health Organisation to be the second leading cause of death among children aged 5-14 years and young people aged 15-40 years in developing countries. The latter group usually constitutes the breadwinners in many cultures. According to Odera, Garner and Zwi (1997), seventy

four percent of all road deaths occurring globally each year happen in developing countries. Nigeria as a nation has witnessed astronomical increase in the volume of the Road Traffic Accident affecting all categories of road users. According to Nwachukwu (1998), Nigeria has witnessed a five-fold increase in traffic-related deaths over the last 30 years and it has had numerous consequences on Nigerians, while Assum (1998) submits that road accidents kill an average of four people daily in Ghana.

Furthermore, Oyeyemi (2003) submits that road accidents consume human and material resources than all communicable and non-communicable diseases put together in Nigeria. Aworemi *et al* corroborated this when they state that death in Nigeria today far exceed those by any communicable disease in the country, while Ahmed (2008) submits that accident occurs almost on daily basis on roads and highways in Nigeria, and expectedly when they happen, blood and tears flow. Hence, Anyaoku (2009) has described Nigerian roads as huge slaughter slabs where human lives are worth little or nothing. He pointed out that hundreds of fellow human beings are injured, paralysed, disfigured for life everyday and that many are killed outright or died a slow and painful death as a result of accidents on roads and highways in Nigeria. Road accident therefore, is an important cause of morbidity.



Fig. 1.1: Pictures of some accident scenes

Road accidents are caused by many factors, sometimes singly but more frequently in combination. According to Maduagwu (1998), most accidents are

caused by human error such as the involvement of juveniles, drunk, unlicensed and stark illiterates in the handling of automobiles. Other available literature reveal that they are caused mainly by man, vehicle and environmental conditions (Wetteland and Lundebye, 1997; Yakassai, 1997; Eke, 2000; Oyeyemi, 2003; Balogun, 2006; FRSC, 2007). According to Eke (2000), vehicle and environmental condition by themselves are incapable of producing road accident; it is the drivers' reactions or responses to these factors that eventually lead to accidents. In-depth studies carried out in Britain, US and Nigeria revealed that road users alone were responsible for 65%, 57% and 85% of road crashes respectively in these three countries, while in India, human factor is said to be responsible for ninety five percent (95%) of road accidents (Wetteland and Lundebye, 1997; Balogun, 2006; Mahipal and Jain, 2010). This human factor includes acts of indiscipline either on the part of the driver, or pedestrians.

Acts of indiscipline on the part of drivers include: reckless driving, dangerous overtaking, over speeding, overloading, driving with one hand, failure to signal before turning left or right, driving and receiving phone calls, lack of knowledge (ignorance) of traffic signs and disregard of traffic regulations among others (Balogun 2005). Ahmed (2008) corroborated this by saying that most faulty decisions that result in motor vehicle accidents are attributable to ignorance of traffic regulations and procedures. Others include wrong responses to varying road and traffic conditions and most of all, lack of consideration for other road users. Road users are therefore, critical elements in road transport system and their behaviour must be directed aright if significant gains in safety are to be obtained.

Though successive governments in Nigeria since 1960 attempted to promulgate laws to control traffic behaviour, Balogun (2006) submits that the observance and enforcement of these traffic rules and regulations had been lax on the part of the drivers, other road users and enforcers. Hence, there was no concrete and sustained policy action to address road safety questions prior to the establishment of FRSC. He pointed out that earlier attempts in this direction were limited to isolated attempts by some states of the federation and corporate bodies. These include: the effort of Shell Petroleum Development Company of Nigeria Limited between 1960 and 1965 and the road safety training programme initiated by the Nigerian Army for its staff after the civil war in 1970. In his own paper, Oyeyemi (2003) submits that the Nigerian Army also had its first public road safety campaign in 1972 with its road safety week organised every December as response to the rising trend of road carnage.

Furthermore, available literature revealed that the Federal military government created the National Road Safety Commission (NRSC) in 1974 (Adeleye, 1994; Okorie, 1996; Amaka, 1997; Oyeyemi, 2003; Balogun, 2006). However, the impact of this commission was not felt until 1977 when the Oyo State Road Safety Commission (OYSRSC) also known as '*Majamaja*' was established (Balogun, 2006). With the operation of OYSRSC, there was significant improvement in road safety and discipline (Ochuko, 1995; Oyeyemi, 2003; Balogun, 2006). However, between 1982 and 1983, the government of the Federal Republic of Nigeria banned the activities of the OYSRSC on federal roads. Thus, the following four years after the demise of OYSRSC saw a glaring rise in road accident in Nigeria. The continuous increase in the trend of road accidents led to the establishment of the Federal Road Safety Commission in 1988 to address the road safety crisis and to curb the escalating rate of road mishaps in Nigeria (Ochuko, 1995; Oyeyemi, 2003).

The Federal Road Safety Commission was established by decree 45 of 1988 and amended in 1992 by decree 35 now referred to in the statute book as "the FRSC ACT CAP 141". The mission of the commission as stated in the FRSC ACT CAP 141 P₆ is to chart the course of Road Safety in the nation with a view to minimizing road traffic crashes to a bearest minimum in Nigeria.

The Objectives of the Commission include:

- (i) To educate motorists and members of the public on the proper use of roads and highways.
- (ii) To prevent and minimize road traffic accidents on the highways.
- (iii) To clear obstructions on any part of the road.
- (iv) To provide prompt attention and care to the victims of road traffic accidents.
- (v) To determine and enforce speed limits for all categories of roads and vehicles.
- (vi) To cooperate with bodies, agencies and groups engaged in road safety activities or the prevention of highway accidents.

Source: FRSC ACT CAP 141 (1990) p₆

One of the main objectives for establishing FRSC was to enlighten/educate Nigerians on road safety matters. Thus, Corps Marshal Osita Chidoka submits that public enlightenment programme was designed by the Federal Road Safety

Commission to educate road users in general and drivers in particular on the proper way to use roads and highways so as to eradicate acts of indiscipline and reduce accident rate (Idoko, 2010). Sani (2005) (former head of the FRSC public enlightenment department) gave the general objectives of the public enlightenment programme. These include:

- To give the general road users current and greater knowledge and understanding of the proper and safer use of the road;
- To set road users free from prejudice, wrong beliefs and ignorance about road usage in order to enable them to embrace the current and safer trend in using the road;
- To inform road users on what they are expected to do and what they should not do on the highways (i.e. dos and don'ts) and to warn road users of possible consequences of flagrant breach of traffic rules, regulations and practices.

According to the Corps Marshal, Osita Chidoka, the specific objectives of the FRSC Public Enlightenment programmes for drivers include: to reduce traffic congestion and accident, to enforce road traffic rules and regulations targeted at over speeding, dangerous driving, road sign violation, overloading, lane indiscipline, non usage of seat belt, use of cell phone/GSM while driving, drunk driving among others Idoko (2010). In order to achieve these objectives several tools and strategies are used by the public enlightenment departments of the FRSC. As written in the commission's annual report (2004), the education of the public on adherence to road traffic rules and regulations and various radio jingles, television and newspaper adverts form the bulk of the commission's enlightenment media. Other innovative varieties include rallies at motor parks, churches, mosques, community gatherings and so on. In addition, Special Marshal Units (SMU) have been established by the public enlightenment department of the FRSC in all Local Government Areas to assist regular marshals create more awareness and ensure participation by private and public sectors so as to reduce accidents. Besides, as posited by Oyeyemi (2003), Advisory Committees and road safety clubs have also been established at State and Local Government levels so that everybody will be road safety conscious and drivers are usually warned on the roads to desist from acts of indiscipline so as to avoid being prosecuted.

The introduction of the public enlightenment programme was seen as an innovation that will engender attitudinal change of drivers on the roads. It was also

considered as a strategy to solve the problem of high rate of indiscipline and accidents on Nigeria roads and highways (Balogun, 2006). However, in spite of all the efforts aimed at maintaining safety on the road, accident rate kept on fluctuating. An analysis of the traffic crashes data recorded over a five year period of 2004-2008 shows that 102,850 cases were recorded with 30,609 people dead and 90,062 people injured (FRSC, 2009). Table 1.1 shows the aggregate data on road traffic accidents in Nigeria after the establishment of FRSC.

Table 1.1 Aggregate Data on Road Traffic Accident in Nigeria after the Establishment of FRSC (from 1989 to 2008)

Year	Cases Reported	No of Persons Killed	No of Persons Injured	Total Casualty
1989	23987	8714	23687	32401
1990	21683	8154	22,786	30940
1991	22498	9525	24508	34033
1992	22909	9620	5759	15379
1993	21419	9454	24146	33600
1994	18218	7440	17938	25378
1995	17000	6647	14561	21206
1996	16795	6364	15290	21654
1997	17500	6500	10786	17286
1998	16046	6538	17341	23879
1999	15873	6795	17728	24523
2000	16348	8473	20677	29150
2001	20530	9946	23249	33195
2002	14544	7407	22112	29515
2003	14363	6452	18116	24568
2004	14279	5351	16897	22238
2005	8972	8980	15779	24779
2006	22301	4944	17432	22376
2007	22467	4673	17974	22647
2008	34641	6661	27980	34641

Source: Statistics compiled by Federal Road Safety Commission available on www.frsc.gov.ng (2009)

From the table, it can be seen that in 1992, the number of road accident was 22,909 but it dropped to 15,873 in 1999. In 2001, it rose to 20,530 while in 2005 it dropped to 8972. However, as from 2006, it started to increase again and by 2008 it had increased to 34,641.

In addition, table 1.2 shows the summary of road traffic accident data of South-West States between 1990 and 2005.

Table 1.2: Summary of Road Traffic Accident Data of South Western State between 1990 and 2005

State	Ekiti	Ondo	Ogun	Oyo	Osun	Lagos
Fatal Cases	289	2363	5971	4181	1386	19376
Serious Cases	529	3846	8218	5698	1748	23719
Minor Cases	156	2498	5599	13505	2254	19472
Total Cases	974	8707	19788	23384	5388	62567
No. of Persons Killed	397	3684	9041	6031	2300	11369
No. of Persons Injured	1060	9444	21337	2968	5555	31391

Source: computed by the researcher from records of FRSC in the South West States (2006)

From table 1.2, it is evident that the casualty rates from road accidents within fifteen years were very high. Seventy one thousand seven hundred and fifty five (71,755) people were injured while thirty two thousand eight hundred and twenty two (32,822) people were involved in various road accidents in the South-West states only, with Lagos state having the highest number of casualty. This indicates that an average of 5125 people was injured yearly and an average of 2345 people was killed in road traffic accidents in South West.

Twenty-three years have passed since the establishment of FRSC. It is also over twenty two years since Public Enlightenment Department has been making several efforts to enlighten and to educate road users on the proper use of road and importance of discipline on the highways in order to improve the knowledge of road traffic system and engender good road traffic behaviour. Although one of the primary roles of FRSC as stated in the Commission's ACT CAP 141 is to publicise safe driving, it appears this has not been effective due to bad driving culture in Nigeria. Although the Public Enlightenment Department of the FRSC claimed to have conceptualized, designed and implemented public enlightenment programmes that cut across language, cultural and religious barrier, the extent of the effectiveness of their public enlightenment/education programme needs to be known. That is, the extent to which the programme is effective at increasing the level of knowledge, understanding and application of the road traffic rules by road users most especially drivers in order to ensure safety and reduce accidents on roads and highways. More so, that the essence of setting up of FRSC is not only to curb the menace of road traffic accidents,

but also to instill a 'safe driving attitude' in Nigerian drivers so that there will be free flow of traffic and safety on Nigerian roads.

1.2 Evaluation Objectives

Based on the stated objectives of the Public Enlightenment programme, the objectives of this study, therefore, are:

- i. To find out how effective FRSC public enlightenment/education programme (through the use of jingles, motor park rallies, lectures/workshops/seminar, special campaigns during festivals and highway traffic sign literacy campaign) is, in fostering road safety consciousness in vehicle drivers.
- ii. To find out the effectiveness of FRSC public enlightenment/education programme in reducing rates of indiscipline and accidents on roads and highways in Nigeria as perceived by road users.

1.3 Statement of the Problem

The Federal Road Safety Commission was established to improve the road traffic situation in Nigeria through the education of road users on the proper ways of using roads in order to prevent traffic indiscipline and road accidents. Thus, the critical mandate of FRSC is accident prevention and loss reduction. This, it hopes to achieve through the education/enlightenment of drivers and other members of the public on the proper use of roads and highways. In this regard, the FRSC inaugurated a programme aimed at enlightening Nigerians on road safety and crash prevention matters. In order to realise these objectives, the FRSC adopted aggressive public enlightenment and safety awareness programmes. However, the rate at which accidents happen is still seemingly high on the Nigerian highways. This seems to undermine the effectiveness of FRSC. Though literature reviewed showed that studies have been carried out on accidents and their causes, there is no known study that has been carried out on the effectiveness of the FRSC public Enlightenment programme. This study therefore, evaluated the public enlightenment programme of the FRSC in order to determine its effectiveness in fostering road safety consciousness in the drivers as well as in reducing accidents. The study also investigated road users' perception of the effectiveness of FRSC public enlightenment programme and the concomitant constraints as well as proffered possible solutions.

1.4 Research Questions

In order to give direction to this study, the following research questions were addressed:

1. What was the road traffic situation like in terms of indiscipline and accident rate before and after the establishment of FRSC in South-West, Nigeria?
- 2a How do the drivers perceive the effectiveness and adequacy of FRSC Public Enlightenment Strategies?
- b How do the commuters and drivers perceive the effectiveness of FRSC Public Enlightenment Programme vis-a-vis drivers' behaviour on roads??
- 3 How do the FRSC staff perceive the effectiveness of FRSC Public Enlightenment Programme vis-a-vis drivers' behaviour on roads and traffic situation?
- 4a What is the drivers' knowledge of the highway traffic code?
- b Is there any significant difference in the drivers' level of knowledge of the highway traffic code on state basis?
- c Is there any significant difference in the knowledge of the highway traffic code by drivers who attended driving school and those who did not?
- d Is there any significant difference in the drivers' knowledge of the highway traffic code by categories (Private hired, private owner and commercial vehicle drivers)?
- 5 Is there any significant difference in road traffic situation (in terms of accident and rate of indiscipline between pre-FRSC era and after the establishment of FRSC in South-West, Nigeria (As perceived by commuters and drivers)?
- 6a Is there any significant difference in the drivers' perception of the effectiveness of the FRSC public enlightenment programme based on driving experience?
- b Is there any significant difference in the FRSC staff perception of the effectiveness of the public enlightenment programme on drivers' behaviour based on working experience?
- 7 Is there any significant relationship between commercial vehicle

drivers' level of knowledge of the Highway traffic code and their behaviour on the road?

- 8 What are the constraints and probable solutions to effective achievement of the objectives of FRSC Public Enlightenment Programme?

1.5 Scope of the Study

This study undertook a comprehensive evaluation of the extent to which FRSC Public Enlightenment Programme is effective in increasing the level of drivers' knowledge and understanding of road traffic rules and regulations with regards to prevention of road traffic indiscipline and accident reduction in Nigeria. This study concentrated on the South West of Nigeria. The subjects used were private and commercial vehicle drivers and Commuters/Pedestrians in selected motor parks and Local Government area offices. The FRSC staff in the two States were also used in the study. Lagos and Oyo States were chosen because the vehicular traffic on their roads appears heavier than all the other four States in the South-West, Nigeria. Data collected were analysed using percentages, t-test, ANOVA and Pearson's Product Moment Correlation Coefficient.

1.6 Significance of the Study

Road transportation is very important to the Nigerian society and economy. This is because nearly everybody goes on roads. Thus, the safety of Nigerian citizens on road is of paramount importance. The establishment of FRSC and the implementation of its education/enlightenment programme in Nigeria are expected to improve the traffic situation in Nigeria in terms of accident reduction and maintenance of discipline and safety on the road. A study of this nature is therefore necessary to provide empirical data on the impact of the programme of the Commission on the life of the road users. It will provide a feedback to the programme evaluators on the effectiveness of the programme as well as on the strengths and weaknesses of the programme so as to provide probable solutions for decision makers to choose among alternatives. This will enable the stakeholders to have the opportunity of identifying the strengths and weaknesses of the Commission's programme with a view to refining or modifying it.

The study will provide feedback to the government on the justification for the

huge public expenses on the programme. It will also provide road transportation sectors with the opportunity to know the essence of the public enlightenment programme of the FRSC, through which the knowledge will make them behave well on the road, thereby reducing the incidence of road traffic accidents. The Federal Road Safety Commission will also gain from it because it will make them to know how people perceive their programmes and thereby try to improve upon their performance. The study will further provide impetus for evaluation of FRSC, that is, the result of the study will serve as a major source of data for intending researchers who may want to do further work on this study.

1.7 Definition of Terms

For the purpose of this study, the following terms were defined under the following headings; conceptual definition and operational definition.

Conceptual Definition of Terms

Road Traffic Accident: An unpleasant event which happens unexpectedly on the road and causes injury, damage or death.

FRSC Education Programme: The public enlightenment programme usually carried out by the FRSC in order to educate road users on the proper use of road.

Road Users: Everybody who makes use of the road, be it pedestrian, driver etc.

Operational Definition of Terms

Perception: How people see or view FRSC enlightenment programme in effecting good road traffic behaviour.

Road Traffic Discipline: This is strict compliance to traffic rules and regulations on the road and highways. It is also a situation where road users keep to speed limit, being on the right lane, observing all traffic rules on the way.

Road Traffic Situation: Assessment of the level of awareness of road safety conscious attitude, enforcement of traffic rules and regulations and reduction of accidents.

Road Signs: These are signs on the roads which are used to control the traffic and facilitate their effective use.

CHAPTER TWO

LITERATURE REVIEW

Relevant literatures on the key issues were reviewed in this chapter. These issues are considered essential to the understanding of the basis for the research. The review covered the following areas;

- 2.1 Road Traffic situation in Developed and Developing countries.
- 2.2 Road safety situation in selected African Countries:
 - 2.2.1 Road safety situation in Ghana.
 - 2.2.2 Road safety situation in South Africa.
 - 2.2.3 Road safety situation in Nigeria.
- 2.3 Road Traffic accident.
 - 2.3.1 Causes of Road Traffic accident.
- 2.4 Historical overview of the Federal Road Safety Commission (FRSC)
- 2.5 Highway Code
- 2.6 Public Enlightenment/Education
- 2.7 Evaluation
- 2.8 Programme Evaluation
- 2.9 Impact Evaluation
- 2.10 Evaluation models
- 2.11 Conceptual framework
- 2.12 Appraisal of Reviewed Literature.

2.1 Road Traffic situation in Developed and Developing countries.

The problem of transportation safety is of great magnitude. It encompasses all modes of transportation, all economic levels and all transport purposes (Aworemi, Abdul-Azeez and Olabode, 2010). The problem of death and injuries resulting from road accidents is acknowledged to be a global phenomenon and Global status report of World Health Organisation on road safety is the first broad assessment of the road safety situation in 178 countries using data drawn from a standardized survey (Jacobs and Aeron-Thomas 2003). In the studies carried out by World Health Organisation in 1996 and 1999 on causes of death worldwide (reported in Bulletin of World Health Organisation 2007), road accident was in the ninth place out of a total of over 100 separately identified causes while it is the sixth leading preventable cause of death in

the United States (where 45,800 people died and 2.4 million people were injured in 2005). It is also the cause of 48% of severe injuries in Canada. Furthermore, World Health Organisation estimated approximately that 1.2 million people were killed in road traffic crashes in 2004 and 50 million more were injured in motor vehicle accidents worldwide. In their own study, Alyson and Ehiri (2006) found that 85% of all deaths in developing countries are caused by road traffic accidents while 90% of lost disability adjusted life years and 965 of all children's deaths are also due to road traffic injuries. Forecast however, suggest that by year 2020, road accidents will move up to the sixth place as a cause of death.

Road accident is a serious problem throughout the world in terms of social, health and economic developments and authorities in virtually all countries of the world are concerned about the growth in the number of people killed and seriously injured on their roads. According to Anthony-Albanese (2010), road trauma is one of the major public health problems facing Australia. While Tutu (2007) submits that road traffic accidents kill and maim millions of people annually in African countries. He also stated that they hamper economic development of many nations and cause enormous suffering. Furthermore, the rate of mortality in road traffic accident is very high among children and young adults in their prime and who constitute the work force in many countries (Peden, Mcgee and Krug, 2004; W.H.O, 2004; Sanger, 2010; Anthony-Albanese, 2010).

According to WHO (2004) road accident is the leading cause of injury and death among children. It was estimated that 260,000 children and youths between ages 10-19 years die worldwide in a year. Anthony-Albanese (2010) corroborated this when he stated that road trauma in Australia disproportionately affects young healthy Australians. He submits that about thirty percent of those killed and thirty seven percent of those hospitalised from road crashes are under twenty five (25) years old. An analysis of casualties and fatalities by age showed that young people are involved in proportionately more accidents in Africa, Asia and the Middle East than in the West. In their study, Mahipal and Jain (2010) observed that one of the top causes of death for 5-44 age groups in India is road accidents. Summarily, data from all regions indicated that road accidents involved mostly the economically active in the age group 25-40 years (WHO, 2004).

The magnitude of the road safety problem varied between different countries. Recent research has shown that many developing countries have serious road accident problems and that accident rates are higher than those of western industrial countries. According to Baluja (2010), India is a major developing country and has the world's worst road safety record. The government of India reports over 118,000 road accident fatalities in 2008 (NCRB 2010), which accounts for 9% of 1.2 million fatalities worldwide. Baluja (2010) further submits that motor vehicle injuries are the third most important cause of death in developing countries. It leads to significant death and disability. This affects mainly the young males who are economically active.

In Nigeria, road safety situation is an abuse of humanity for the exact number of people killed each year is outrageous and it has often generated controversies (Anyaku 2009). Hence, daily death seriously threatens every family, killing and maiming innocent members and all age group of road users are at the risk of death. However, the World Health Organisation has forecast that by the year 2020, road accidents will move up to sixth place as a cause of death, and in terms of years of life lost and 'disability adjusted life years, it will be in second and third place respectively and there will be a 65% increase in the statistics if no immediate action is taken (Baluja, 2010). Road accident problem therefore, is urgent and complicated. Thus, there has been the call for the need to give more attention to the safety of road users in developing countries.

Traditionally, road safety is gauged by taking into account factors such as the number of road accidents, the rate of road traffic injuries (RTIs) and the rate of fatalities. According to Assum (1998), while the number of death and injuries on roads in developed countries were reducing, it has continued to rise in developing countries. In Ghana for example, road crashes kill an average of four people daily while in Benin, Cote D'ivoire, Kenya, Tanzania and Zimbabwe, road accidents and fatality rates have greatly increased. While Jacobs and Aeron-Thomas (2003) submit that road accidents in developing countries are increasing and the number of those with fatalities and serious injuries is a considerable problem. In their own writing, Bener, Abu-Zudan, Bensiali and Al-Mulla (2003) submit that studies in developed countries have shown that road crashes result from both known and unknown factors. Road traffic accidents therefore, are a significant but preventable cause of death, disability and economic loss in developing countries.

Efforts are being made by several countries worldwide to curb the high rate of road traffic crashes and deaths. In order to reduce the great effect of road accident, the United Nations general assembly in 2004 adopted three resolutions in which it called on member states, the World Health Organisation, the five regional commissions and international organisations to address the global road safety crisis. Furthermore, Jacobs and Baguely (2004) submit that scientifically conducted investigations in developed countries have led to the identification of underlying causes of road crashes and allowed authorities to devise and implement countermeasures to these and thereby improve road safety.

In the U.S, the National Traffic and motor vehicle safety Act was enacted in 1966 to empower the Federal Government to set and administer new safety standard for motor vehicles and road traffic safety. The Act created the National Highway Safety Bureau [now National Highway Traffic Safety Agency] (N.H.T.S.A) and it was one of the initiatives by the government in response to the increase in the number of vehicles and associated fatalities and injuries on the roads. The enactment and enforcement of traffic safety laws reinforced by public education led to safer behaviour choices (Fernando, 2010). Also in Australia, road safety council was established in 2009 by the Australian transport council to act as advisory on road safety matters to support the importance of key road safety measures in the national road safety strategies. While in Africa, the United Nations Economic Commission for Africa (U.N.E.CA) together with other International Organizations organized the First African Road safety Congress in Kenya in 1984, the Second African Road safety Congress in Ethiopia in 1989 and the Third African Road safety Congress took place in South Africa in 1997 (U.N.E.C.A. 2009).

Furthermore, many road safety initiatives were also undertaken by Member States and sub-regional organizations in order to improve the road safety situation in Africa. In Ghana, the National Road Safety Council (NRSC) Act was also enacted in 1999 in order to develop and promote road safety and to coordinate policies in relation to them. One of the duties of the Commission is to undertake nationwide road safety education (Adomako, 2006). Although there is road safety publicity in many countries, some of them lack adequate budgets for publicity. (Jacobs and Aeron-Thomas, 2003).

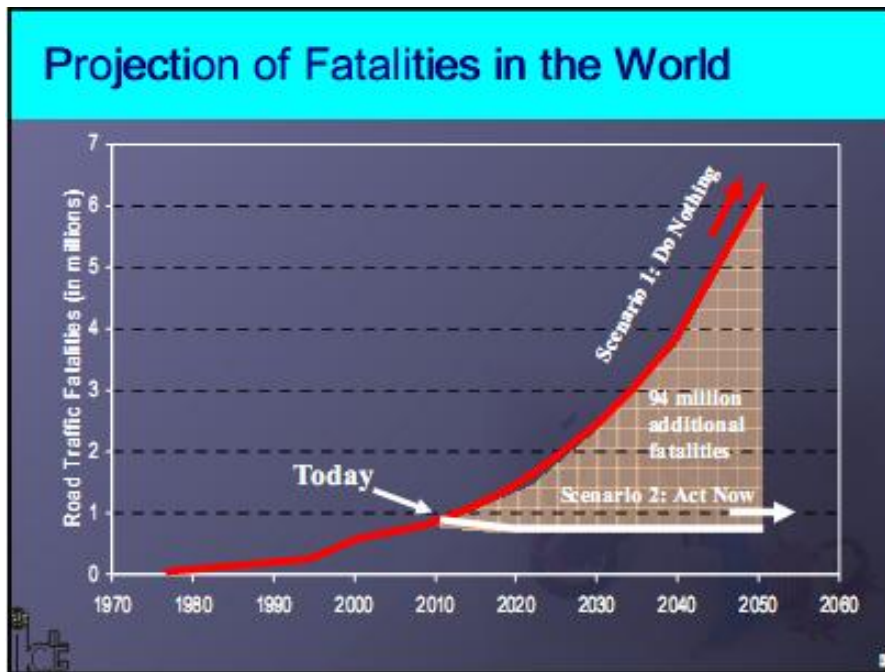


Fig. 2.1: Projection of Road Fatalities in the World (WHO, 2004)

2.2 Road Traffic Situation in selected African Countries:

2.2.1 Road Traffic Situation in South Africa

Road traffic situation is regarded as a serious problem by the national government of South Africa and the general public. As stated in the Global Road Safety Partnership of South Africa (G.R.S.P.SA) reports (2010), the number of fatal crashes for 2006 increased by 6.12% and the number of road traffic related fatalities increased by 8.9%. Excessive speed, drinking and driving, and the non-wearing of seat belts were found to be the contributory factors to the increase in fatal crashes. In order to maintain safety on South African roads, the Global Road Safety Partnership (GRSP) initiative was launched in 2000 in support of the Department of Transport National Road Safety strategy. One out of the several efforts that have been made by the South African Government to improve safety on roads includes the initiation of road safety campaigns by provincial Department of Transport (GRSPSA, 2010). The GRSP implemented a number of pilot projects which include; the establishment of community safety forum, improvement of pedestrian facilities and pedestrian visibility and road safety education and awareness for teachers and learners. Apart from this, Road Traffic Management Corporation (RTMC) was also established in 2005 to co-ordinate road safety programmes. As written in the GRSPSA (2010) report, it was established as an agency of the Department of Transport to oversee road

traffic management in South Africa. The corporation was to manage various road traffic functions including; road safety education and communication, crash investigation, traffic information and training of traffic law enforcers.

Several projects were also carried out by the GRSPSA to raise road safety awareness and knowledge among road. As reported in the GRSPSA news (2010), a study carried out in Limpopo shows that there was an increase in both learners awareness of the seriousness of the road safety situation and their knowledge of correct behaviour in traffic in the area. In an effort to further reduce road crash injury severity, RTMC implemented an intensive national campaign to also increase the use of seat belt in South Africa and this has brought about a reduction in the rate of road crashes fatalities.

2.2.2 Road Traffic Situation in Ghana

The rapid increase in the number of vehicles in Ghana coupled with population growth has contributed to a rise in the number of road traffic injuries and fatalities (G.R.S.P News, 2010). Road safety has become a major national issue receiving front-page coverage in the press and National TV news on a regular basis. In an attempt to curb the increase in road traffic crashes, the government of Ghana enacted the National Road Safety Commission Acts in 1999. This is the 567th Act of the parliament of the Representatives of Ghana. As stated by the GRSP News (2010), the functions/objectives of the Commission are to develop and promote road safety in Ghana and to coordinate policies in relation to them. One of the duties of the commission is to undertake nationwide road safety education, encourage the development of road safety education as part of the curriculum and the training of teachers in road safety. All these were put in place because of the situation of road traffic in Ghana.

According to Adomako (2006), drivers' indiscipline on roads then was very high and there was high rate of road accidents. Adonteng (2008) corroborated this when he states that the National Road Safety Commission in Ghana is faced with numerous challenges such as the incidence of over-speeding, deficiencies in vehicle fitness, unsafe driving, insufficient law enforcement and consistent increase in vehicle fleet, fatigue driving and the influence of alcohol. He viewed that 12,000 persons could be killed and more than 40,000 persons injured if extensive efforts were not put in place to address the situation with the increase of vehicle population to 1.2 million.

Thus, to enhance the performance of the commission, a traffic and transport system that would be safer and convenient for road users such as pedestrians and public passenger fleet operation was established. The government of Ghana and donor community also increased funding to the National Road Safety Commission (NRSC) in order to enable the NRSC to expand and implement new targeted road safety initiatives.

Road crashes kill an average of four persons daily in Ghana. As stated in the Global Road Safety Partnership newsletter (2010), the number of road crashes increased in 2005 by 16% relative to 2004. The regions Ashanti, Eastern, Gt. Accra, Central and Brong Ahafo Regions account for more than 70% of the total number of crash fatalities and speeding was found to be the major cause of crashes, accounting for over 50% of reported crashes. Buses and mini-buses cause 35% of fatal crashes while cars are responsible for 32%. Apart from vehicle drivers, the pedestrians are also the most vulnerable road user group, accounting for more than 40% of the annual road crash fatalities (GRSP 2010). It was also written in the newsletter that 21% of pedestrians killed annually are children below the age of 16 years.

Although fatality numbers are growing, crash risk has remained stable over the past six years. In the past, road safety activities were carried out by individual departments within the Ministry of Roads and Transport (Ghana Highways Authority, Department of Urban Roads, Department of Feeder Roads and Driver Vehicle Licensing Authority) together with the National Road Safety Committee. In 2000, the Committee became a Commission by act of Parliament and the Commission coordinated safety activities within Ghana. The Government of Ghana, acting through the Ministry of Transport and Communications then established the National Road Safety Commission (NRSC) to develop, promote and coordinate the National Road Safety Strategy.

The National Road Safety Strategy provided the NRSC with guidelines for its work in the 5-year period 2001-05. The purpose of the strategy was to break the upward trend in crashes, injuries and fatalities and create a basis for concrete, sustainable crash reduction by 2010. The overall target was a 5% reduction in road fatalities from 1998 as the base year to 2005 and a further 15% reduction before the end of 2010. Thus, stakeholders were also called upon to intensify efforts in areas such as increase in the use of seatbelts and crash helmets, campaign against the use of

mobile phones whilst driving and road safety education for children while a new 5-year strategy is also currently being prepared.

2.2.3 Road Traffic Situation in Nigeria

Road traffic situation in Nigeria before the establishment of the Federal Road Safety Commission is characterized by high rate of accidents and indiscipline (FRSC 2007). Accidents happen almost on daily basis on roads and highways. According to Oyeyemi (2003), the frequent accidents experienced on roads and highways in Nigeria over the past years have caused many problems for the development of the country and the carnage arising from it has become the bane of the country's socio-economic development. Odeleye (2000) submits that there is hardly any day without the news of loss of lives and properties on highways as a result of road crashes and innocent children are often direct victims. The continuous increase in the trend of road accident on Nigeria road and highway therefore, led to the establishment of the Federal Road Safety Commission to look into road safety matter.

Since the establishment of the Federal Road Safety Commission in 1988, the agency has been battling with the onerous task of reducing road traffic crashes and creation of safe motoring environment. Records from FRSC show that the federal road network alone is over 34,000 km while the entire network of roads across the length and breadth of the nation is about 194,000 km with a population of over 140 million people and road transport remains one of the major modes of transportation as it accounts for over 80% of the movement of people, goods and services in Nigeria.

In his own writing, Emejor (2010) submit that human and vehicular traffic are always on the increase in Nigeria during festival periods, and a high number of road accidents and deaths is always recorded. The recurring auto accidents in Nigeria appear to have defied solution in spite of the concerted efforts of the FRSC and other stakeholders to reverse the trend. An analysis of the statistics obtained from the Federal Road Safety Corps (FRSC) in Abuja showed 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 2009. The FRSC recorded 11, 341 accidents with total number of deaths put at 6,661 and 27,980 injured in 2008. Also, between January and June 2010, 5,560 cases of auto accidents were recorded in which 3,183 persons lost their lives and 14,349 others sustained various degrees of injuries. Idoko (2010) submits that Nigeria loses three billion naira every year to road crashes and that road

crashes cost Nigeria 13 percent of her Gross National Product (GNP). This loss undoubtedly inhibits economic and social development.

Road accidents are preventable because they do not just happen. They are caused mostly by human error. Hence, most of the accidents occur because of bad driving and the unnecessary haste by drivers. No doubt Nigerian roads are in a deplorable state, but the consequence of bad driving habit is enormous (Idoko, 2010). Many Nigerians have lost their loved ones due to carelessness on the part of drivers. Some highways which include Abuja-Lokoja, Benin-Onitsha, Lagos-Ibadan, Lagos-Abeokuta, among others, are notorious for daily occurrences of heavy casualties (Adeoye, 2009). In a bid to combat the high rates of accidents and injuries, the FRSC has always been pro active in the introduction and implementation of various special Public enlightenment campaign programmes to mitigate the carnage on the roads most especially during festival periods. The FRSC Chief Executive Chidoka during an interview in 2009 stated that ‘due to the high rate of indiscipline on our roads, the FRSC always insist on compulsory enlightenment of arrested drivers before releasing their vehicles to them’.

2.3 Road Traffic Accidents

Road accidents are commonly described with different terms. The World Health Organisation for example, uses the term ‘road traffic injury’ while the U.S census Bureau uses the term motor vehicle accident. Road traffic collision or accident occurs when road vehicles collide with another vehicle, pedestrian and or object and this can result in injury, property damage and death. A recent UNESCAP report revealed that the number of traffic accidents increases every year in the world and that these accidents kill around one million people and injures 23 million others. As stated in the Cambodia annual report (2004), 85% of the fatalities occur in the developing countries. For example the Asia–Pacific region alone accounts for up to 44%. In the report also, Thol reported that road traffic accidents are considered as the second largest catastrophe in Cambodia after AIDS, killing three people and injuring many others per day, not considering damages and loss of public or private properties and the moral distress to society. Similarly, in Rwanda, the World Health Organisation discovered that accident was taking place every two and a half hour on Rwandan roads almost of which left people injured and ten percent of which resulted in deaths. However, it is believed that with the combined efforts of various institutions, Non

Governmental Organisations, private companies as well as the people themselves, traffic accidents can be reduced in a near future (Thol, 2004).

Accidents tragically, are not often due to ignorance, but are due to carelessness, thoughtlessness and over confidence (Jha, Srinvasa, Roy and Jagdish, 2004). Ruranginwa mentioned (in the Bulletin of the World Health Organisation, volume 85, 2007) that urban centres in Rwanda saw frequent violent collisions sometimes because drivers refused to respect the rights of ways as well as excess speed resulting generally from alcohol consumption. However, the result of a study carried out by some researchers on the trend and characteristics of road accident in Nigeria using data from police records showed that there has been an increasing trend in the case of fatality and injury on Nigeria roads and highways (Ezenwa 2010).

Motor vehicle accidents worldwide lead to both loss of lives and disability. Studies carried out by researchers showed that thirty one percent of the highest number of road traffic accident (RTA) victims were found between the age group of 20 and 29 years (Mahipal and Jain, 2010). They stated further that similar findings were also reported from Delhi and Nepal. In some other studies, 16 to 30 years and 15 to 35 years age groups were more involved in road traffic accidents while another study from Delhi reported that people of the third decade of age were most commonly involved in road traffic accidents. The study carried out by Jha, Srinvasa, Roy and Jagdish (2004) also found that more than 69% of the victims were in the age group between 20 to 49 years. This shows that the people of the most active and productive age group are usually involved in road traffic accidents, which according to Jha et al (2004) adds a serious economic loss to the community. Accidents therefore, usually cause huge financial loss to both the society and individuals (Wikipedia Encyclopedia, 2010).

The causes of crashes and fatalities are usually complex and involve many factors. In their writing also, Jha et al (2004) assert that accidents tragically, are not often due to ignorance, but are due to carelessness, thoughtlessness and over confidence. While Oni (2010) submits that road accidents do not just occur, they are caused by a number of factors which include; vehicle design, speed of operation, road design and driver impairment. He stressed further that accident occur due to various reasons which include; driving too fast or doing so under the influence of alcohol. In their own writing, Bener, Abu-Zudan, Bensiali and Al-Mulla (2003) stated that most of the factors affecting accident occurrence and rates may be grouped and labeled as

'economical' factors while the World Bank relates much of the accident problems in developing countries to a shortage of funds, for both owners of vehicles and governments. Bener et al further stated that a study of the factors affecting traffic accidents in different countries conveniently divided them into two groups: (a) Direct factors - which contribute directly to the occurrence of individual accidents. These include: road user behavior, driver's ability and attitude, traffic engineering, roads and environment, and medical services. (b) Indirect factors. They include demographic population structure and distribution), and vehicle population and characteristics (number, type, usage and occupancy). Many studies have shown that these factors contribute to higher accident risks or to more serious accidents. AUSTROADS (1994) grouped the factors that cause road accidents to occur into Human factors, Vehicle factors; Road and environmental factors while other literature categorized the factors into three namely; Human, Mechanical and Environmental (Agunloye, 1989; Balogun and Abereoje, 1992; Luby, Hassan, Jahangir, Rizvi and Farooqi, 1997; Mock, Amegashie, and Darteh, 1999 Wakawa, 2001; Oyeyemi, 2003; Balogun, 2006). Aworemi *et al* (2010) in their own writing pointed out that road traffic crashes are caused by vehicle, driver, roadway and environmental factors.

2.3.1 Causes of Road Traffic Accidents

Human factor

According to Oyeyemi (2003), human factor is the underlying cause of almost all road accidents. Chidoka (2009) cited by Idoko (2010) corroborated this when he states that the problem of road traffic situation lies with human beings who do not take to simple precautions. These include; human error in observation, decision making and response to situation at hand. Researches carried out in several countries found out that human error is involved in over 90% of all road accidents and that only a small proportion of road accidents can be directly attributed to vehicle defects or faults in road design or maintenance (Balogun, 2006). Studies show that drivers routinely ignore traffic laws and pedestrians routinely walk in the middle of streets and cross without checking for traffic. Hobbs cited by Bener et al (2003) reported that drivers' errors in general, often accompanied by law violations, are in the chain of events leading to more than 90% of all highway accidents.

Accidents are mostly attributed to human error in most developing countries. In India for example, Baluja (2010) states that the Government of India (GOI 2008)

attributes drivers' fault as the most important factor responsible for accidents, injuries and fatalities. In 2006, drivers' fault was suggested as the cause of 77 % of the total road accidents, 79% of the total number of persons injured and 73% of the total number of persons killed in road accidents in India (Baluja, 2010). In Nigeria, human error is responsible for almost 90% of the accidents that happen on roads (FRSC, 2007). Road crashes under human error are caused by pedestrians, passengers, or drivers. According to Odeleye (2000), many roads in Nigeria have no special walkway for pedestrians, thus, they make use of the highways along with moving vehicular traffic. FRSC (2007) corroborated this by stating that many Nigerian roads are designed with no safety in mind, no vehicle/traffic pedestrian separation, no drains, no road signs, no lighting and no zebra crossings. Most pedestrians walk on the roads and highways without caution. Wakawa (2001) added that most pedestrians do not cross where they can be noticed and read; instead they often cross the road from in-between cars or lorries.

Balogun (2006) explained that certain pedestrian behaviour, such as walking along the roadway with traffic, and crossing a roadway at a point other than an intersection are significant in fatal crashes. Fernando (2010) submits that pedestrian zebra crossings are another area that the public needs to be educated on. Pedestrians' minds therefore, need to be conditioned to the fact that they should cross roads at such crossings only, and when red lights indicate it is danger to cross, they cannot choose to simply walk across the road at will as if they are walking in their homes. In Japan, sound tracks are used to inform the pedestrians to cross the road when it is safe (Fernando, 2010). These are basically due to the lack of the authority's intervention in educating the public. Road rules and Highway Code practices need to be rubbed down on people's minds until the message get through to them.

Accidents are also sometimes caused by passengers through the distraction of drivers According to Sanger (2009), the British scientists in a research conducted by them suggested that the drivers' attention can be affected by distracting sound such as conversations from passengers. He stated further that many accidents are also caused by drivers actually being distracted by another accident happening on the road and that even things such as changing cds, looking at mobile phone or checking out make up in the mirror by drivers can all cause accidents. Basically anything that makes one to take one's eyes off the road can create disastrous situations on the road.

Literature revealed that road accidents are mainly caused by drivers (Oyeyemi,

2003; Balogun, 2006). This is because the driver is the man behind the wheel and he is the decision maker at every point on the road. Literature further revealed that the driver is the most important factor behind all reported cases of road crashes in many countries (Oyeyemi, 2003; Balogun, 2006). For example, in the report of a research carried out in Britain and America, 57% of crashes were due solely to driver factors, 27% to combined road way and driver factors 6% to combined vehicle and driver factors (Wikipedia encyclopedia 2010). In Nigeria the results of the various researches carried out by scholars showed that the driver is responsible for 80% of the human factor that cause road traffic accident (Oyeyemi, 2003; Balogun, 2006; FRSC, 2007).

The performance of driver in both single vehicle and multivehicle crashes has been described as the major contributing factor for many traffic crashes (Jacobs *et al*, 2003). The pre-crash driver behaviour and attitude is very important in judging the driver's actions. These include; medical conditions, alcohol and drug abuse, inattention to the roadway and surrounding traffic, speeding and disregarding traffic law and/or traffic control devices, which could result from confusion or unfamiliarity with the roadway. Reports from research on British and America crash data also indicated that driver error, intoxication and other human factors contribute wholly or partly to about 93% of crashes on roads in these countries (Fernando, 2010).

Furthermore, Oni (2010) citing Van and Donald (2001) states that drivers today are faced with many problems when driving in congested and overcrowded cities, specifically by having the senses overloaded by the vast amount of information that needs to be continuously processed (a condition also known as information overload) and that the types of information a typical vehicle driver may encounter and need to react upon are numerous. These include; traffic signs, traffic signals, information about detour, billboard and other advertisements, horns, loud music from passing vehicles, vehicle changing lanes, pedestrians and many more. Thus, failure to react upon some of these may lead to accident. Human factors therefore, are without doubt the most complex and difficult to isolate, as they are almost all very temporary in nature.

Aworemi et al (2010) in their studies affirmed that some of the human characteristics that contribute to its potency in accident causation include, alcohol or drug abuse, indecision, fatigue, inexperience, physical defects, distraction, over speeding, and confusion, just to mention a few. Other studies had earlier on shown

that driver's illiteracy, inability to read and comprehend road signs, impatience, reckless driving, dangerous overtaking, driving under the influence of alcohol/drug, overconfidence, tiredness or fatigue, indiscriminate parking, poor visibility are some of the factors which contribute significantly to road traffic accident (Odeleye, 2000; Akosua, 2007). Odeleye (2000) in his studies discovered that many drivers lack necessary driving skills required for avoiding accident and many road users tended to be less disciplined in terms of their behaviour on roads. In addition, Chidoka cited by Idoko (2010) identified over speeding, mechanical defects, and lack of adherence to traffic rules and regulations as the major causes of road traffic accidents on Nigeria highways.

Drivers' factors which lead or cause road accident include drunkenness and drug use by drivers. According to Wetteland and Lundebye (1997) and Oyeyemi (2003), driving under the influence of alcohol has been discovered to be the major cause of road crashes in many countries. Some drugs/alcoholic drinks taken by drivers interfere with their ability to drive. Such drugs include those that have sedative (i.e. sleep inducing) effect. Other drugs popularly taken by drivers are Indian hemp and sometimes cocaine. Sanger (2010) submits that 33.8% of motor vehicle deaths were associated with alcohol use in Canada while drug use among fatally injured drivers increased over the last five years in United States. Data shows that 63% of the 21,978 drivers killed in motor vehicle crashes in 2009 in U.S were tested for drugs or alcohol before driving while 16,885 alcohol-related traffic deaths occurred in 2005.

In Kenya, a survey of hospitalized patients revealed that 40% of drivers and 20% of pedestrians being treated for traffic-related injuries were reported as being under the influence of alcohol at the time of the crash. According to Ogunwumi (2009), four out of ten traffic deaths are alcohol-related (either the driver or a victim had been drinking/ drunk). 'Alcohol-related' means at least one of the people involved has a blood alcohol concentration (BAC) of .01 or higher. In U.S, the annual motor vehicle crash related fatalities involving alcohol has greatly decreased now. This (as written in the history of United States) is due to increased public awareness (through enlightenment programmes) of the dangers of drinking and driving and the enforcement of laws against driving while drunk.

As stated in the Nigerian Highway Code (2008), alcohol can cause over confidence, poor judgement, lack of co-ordination and recklessness. Drinking and driving is a problem in most African countries (Assum, 1998). Examples of such

African countries include; Kenya, Tanzania, Benin and so on. Researchers have also discovered this to be a serious problem among drivers in Nigeria as well (Oyeyemi, 2003; Balogun, 2006). In his own writing, Balogun (2006) stated that Nigeria drivers (most especially commercial vehicle drivers) are fond of drinking alcohol and or drug before driving and most times this makes drivers to lose their ability to co-ordinate.

Another cause of road accident is over speeding. According to Alyson and Ehiri (2006), speed is a crucial factor in many road traffic accidents and it influences both crash probability and severity of injury. As a general rule, 'the greater the speed, the more likely a crash will occur and the more likely severe injuries will be sustained.' In Ghana, speed alone was responsible for half of all traffic crashes between 1998 and 2000 and it also contributed to 44% of all police-reported crashes in Kenya (Adomako, 2006). In their study in Kuwait, Alyson and Ehiri (2006) also discovered that over speeding is the primary cause for almost 92% of road traffic accidents in the sample.

According to Oyeyemi (2003), most drivers believe that the faster they drive, the more they impress themselves and others. They forget that they cannot control the road, weather condition and environment and that anything can happen to the vehicle, such as: tyre burst, brake failure or pedestrian running across the road. The Road and Traffic Authority of the Australian State of New South Wales also found that speeding (i.e. travelling too fast for the prevailing condition or above the posted speed limit) is a factor in about 40% of road death (Orzag, 2009). The contributory factor report in the official British road casualty statistics for 2006 shows that exceeding speed limit was a contributory factor in 5% of all casualty crashes (14% of all fatal crashes) and travelling too fast for condition was a contributory factor in all 11% of all casualty crashes [18% of all fatal crashes] (Fernando, 2010).

In Nigeria, researches carried out by the Federal Road Safety Commission showed that over speeding contributed greatly to most crashes on roads and highways (Balogun, 2006). This was corroborated by Chidoka cited by Idoko (2010) when he identified over speeding as one of the major cause of accidents on Nigeria roads. He therefore appealed to motorists to exercise extreme caution while travelling in view of the terrible condition of the Nigerian highway.

Dangerous overtaking is another contributory factor to road traffic accidents. According to Oyeyemi (2003), overtaking another vehicle dangerously is responsible for about 45% of all crashes on roads in Nigeria. Most drivers overtake carelessly and

some at corners or bends, and when their judgement is poor, it leads to crashes. Chidoka in 2009 also submits that most drivers, the commercial vehicle drivers in particular overtake at dangerous bends without caution, and this often lead to accidents most of the time.

Road accident is also sometimes caused by indiscriminate parking of vehicles. According to Chukwu (2007), some drivers are fond of parking their vehicles in the middle of the road just to change tyres or because of engine problem. This has on many occasions caused road crashes especially at night or around a sharp bend or close to crest of a hill where the vehicle cannot be seen far off by other road users. Literature revealed that some drivers of broken down vehicles do not give adequate warning signs to approaching vehicles and as such, others run into these vehicles thereby leading to the death of people and a times serious injuries (Balogun, 2006; Nigerian Highway Code, 2008).

Another cause of road accident is drivers' distraction either by passengers or through the use of mobile phone while driving. Despite the increasing benefits of the use of mobile phones, there is no iota of doubt in the fact that its use while driving has wrecked a lot of havocs world-wide including Nigeria. According to Ogunwumi (2009), many lives and properties have been lost through several preventable accidents through the use of mobile phones while driving. He further cited two dangers that are associated with driving and cell phone use. First, drivers must take their eyes off the road while driving; second, people can become so absorbed in their conversation that their ability to concentrate on the act of driving is severely impaired, jeopardizing the safety of vehicle occupants and pedestrians (Ogunwumi, 2009). There are increasing evidences that the dangers associated with cell-phone use outweigh those of other distractions. Safety experts also acknowledge the facts that the hazard posed by cell phone conversations is not eliminated (FRSC, 2007).

As stated in the FRSC annual report (2007), there have been cases of vehicle veering of their lanes into the bush, ditch or even colliding with on-coming vehicles because the drivers lost concentration while using mobile phones. For example, in 2004 along Lagos-Ikorodu road, a woman lost focus and control of the car she was driving and crossed to the other side of the road facing an oncoming vehicle due to distraction from the use of mobile phone and this resulted in the death of over thirty people and many others sustained various degrees of injuries (Ogunwumi, 2009). Many innocent pedestrians have also been killed and many drivers have lost control

while making or receiving calls while driving. The finding from a study carried out in Australia revealed that 61% of the drivers make use of mobile phones while driving (Orzag, 2009).

Apart from all the causes of road accidents mentioned, non-usage of seat belt by drivers while driving have also been found to be the cause of a large number of road traffic accident death or serious injuries in many developing countries. Research has shown that across all collision types, seat belts were not worn in most collisions involving death or serious injuries (Ezenwa, 2010). Seat belts are expected to be worn so as to increase safety of lives on roads and highways. A study carried out in Australia on the use of seat belt by commercial vehicle drivers show that seat belt usage have saved 72,000 lives during five years period from 2005 to 2009 (Anthony – Albanese 2010).

From all indications, it could be seen that the driver is the most important factor behind most reported cases of road crashes in Nigeria. It is believed that if drivers can be made to drive safely, a lot of road accidents might be averted.

Vehicular Factor

Abundance of mechanically defective vehicles are common sights on Nigeria roads and highways and these are in reality death traps for motorists. A small percentage of crashes are caused by mechanical failure of a vehicle. According to Oyeyemi (2003), the vehicle factors which often cause accident on the road include; worn out tyres, poor brakes and non-functional lights; overloading of public service vehicles and trucks, use of unsuitable vehicles like pickups for transport of passenger. Other mechanical factors causing road crashes include propeller and wheel pull out, shaft breakdown, engine failure, use of fake spare parts and poorly maintained vehicles (Nkwonta, 2001; Uchegbu, 2001).

Environmental Factor

The topography of Nigerian road network has quite remarkable obstructions in road constructions. According to Balogun (2005), mountains, valleys and rivers contribute to sharp bends, steep hills as well as sharp slopes which are potentially dangerous features against unsuspecting road users. Heavy torrential rainfall often causes deep gullies while extreme sunshine also affects the road network negatively thereby leaving potholes, deadly black spots as well as other impediments to safe

road use. These have caused needless accidents and deaths. Other environmental factors that militate against road use in Nigeria include foggy and dusty weather, dangerous bends, steep slopes and broken down/abandoned vehicle (Fadaka, 1995).

The influence of weather on roads can contribute to crashes; for example wet pavement reduces friction and flowing or standing water can cause the vehicle to hydroplane. According to Oyeyemi (2003), many severe crashes have occurred during conditions of smoke or fog which has greatly reduced visibility. Vehicle travelling at high rate of speed are unable to see the slowing and or stopped vehicles in front of them, which can lead into multiple-vehicle pile-up. Glare can reduce driver's visibility, especially during the hours of sunrise and sunset. During foggy conditions, glare off of streetlight and stoplights can also affect visibility, especially at night. The poor conditions of the highway are further exacerbated by the nuisance that trailers and heavy duty vehicle constitute. As stated by Anyaoku (2009), double parking on both sides of the roads makes movement to be slow and altogether hampered at many different times.

Though road crashes might occur due to mechanical and environmental factors, the vehicle and environmental conditions by themselves are incapable of producing road accident, it is the drivers' reactions or responses to these factors that eventually lead to accident (Ahmed, 2008). Most accidents are caused by faulty decisions by road users as a result of ignorance of traffic rules and regulations or wrong responses to varying road and traffic conditions. The World Health Organisation had predicted that by 2020, road traffic death and injury will exceed HIV/AIDS as a burden of death and disability (McGee and Krug, 2004). The World Health Organisation in its global report on road safety in 2009 states that over 90% of the world fatalities on the road occur in low and middle income countries which have only 48% of the world registered vehicles. Since road users are critical elements in the road transport system, their behaviour must be directed aright if significant gains are to be obtained. Hence, there was persistent call for the education of road users (FRSC, 2002)

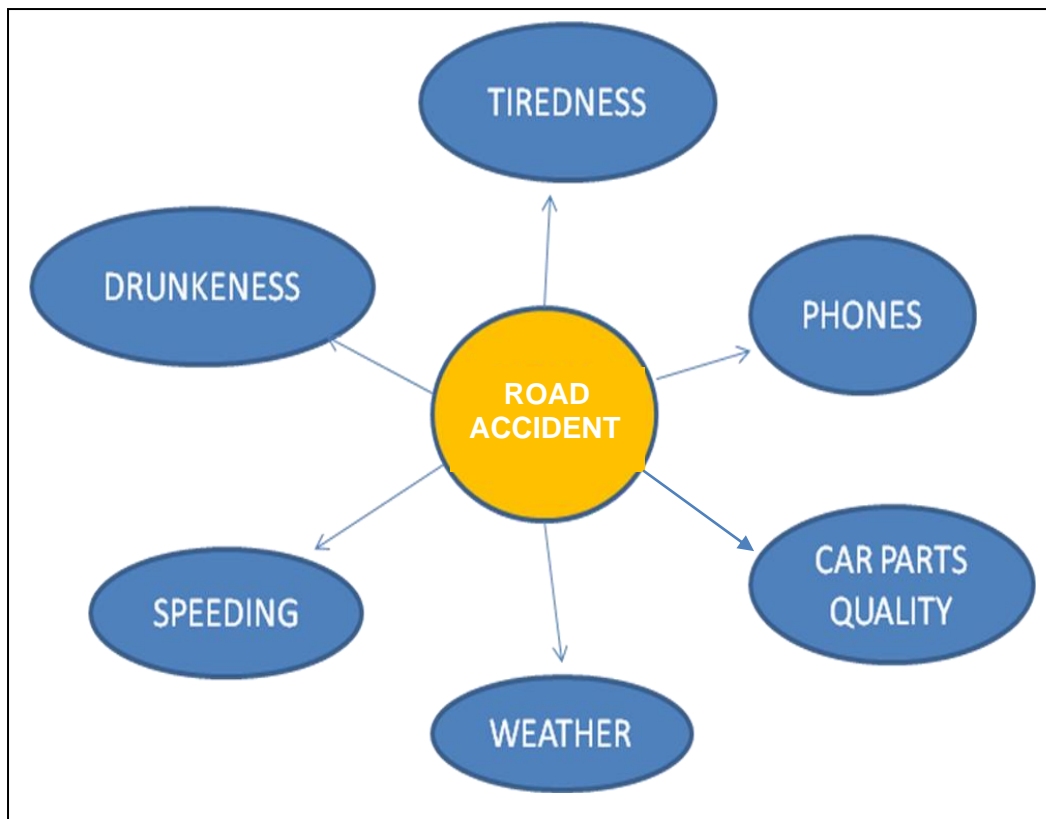


Fig 2.2: Some Causes of Road Traffic Accidents

2.4 Historical Overview of the Federal Road Safety Commission (FRSC)

Literature revealed that the antecedents of road safety in Nigeria could be traced back to the activities of Shell Petroleum Development Company Nigeria, Limited (Oyeyemi, 2003 and Balogun, 2006). The Nigerian army initiated road safety training within its rank and file shortly after the civil war in 1970. The Nigerian army also started the first public road safety campaign in 1972 with its road safety week organized every December as a response to the rising trend of road carnage. According to Balogun (2006), researchers suggested that improving road safety requires the participation of many different organisations and sectors, and that no one sector working alone can effectively reduce the number of road casualties. Either a lead Ministry or a National Road Safety Council (NRSC) or Commission should head the concerted effort. Thus, in 1974, the Federal Military Government created the National Road Safety Commission [NRSC] (Oyeyemi, 2003; Balogun, 2005; FRSC, 2007). The scholars stated that the commission was put together with representative from selected ministries, other government agencies and the police. However, the impact of a government sponsored agency outside the military was not felt until 1977

when the then military governor of old Oyo State created the Oyo State Road Safety Commission (OYSRSC) also known as '*Majamaja*' (Adeleye, 1994; Okorie, 1996; Amaka, 1997). The Oyo State Road Safety Commission was a small but efficient and quick action corps of men and women who were properly equipped to combat the menace of road crashes in the then Oyo State.

The Federal Road Safety Commission (FRSC) is an offshoot of the Oyo State Road Safety Commission (OYSRSC). Literature revealed that before the formation of OYSRSC, two committees were set up in the early 70s to examine the factors that were responsible for carnage on Oyo State roads (Ochuko, 1995; Oyeyemi, 2003). The two committees were the Highway Accident prevention committee (HAPC) and Road Safety Committee (RSC). While the former was responsible for the provision of road signs, pavement marking and clearing of obstacles from roads, the latter was responsible for organizing road safety campaigns on an annual basis in the state and local government areas. The campaigns were meant to enlighten road users on the proper use of roads and reduction of accidents on the roads. However, the campaigns were found to be only effective for the time it lasted. The committee lacked the power to enforce regulation, thus, a new approach had to be adopted.

In 1977 researches carried out by a nine man committee led to the formation of the Oyo State Road Safety Commission. According to Oyeyemi (2003), members of the commission (corps) were charged with the responsibility of preventing or minimizing road accidents, taking care of accident victims, educating both drivers and prospective ones, conducting research into causes of road accidents and possibly finding ways of preventing them. The committee set up to evaluate the body (in order to carry out the functions successfully) suggested that the corps members be backed up by law, possess the relevant tools for the job, (such as vehicles, motorcycle, ambulance) be empowered to make arrest of offending drivers, detain vehicle and be provided with all requisite legal means to protect all the road safety functionaries (Ochuko, 1995). Other proposed activities of the OYSRSC included streamlining of the procedure for obtaining drivers' licence, a programme of educating drivers through the driver educating centre, streamlining of vehicle inspection procedure, supervision of driving schools, research collation and interpretation of data. With the operation of the OYSRSC, significant improvement in road safety and discipline became evident.

Oyeyemi (2003) stated that the success of the first road safety project in Oyo state was so significant that other states of the federation began to copy the approach.

However, between 1982 and 1983 due to election, it was alleged that the road safety commission of Oyo State was being used as a political weapon for fighting the opposing party (NPN) by the ruling party (UPN). Thus, in 1983, the then government of the Federal Republic of Nigeria banned the activities of OYSRSC on federal roads (Oyeyemi, 2003). The power of the OYSRSC was therefore restricted to the Oyo state roads only and this gave the public the opportunity to disobey the traffic rules and regulations. According to Ochuko (1995), this act of the federal government gradually diminished the power of OYSRSC until it finally died out in 1983.

The following four years after the demise of OYSRSC saw a glaring rise in road accident in Nigeria. The situation was so bad in 1988 that Nigeria was labelled as one of the most dangerous country worldwide with fatality index of road crashes exceeding 120 percent mark. The situation of the road during this time led to extensive researches being carried out by some scholars and the results of their studies provided operational framework for the activities of the unborn FRSC (Oyeyemi, 2003). The society felt that there was a need to establish good and efficient machinery for controlling traffic on roads and highways in Nigeria. It was against this background that the FRSC was established by the Federal Government on 18th February, 1988.

FRSC was established by the government of the Federal Republic of Nigeria under decree No. 45 of 1988 and amended by decree 35 of 1992 otherwise known as FRSC Act CAP 141 laws of the Federation with effect from 18th February, 1988 (FRSC, 2007). As stated in the FRSC Act (1990), the commission is charged with the responsibilities for policy making, organization and administration of road safety in Nigeria. According to Ogunjobi (1991) cited by Oyeyemi (2003), the initial statutory location of the FRSC under the presidency gave it a level of autonomy and independence which conferred on it the right of self-determination in certain establishment and service matter such as policies, operational methods and modes, staff development and training, administration, salary structure, line of communication, self-accounting and bearing of firearms as a paramilitary organization. In 2001, the presidency removed the autonomy of the FRSC. The command and control of the commission was thus placed under the direct supervision of the Inspector General of Police and its nomenclature was also changed from Commission to corps (Oyeyemi, 2003). However, apart from command and control at the policy level, the FRSC is allowed to remain intact in every of its usual

ramifications.

FRSC has a twelve member Governing Council appointed by the President, Federal Republic of Nigeria. The national headquarter is at Abuja and it is headed by Chief Executive Officer (CEO) who oversees the day to day administration of the corps. Information from the FRSC (2007) revealed that the commission had its first National Headquarters at Ibadan, later at Gbagada, Lagos. It was moved to Abuja in 1992. According to Balogun (2006), the Commission at inception had five zonal commands located in Kaduna, Bauchi, Benin, Aba and Ibadan. These zonal commands were meant to co-ordinate the activities of the commission in the various states. The commission had been restructured a number of times over the years to achieve greater productivity. The structure of the commission thus; metamorphosed from six directorates to eleven departments in 2003 and these departments were pruned down to eight in 2005 with the nomenclature changing from directorate to departments (Balogun, 2006; FRSC, 2007).

In the same vein, the number of the zones grew from the initial five to ten, later back to eight and rose again to twelve zonal commands in 2005 (FRSC, 2007). The zonal structure was later re-aligned when the commission was de-emerged from the Nigeria police. This resulted in the relocation of some zonal command headquarters. The zonal headquarter of the Southwest is presently in Osun State. The number of sector commands has continued to increase due to creation of States with state creation. According to Balogun (2006), the number of unit command has grown from less than twenty in 1994 to seventy in 2005. This has further continued to increase till date. The commission (in order to give room for effective performance) also created a number of specialized units known as corps offices. These include the Public Educational/Enlightenment, Intelligence, Provost, Legal, Corps Secretary, Audit and Corps Protocol as well as Rescue Unit (FRSC, 2007).

The establishment, function, power of the commission as well as functions and ranks of members of the road safety corps are well stated in Act CAP 141 of 1990 laws of the federation of Nigeria. The statutory functions as well as the responsibilities of the FRSC generally relates to making the highway safe for motorists and other road users by educating drivers, motorist and other members of the public on the proper use of the highway, clearing obstructions on any part of the highways, designing and producing the drivers' licence to be used by various categories of vehicle operator, determining from time to time, the requirements to

satisfy by an applicant for a driver's licence, the standardization of highway traffic codes, giving prompt attention and care to victims of accident, determining and enforcing speed limit for all categories of roads and vehicles and controlling the use of speed limiting devices (FRSC Act CAP 141,1990 P6). Other responsibilities of FRSC stated in the Act include: 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 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 paramilitary agencies, providing roadside and mobile clinics for the treatment of accident victims free of charge, regulating the use of seatbelts and other safety devices, regulating the use of motorcycles on the highways, maintaining the validity period for drivers' licences which shall be three years subjects to renewal at the expiration of the validity period (FRSC, 2007). The offences and penalties for each offence are also stated on pages 11 and 15 of the Act.

Since the establishment of the Federal Road Safety Commission, the agency has been battling with the onerous task of reducing road traffic crashes and the creation of safe motoring environment in Nigeria (Emejor, 2010). The emergence of FRSC brought about the introduction of the harmonization of the national road traffic regulations of 1977. Literature revealed that the provision in the regulation contains the following highlight: the establishment of the directorate of motor vehicle administration in every state of the federation and the FCT, conditions for the registration of vehicle licences and vehicle identification mark (plate number), driving licence (classes and eligibility), conditions for the registration and operations of taxis stage carriages, omnibuses and motorcycles for hire, passenger manifest, conditions for the use of a motor vehicle generally, vehicle examinations by vehicle inspection officer, the act of driving (rules and regulations for private/commercial drivers and motorcycle riders), removal of accidental vehicles from the highway, special provisions relating to the use of express way, miscellaneous motor traffic regulation, provision for the inspection of vehicles, provisions relating to pedestrians and to traffic other than motor traffic, International convention provisions and general provisions, exemption, revision of the highway code, offences, power to issue notice of offence, delegation of power to make other regulations, amendment, interpretation and citations (Oyeyemi, 2003; Balogun, 2006).

The national road traffic regulation gazetted by the federal government introduced far reaching measures for sanity on the various traffic situations. According to Balogun (2006), the road traffic regulations concern not only drivers and vehicle owners, but also the pedestrians, the passengers, the young, the old, the educated, the less educated and practically every person in the society. The law also provides for the education of drivers. The, FRSC also put in place various schemes to reduce road traffic accident in Nigeria. As written in FRSC annual report (2002), the schemes include revision of the Highway Code, the introduction of national uniform licensing scheme, public education, three tier systems and four point approaches.

2.5 The Highway Code

According to Nkwonta (2001), the Highway Code was first written in the early 1930s as part of the received English laws domesticated for use in most British colonies. This was updated in 1972 to include new regulations in consideration of emerging and more complex traffic situation in Nigeria. In his book, Oyeyemi (2003) states that there was no conscious effort in the direction of the Highway Code in line with changing realities in road traffic administration until 1989 and 2008. The Nigerian Highway Code was revised in 1989 and 2008 by the FRSC to meet local and international specifications of road traffic management and crash control. Critical review of the Highway Code indicates that it is divided into seven parts and 33 sections with each part dealing with an important aspect of highway safety in the country.

In the revised Highway Code (2008), there are safety guidelines for various road users. There, the pedestrians are advised not to loiter on any type of pedestrian crossing, willfully obstruct the free passage along highways, proceed along or across the carriage way when given a direction to stop by a traffic officer charged with controlling traffic, be drunk in any highway or public place, walk on the express way or cross it except by using specially designed bridges. The cyclist must have efficient brakes, always have consideration for other road users, and observe traffic signs and signals of traffic officer controlling traffic, stop when signaled to do so by a school crossing patrol, give precedence to pedestrians on an uncontrolled zebra crossing. The cyclists must neither stop their cycles within the limits of a pedestrian crossing except to avoid an accident nor ride in a manner which is dangerous to the public. They must

not ride under the influence of alcoholic drink or drug, willfully rise on a part set apart for the use of pedestrians and interrupt the free passage of any road user or vehicle (Nigerian Highway Code, 2008).

There are also safety guides for drivers which are expected to be carried out before, during driving for safe driving and when one stops. As stated in the highway code book, these include ensuring that their vehicles are properly licensed and insured, ensuring that they have valid and correctly classified driver's licence, they have current road worthiness certificate for their vehicles, their eye sights can pass the test required for safe driving, the condition of their vehicles and of any object they may be towing and all parts and accessories is such that no danger is likely to be caused by themselves or others, their vehicles are properly fitted with clean wind screens, properly inflated tyres, good brakes, mirrors seat belts, wipers and good headlamp.

When driving, motorists are enjoined to be in such a position that he/she can exercise proper control over his/her vehicle and retain a full view of the road and traffic ahead, observe speed limits or any special speed limit for his or her vehicle or the highway or determined by weather or road conditions, drive on carriage ways only and observe lane rules, observe traffic signs and signals and the direction of a traffic officer controlling traffic. For safe driving, vehicle drivers must not; drive recklessly or at a speed or in a manner which is dangerous to the public, drive without due care and attention or without reasonable consideration for other persons using the road, drive under the influence of drugs or alcoholic drinks, sound his or her horns at night in a built up areas except in emergencies, reverse on the expressway, park his/her vehicle on the road in a way to cause obstruction, park in a way that is likely to cause danger to other road users. Information from the FRSC also revealed that the well illustrated revised Highway Code has been translated into the three major Nigerian languages: Hausa, Igbo and Yoruba.

An important aspect of the Nigerian Highway Code is the road signs. According to Nkwonta (2001), one of the most important aspects of the Revised Nigerian Highway Code is the knowledge of the traffic signs. These traffic signs are grouped into three broad headings namely: Regulatory, warning and mandatory signs so differentiated by their shapes and colours. The signs are to ensure a smooth and safe traffic flow and road users are expected to know, understand and be able to recognize them immediately they see the signs so as to prevent accidents on the road.

Though a thorough knowledge of traffic signs, signals and road pavement marking is compulsory for all drivers, research conducted by Federal Road Safety Commission (FRSC) contained in FRSC annual reports (2002) shows that the highway code are frequently broken by all categories of road users either through ignorance, negligence or willful act. Ahmed (2008) affirmed that most faulty decisions that result in motor vehicle crashes are attributable to ignorance of traffic signs and regulations.

2.6 Public Education/Enlightenment

As stated in FRSC annals (2002), one of the most important objectives of setting up the commission is to educate motorist and the other road users on the proper use of highways. Thus, a very important function of the commission is the education of the public on adherence to road safety rules and regulations and subtle enforcement of it through arrests and fines. This is usually done by the public enlightenment department of the commission According to corps marshal Akpabio (the head of the public enlightenment department) during an interview with the Nation newspaper on the 15th of November, 2009, p13, enlightenment programmes are usually carried out by the Commission to mitigate the carnage on roads. The underlying philosophy behind most of their programme is to ensure that road traffic crashes, injuries and death rates are reduced to zero level (if possible).

As stated by Sani (2005), the tools and strategies being used for effective enlightenment of the road users by the FRSC include;

- (a) Electronic media and the print media. The electronic media consists of the radio and the television. While radio provides audio effects in public education, the television provides both audio and visual effects. The print media - this comprises the daily or weekly newspapers, magazines, journals and newsletter handbills. Through the print media, advertorial, editorials, comments, discussions, interviews, road traffic accident data, warnings and information on road conditions- are brought to the motoring public for their enlightenment and guidance. Various jingles on radio and television and newspaper advertisement form the bulk of the corps enlightenment media.
- (b) Public enlightenment workshops, seminar, drivers improvement courses - are strategies for public enlightenment on road safety. They are usually organized to discuss, highlight and profer solutions to peculiar or persistent road safety phenomena.

- (c) Motor Park rallies involving drivers' association and passengers teaching them to avoid accidents or what to do in case of accidents. They usually feature lectures speeches, advice, warnings, drama sketches, demonstrations, questions among others.
- (d) Highway Code campaign emphasizing Highway Code literacy and the understanding of vehicle parts and function, special campaigns during festivals and special campaigns for selected targets such as ministries, institutions, banks, media houses, truck drivers and road relate industries and focusing attention on passengers who tend to be unaware that road crashes claim more passengers than drivers.
- (e) Enforcement of traffic rules and regulations and free eye test
- (f) Establishment of model driving schools to train drivers and its trainers
- (g) Listing of various offences, penalty points and appropriate deterrent fines to enlighten road offenders against repeating road offences.

According to Sangowawa (2007), several public enlightenment campaigns have been carried out by the FRSC in various motor parks in order to improve road safety among the commercial vehicle drivers. The enlightenment campaign aimed at educating commercial drivers about the important role they play in road safety. Topics addressed include the problem of road traffic accidents as well as the causes and prevention of accidents, the importance of seatbelts and consequences of non-usage. Furthermore, Centre for Emergency Help and Accident Prevention (CEHAP) organised road safety activities that spanned the whole week in 2007. There, Radio jingles, Television programmes, workshops, rallies and road safety campaigns were carried out.

Other efforts made by the public enlightenment/education unit of the FRSC to reduce road traffic accidents in Nigeria as stated by Balogun (2006) include: the establishment of Special Marshal Units (SMU) in all local governments. This is to assist the regular paid marshals create more awareness and ensure participation in private and public sector. The establishment of SMU takes into consideration high traffic flow, land mass, road network as well as diverse background of human resources and interest group. The members of the special marshal unit do not exceed ten (10).

The FRSC has its formation in 12 operational zones, 37 sector commands and 82 unit commands throughout the country to patrol and bring sanity to our highways.

As stated in the FRSC Act (2007), various offences, penalty points and appropriate and deterrent fines have been identified and listed on their book sheet to further convict and enlighten the offender against repeating the offence. Advisory committee and road safety clubs are established at state and local government level, secondary and tertiary level of education so that everybody will be road safety conscious. The FRSC since 1988 has been persuading drivers to drive carefully, educate children and adults on safe road use, reformed and enforce traffic regulations to accommodate safety on roads.

In addition, a review of the paper presented by Sani (2005) at a workshop for FRSC Public Enlightenment officers held at Zone RS4 HQ Jos, indicated that the commission used to persuade local government to construct physical calming structures, engage all relevant agencies in public campaigns on traffic regulation, enforce compulsory installation of speed governors and fire extinguisher in vehicle, use seat belt in rear seat of vehicle. Each public education officer at all levels of commands endeavoured to identify all formal and informal grouping i.e. NURTW (Bus/Taxi) NUPENG (not related to Transport but influential) NATO, PENGASAN etc., their members are appointed into council and they relate with them equally, carefully and understandably.

Furthermore, the Federal Road Safety Commission in order to ensure co-ordinated road management evolved a three tier system (Yakassai, 1997; Oyeyemi, 1999). These are: Regular marshals, special marshals and road safety club. Yakassai (1997) stated that the components used by the regular and special marshals to enforce all traffic rules and regulations are the elements of persuasion, subtle force and enforcement (fines and prosecution). Generally, the corps efforts are concentrated on striving to be identified as an extension of the social will of the citizenry rather than being seen as yet another agent of government revenue collector (Balogun, 2006). The corps on all nations' highways carry out mobile motorised patrols similar to those of the police. Several materials are usually deployed to various routes of the highway to ensure strict compliance with traffic rules and regulations even as offenders are prosecuted (Chidoka, 2009).

From all indications, it is obvious that the role of the public enlightenment unit of the FRSC in the provision of safety on roads is very important. Since the FRSC functions are to enlighten and to enforce, its effectiveness is found in the road users profiles which reflects the areas in which their behaviour have changed and those in

which nothing is observed. In the light of these functions, it is yet to be seen how the public enlightenment programme of the FRSC has impacted on the beneficiaries since the road safety public enlightenment programme has never been evaluated and its effect on road users and road traffic situation is unknown.

2.7 Evaluation

According to Umoru-Onuka (1996), evaluation is an elastic word that stretches to cover judgement of many kinds and it has been defined in different ways depending on the purpose for which evaluation is being carried out. Ogunyinka (2000) stressed that literature on evaluation has been marked by different approaches which have given rise to different definitions. Ogunyinka (2000) citing Chelmsky also stated that there are several purposes for doing evaluation, for example evaluation could be done to measure and account for the result of public policies and programmes, or to determine the efficiency of programme or project and their component processes, or to gain explanatory insights into social and other public problems and into past and present efforts to address them. In their writing, Reeve and Peerbhoy (2007) argue that evaluation is a 'contested term' as evaluators use the term evaluation to describe an assessment or investigation of a programme, whilst other researchers simply see it as being synonymous with applied research. Potter (2006) asserts that evaluation is an eclectic and diverse field. He argues that this diversity is reflected in the body of literature around evaluation.

Evaluation is a theoretically informed approach and consequently a definition of evaluation could be tailored to the theory, approach, needs, purpose and methodology of the evaluation itself (Reeve and Peerbhoy, 2007). According to Trochim (2006), evaluation is the systematic acquisition and assessment of information to provide useful feedback about some objects. (Object here could refer to a programme, policy, technology, need, activities, and e.t.c.) This definition emphasizes acquiring and assessing information. This is because all evaluation work involves collecting and sifting through data, making judgement about the validity of the information of inferences we derive from it. Hence, the reason for evaluating someone or something at times is to estimate the worth, quality, importance, relevance, performance, with a view to pricing, rating, correcting, improving or changing it. Evaluation is a feedback mechanism which enables one to find out whether or not a programme's goals are being achieved.

The generic goal of evaluation is to provide useful feedback to a variety of audience. (Trochim, 2006). Evaluation enables the evaluator to identify the strength, weaknesses, opportunities and threats of a programme. Earlier on in his study, reference was made to Umoru-Onuka (2001) who asserts that evaluation is the documentation of a programme activities to prove that stated objectives of a programme are being achieved or otherwise, as well as to determine how well and how efficiently they have been achieved, (which is programme accountability). Thus, evaluation seeks to answer questions like; how good, how adequate, how efficient, how effective, how stable a programme is. In an attempt to provide a comprehensive definition of evaluation, Palton (1997) in Ogunyinka (2000) defined evaluation as the systematic collection of information about activities, characteristics and outcomes of a programme to make judgement about the programme, improve programme effectiveness and inform decisions about future programming.

Other literature reviewed showed that different scholars gave different definitions to evaluation. Rossi, Lipsey and Freeman (2004) for example described evaluation as a systematic, rigorous and meticulous application of scientific methods to assess the design, implementation, improvement and or outcome of a programme. In their study, Guba and Stufflebeam cited by Ogunmodede (2006) defined evaluation as 'the process of delineating, obtaining and providing useful information for judging decision alternatives' while Umoru-Onuka (1996) had earlier on, asserted that evaluation is a process because it provides a basis for rational choices between alternative practices. It involves the appraisal of effectiveness of a particular enterprise or commission, the degree to which a set goal is being achieved. Stufflebeam in Reeve and Peebhoy (2007) also defined evaluation as a study designed to assist some audience to assess an object's merit and worth. In this definition, the focus is on facts as well as value laden judgement of programme outcomes and worth. These definitions reveal that evaluation is a process of involving objectives (or goals or decision areas of concern) for which information should be gathered, analysed and reported to aid judgment of merit in decision making.

Programme evaluation is one of the major concerns of educational evaluators. Evaluation should produce true, relevant, credible and objective findings and conclusions in programme performance based on valid and reliable data collection and analysis. As stated by Obemeata (2005), evaluation can be said to be successful only in so far as the information generated forms part of the decision making process

of findings and the extent to which the goals of a programme are being achieved. Umoru-Onuka (1996) stressed that evaluation must deal with both the intended and unintended impacts of the programme.

There are many different types of evaluation depending on the object being evaluated and the purpose of the evaluation. Perhaps the most important basic distinction is that between *formative* and *summative* evaluation. Formative evaluation is the type of evaluation that aids and guides development and implementation of a programme (Scriven, 1974) It is a type of evaluation that is most appropriate during the planning and implementation stages of a programme. In Formative evaluation, questions asked as stated by Trochim (2006) include:

- i What is the definition and scope of the problem or issue, or what's the quest.
- ii Where is the problem and how big or serious is it?
- iii How should the programmes or technology be delivered to address the problem?
- iv How well is the programme or technology delivered?

Formative evaluation strengthens or improves the object being evaluated. They examine the delivery of a program or technology, the quality of its implementation, and the assessment of the organizational context, personnel, procedures, inputs, and so on. Summative evaluation in contrast, is a type of evaluation carried out at the terminal stage of a programme. It focuses on the overall effectiveness of a programme for the purpose of making judgement or worth of the outcome of a programme. Trochim (2006) states that questions asked in summative evaluation include;

- i What type of evaluation is feasible?
- ii What was the effectiveness of the programme or technology?
- iii What is the net impact of the programme?

Summative evaluation examines the effects or outcomes of some object, they summarize it by describing what happens subsequent to delivery of the program or technology; assessing whether the object can be said to have caused the outcome; determining the overall impact of the causal factor beyond only the immediate target outcomes; and, estimating the relative costs associated with the object. Others include (i) Project evaluation, (ii) Programme evaluation, (iii) Diagnostic evaluation, (iv) Goal based or goal free evaluation etc. The purpose of evaluation determines which type to employ; for example, Umoru-Onuka (2001) stated that the evaluation of a project calls for project evaluation which in fact is a component of programme

evaluation. If it is meant for immediate correction, then the only option would be formative (development) evaluation while summative evaluation could be used to determine whether or not a programme should be retained, since one of the purposes of evaluation is to examine progress towards goal. Evaluators ask many different kinds of questions and use a variety of methods to address them depending on whether the evaluation is formative or summative.

2.8 Programme Evaluation

Programme evaluation consists of those activities undertaken to judge the worth or utility of a programme. The Treasury Board Secretariat (2001) defined it as “the systematic collation and analysis of information on the performance of a policy, programme or initiative to make judgement about relevance, progress or success and cost effectiveness, and or to inform future programming decisions about design and implementation,” while Umoru-Onuka (2001) described programme evaluation as a means of programme accountability. It determines the responsiveness of a programme operator by providing answers to questions as to how it has been responsible in achieving its goal to the programme clientele.

Evaluation is an essential, integral component of all innovative programs” It is “the process of making judgment about the merit, value, or worth of educational programs, projects, materials and techniques” (Townsend and Adams 2003). In his own writing, Mattessich (2003) defines programme evaluation as “a systematic process for an organisation to obtain information on its activities, its impacts and the effectiveness of its work, so that it can improve its activities and describe its accomplishments” while Wholey (2004) defines programme evaluation as “the systematic assessment of the programme result and, to the extent feasible systematic assessment of the extent to which the programme caused those result”. To him, programme evaluation includes on-going monitoring of programme as well as snapshot studies of programme process or programme impact. Stake and Schwandth (2006) cited by Hurteau, Houle and Mongiat (2009) assert that the main purpose of programme evaluation is to determine the quality of a programme by formulating a judgement.

Among these and other definitions, it is clear that programme evaluation employs and depends on a systematic process. Many of the definitions also address the goal of programme evaluation which is to obtain information that will assist with

decision making to improve a programme. Programme evaluation investigate the contribution of all stakeholders towards objectives realization or otherwise of the programme. It takes cognizance of all parameter that could either make or mar the realization of the programme objectives.

Program evaluation is a collection of methods, skills, and sensitivities necessary to determine whether a human service is needed and likely to be used, whether the service is sufficiently intensive to meet the unmet needs identified, whether the service is offered as planned, and whether the service actually does help people in need at a reasonable cost without unacceptable side effects (Posavac and Carey, 1997, p.2). Sanders (2000) submit that the essential characteristics of sound and fair program evaluation comprises of four categories which include; *Utility standards*- that is ensuring that an evaluation serves the information needs of the intended users. More specifically, they include: stakeholder identification, evaluator credibility, information scope and selection, values identification, report clarity, report timeliness and dissemination, and evaluation impact. *Feasibility standards* require that an evaluation be realistic, prudent, frugal, and diplomatic. Practical procedures, political viability, and cost effectiveness comprise these standards. *Standards of propriety* guarantee that any evaluation will be conducted ethically, legally, and with due regard for the welfare of those both involved and affected by the evaluation.

These standards embrace service orientation, formal agreements, rights of human subjects, human interactions, fair and complete assessment, disclosure of findings, conflict of interest, and fiscal responsibility. Finally, *accuracy standards* guarantee that the evaluation reveals and conveys information that is technically adequate relative to determining the worth or merit of the program under review. They consist of program documentation, context analysis, described procedures and purposes, defensible sources of information, valid information, reliable information, systematic information, analysis of quantitative information, analysis of qualitative information, justified information, impartial reporting, and meta-evaluation.

Programme evaluation adopts macro-approach. It takes a global or holistic approach to the investigation. For instance, Umoru-Onuka (1996) in his evaluation of the impact of management training programme, took holistic/global views of the programme. He examined the antecedents (input and context) of the programme, transaction or processing (transformation) including instruction and the outcome (output) their efficiency and effectiveness at workplace after training. Evaluation may

be conducted for programme of any size or scope. The essence of evaluation during the implementation of a programme plan is to provide information for feedback into the system for necessary adjustment and improvement to ensure that the ultimate execution of the plan complies with that which was desired at its conception or for better results. This means that evaluation is a major tool for determining programme accountability, the result of which is used as feedback to the system for corrective purpose. Thus, evaluation can be said to be successful only in so far as the information generated forms part of the decision making, process of finding and the extent to which the goals of programme are being achieved (Obemeata, 2005). Monitoring and evaluation are therefore necessary at all steps of a road safety policy or program to ensure that the proper action is actually carried out or that necessary adjustments are made.

The results from monitoring and evaluations can be reported to decision-makers and the road users as a basis for more road safety action. Impact evaluation is implied in both programme and project evaluation as it goes on to look at the total effectiveness of a programme intended and unintended, negative or positive.

2.9 Impact Evaluation

One critical stage of an evaluation process is to identify evaluation goals because it determines the overall structure of the evaluation efforts and establishes parameters that influence later stages of evaluation (Mafolasire, 1999). The determined structure can then be used to qualify the evaluation process and differentiate it from others with different goals. Impact evaluation means assessment of the direct and indirect effects of activities and programme on individual, institutional and sectional performance and/or on policies and the consequences for the welfare of the larger community. According to Osei (1998), impact evaluation may be viewed as the process of determining the weight of a thing from the evidence about that thing or object while Ogunyinka (2000) states that impact evaluation is an ex-post evaluation which attempts to identify all the effects of a programme whether intended or unintended. In his own view, Orzag (2009) states that evaluation can help policy makers and agency managers strengthen the design and operations of programmes. Rigorous independent programme evaluation can be a key resource in determining whether government programmes are achieving their intended outcomes as well as possible and at the lowest possible cost of operation of programmes.

Impact evaluation aims at determining the effects of a programme. The goal is to make researchers, policy makers and the general public aware of studies planned or underway that examine whether a programme is achieving its intended outcome or study alternative approaches for achieving outcomes to determine which strategies are most effective. There are a number of steps to programme evaluation. These include;

- (i) Identifying and examining the values in the programme being evaluated.
- (ii) Formulating or clarifying the goals and objectives or purpose of the programme.
- (iii) Determining the criteria of measure of its value.
- (iv) Defining, obtaining, analyzing or interpreting data.
- (v) Determining and explaining the extent of its success or failure.
- (vi) Showing the relationship between experience during the programme and programme outcome.
- (vii) Identifying the intended effect.
- (viii) Finding out the programme impact and that of the external variables uncontrolled by the programme.
- (ix) Recommending alteration, replacement or discountenance of the programme or some features of the programme.
- (x) Setting up a continuing review of the programme.
- (xi) Assessing the value, benefit and social ability of the programme objectives and process and the evaluation itself.

Impact evaluation is a purposeful activity undertaken to affect policy and institution's development in order to reshape the design and implementation of future interventions and to improve the management of training and development programme (Umoru-Onuka, 1996). It can increase understanding of the positive and negative factors that have contributed to impact. Impact evaluation could be viewed as a goal evaluation, although, it also considers information on the unintended outcome of the programme.

Scriven (1991) in Ogunyinka (2000) defines impact evaluation as an evaluation focused on outcome or payoffs rather than on the process, delivery or implementation while Rossi and Freeman (1989) also in Ogunyinka (2000) defined the term as "the net effect of programme. In impact evaluation, efforts are always made to move towards the set objectives of a programme and see the aspects of the objectives that have been achieved. Impact evaluation involves the gathering of

information on the programme's antecedents, transaction and outcome (Osei, 1998). Impact evaluation looks at the overall effectiveness of a whole programme. There are many programmes whose impact can be evaluated. These include social, welfare and education programmes. The nature of a programme will determine the nature of impact that is expected and consequently the type of evaluation activities that will be carried out. Trochim (2006) identified several sources of data for programme or impact evaluation as follows; the judgement of authorities about the programme, the opinions of the consumers of the commission's programme, the opinions of the programme/commission staff, the comparison of actual and expected outcome. Impact evaluation is one purpose of evaluation. It may be viewed as the process of determining the weight of a thing from the evidence about that thing.

2.10 Evaluation Models

Provus (1973) in Ogunmodede (2006) defined evaluation as an assessment of the discrepancy between objectives and performances. Evaluation cannot be carried out without a direction (Rose and Nyre, 1977). Models are like guides and they in fact guide the evaluation. Evaluation models can be used to help you define the parameters of an evaluation, what concepts to study, and the processes or methods needed to extract critical data. Ogunyinka (2000) described evaluation model as a (a pictorial) path way which has been found to be workable within a design.

There are a wide variety of evaluation models which "prescribe what evaluators ought to do and explain how to conduct a particular type of evaluation" According to Borich (1974) in Ogunmodede (2006), models have three identifiable characteristics namely precision, specificity and verifiability. He stated that models must be efficient, heuristic, internally logical and complete, capable of being extended by empirical study, capable of helping the evaluator anticipate all the information needed for decision making and capable of relating elements in ways not previously related. Models of evaluation exist in large number. These include goal attainment model, discrepancy model, the context, input process, product, model (CIPP), the CES model, the countenance education evaluation model i.e. Antecedent, transaction, Outcome model (ATO) etc.

Although there are different programme evaluation resources with different intended audiences, a review of over one hundred evaluation models by first nation found a number of similarities. First most evaluation is concerned with one or more of

the following types of evaluation.

- (i) Formative – which is often concluded in the early stages of a programme? The results from this type of evaluation are often used to help structure the rest of programming and/or develop a baseline of information for comparative purposes.
- (ii) Summative which is often conducted at the end of a programme and addresses the question, “Did the programme make a difference?”

A second similarity among many of the model is the call for incorporating programme evaluation into the overall programme design process. Part of the rationale for this stems from the movement away from strictly measuring outputs and outcomes to recognising the importance and opportunities of evaluation at all stages of a programme.

Goal Attainment Models

These models focus on the achievement of stated goals and objectives of a programme. They do not consider the unintended outcomes of a programme neither do they consider the implementation process of the programme in question. Tyler's model belongs to this category.

Goal Free Model

This model is a modification of goal attainment or objective oriented models originated by Tyler in the 1930s. According to Ogunmodede (2006), the originator of the model states that every programme may have its stated objectives but the evaluator must be free from the bias of the programme's goal. It is not necessary to evaluate only with regards to goals and objectives, instead "goal free evaluation" and 'Eolithic' are certainly possible. Ogunmodede (2006) further stated that Eolithic evaluation is more of a "process" evaluation and that instead of looking at how/if goals are fulfilled, the investigator is directed to "consider how ends can flow from means. One begins by seeing what exists in the natural setting and then attains whatever outcomes one can with the resources at hand". In his writing, Scriven (1974) indicated that a programme should not be judged only by the intended, but also by its unintended outcomes. The models suggest that data collected on the actual effects of the programme should be used to pass value judgement on the programme irrespective of its goal. The criticism against this model is that it focuses only on the

programme outcomes and neglects the other components of the programme (Rose and Nyre, 1977).

The Discrepancy Model

This model got its name from the definition of evaluation by Makolm Provus. Discrepancy model involves five stages. The primary functions and orientation of this model is to provide information for decision makers. Popham (1975) refers to it as decision facilitation model.

Judgemental Model

In this category are models that focus on the assessment of merit of an entity. As stated by Ogunyinka (2000), evaluators in this group take into account not only the goals and objectives of the programme but also the processes or operations as well as the outcome, intended and unintended. Scriven and Stake's models exemplified judgemental models.

The CIPP Model

The CIPP model is one of the most well known and widely used. It was developed by Guba and Stufflebeam in 1970. The CIPP is an acronym that stands for four types of evaluation which is the model clearly addressing; Context Evaluation, Input Evaluation, Process Evaluation and Product Evaluation. According to Rose and Nyre (1977), the CIPP model distinguish between four different decision making settings in education and four corresponding types of decisions, in addition to the four types of evaluation that form the model's name. Basically, the CIPP model answers the following four questions.

- ▶ (i) What objectives should be accomplished?
- (ii) What procedures should be followed in order to accomplish the objectives?
- (iii) Are the procedures working properly?
- (iv) Are the objectives being achieved?

The CIPP model has been used extensively to guide programme evaluation throughout the field of education. It is one of the first full scale models that directed attention to information needs of decision makers.

Stake's Model

This is known as countenance model. The model says that evaluation is a judgemental process of ascertaining the discrepancy between objectives content and performances (outcome). The countenance model was created by Robert Stake (1967). Stake (1967) contends that an evaluation should be concerned with three categories of data sources namely: Antecedent, Transaction and Outcome Stake's congruency-contingency model has therefore come to be known as ATO Model. Antecedents refer to conditions existing prior to implementation of the programme/or introduction of programme. Transactions are the interactions and activities that take place during the development and implementation of the programme. Outcome refers to the effects of introducing the program on group of people, organization or policies.

Stake views evaluation as a system describing educational programme as well as judging the worth of the programme in relation to some external criteria. Thus, an evaluator using the ATO model has two responsibilities; (i) describe the Antecedents, Transaction and Outcome of the programme (ii) judge the appropriateness or merit of the three categories of data. The countenance of educational evaluation model which Stake proposed can be represented in one form or another depending on adaptation. The model takes into consideration the fact that programme antecedents, transaction and outcome can be gathered in one of two forms or the two forms simultaneously namely: Descriptive matrix and judgemental matrix. The descriptive information is classified either as intent or observation (Umoru-Onuka, 1996). Intent include programme objectives not only the intended outcome, but also the planned for environmental conditions as well. The judgement matrix includes both the standards used to reach judgement and the actual judgement themselves. These classifications are depicted by this diagram:

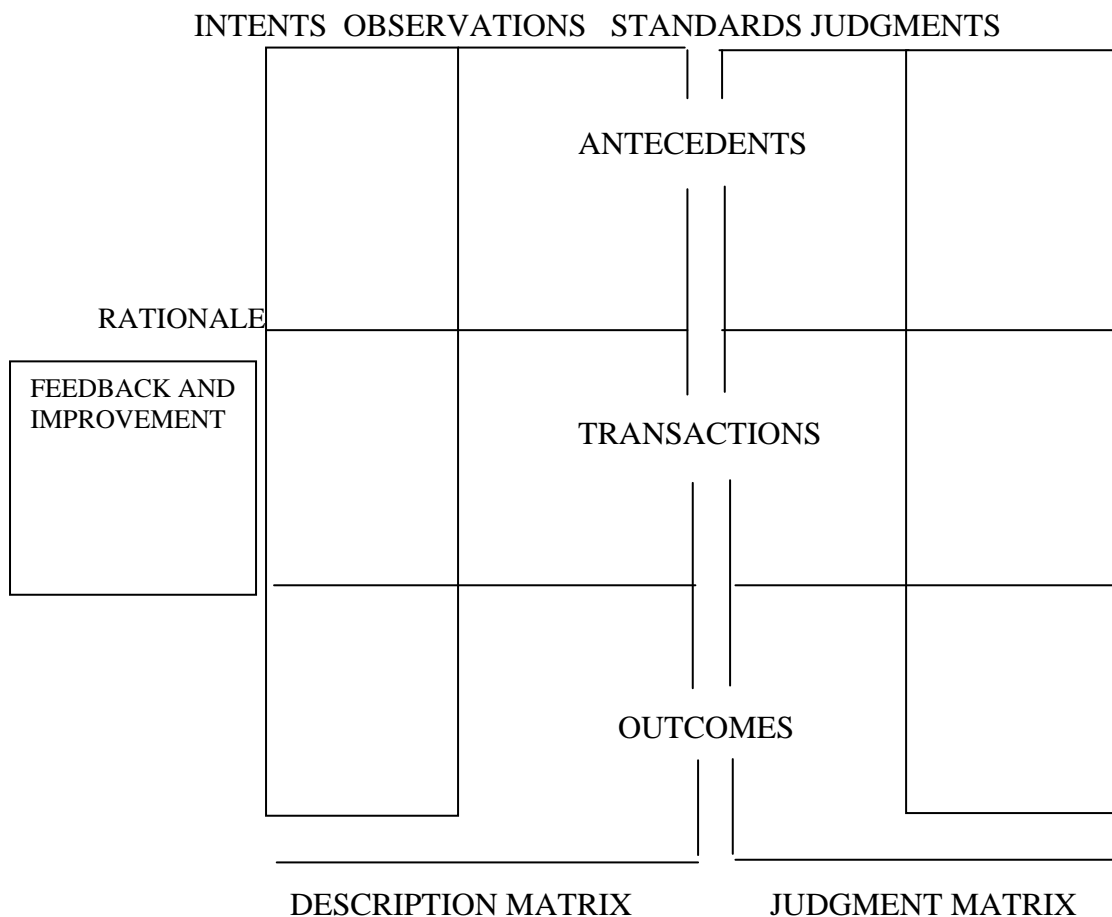


Fig 2.3: Stake ATO Model (1967)

Source: The practice of Evaluation by Rose and Nyre (1977) 11.

Figure 2.3 is a layout of statements and data to be collected by the evaluator of an educational programme. Stake feels that wide consultation should be made before arriving at programme rationale. It is the programme rationale that informs the rationale for its evaluation. But for an ongoing programme, its evaluation rationale may be its replication, termination or improvement on accountability (Umoru-Onuka, 1996).

According to Stake (1967), evaluation is not complete without a statement of the programmes rationale. The two principal ways of processing descriptive evaluation data are identified viz: finding the contingencies among antecedents, transactions and outcomes, and finding the congruencies between intents and

observations. The data for a programme is congruent if what was intended actually happened, though, it is unlikely that all the intended antecedent, transactions and outcomes come to pass exactly as intended. In using the countenance model, the task of the evaluator is to identify outcomes that are contingent upon particular antecedent conditions and instructional transactions (Rose and Nyre, 1977).

The countenance model is judgemental, however, the evaluators in the countenance model rather than passing judgement needs to collect samples of the judgment of people who are involved in the programme i.e. the clients, staff, community etc. This enabled the researcher to evaluate the

- i. Antecedent (i.e. condition, existing prior to implementation of the programme such that may relate to outcomes).
- ii. Transaction i.e. the succession of engagements that made up the process, for example how the FRSC corps and officials are carrying out their activities in order to achieve the set objectives.
- iii. Outcome i.e. the programme impact on the road users, and the society at large as well as the effectiveness of strategies, equipments and facilities used to achieve the outcome.

Here, the level of attainment of the programme's objectives up to this point is evaluated to identify any congruence and discrepancies between the intended objectives and actual attainment. Data would be collected on what the programme hopes to do to meet the identified needs, i.e. its objectives, what objectives (i.e. strategies for change) what assumptions are made about the factors that are likely to influence whether the desired change happens, how implementation were carried out to bring about changes, find out if the programme objectives have been attained, determining the causes of the obtained result and also finding out the extent to which the road users have acquired the specific behaviours and attitude profiles.

2.11 Conceptual framework

Conceptual framework is used in researches to outline possible courses of action or to present a preferred approach to an idea or thought. Because conceptual

frameworks are so close to empirical inquiry, they take different forms depending upon the research questions or problem. Here, the conceptual framework for this study takes the form of models of operations research. Thus, the conceptual framework for this study is adapted from the countenance model developed by Stake (1967). In this conceptual perspective, the concepts and variable in the study are identified and how these concepts are connected are shown in form of a diagram. A conceptual diagram that links what was happening before i.e. road traffic situation before FRSC was established (Antecedent), strategies employed by FRSC to improve the situation of road traffic (Transaction) and the expected result. (Outcome) are illustrated as follows:

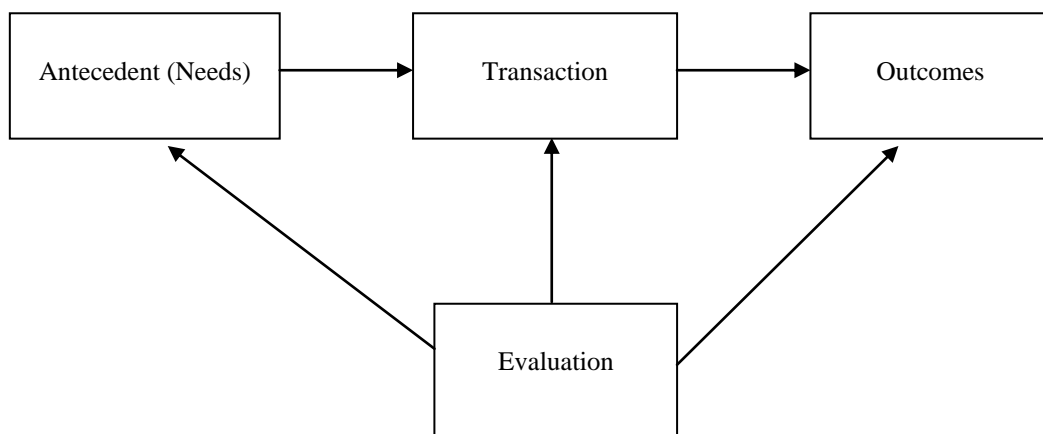


Fig 2.4: Diagram of the conceptual frame work of the study.

These are scheme of concepts or variables that underlie the study and relationships among these concepts.

2.12 Appraisal of Reviewed of Literature

The reviewed literature indicates that though studies have been carried out with respect to road traffic situation, the greatest proportion of the work have been on what causes accidents and accident rates . As revealed by the review, as at the time of this study, none of the previous studies reviewed attempted to evaluate the public enlightenment programme of FRSC. There was no known comprehensive evaluation of FRSC public enlightenment programme that was carried out. In view of the

unavailability of empirical data with respect to the actual status of the education programme of FRSC and lack of empirical studies that attempted to evaluate the FRSC public enlightenment programme in order to bring into focus the extent of the effect of the programme on road users (most especially drivers), there is therefore the need for the present study to bridge the existing gap. (i.e. evaluation of the effectiveness of FRSC public enlightenment programme).

From all literature reviewed, it is seen that evaluation is necessary in any programme since it enables one to be able to identify the strength, weakness, opportunities and threats of a programme. Evaluation is like the documentation of a programme activity to prove that the stated objectives of the programme are being achieved or otherwise. Thus, like any other public programme, it is a healthy exercise to make a periodic and systematic appraisal of the Federal Road Safety Commission's programmes, be it innovative or conventional. The purpose is not to find fault but to evaluate the extent to which the stated objectives are being achieved after twenty three years of existence. Evaluation of the FRSC will enable us to know the contributions of all stakeholders (i.e. the government, FRSC staff and the road users) towards objective realization or otherwise of the programme.

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CHAPTER THREE

METHODOLOGY

This chapter described the research methodology which include; research type, evaluation model, target population, sampling technique and sample, instrumentation and the general procedure used for data collection and analysis.

3.1 Research type

This study was an *ex post facto* design. No variable was manipulated in the study as they have already occurred.

3.2 Evaluation model

In this study, Stake's congruency-contingency model known as Antecedent, Transaction and Outcome (ATO) model was used. The researcher adapted Stake's (1967) Countenance of Education Evaluation Model because it is systematic and can evaluate the components of the programme which are the focus of the study. According to Stake cited by Umoru-Onuka (1996), three main bodies of information that need to be tapped when evaluating a programme are antecedent data, transaction data and outcome data. This is similar to context, input, process and outcome model of Guba and Stufflebeam (1970). This study, focused on what existed before the establishment of FRSC and its enlightenment programme (Antecedents) with its establishments and the implementation, the adequacy of their strategies (Transactions) and also the outcome of their activities, if it has any effect and the extent of its effectiveness, if the stated objectives are being attained or not, and the effects of the Commission's enlightenment programme on the society at large (Outcomes). In the study, the programme's goals and objectives served as the evaluation criteria. The ATO model is considered appropriate for this study because it takes care of all possible variables of interest in the study

The rationale for this Evaluation study is based on feedback and improvement since it is an on-going programme.

Table 3.1: Summary of the Evaluation Framework of FRSC for this Study

Evaluation Component	Variables of Interest	Intent/Assumption	Observation Instrument/Technique	Judgement Decisions
Antecedent	Background Information and input variables: Road traffic situation before the establishment of FRSC and the commencement of its enlightenment. Objectives of FRSC Public enlightenment programme FRSC public enlightenment officers' exposure to training	i) To ensure sanity or discipline on the road by road users. ii) To bring about free flow of traffic. iii) To reduce accident on roads and highway to the bearest minimum.	1 Questionnaire 2 Document scrutinizing	Appropriateness of objectives
Transaction	Adequacy of the strategies used in carrying out the enlightenment programme, level of participation by road users.	i) Motor park rallies ii) Seminars/workshop. iii) Use of video clips/tapes iv) Daily public education for arrested offender. v) Use of electronic and print media. vi) Participant observation vii) Enforcement of traffic rules and regulations.	Questionnaire	Effectiveness and participation level
Outcome	Road users level of discipline, application/obedience to road traffic rules and regulations, knowledge of road signs, behavioural changes in driving on the roads, road usage behaviour by drivers.	Sanity on the road, free flow of traffic. Accident reduction on roads and highways, obedience to traffic rules.	(i) Questionnaire (ii) Knowledge of highway code assessment test (KHCAT)	Observance of Safety Code. Obstruction/parking of vehicles

3.3 Variables in this study

The independent variable

- 1: FRSC public enlightenment strategies, driving experience

The dependent variables

1. Behaviour of road users (i.e drivers' compliance to traffic rules and regulations, behavioural changes, acquired knowledge and level of application)
2. Accident reduction.

3.4 Target population

The target population for this study comprised all the road users in South West Nigeria (drivers, commuters and pedestrians) and the FRSC public enlightenment officers.

3.5 Sampling Technique and Sample

Multistage sampling technique was employed in the study. There are six states in the South West and they were also clustered along Coastal (Lagos, Ogun and Ondo states) and Inland States (Oyo, Osun and Ekiti states). Lagos State was selected to represent the coastal States and Oyo State represented the Inland States. The two states were selected because of the heavy vehicular traffic they often experience since Lagos is the commercial capital of Nigeria. The two states were also clustered along the existing senatorial districts and simple random sampling was used to select one senatorial district from each state.

In Lagos state, Lagos West senatorial district was used while in Oyo state, Oyo South senatorial district was used. Simple random sampling was also used to select three local government areas out of the ten local government areas in each of the selected senatorial district. The local government areas sampled from Oyo state are Ibadan North East, Ibadan North, Oluyole, and that of Lagos state are Oshodi/Isolo, Ikeja and Amuwo odofin. Purposive sampling technique was used to select the one popular motor parks each from the selected local government areas based on the heavy usages by many people. Iwo road, Sango and Orita challenge motor parks were selected in Oyo state while, Oshodi, Ojota and Mile 2 motor parks were selected in Lagos state. The selected local government area offices were also used in this study. Thirty-five (35) commercial vehicle drivers were purposively selected from each motor parks based on their regularity at the parks. Fifteen (15) private hired drivers and thirty-five (35) private owner drivers were also purposively selected from the offices in each of the selected Local Government Areas based on easy accessibility. Thus, two hundred and ten (210) commercial vehicle drivers, ninety (90) private hired drivers and two hundred and ten (210) private owner drivers participated in the study. Convenient sampling technique was used to select four hundred and twenty (420) commuters while simple random sampling technique was used to select one hundred (100) FRSC public enlightenment officers. In all one thousand and thirty subjects participated in the study.

Table 3.2 depicts the summary of the sample.

Table 3.2 Distribution of L.G.A. and the Proportion that were sampled from two states in Southwest

States	No. of Senatorial Districts	No. of LGA in each State	No. of selected Senatorial Districts	No. of LGA in selected Senatorial Districts	No. LGA selected	No. of selected motor Parks	No. of Selected Commercial drivers	No. of Private Vehicle Drivers (hired)	No. of Private Vehicle Drivers (owner)	No. of Commuter/Pedestrians	No. of FRSC staff selected	Total
Lagos	3	20	1	10	3	3	105	45	105	210	60	525
Oyo	3	33	1	10	3	3	105	45	105	210	40	505
Total	6	53	2	20	6	6	210	90	210	420	100	1030

3.6 Instrumentation

Five instruments were used to collect data for the study. They are:

- 1 Drivers Perception of FRSC Public Enlightenment Programme questionnaire (DPPEPQ)
- 2 Commuters Perception of FRSC Public Enlightenment Programme questionnaire (CPPEPQ)
- 3 Knowledge of highway traffic code assessment test (KHTCAT)
- 4 Drivers' Observance of Road Traffic Rules and Regulation Checklist (DORTTRRC).
5. FRSC Staff Perception of the Effectiveness of Public Enlightenment programme Questionnaire (FRSCSPEQ).

3.6.1 Drivers' perception of FRSC public Enlightenment programme questionnaire

This instrument aimed at measuring drivers' perception of the FRSC public enlightenment programme and it was constructed by the researcher. It contained two

Sections. Section A of the instrument dealt with the drivers' personal data while section B consisted of 37 items divided into 2 subsections. One subsection is on drivers' view about road traffic situation before and after FRSC establishment while the second subsection are on the drivers' perception of the FRSC public enlightenment programme, the adequacy of its strategies and its effects. The Researcher gave the English version of the questionnaire to experts in Yoruba language for proper translation. The questionnaire which initially consisted of forty items (40) was pilot tested on a sample of thirty (30) drivers different from the study sample to determine its content validity. Drivers who usually report and take off from Ilorin were used for the pilot testing. The construct validity of the questionnaire was done using factor analysis. High degree of homogeneity of item is an evidence of construct validity. Factors which accounts for 70% of the total variability were retained. The reliability coefficient was determined by using Cronbach Coefficient Alpha. The reliability coefficient was 0.82.

3.6.2 Commuters Perception of FRSC public enlightenment programme questionnaire

This questionnaire has two sections and it was constructed by the researcher to elicit information on commuters' perception of the Federal Road Safety Commission's public enlightenment programme. Section A consists of the bio-data while section B consists of twenty two items (22) which was used to measure the commuters' view about the traffic situation before and after the establishment of FRSC and also their perception of the public enlightenment programme. This instrument which initially consisted of thirty items was pilot tested on a sample of 30 commuters different from the study sample. The commuters who were used for pilot testing were selected from Oshogbo motor parks and offices in Osun state Secretariat. The instrument was given to experts in evaluation to determine the content validity, while the construct validity was done by using factor analysis. The reliability coefficient was determined using Cronbach alpha coefficient. The reliability coefficient was 0.75.

3.6.3 Knowledge of Highway Traffic Code Assessment Test. (KHTCAT)

This test consists of twenty five items, sixteen (16) diagrams showing various traffic signs drawn by the researcher and nine (9) other questions on the highway Code. The respondents were expected to indicate what each signs mean by picking from options A-E given. The instrument which initially consisted of twenty diagrams and ten questions on the Highway Code was given to twenty FRSC staff in Akure zone for assessment. Lawshe formula was used to test its content validity.

Lawshe formular as indicated in Cohen and Swerdlin (1999) is

$$CVR = \frac{N_e - N/2}{N/2}$$

$$N/2$$

Where CVR=Content Validity Ratio

N_e = No of panels indicating Good

N = Total No of panel.

Kuder Richardson formula 20 (K-R20) was used to determine its reliability. The instrument has a reliability coefficient of 0.82.

3.6.4 Drivers' observance of road traffic rules and regulations on the road checklist.

This instrument was developed by the researcher and it consists of a list of fifteen drivers' behaviour on roads. The Commuters, the Research assistants and the Researcher observed the commercial drivers to find out which of these acts were displayed on the roads by the drivers. The instrument was given to experts in evaluation to determine its content validity while the construct validity was determined by using factor analysis. The reliability was determined by using Scot Pie formular to establish the inter-observer reliability of the instrument.

Scot Pie Formular is $\frac{P_o - P_e}{100 - P_e}$

$$100 - P_e$$

The reliability coefficient of the instrument was 0.78.

3.6.5 FRSC Staff Perception of the effectiveness of the enlightenment programme questionnaire (FRSCPEQ)

This questionnaire is in sections A and B. Section A consists of the bio-data of the respondents while section B consists of twenty three (23) items addressing the perception of FRSC staff about the effect of the Commission's enlightenment programme on drivers as well as the road traffic situation, the probable constraints and solutions to effective achievement of FRSC public enlightenment programme objectives. The instrument was pilot tested on a sample of twenty staff different from the study sample and the construct validity was determined using factor analysis. Cronbach coefficient alpha was used to determine the reliability. The reliability coefficient was 0.77.

3.7 Data Collection Procedure

The researcher collected a letter of introduction from the Institute to the Chairmen of the various motor parks in the selected zones within the two states. This helped in gaining the cooperation of the chairmen of the sampled motor parks. The researcher organised two days training programme for the fourteen research assistants to teach them the content, interpretation of the instruments and how to use them. The suitability of the research assistants for the work was also tested by the researcher. The researcher and fourteen trained research assistants administered the instruments directly on the drivers and commuters in the selected motor parks and offices. The Yoruba version of the questionnaire was given to the drivers who do not understand English language. The researcher spent about three weeks in each of the motor parks before the instruments were maximally returned. However ten out of the instruments given to the commercial vehicle drivers were not returned. In the selected offices, the instruments were collected back after two weeks from the trained research assistants. The administration of the FRSC questionnaire was also done by the researcher and two research assistants. The administration of the instruments lasted for about twenty weeks.

Table 3.3: Summary of Sampling Framework

	Drivers	Commuters	FRSC staff
Intended	510	420	100
Achieved	500	420	100
% returned	98%	100%	100%

Table 3.3 shows the intended number the researcher had in mind to use and the number of instruments sent out. The achieved is the actual numbers that were finally retrieved. The data analysis was based on the achieved.

Scoring of the instrument

Traffic situation before and after

Very High	4
High	3
Low	2
Very Low	1

Effectiveness of FRSC public enlightenment programme

Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

Observed behaviour on roads

Yes	2
No	1

Level of knowledge

High	Q ₃ and above (Third quartile and above)
Moderate	Above Q ₁ to below Q ₃ (above first quartile to below third quartile)
Low	Below to Q ₁ (below first quartile).

3.8 Method of Data Analysis

All the Very high and High responses were merged together under High while all the Very low and Low responses were merged under Low. In addition, all the Strongly Agree and Agree responses were categorised under Agree while all the Strongly Disagree and Disagree responses were categorised under Disagree. The data collected were then analysed as follows:

Table 3.4 Table showing method of Data Analysis

Research Questions	Statistical analysis used
1,2a,b,3,4a,,8	Percentage, bar charts and graphs
4b,c,5	t-test
4d, 6a,b	ANOVA
7	Pearson's Product Moment Correlation Coefficient

All the statistical analysis were tested at 0.05 level of significance

3.9 Methodological Challenges

In the course of this study, the researcher encountered some challenges in the area of choice of participants (since everybody uses the road), location of participants (since road users are scattered everywhere). It was also tasking to use drivers and commuters since most of them were illiterates. Thus, to avoid these challenges, only the drivers in offices and motor parks who could read and write in either English or Yoruba languages served as samples in this study. FRSC officials as well as commuters in the selected parks and offices were also used. The researcher also encountered some problems in retrieving the instruments from the commuters who served as observers. Thus, to overcome this problem, the commuters were instructed to envelope the instruments and give it to the drivers for onward transfer to the trained Research Assistants who were also drivers in the parks.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The results obtained in this study are presented and discussed in this chapter. The sequence of the presentation and discussion is in accordance with the research questions raised in this study.

4.2 Results and Discussion

Research Questions 1

What was the Traffic situation on the road before and after the establishment of Federal Road Safety Commission and its Public Enlightenment Programme?

Table 4.1.1 shows the summary of road traffic accident data before the establishment of FRSC

Table 4.1.1 Road Traffic Accident Data in Nigeria before the creation of Federal Road Safety Commission in 1988

Year	Cases Reported	No of Persons Killed	No of Persons Injured	Total Casualty
1970	16666	2893	13154	16047
1971	17745	3206	14592	17798
1972	23287	3921	16161	20082
1973	24844	4537	18154	22691
1974	28893	4992	18660	23652
1975	23651	5552	20132	25684
1976	40881	6761	28155	34916
1977	35351	8000	30023	38023
1978	36111	9252	28854	38106
1979	29271	8022	21203	29225
1980	32138	8736	25484	34220
1981	33777	10202	26337	36539
1982	37094	11382	28539	39921
1983	32109	10462	26866	32328
1984	28892	8830	23861	32691
1985	29978	9221	23853	33074
1986	25188	8154	22176	30330
1987	28215	7912	22747	30659
1988	25792	9077	24413	33490

Source: FRSC Abuja (2007) www.frsc.gov.ng

Table 4.1.1 shows that in 1982, 11,382 Nigerians were killed with 37,094 road accident recorded that year. The table shows that in just four years, from 1985-1988, 106,173 accidents occurred with 91,189 people injured and 34,364 people dead.

Table 4.1.2 shows the frequency counts of the road users' responses and the percentages were summarised into high and low as shown in table 4.1.2

Table 4.1.2 Road Users' Perception of Road traffic situation before and after FRSC was Established.

S/N	Items	BEFORE		AFTER	
		High	Low	High	Low
	Acts of indiscipline on the road such as :	F (%)	F (%)	F (%)	F (%)
1	Indiscriminate parking of vehicles on road.	745(81)	175(19)	322(35)	598(65)
2	Reckless Driving	856(93)	64(7)	543(59)	377(41)
3	Dangerous Overtaking	856(93)	64(7)	644(70)	276(30)
4	Overloading of Vehicles	736(80)	184(20)	239(26)	681(74)
5	Willful obstruction of the road.	754(82)	166(18)	193(21)	727(79)
6	Non-usage of seat belt	681(74)	239(26)	662(72)	258(28)
7	Over speeding	644(70)	276(30)	534(58)	386(42)
8	Drunk Driving	653(71)	267(29)	248(27)	672(73)
9	Accident rate on the road	810(88)	110(12)	552(60)	368(40)
10	Death rate on the road	846(92)	74(8)	580(63)	340(37)

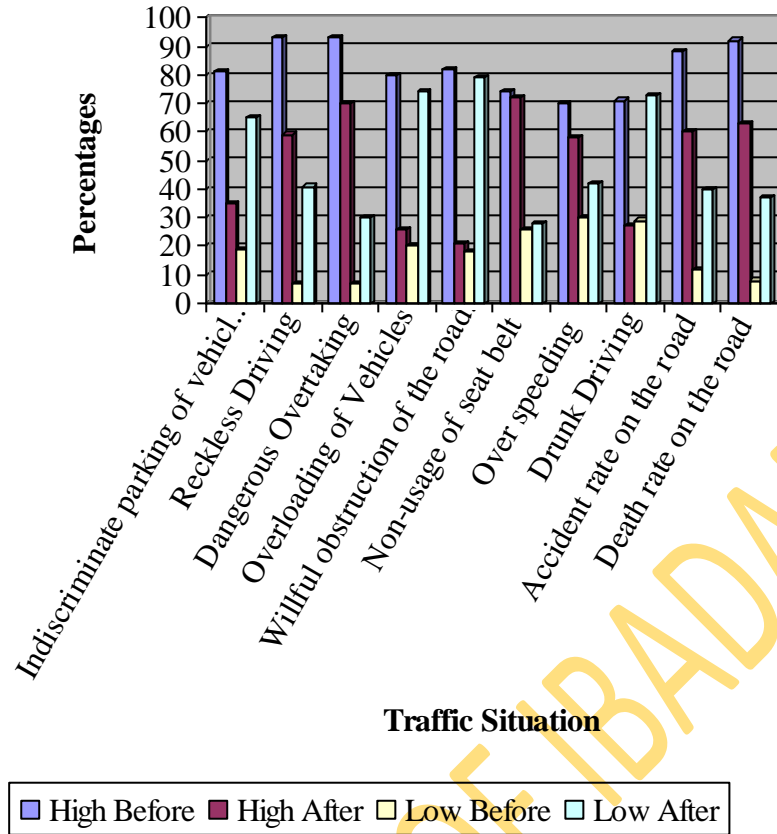


Fig. 4.1: Graphical Illustration of Road Traffic Situation before and after the Establishment of FRSC

Table 4.1.1 shows accident rate data before the establishment of the Federal Road Safety Commission in Nigeria, while table 4.1.2 and figure 4.1 show the comparison of road users' perception of the traffic situation before and after the establishment of the Federal Road Safety Commission and the implementation of its Public Enlightenment Programme. The table shows that the rates of acts of indiscipline on roads and highways were higher before than after the establishment of FRSC. These acts of indiscipline include; indiscriminate parking of vehicles (81%), reckless driving and dangerous overtaking (93%), overloading of vehicles (80%), willful obstruction of the road (82%) non usage of seat belt while driving (74%), over speeding (70%), and drunk driving (71%). As regards accident and death rates, the table shows that more than 88% and 92% of the road users claimed that they were on the high side. The establishment of the Federal Road Safety Commission and the introduction of its public enlightenment programme however, brought about some improvement on the situation of road traffic. As indicated by the road users, the rates of some acts of indiscipline which were very high on roads and highways before

became low. These include; indiscriminate parking of vehicles on roads (55%), drunk driving (73%), overloading of vehicles (74%) and willful obstruction of the roads with vehicles or any other objects (79%). The table further shows that 60% and 63% of the sampled road users respectively indicated that accident rate and death rate are still high on the roads. As regards reckless driving, over speeding, dangerous overtaking, 59%, 58% and 70% of sampled road users respectively indicated that they are still on the high side while the table also revealed that 72% of the respondents claimed that non-usage of seat belt by drivers is still on the high side as well.

Tables 4.1.3 and 4.1.4 showed Road Users Perception of Road Traffic Situation Before and After FRSC was established on State basis.

Table 4.1.3: Lagos State Road Users' Perception of the Road Traffic Situation Before and After FRSC establishment

S/NO	Items	Before		After	
		High F(%)	Low F(%)	High F(%)	Low F(%)
1	Indiscriminate parking of vehicles on roads	367(79)	98(21)	47(10.2)	418(89.8)
2	Reckless driving	384(82.5)	81(17.5)	223(48)	242(52)
3	Dangerous overtaking	451(97)	14(3)	302(65)	163(35)
4	Overloading of vehicles	387(83.2)	78(16.8)	107(23)	358(77)
5	Wilful obstruction of roads	378(81.2)	87(18.8)	93(20)	372(80)
6	Non-usage of seatbelt	335(72)	130(28)	265(57)	200(43)
7	Over speeding	336(72.3)	129(27.7)	260(56)	205(44)
8	Drunk driving	326(70.2)	139(29.8)	98(21)	367(79)
9	Accident rate	414(89)	51(11)	153(33)	312(67)
10	Death rate	437(94)	28(6)	172(37)	293(63)

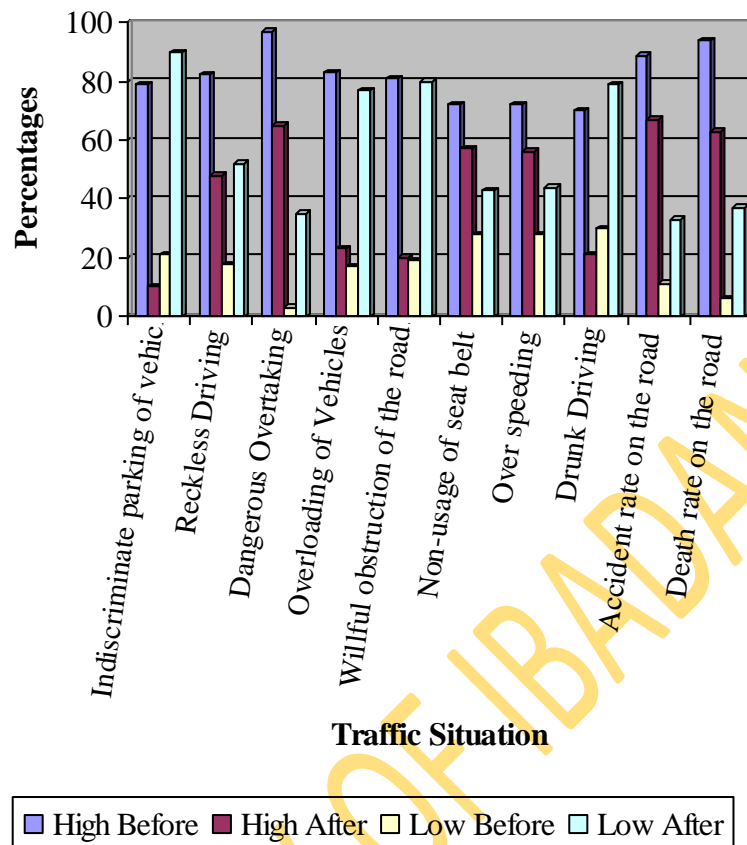


Fig. 4.2 Graphical Illustration of Road Traffic Situation Before and After the Establishment of FRSC as indicated by Lagos State Road Users

Table 4.1.4: Oyo State Road Users' Perception of the Road Traffic Situation Before and After FRSC establishment

S/NO	Items	Before		After	
		High F (%)	Low F (%)	High F (%)	Low F (%)
1	Indiscriminate parking of vehicles on roads	378(83)	77(17)	227(49.8)	228(50.2)
2	Reckless driving	437(96)	18(4)	291(64)	164(36)
3	Dangerous overtaking	405(89)	50(11)	341(75)	114(25)
4	Overloading	349(76.8)	106(23.2)	132(29)	323(71)
5	Willful obstruction	376(82.6)	79(17.4)	100(22)	355(78)
6	Non-usage of seatbelt	346(76)	109(24)	396(87)	59(13)
7	Over speeding	308(67.6)	147(32.4)	273(60)	182(40)
8	Drunk driving	327(71.8)	91(20.2)	150(33)	305(67)
9	Accident rate	396(87)	59(13)	205(45)	250(55)
10	Death rate	410(90)	45(10)	241(53)	214(47)

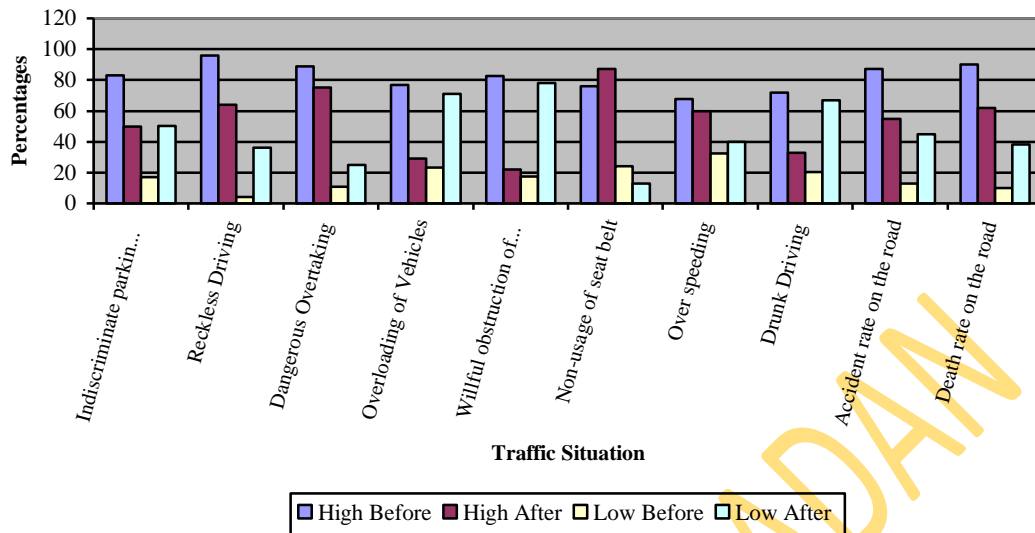


Fig. 4.3: Graphical Illustration of Road Traffic Situation Before and After the Establishment of FRSC as indicated by Oyo State Road Users

Tables 4.1.3 and 4.1.4 and figures 4.2 and 4.3 show the road users' perception of the traffic situation on state basis. The table shows that in Lagos and Oyo states, a high percentage of people indicated that acts of indiscipline as well as accident rate were higher before. However, the comparison of their perception after the establishment of FRSC shows that in Lagos State, 48% of the sample indicated that reckless driving is still high on roads while in Oyo state, it is 64%. The table also shows that the percentages of road users in Oyo State who indicated that acts such as indiscriminate parking of vehicles, dangerous overtaking, non-usage of seatbelt, over speeding and death rate are still high after the establishment of FRSC are higher than the percentages of that of Lagos state. The table indicated that while 10.2% claimed that acts of indiscriminate parking of vehicles are still high in Lagos state, it was 49.8% in Oyo state. Also, in Lagos, 48%, 65%, 57%, and 56% claimed that reckless driving, overtaking dangerously, non-usage of seatbelt and over speeding are still high respectively while in Oyo state, it is 64%, 75%, 87% and 60% respectively.

Discussion

The finding of the study revealed that the traffic situation before the establishment of FRSC was bad. Table 4.1.1 shows the road crash data from the FRSC. It shows what the traffic situation was in Nigeria before the establishment of the Commission in 1988. From the table it can be seen that between 1972 and 1984, there was an unprecedented increase in the number of accident cases with 1976 experiencing the worst with 40,881 road accidents recorded. The table further revealed that in just four years, that is from 1985 to 1988, 106,173 road accidents occurred with 91,189 people injured and 34,364 people dead. This alarming road accident records had far reaching effects on families, lives, development and economic activities of the country Balogun (2006). From all indications, it appears that records shown in the table are the only accident record the commission had so far posted on its website. Thus, it is not unlikely that some accidents were not known to the commission. Therefore, it could be assumed that comprehensive records of accident are not yet available to the public. This is because in a study carried out by Jacob and Aeron-Thomas (2003), a number of countries show a wide variation between official death statistics from road accidents and information from other sources. Examples of such countries as stated by researchers include Philippine and Indonesia where insurance companies report almost 40% more deaths than the police.

Furthermore, the road users indicated that the rate of indiscipline on the road was very high so also was accident rate. Evidence from their responses shows that the rate of over speeding was very high and there was nothing like obedience of speed limit. The rates of overloading of vehicles by drivers were very high so also was reckless driving. This finding corroborates Balogun's (2005) submission that many drivers carry excess loads and even passengers without minding the conditions of their vehicles and their safety. Furthermore, the respondents indicated that the rate at which drivers overtake at corners or bends was also very high. This result confirms Oyeyemi's (2003) finding that many drivers overtake at blind corners and on many occasions this has led to accidents which resulted into the death of many people. In addition, the finding of the study revealed that acts of willful obstruction of roads and highways either with vehicles or other objects and indiscriminate parking of vehicles on roads by drivers were high. This finding corroborates Yakassai's (1997) assertion that many drivers park their vehicles in the middle of the road to greet one another holding the traffic and other road users to ransom.

The road users also indicated that the rate at which drivers drive under the influence of alcohol or drug was very common so also was non usage of seat belt while driving. Apart from these, the findings also revealed that accident rates and death rates on roads were high before FRSC was established. This finding confirms the road traffic accident data table from the Nigeria police and Federal Road Safety Commission's website. The table shows what the situation on the road was like before 1988 in terms of accident rate, death rate and injury rate. It also corroborates Ahmed (2008) submission that the situation of the road before the establishment of FRSC was bad because hundreds of fellow men were injured, paralysed or disfigured for life and many people have lost their lives in road accidents.

Due to the absence of good driving culture and high rate of accident, the Federal Road Safety Commission was established to save the road traffic situation from getting worse in terms of the high rate of drivers' indiscipline and accident rates on roads and highways. The establishment of the FRSC and the commencement of its Enlightenment programmes however, brought about some improvement to road traffic situation. The rates of indiscipline and accidents on the road became reduced. This implies that the commencement of the enlightenment programme by FRSC brought about some changes in some drivers' bad driving habits and behaviour on roads and highways. The respondents indicated that the rate of overloading of vehicles by drivers are now low compared to the way it used to be before so also is the act of willful obstruction of roads and highways. The findings further revealed that drunk driving has reduced. This is an indication that many drivers now are aware of the consequences of drinking and driving. Hence, most of them now avoid drinking alcohol or taking drugs while driving. The finding further shows that 60% and 63% of the road users are of the view that the enlightenment programme has brought about little reduction in accident rate and death rates. It however, disagrees with Oyeyemi's (2003) findings that the establishment of the Federal Road Safety Commission brought a rapid reduction to the rates of road accident and death on Nigeria roads. It however agrees with the data from FRSC after which shows that accident rate is still on the high side. The high rate might be due to the fact that there is increase in the population as well as the number of vehicles plying Nigeria roads now. However, since one of the FRSC objectives is to reduce accident rate to zero level, the commission still need to put in more efforts to achieve this

Furthermore, the finding of this study shows that the rate of reckless driving, dangerous overtaking and over speeding by drivers are still on the high side. This is an indication that in spite of the law on speed limit for each vehicle type, most drivers still over speed, they overtake wrongly and even drive recklessly on the roads. This confirms Chukwu's (2007) submission during an interview in punch newspaper of April 17, (p17) that many drivers overtake at corners and bends with the hope that no other vehicle is coming from the opposite direction at that moment and a times when they run out of luck, it often results in disasters. It also corroborated Corps Marshal Chidoka's assertion in Idoko (2010) that the problem is that many drivers (most especially commercial vehicle drivers) are always in a haste to get to their destinations, hence, they violate the speed limit of 100km/hour with impunity and also overtake anywhere, even at corners or bend.

Many drivers behave irrationally on roads, they over speed, overload, overtake at all odd spots use defective tyres and some even emerge from side road to the main road without bothering about their lives. Furthermore, the result revealed that in spite of the enlightenment on the importance of seat belt, 72% of the road users claimed that non usage of seat belt while driving is still very common among the drivers (most especially commercial vehicle drivers). This finding disagrees with Anthony-Albanese' (2010) earlier finding that in many countries public education increased the rate of seat belt usage nationwide. The usage of seat belts in many developed countries has reduced the rate of road death (Jacob and Aeron-Thomas, 2003). Thus, to reduce the bloodbath on Nigeria roads, people have to imbibe the culture of making use of seatbelts while driving.

A comparison of the drivers' perception of the traffic situation before and after the establishment of FRSC and the implementation of its enlightenment programme on state basis shows that the percentages of Lagos state drivers who indicated that the programme improved road traffic situation are higher than Oyo state drivers. This could be due to the fact that unlike Oyo State, the Lagos state government usually assists the FRSC in ensuring that everybody is safety conscious. One of the road users interviewed in Lagos state stated that the FRSC staff and the Lagos State Traffic Management Agency (LASTMA) ensure strict compliance to traffic rules. The road user further states that the agencies usually apprehend road traffic offenders by issuing penalties for errant drivers and such a person is usually asked to pay a huge sum of money into the government account. In Oyo State, the road user interviewed

claimed that drivers in the state behave the way they like on road without any fear of being apprehended. This according to the road user is because of the political influence of some of the leaders of the drivers' union. In addition, the researcher while carrying out the observation of the drivers' behaviour on roads discovered that the commercial drivers in Lagos state are more disciplined than those in Oyo State in terms of their observance of the traffic rules and regulations.

Question 2a How do the drivers perceive the adequacy and effectiveness of FRSC Public Enlightenment Strategies?

Frequency counts of the drivers' responses and the percentages are shown table 4.2.1

Table 4.2.1 Drivers' Perception of the adequacy of FRSC Public Enlightenment Strategies (in percentages)

	STATEMENTS	AGREE F (%)	DISAGREE F (%)
1	Adequate hand bills are distributed	317(63.4)	183(36.6)
2	Adequate road signs and posters are placed at strategic points.	280(56)	220(44)
3	Adequate jingles are often played on radios and televisions.	284(56.8)	216(43.2)
4	Adequate lectures/ seminar are often given	192(38.4)	308(61.6)
5	The Adequate special campaign programmes are usually carried out during festive periods.	362(72.4)	138(27.6)
6	Adequate rallies are often carried out	214(42.8)	286(57.2)
7	Adequate films are usually shown to traffic offenders.	313(62.6)	187(37.4)

Table 4.2.1 reveals the drivers perception of the FRSC Public Enlightenment strategies. From the table, 63.4% of the sampled drivers agreed that adequate hand bills are often given to them to enlighten them on the proper way to use roads and highways. 56% agreed that adequate road signs and posters are placed at strategic points to notify road users on the nature of road and highways. The table further shows that 56.8% and 38.4% respectively agreed that adequate jingles are played on radios and televisions and that adequate lectures/seminars are given to road users to improve their behaviour on roads by FRSC officers. Furthermore, the table also revealed that 72.4% of the sampled drivers agreed that the special campaigns usually

carried out during festive by the FRSC are adequate while 42.8% agreed that adequate rallies are often carried out to enlighten drivers on the use of roads and highways by FRSC staff at motor parks. As regards the adequacy of films usually shown to road traffic offenders, 62.6% of the sample agreed that it is adequate. Data on drivers' perception of the effectiveness of the strategies being used by the public enlightenment officers of the Commission was also collected. The result is shown in figure 4.4 below.

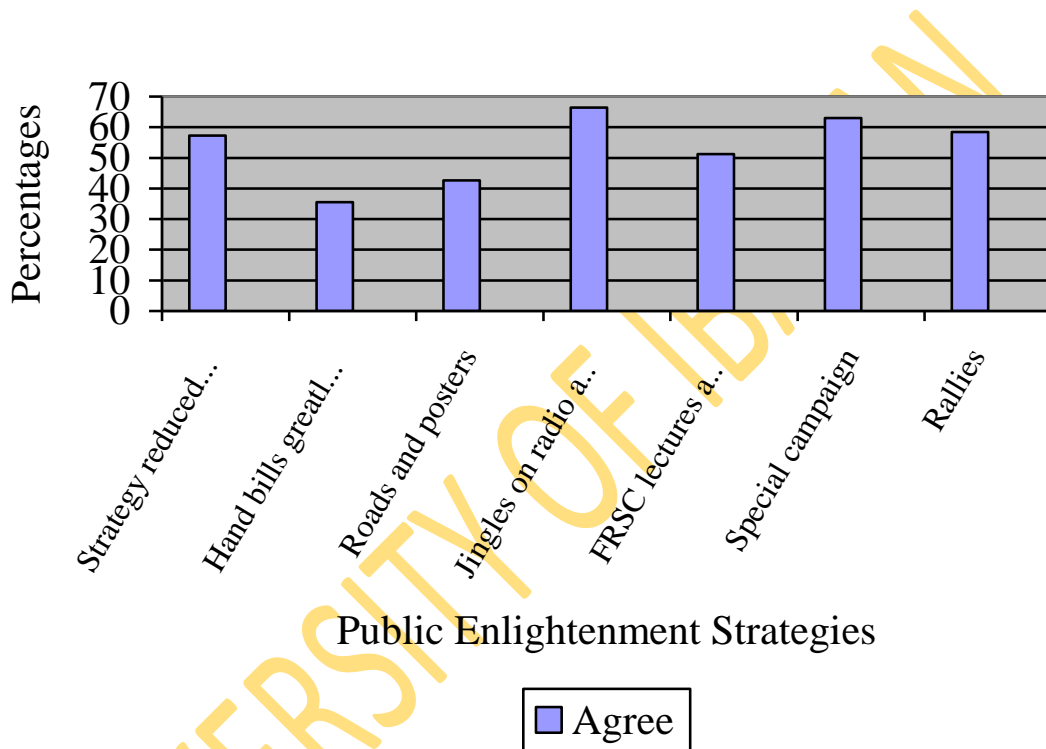


Fig 4.4: Graphical illustration of Drivers' Perception of the Effectiveness of FRSC Public Enlightenment Strategies.

Figure 4.4 reveals the drivers' perception of the effectiveness of the FRSC Public Enlightenment strategies. 57.3% of the respondents agreed that the public enlightenment strategies being used by the FRSC have greatly reduced accidents on roads. As regards the extent of the effect of each of the strategies being used, only 35.5% and 42.6% of the respondents indicated that the use of hand bills has greatly enlightened them on the importance of discipline and that road signs and posters which are placed at strategic points on roads had greatly enlightened them on the nature of most roads and highways respectively. 66.4% of the sampled drivers indicated that the

jingles played on radio and televisions have greatly enlightened them on how to be safety conscious. 63% agreed that the special campaigns usually carried out during festive periods have greatly reduced accidents on roads. The table also shows that 58.4% of the sampled commercial vehicle drivers indicated that the FRSC enlightenment rallies have greatly increased their knowledge of the highway traffic code. 51.2% indicated that the various lectures given have adequately increased their knowledge of the highway traffic code and 53.6% agreed that the penalty fines given to road traffic offender usually enlighten them against repeating such offence.

Discussion

The finding of the study shows that though more than 50% of the road users agree that some of the strategies being used by the FRSC in enlightening road users are adequate, some of them are not often carried out as expected. These include; rallies, workshops/seminars and giving of lectures. This finding disagrees with Akpabio's (2009) submission that rallies are carried out on daily basis in various motor parks. Rallies are expected to be carried out at various parks every day while seminars and lectures are expected to be organized very often so as to continue to remind the road users on the proper way to use the road in order to improve their behaviour on roads. The inadequate use of most of these strategies could be responsible for the drivers' low knowledge of the highway traffic code (most especially the road signs) since the ways by which most of these drivers could be properly enlightened is by consistently carrying out rallies in their motor parks and also by organizing workshops/seminars and giving of lectures to drivers on the rules and regulations guiding the use of roads on regular basis.

Furthermore, the findings of the study show that 63.5% and 56.8% of the drivers indicated that adequate handbills are often distributed and adequate jingles are also often played on radio and television stations to caution road users on roads and highways. This finding buttresses Meremikwu's assertion during an interview with the researcher that during campaigns, handbills are usually distributed to road users so that they could learn more about the traffic rules. The finding also shows that 62.5% of the sampled drivers indicated that adequate films are usually shown to road traffic offenders to reduce road traffic indiscipline and accidents. This also agrees with Chidoka's submission that most traffic offenders brought to their office are always shown films after which they would be given lecture on the need to be safety

conscious. This is to enable the drivers know the importance of obeying the traffic rules and regulations and also know the consequences of disobeying them. It is also done to prevent drivers from repeating the same offence. It is believed that by doing so, the road users will be set free from wrong beliefs and prejudices and traffic situation will improve.

As regards the effectiveness of the FRSC public enlightenment strategies, the findings of this study indicated that 57.3% of the drivers perceived that the strategies have greatly reduced accident rates on roads. These include; the rallies carried out at motor parks, jingles on radio and the special campaign usually carried out during festive periods. As revealed in the study, 63% of the road users indicated that the special campaigns usually carried during festive time have gone a long way to reduce accidents on roads and highways. This could be due to the fact that intensive special campaigns are always carried out during this time and the FRSC staff are always on roads during this period to enforce the traffic rules and regulations on the drivers. This finding disagrees with Emejor (2010) submission that a high rate of accident is always recorded during festive periods. Hence, intensive public enlightenment campaigns should always be carried out every time and not during festival periods alone so that the various acts of indiscipline which are still high on roads will be reduced and the traffic situation will improve.

As regards public enlightenment rallies on the importance of obeying traffic rules and regulations, the finding revealed that though 57.25 of the sampled drivers indicated that it is not often carried out as expected, it has greatly increased their knowledge of the Highway Code. The implication of this is that if rallies are carried out on daily basis as expected, the traffic situation will improve and it will be better than what it is now because a large percentage of road users will be safety conscious on roads and highways. Another strategy which is effective as indicated by the drivers includes the use of jingles on radios and televisions. Evidence, from the result of the study, shows that more than sixty percent of the sampled drivers claimed that this strategy has greatly enlightened them on the need to be safety conscious on roads. This could be due to the facts that many people love listening and watching movies/drama on radio and television and most of these jingles are always inform of drama series. The finding also revealed that regular lectures/seminar are not usually organised or given to drivers because less than forty percent of the drivers indicated that adequate lectures are given. This could be the reason why many drivers disobey

traffic rules and regulations with impunity. Hence, adequate lectures on the proper use of roads should always be given to road users, most especially drivers and motor cyclists who are now many on roads and highways so as to reduce the high rate of indiscipline and improve the driving culture of Nigerian drivers.

Question 2b: How do commuters and drivers perceive the effectiveness of FRSC Public Enlightenment Programme vis-a-vis drivers' behaviour on roads?

This question was answered by using frequency counts of the drivers' responses and percentages as shown in table 4.2.2

Table 4.2.2: Drivers and Commuters Perception of the effectiveness of FRSC Public Enlightenment Programme on drivers' behaviour on roads

		AGREE	DISAGREE
	With the FRSC public enlightenment programme, most drivers now	F (%)	F (%)
1	make use of seat belts	407(44.5)	513(55.5)
2	Do not make use of G.S.M./Cell Phones while driving	310(33.7)	610(66.3)
3	Obey the traffic signs on the roads.	403(43.8)	517(56.2)
4	consider the other road users while driving	350(38)	570(62)
5	There is increase in free flow of traffic on most roads and highways	313(34)	607(66)
6	obey speed limit	210(22.8)	710(77.2)
7	signal before changing lanes	586(63.7)	334(36.3)
8	drive with caution on roads	295(32.1)	625(67.9)
9	Do not drive under the influence of alcohol or drugs	575(62.5)	345(37.5)
10	Do not overtake at corners/bends	222(24.1)	698(75.9)

Table 4.2.2 shows that 62.5% of the respondents indicated that the enlightenment programme has brought about reduction in the incidence of driving under the influence of alcohol or drugs by drivers, while 63.7% of the respondents believed a significant number of drivers do signal before changing lane. However, only 32.1% of the respondents agreed that due to the Public Enlightenment Programme, most drivers now drive with caution on roads. With regards to the use of seat belt, 55.5% of the sampled road users disagreed that most drivers now make use of seatbelts. As regards if the drivers now have consideration for other road users while driving, 62% of the sampled disagree with this. 66% of them also disagree that

there is increase in the rate of free flow of traffic on most roads now. The table further shows that 66.3% of the respondents disagreed that the use of G.S.M./Cell Phones while driving has reduced while 77.2% disagreed that most drivers now obey speed limit. In addition 75.9% of them disagreed that the act of overtaking at corners or bends has reduced.

To confirm road users' perception of the effect of the public enlightenment programme on drivers' behaviour/habits, the commercial vehicle drivers were observed. Fig 4.5 shows the observed behaviour.

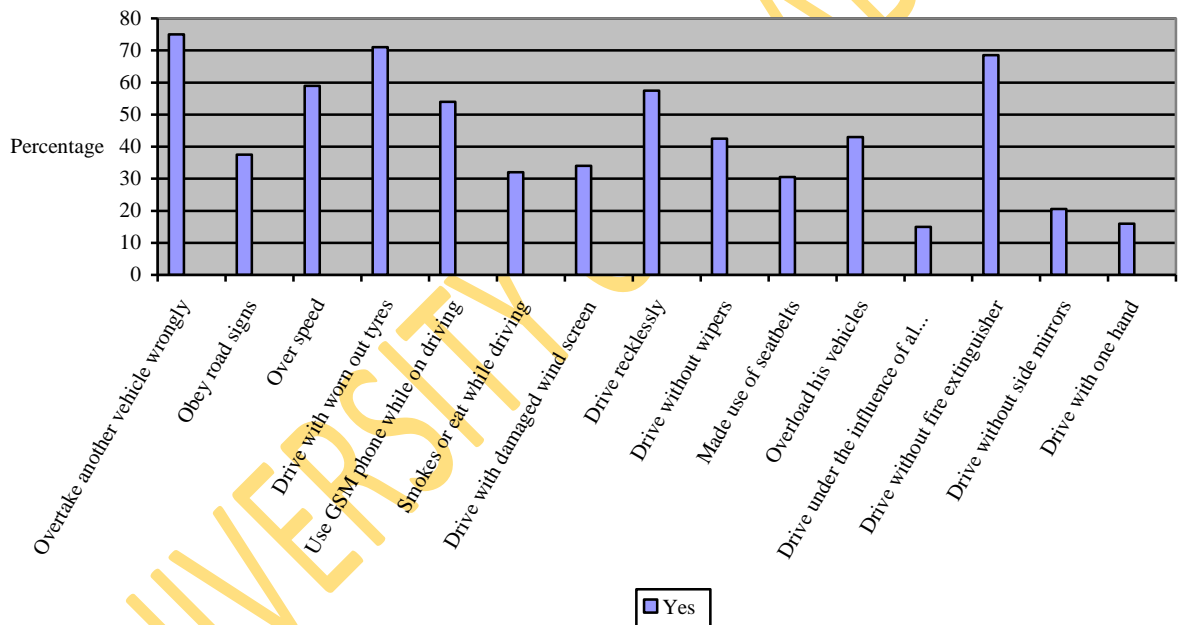


Fig. 4.5: Bar chart showing the observed commercial drivers' behaviour on Roads in percentages

Figure 4.5 shows that between 75% and 71% of the commercial vehicle drivers observed overtook another vehicle wrongly and drove vehicles with worn out tyres respectively. Only 37.5% of them obeyed traffic signs and 59% over sped on the road. As regards the use of G.S.M phones and seat belts while driving, 54% of the drivers observed made use of G.S.M while driving and only 30.5% of them made use of seat belts while driving. 68.5% of the drivers did not have fire extinguishers in their vehicles while driving. 84% and 79.5% of the observed drivers drove with the two hands and did not drive without side mirrors. The table further shows that 57% and

42.5% of the observed drivers neither overloaded their vehicles nor drive recklessly. 88% and 68% of the observed drivers neither drove vehicles with damaged windscreen nor ate or smoke while driving. In addition, 85% of the drivers observed did not drive under the influence of alcohol, while only 48.5% of them drove without having wipers.

Discussion

The public enlightenment programme of the FRSC has brought little or no difference to most drivers' regular behaviour/ habits on roads. Findings from the study revealed that in spite of the public enlightenment programme, the road users indicated that most drivers (most especially commercial vehicle drivers) still drive without caution on roads. The sampled road users also claimed that most drivers still make use of cell phones while driving. This claim was verified when some of the drivers were observed. Majority of them that were observed on roads disobeyed some traffic rules. Most of them made use of G.S.M phone while driving, disobeyed speed limit, overtook dangerously and did not make use of seat belt. The findings also revealed that the use of cell phones/G.S.M by most drivers while driving is still high. Most of the drivers observed at different times either received or make calls while driving. Most drivers find it very difficult to park in order to receive or make a call. This is an act of disobedience to the traffic law which states that they should neither make nor receive calls while driving. Despite the increasing benefits of the use of mobile phones there is no iota of doubt in the fact that its use while driving has wrecked a lot of havocs world-wide (including Nigeria). This finding is similar to Maduagwu's (1998) assertion that many people love giving attention to phones instead of the road or human lives while driving and this has on many occasion led to road traffic accident. It also corroborates Chidoka's statement in an interview with Nigerian Tribune on the 23rd of December 2009 and Orzag's (2009) finding that most drivers (61%) still make use of cell phones /GSM while driving and this sometimes cause accidents on roads.

Many innocent pedestrians have been killed while many drivers have lost control of their vehicles while making or receiving calls on their mobile phones. The use of mobile phones while driving often distracts drivers' attention from the roads and this has on many occasions led to road accidents (Ogunwumi, 2009). Apart from this, the road users indicated that most drivers do not obey the law on speed limit,

most drivers observed over speed. This is an indication that the rules on speed limit for each vehicle is not being adhered to by most drivers. Evidence from the scores obtained from the assessment test given to the drivers indicated that many drivers do not even know the maximum speed limit for their vehicles, thus, they hardly abide by it. This finding affirms Yakassai's (1997) assertion that many drivers are in a haste to get to their destinations, hence, they over speed on roads forgetting the fact that anything can happen to them.

Furthermore, the finding revealed that most drivers still overtake at corners or bends. Evidence of this is seen in figure 4.5. In the figure, about 75% of the sampled commercial vehicle drivers observed overtook other vehicles wrongly. Evidence from the data collected indicated that each of these drivers performed this act more than twice during the periods that they were observed. Some of the observers interviewed by the researcher claimed that some of these drivers overtook at corners, while some overtook even when they saw that the oncoming vehicle from the other end is closer to them. This finding corroborates Chukwu's (2007) assertion during an interview with punch newspaper on the 17th of April p17 that most accidents on roads are mainly caused by dangerous overtaking. Many drivers (most especially commercial vehicle drivers) behave irrationally on roads, they overtake at all odd spots and whenever they run out of luck, it usually leads to disasters. In addition, the findings revealed that most drivers hardly make use of seat belt while driving. This was also evidenced from the observation carried out.

69.5% of the sampled commercial vehicle drivers observed did not make use of seat belt while driving. The only few that made use of the seat belt were mainly those who drove cars. The use of seat belt while driving is very important as a research carried out in Britain showed across all collision types that seat belt were not worn in the ones that death or serious injury were involved. The research found out that the wearing of seat belt reduces the risks of death by two third (Fernando, 2010). As regards traffic signs on roads, it was discovered that most drivers do not obey them. This could be as a result of the fact that most of these drivers do not know the meaning of these traffic signs and it could also be due to the fact that about 80% of the sampled commercial vehicle drivers did not attend any driving school before obtaining driving licences. Hence, they were not taught and they do not know the importance of knowing the meaning of these signs. Evidence from the data collected showed that the only few people who indicated that they attended driving schools

before they started driving were mainly private vehicle drivers.

The non obedience of traffic rules and regulations usually lead to absence of free flow of traffic on most roads more so that there is increase in the number of vehicles plying the roads now. Evidence from the study shows that 66% of the road users sampled perceived that the rate of congestion on roads is still high. This finding is similar to the report of the findings of the Global Road Safety Partnership in Ghana (2010) that the rapid increase in the number of vehicles on Ghana roads contributed to rise in road crashes. The finding from the study further revealed that most drivers still drive without taking due consideration of other road users. This finding is also similar to that of W.H.O's report in the 2007 bulletin about Rwanda, that the capital, Kigali saw frequent collisions sometimes because drivers refused to respect other road users' right of ways. This implies that if drivers respect the other road users' right of way while on roads, most accidents that happen would have been avoided and there will also be free flow of traffic. Although one of the primary roles of current FRSC is to publicise safe driving, it appears this has not been effective, based on the driving culture of the drivers on the road. This finding buttresses Oni (2010) finding that the situation of the road has deteriorated so badly that it is often joked that prospective drivers in Lagos should 'remember that every road user is mad.' This situation is compounded with the ease with which a driving licence is obtained. Many drivers, especially commercial drivers often obtain licence without due driving tests by bribing the license authorisation officers (Oni, 2010).

However the programme has succeeded in making most drivers to signal before changing lanes and also avoid the act of driving under the influence of alcohol. In addition, most drivers observed did not drive using one hand, most of them made use of the two hands while driving. This is evidenced in Figure 4.5. This is in consonance with what the traffic rules say. More than 60% neither ate nor smoked while driving. 57.2% did not overload their vehicles while 79.5% of them did not drive without having side mirrors, more than fifty percent of them had wipers which they could make use of when there is rain. 85% of the observed drivers also did not drive under the influence of alcohol. This is an indication that the enlightenment programme has reduced the act of taking alcohol by most drivers before driving. Thus, the programme has at least achieved parts of its objectives. The findings however, agrees to some extent with the findings from the study carried out in Limpopo where it was discovered that enlightenment programme brought about

increase in both learners awareness of the seriousness of the road safety situation and their knowledge of correct behaviour in traffic.

Question 3: How do the FRSC staff perceive the effectiveness of FRSC Public Enlightenment Programme vis-a-vis drivers' behaviour on roads an road traffic situation?

Frequency counts of the FRSC staff responses and their percentages are shown in table 4.3

Table 4.3: FRSC Staff Perception of the Effectiveness of the Public Enlightenment Programme on Drivers' behaviour on roads

S/N	With the FRSC public enlightenment programmes, most drivers:	AGREE F (%)	DISAGREE F (%)
1	now drive with caution	56(56)	44(44)
2	now obey speed limit	34(34)	66(66)
3	Drunk driving has greatly reduced	67(67)	33(33)
4	Indiscriminate parking of vehicle has decreased	55(55)	45(45)
5	now make use of seat belt	52(52)	48(48)
6	Overtaking wrongly by drivers on roads have reduced	38(38)	62(62)
7	now obey the traffic signs	34(34)	66(66)
8	Accident rate has greatly reduced	72(72)	28(28)
9	Casualty rate from road accidents have reduced	74(74)	26(26)
10	There is an increase in free flow of traffic now.	52(52)	48(48)

Table 4.3 shows that with the FRSC staff perceive that the implementation of the enlightenment programme brought some improvement in the traffic situation and drivers' habits on roads. 56% of the sampled FRSC staff indicated that most drivers now drive with caution on the roads while 67% claimed that drunk driving has reduced greatly. More than 70% indicated that accident and casualty rates on the roads have reduced while 55% and 52% respectively indicated that indiscriminate parking of vehicles has reduced and that there is an increase in free flow of traffic on most roads now. 66% of the staff disagree that most drivers now obey speed limit and traffic signs on roads while 52% indicated that many drivers now make use of seat belts while driving.

Discussion

The finding revealed that the members of the Federal Road Safety Commission staff perceived that the enlightenment programme has succeeded to some extent in bringing about some improvement to the road traffic situation. 67% of them like the other road users indicated that most drivers have stopped the habits of driving under the influence of alcohol. 56% of the Commission's staff also indicated that many drivers now drive with caution. This finding is a bit different from that of the road users perception because the drivers and commuters are of the opinion that reckless driving, over speeding and dangerous overtaking are still on a very high side on most roads and that the programme has little or no effect on most drivers. The difference in the FRSC staff view could be due to the fact that being staff of the commission, they may not see much lapses in the activities of the Commission in order to protect their job.

The staff also believed that the Commission through its enlightenment programme has also brought about reduction in accident and casualty rates. More than 50% of them also indicated that indiscriminate parking of vehicles on the roads has reduced and that there is an increase in the rate of free flow of traffic on most roads now. This finding affirms Oyeyemi (2003) and Balogun (2006) submissions that the activities of the Federal road safety commission has brought about reduction to the rate of accident as well as indiscipline on most roads in Nigeria. It however, disagrees with the perception of the road users for most of them perceived that the rate at which there is free flow of traffic on most roads is still low. About 66% of the roads users indicated their disagreement that there is an increase in free flow of traffic on most roads now.

However, much still need to be done by the commission because the study revealed that 66% and 62% of the FRSC staff indicated that drivers still do not obey speed limit and they also overtake wrongly. This could be the reason why accident rate is still on the high side. Hence, the commission still need to enforce the maintenance of speed limit on drivers and also organise either workshop or seminar for drivers on the essence of maintaining speed limit and how, when and where to overtake on roads. It is believed that if drivers obey speed limit, injury and death rates on roads will reduce. As regards road signs, the views of the staff as well as that of the road users agree together. The officials of the commission also believe that many drivers still disobey most traffic signs on the roads. This could be due to the nonchalant attitude of road users or due to the fact that most of them do not know the

importance of the signs. These nonchalant attitudes of most drivers on roads have brought about an increase in the number of arrest from 290,725 in 2009 to 383,540 in 2010 (FRSC, 2010).

Question 4a What is the level of knowledge of the Highway Code by drivers?

Table 4.4.1 shows the frequency counts of the number of drivers and the percentages in each level in terms of their knowledge of the Highway Code

Table 4.4.1: Drivers' Level of Knowledge of the Highway Code.

Level	Respondents	Percentage
Low	260	52%
Moderate	77	15%
High	163	33%

Table 4.4.1 shows that only 33% of the sampled drivers have high knowledge of the Highway Code, while 52% have low knowledge.

Table 4.4.2: Lagos State Drivers' Level of Knowledge of the Highway Code

Level	Respondents	%
High	87	34.1
Moderate	34	13.3
Low	134	52.6

Table 4.4.2 shows that only 34.1% of the sampled Lagos state drivers have high knowledge of the Highway Code, while 52.6% have low knowledge.

Table 4.4.3 Oyo State Drivers' Level of Knowledge of the Highway Code

Level	Respondents	%
High	76	31
Moderate	43	17.5
Low	126	51.4

Table 4.4.3 shows that 51.4% of the sampled drivers in Oyo state have low knowledge of the Highway Code while only about 31% of them have high

knowledge.

Discussion

The finding of this study shows that fifty two percent of drivers from the two states have low knowledge of the highway traffic code. The scores obtained from the assessment test given to the drivers show that most of them do not know the meaning of some of the traffic signs. This finding buttresses Anyaoku's (2009) submission that many drivers do not know the meaning of most road signs and some that even have the knowledge of its meaning hardly abide by it. It is also similar to Akosua's (2007) findings in Ghana where he found out that many drivers have little knowledge of the highway code most especially road signs and that is why there is high rate of driver indiscipline and accidents on roads. This could also be the reason why the rate of indiscipline and accidents are still on the high side on roads and highways in Nigeria. Therefore, much work still need to be done by the public Enlightenment unit of the FRSC in ensuring that almost (if not all) all the drivers have high knowledge and understanding of the highway code so that safety will be maintained on roads and highways. Most of the sampled drivers could not indicate what most of the road signs mean, most especially signs that indicate; give way to traffic on your left, maximum speed limit, long grade dangerous hill, dangerous double bend, general danger and intersection with major roads. Hence, to obey them might be difficult.

The findings of this study also shows that most drivers do not know the maximum speed limit for their vehicles as stated in the Nigerian Highway Code. Furthermore, most of the drivers tested do not know that it is not good to rely on stay-awake drug like coffee, or kolanut when making a long distance journey while more than 60% claimed that there is nothing wrong with a driver reversing from a side road into a major road. Efforts must therefore be made to make sure that most drivers have high knowledge of the traffic rules most especially the speed limits for their vehicles and also the road signs because over speeding is a serious problem that must be addressed on various levels and by walks of life to save innocent lives. By doing this, the traffic situation in Nigeria will improve. This corroborates Balogun (2006) findings that many drivers lack the knowledge of the Highway Code and this is the reason why accident rate is still high on most roads in Nigeria. Thus, every road user should still assume that he or she is the only sane person on road and practice defensive driving techniques so as to avoid unnecessary accidents.

Question 4b: Is there any significant difference in the drivers' level of knowledge of the highway traffic code on state basis?

In answering this question, the drivers' scores from each State were analysed using t-test and the result is shown in table 4.4.4

Table 4.4.4: Comparison of Drivers' Level of Knowledge of Highway Code on State Basis.

	State	N	Mean	SD	t	Df	Sig
Score	Lagos	255	13.77	3.73	1.51	498	.132
	Oyo	245	13.29	3.40			

Table 4.4.4 presents the t-observed indicating the difference between the knowledge level of the Highway Code of Lagos state and Oyo state drivers. The $t_{(498)} = 1.51$ $p > 0.05$. Since P value is more than 0.05, there is no significant difference. The mean scores show that the level of knowledge of the highway traffic code by drivers in the two states are the same.

Question 4c: Is there any significant difference in the level of knowledge of the highway traffic code by drivers who attended driving schools and those who did not?

This question was answered by using t-test to analyse the scores of drivers who attended driving schools and those who did not as shown in table 4.4.5

Table 4.4.5: Comparison Between Level of Knowledge of the Highway Code of Drivers who Attended Driving Schools and Those Who did Not

Drivers		N	Mean	SD	DF	t	Sig.
	Attended driving school	153	18.50	2.228	498	25.583	.000
	Did not attend driving school	347	12.74	2.361			

Table 4.4.5 shows that the calculated $t_{(498)} = 25.583$ is less than P value ($P < 0.05$). Hence, there is significant difference in the level of knowledge of the traffic code by drivers who attended driving school and those who did not. The mean scores show that those who attended driving schools have higher knowledge than those who

did not.

Question 4d

Is there any significant difference in the drivers' level of knowledge of the highway traffic code by categories (Commercial, private hired, private owner)?

In answering this question, the scores of the three categories of drivers in the study were analysed using ANOVA as shown in table 4.4.6.

Table 4.4.6: ANOVA Table Showing Drivers' Level of Knowledge of the highway Highway Code by Categories

	Sum of squares	DF	Mean Squares	F	Sig
Between Group	1124.321	2	571.161	52.947	.000
Within Group	5361.317	497	10.787		

Table 4.4.6 shows that the F-value $(_{2,497}) = 52.947$ is significant at 0.05 alpha level ($P < 0.05$). The table shows that there is significant difference in the level of knowledge of the highway code of drivers by type.

In order to know where the difference lies, post hoc analysis was carried out using Scheffe test as shown in table 4.4.7. The table shows where the difference lies.

Table 4.4.7 Scheffe Table Showing the Mean Scores of the Drivers by Categories

	N	1	2	3
Commercial	200	13.24		
Private (hired)	90		14.78	
Private (owners)	210			16.56

Table 4.4.7 shows the mean score of each category of drivers. The table shows that the differences in the drivers level of knowledge of the Highway Code lie between commercial and private owners and between private hired and private owners. It shows that the private owner drivers have the highest level of knowledge of the Highway Code followed by the private hired drivers. The mean plot reveals the difference at a glance.

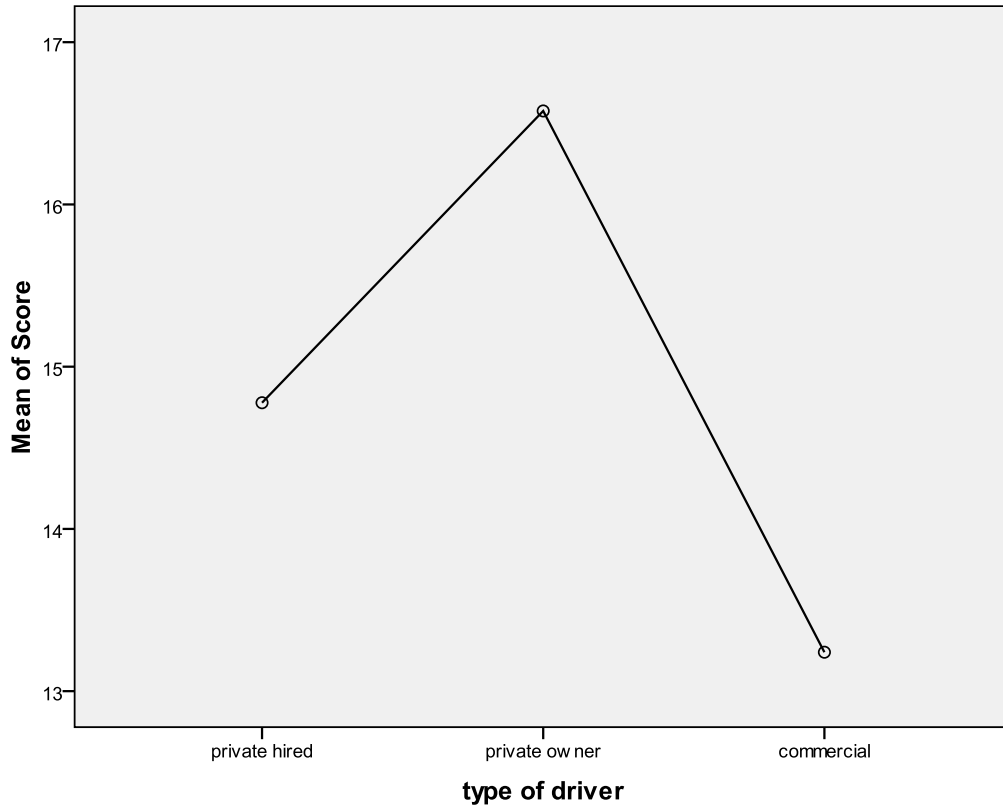


Fig. 4.6: Graph of the Mean plot of Drivers' Level of Knowledge of the Highway Code by Categories

Discussion

A comparison of the level of knowledge of the highway traffic code by drivers in Lagos and Oyo states revealed that there is no significant difference in the knowledge level of drivers in the selected two states. Only few drivers from the two states have high knowledge of the Highway Code most especially the traffic signs. This is an indication that drivers from one state are not better than the drivers in the other state as shown from the result. This could be the reason why many drivers still behave the way they like on the roads and highways. The finding however disagrees with what was observed because most of the Lagos state drivers observed behaved better on the roads than the Oyo state drivers.

Although 52% of the sampled drivers have low knowledge of the highway traffic code, the findings revealed that the drivers who attended driving school have higher knowledge of the signs than those who did not attend. From the result of this study, about 80% of the drivers who attended driving schools are private owner drivers. This shows that although there might not be model driving school from the

FRSC end for training and retraining of drivers, the available driving schools owned by individuals are still trying their best to educate and teach their learner drivers the Highway Code. The finding of this study disagrees with Plappville's (2008) assertion that 'driving schools in Nigeria are only money centered'. Though Plappville (2008) claimed that driving license are as easy to obtain as pure water in Nigeria, result of the study shows that many people who attended driving schools are better off in terms of their knowledge and understanding of the Highway signs. It is the responsibilities of the driving schools is to ensure that their learner drivers are fully aware of the Highway Code when training is given and prior to their submission for a driving test (Fernando, 2010). Good roads are of no value if road users do not have the right driving value, hence, it is necessary to build and instill a new driving culture among all the road users.

The finding further revealed that most drivers who are knowledgeable about most road signs on the roads are private owner vehicle drivers. This could be due to the fact that most of them attended driving schools before they started driving. This is evidenced from the bio-data information gathered from the various drivers. Apart from this, many of them are well educated and knowledgeable. Also, most of them claimed that they have their own highway traffic code book. Thus, this might have given them the chance to learn more from the book on their own. This finding is similar to Chukwu's (2007) finding that most commercial vehicle drivers are illiterates and have low knowledge of the traffic rules and regulations most especially the road signs. The private owner drivers were followed by the private hired drivers. This could be due to the fact the sampled private hired drivers are those in the selected offices who might have undergone some tests before being employed as drivers. Most of the commercial vehicle drivers did not attend driving schools, some learnt the trade from mere watching other drivers when they were acting as conductors, some were taught by mechanics. Since some of them claimed to be enlightened through jingles on radios and some from rallies alone, there is no way by which they might have been taught to know the meaning of most of these signs and the other rules guiding road usage without attending driving schools. A private owner vehicle driver that was interviewed by the researcher claimed that most of the private driving schools have the Highway Code book which they usually use to teach their learner drivers before the practical aspect.

Question 5: Is there any significant difference in the road traffic situation before and after the establishment of FRSC and the introduction of its Public Enlightenment Programme?

In answering this question the responses of the road users were subjected to t-test and the result is shown in table 4.5.

Table 4.5: Comparison of the Traffic Situation Before and After FRSC and its PE Programme

Rate of indiscipline/accident	N	Mean	SD	DF	t	Sig.
Before	920	35.17	12.06	919	41.379	.000
After	920	29.89	10.33			

Table 4.5 presents the t-value observed indicating the difference between road traffic situation before and after the establishment of FRSC and the introduction of its Public Enlightenment Programme. The $t_{(919)} = 41.379$ $p < 0.05$. Since P value is less than 0.05, there is significant difference in the rates of indiscipline and accidents before and after the establishment of FRSC in Nigeria. The mean scores shows that the rate of indiscipline and accidents on roads and highways were higher before than after FRSC Programmes.

Discussion

The comparison of the situation on the road before and after FRSC Public Enlightenment programme shows a significant difference. This indicates that in spite of the fact that some acts of indiscipline are still high on the road, the programme has brought about some significant improvement to road traffic situation. The situation of road traffic has improved. The result of the study indicated that the percentages of almost all acts of indiscipline have reduced to some extent. Overloading of vehicles has drastically reduced so also is driving under the influence of alcohol by drivers. The acts of obstructing the road willfully with either broken down or damaged vehicles or any other object have reduced so also is the acts of indiscriminate parking on the roads. Most roads observed were free from obstructions. During observation, the damaged vehicles were parked by the side of the road without disturbing any other vehicle. Acts of indiscipline such as reckless driving, overtaking dangerously,

overloading of vehicles, and drunk driving (though some are still high) are not as high as before, while the usage of belt has improved a bit when it is compared with the way it was before.

This implies that the Public Enlightenment programme has brought about some changes in the attitude or behaviour of road users especially drivers on roads, and this has in turn brought about a little reduction in accident rate and death rate. This finding corroborates that of Hills (2008) in the United State when he found that the enactment and enforcement of traffic safety reinforced by public education brought about an improvement in the traffic situation of the country for the rate of accidents decreased greatly. It also supports Agunloye's (1989) assertion that road traffic situation could only improve if adequate measures (such as public education of road users) to improve human behaviour are put in place.

Question 6a: Is there any significant difference in drivers' perception of the effectiveness of FRSC public enlightenment programme based on driving experience? In answering this question, the responses of the drivers on their perception based on the years of driving were analysed using ANOVA as shown in table 4.6.1

Table 4.6.1: ANOVA Table Showing Drivers' Perception of the Effectiveness of FRSC Public Enlightenment Programme Based on Driving Experience.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	299.175	4	74.794	14.150	.000
Within Groups	2616.383	495	5.286		
Total	2915.558	499			

Table 4.6.1 shows that the F-value (4,495) is significant at 0.05 alpha level ($p < 0.05$). The table shows that there is significant difference in the drivers' perception of the effect of FRSC public enlightenment programme based on the year of driving experience.

Post hoc analysis was carried out using Scheffe test. Table 4.6.2 shows where the difference lies.

Table 4.6.2: Scheffe Table Showing The Mean Scores of Drivers Based on Driving Experience

driving experience	N	Subset for alpha = 0.05		
		1	2	3
21 years and above	35	27.0571		
16-20 years	99	28.1616	28.1616	
11-15 years	183		28.7705	28.7705
5-10 years	142			29.7113
less than 5 years	41			29.7561
Sig.		.108	.677	.195

Table 4.6.2 shows the subsets with the means of each drivers driving experience. The table shows that drivers with less than five years of driving experience have the highest perception that the programme has brought about some changes in the drivers behaviour on roads

Question 6b: Is there any significant difference in the FRSC staff perception based on working experience?

Table 4.6.3: ANOVA Table Showing FRSC Staff' Perception Based on Working Experience

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	58.221	4	14.555	2.278	.067
Within Groups	607.019	95	6.390		
Total	665.240	99			

Table 4.6.3 shows that there is no significant difference in the perception of FRSC staff on the effect of the Commission's Public Enlightenment programme on drivers' behaviour based on years of working experience ($F_{(4, 95)} = 2.278$), $p > 0.05$.

The chart below still shows the graphical illustration of their perception.

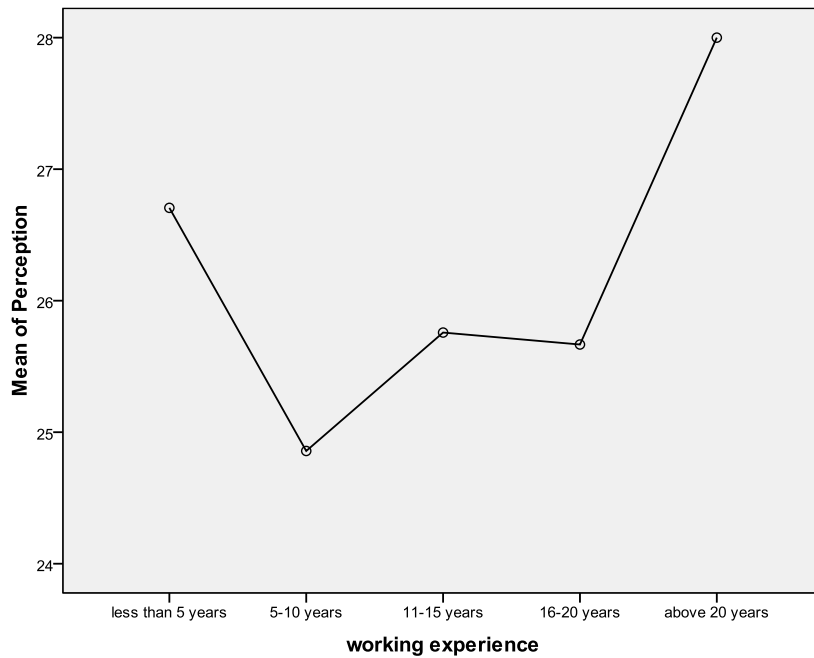


Fig 4.7: Graphical Illustration of FRSC Staff Perception of Effect of Public Enlightenment Programme on Drivers Based on Years of Working Experience

The chart shows that the staff who have been working for about twenty years indicated that programme has great effect followed by those with less five years working experience.

Discussion

The finding of the study revealed that there is significant difference in the drivers' perception of the effect of FRSC public enlightenment programme based on the year of driving experience. Drivers who have been driving for less than five years have the highest perception of the effectiveness of FRSC Public enlightenment programme vis a-vis drivers' behaviour on roads and highways. Most of them believed that the programme has effectively reduced some drivers' regular behaviour on roads such as; the act of driving under the influence of alcohol, the acts of driving with one hand and refusing to signal before changing lanes. This could be due to the fact that most of them claimed that they had at one time or the other been arrested for one offence or the other. This finding corroborates Chidoka' statement during an interview with the Nigeria Tribune of December 23rd,2009 that offenders are often directed to the office by the road safety officials where they are compelled to watch films in order to prevent them from committing such offence again.

However the drivers with more than twenty one year experience had the least perception of the effect of the FRSC public enlightenment programme. Most of them disagree with the fact that the enlightenment programme has made most drivers to be driving with caution now because most drivers still drive recklessly and disobey speed limit. The reason for this could be due to the fact that most of the drivers in this category are private owner drivers who are experienced and have high knowledge of most of the rules guiding road usage. Thus, to them, the enlightenment programme has brought about little or no change to the behaviour of most drivers on roads and rate of indiscipline on the road when compared to the past has not all that improved for the better since most drivers still behave the way they like on roads and highway without having the fear of being apprehended.

The result of this study also revealed that there is no significant difference in the perception of FRSC staff on the effect of the Commission's Public Enlightenment programme on drivers' behaviour based on years of working experience. However, the study shows that the staff who have been working for about twenty years perceived that the programme has great effect on drivers' behaviour on the roads. This could be due to the fact that most of the staff who have been working for the past twenty years and above must have known what the situation was like before in terms of road users habits and accident rates. Thus, to them there is an improvement because it has brought about a reduction in the rate of accident. This finding agrees with Ruranginwa's assertion in the Bulletin of the World Health Organisation (2007) that the road safety programme financed by World Bank brought about an improvement to the traffic situation of Rwanda for the number of death dropped by thirty percent. Speed limit and penalties given for drunk driving also reduced accidents greatly in Rwanda

Question 7

Is there any significant relationship between commercial drivers' knowledge of the Highway Code and their behaviour on the road?

In answering this question, the commercial vehicle drivers' scores in the assessment of their knowledge of the Highway Code test were correlated with their behaviours' scores. Table 4.7 shows the result.

Table 4.7: Pearson Correlation Table Showing the Relationship Between Commercial Vehicle Drivers' Knowledge and Behaviour on Roads

Variable	N	M	SD	r	Sig
Knowledge	200	24.64	2.362	.192	.007
Behaviour	200	13.24	3.219		

Table 4.7 shows the estimated mean score for both knowledge and behaviour which are 24.64 and 13.24 respectively while the Standard Deviations are 2.362 and 3.219 respectively. The calculated $r=.192$ ($p<0.05$) shows that there is significant relationship between commercial drivers knowledge of the Highway Code and their behaviour on the road

Discussion

Result of the study revealed that a significant relationship exist between drivers' knowledge of the Highway Code and their behaviour. Evidence from the observation carried out in the study shows that those that were knowledgeable about the highway traffic code behaved well on roads. Most of them drove with caution and their vehicles had the necessary things that are required of them. This is an indication that for good road traffic culture to be obtained, there is the need to ensure that the drivers have good knowledge and understanding of the highway traffic code. Good knowledge and understanding of the road traffic signs and application of the knowledge on roads will not only eradicate acts of indiscipline on the road, it will reduce rate of accidents to the bearest minimum and good driving culture will be achieved. This finding supports Agunloye's (1989) assertion that for safety to be maintained on roads in Nigeria, drivers must have the knowledge of the rules and regulations guiding road use and they must be ready to abide by it. Thus, the Public Enlightenment unit/ department of the FRSC still need to ensure that enough warning signs are placed at every strategic points on roads so as to prevent disasters and also

they should intensify their effort at educating the drivers on the knowledge and understanding of the various road traffic signs for most drivers behave as if they do not have an iota of knowledge of the highway traffic code on the roads and highways.

Road signs are expected to be placed at strategic places to guide road users (most especially drivers) on the proper use of roads so as to avoid crashes or accidents. The signs are to ensure a smooth and safe traffic flow. Road users are expected to know, understand and be able to recognize them immediately they see the signs so as to prevent accident on the roads (Revised Nigeria Highway Code, 2008). Thus, for safety to be ensured on roads and highways, the road users (most especially drivers) must know and understand the road signs, know the rules and regulations guiding road use and also be ready to obey them when they are behind the wheels. The Public Enlightenment Unit should ensure that they enforce the road users to obey the traffic rules and regulations stated in the Highways code book. All road users should be forced to buy it and always place it in their vehicles every time they are on the roads.

Question 8: What are the constraints (if any) and probable solutions to effective achievement of FRSC public enlightenment programme objectives as perceived by drivers, commuters and FRSC staff?

Frequency counts of the road users responses are shown in table 4.8.1

Table 4.8.1: Drivers and Commuters' Perception of Constraints Affecting Achievement of FRSC Public Enlightenment Programme Objectives.

S/N	Constraints	F
1	Corruption	147
2	Non-availability of the highway code in various languages.	103
3	Economic situation	232

The drivers and the commuters were requested to indicate in an open ended questionnaire the constraints (if any) to effective achievement of the public enlightenment objectives of enforcing road traffic rules and regulations on road users. The frequency counts of the cited ones are shown in table 4.8.1

The FRSC staff were asked if there is any constraints hindering the Commission from achieving the objectives of the enlightenment programme.

Evidence from the data collected indicated that all of them responded that there are. The constraints as indicated by the staff is presented on table 4.8.2

Table 4.8.2: FRSC Staff’s Perception of Constraints Inhibiting the Realization of FRSC P.E Programme Objectives.

S/N	Constraints	AGREE (%)	DISAGREE (%)
1	Poor condition of service	49	51
2	Lack of regular programme of training for staff	68	32
3	Inadequate fund	66	34
4	Inadequate manpower	52	48
5	Inadequate equipment	74	26
6	Indiscriminate transfer of staff.	17	83
7	Inadequate number of competent and well trained staff.	39	61
8	Inadequate motivation of staff.	68	32
9	Nonchalant attitudes of most road users	54	46
10	Lack of Model driving schools by the Commission.	94	6

Table 4.8.2 shows that 49% of the sampled FRSC staff agreed that the condition of services provided by the Commission for its staff is adequate, while only 32% agreed that regular programme of training are usually drawn up for the staff of the Commission. As regards the funds provided for the carrying out of the Commission’s programmes and equipments, 66% and 74% of the sample agreed that they are inadequate respectively. From the table also, 68% agreed that lack of regular programme of training and motivation also serve as constraints to effective achievement of the programme’s objectives, while 52% agreed that inadequate manpower has brought about a set back to the Commission’s activities.

The table further shows that 54% agreed that the nonchalant attitudes of the road users also serve as a constraint, while 94% agreed that lack of model driving school established by the Commission for training and retraining of drivers is also a constraint. As regards if indiscriminate transfer of staff is one of the constraints, 47% of the sample agreed to this.

The FRSC staff were also requested to indicate in an open ended

questionnaire, probable solutions to the achievement of FRSC Public Enlightenment programme objectives. The most frequently cited ones are shown in table 4.8.3

Table 4.8.3: Solutions to Effective Achievement of FRSC Public Enlightenment Programme Objectives as Perceived by FRSC staff.

S/ N	SOLUTIONS	F	%
1	Adequate funding	75	75
2	Adequate infrastructure	63	63
3	Regular training of staff	71	71
4	Motivation of staff	83	83
5	Cooperation of road users	68	68
6	Law empowering the arrest of traffic offenders no matter the position in the society.	58	58
7	Adequate ICT facilities	52	52

Table 4.8.3 shows that majority of the staff cited the following as the major factors that can bring about solutions to the problems hindering effective achievement of FRSC public enlightenment programme objectives: provision of adequate fund (75%), provision of adequate infrastructure (63%), regular training of staff (71%), motivation of staff (83%), cooperation of the road users (68%), enactment of law empowering the arrest of any traffic offender no matter the status in the society (58%) and provision of adequate Information Communication Technology facilities (52%).

Discussion

This finding revealed that the road users indicated that there are constraints hindering effective achievement of FRSC public enlightenment programme objectives. These include the high rate of corruption in the society, non-availability of the translated highway traffic code book in different languages and economic situation of the country. Evidence, from observation, shows that many drivers (most especially commercial vehicle drivers) prefer to give bribe than to obey most of these rules. This could be due to the rate of corruption in the Country. The finding further revealed that the non availability of the translated Highway Code book into the major Nigeria languages is also a constraint, for many road users do not understand English

language. Thus, they find it difficult to understand what is written in the Highway Code book. This finding contradicts FRSC' submission, in its 2009 annual report, that highway traffic codes which have been translated into the three main languages in Nigeria are already available.

The main factor which serves as constraint as indicated by most of the sampled road users however, is the state of the economy (economic situation). Many drivers wrote that motor spare parts are expensive. Thus, they find it difficult to buy new ones, rather, they try to manage the old ones and that is the reason why many vehicles ply the roads and highways with worn out tyres and damaged wind screens. The findings of the study also revealed that all the sampled staff of the Commission claimed that there are some factors which serve as constraints to effective achievement of most of the FRSC public enlightenment programme's objectives. Evidence from the study shows that the major constraints as indicated by the Commission's staff were lack of regular training of the staff, lack of adequate fund, lack of adequate equipments, lack of staff motivation and lack of model driving schools for training and retraining of drivers. Others include nonchalant attitude of the road users and lack of adequate manpower. This finding affirms Oni's submission that regular programme of training is necessary for staff in any Commission in order to give room for proper implementation of any programme. Most of the public enlightenment officers have not been trained on how to carry out their duties effectively. This finding also confirms Nkwonta (2001) assertion that for any programme to yield the expected result, the implementers must be regularly trained.

Lack of adequate fund is also cited by FRSC staff as one of the major constraints affecting effective achievement of the programmes objectives. This finding is similar to Onuka's (2002) finding cited by Ogunmodede (2006) that the poor funding of the UBE programme resulted in poor implementation and management of the programme Adequate funding is necessary for proper implementation of any programme. A lot of obstacle would be removed if adequate fund is provided because the fund would be used to acquire necessary equipments for carrying out the enlightenment programme.

The staff of the Commission also claimed that inadequate manpower has brought a set back to the activities of the Commission. Once there are no adequate number of competent and well trained staff, there is the probability that this will affect the proper implementation of the enlightenment programme. Furthermore, another

constraint as indicated by 83% of the Commission's staff is lack of motivation of staff. This finding confirms Oyeyemi's (2003) submission that a poorly motivated staff cannot effectively contribute to productivity in any organisation. Other constraints include nonchalant attitudes of the road users and non availability of model driving schools for training and retraining of drivers. This finding contradicts what is stated in the establishment Acts of the FRSC, (1990) p5 that 'the Commission shall as soon as may be after the commencement of this Acts, establish in each state or operational zone, a model driving school for training and retraining of drivers. It is over twenty three years and no model driving school has been established by the FRSC. This implies that some of the things stated in the Acts are not properly implemented as expected. This might be the reason why most of the objectives of the programme are not achieved as expected.

Various suggestions were also given by the commission's staff as the solution to effective achievement of FRSC public enlightenment programme objectives. These include the provision of adequate fund for the Commission by the government, and the Commission should in turn give adequate fund to the public enlightenment unit/department to enable it carry out its programme as expected, regular training of personnel, provision of adequate manpower and infrastructure and regular motivation of staff. A programme not well funded cannot be effectively managed (Fadaka, 1995). In addition, for any programme to be properly implemented, adequate manpower and infrastructures must be provided. They further stated that regular training of personnel as well as regular motivation of staff will go a long way to bring about an improvement and solution to the problems. One of the constraints to effective achievement of the objectives as indicated include lack of cooperation from some road users who believed that they are above the law. Thus, to overcome this problem as indicated by the staff is to enact a law that will give the Commission the power to arrest and prosecute any traffic offender no matter the position in the society. In addition, all road users should abide by defensive driving techniques so as to reduce road traffic crashes and increase safety on the roads and highways. Other probable solution as revealed in the finding include the provision of adequate Information Communication Technology facilities such as speed camera, equipments that could be used to detect the level of alcoholic and drug intake, adequate number of projectors so that they could be taken out each time the Commission is going out for rallies or enlightenment campaigns.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

In this chapter, the major findings are highlighted and some recommendations are given. The conclusion of the study as well as a number of suggestions for further research was also provided.

5.1 Summary of Findings

The major findings in this study are summarized as follows;

- The rate of indiscipline and accident on the road was very high before the establishment of FRSC and the implementation of its public enlightenment programme.
- The study shows that there had been improvement in some drivers' behaviour on road as a result of FRSC public enlightenment programme.
- The FRSC public enlightenment strategies through rallies, jingles on radio and televisions and special campaigns usually carried during festivals are effective means that have enlightened road users to some extent and reduced accidents on roads.
- In spite of the enlightenment programme, some acts of indiscipline are still high on the roads and highways. These include, reckless driving over speeding, use of GSM while driving, dangerous overtaking driving with worn out tyres and the act of driving without fire extinguisher.
- The study shows that many drivers have little knowledge of the road traffic rules and regulations.
- The drivers who attended driving school have significantly better knowledge of the highway traffic code than those who did not.
- The private owner drivers are better off in terms of the level of knowledge of the highway traffic code.
- There is significant relationship between commercial drivers' level of knowledge of road signs and their behaviour on the road.
- There is significant difference in the drivers' perception of the effect of the FRSC public enlightenment programme based on driving experience.

- Lack of regular training of staff of the Commission, lack of adequate fund, lack of staff motivation, high rate of corruption, Nonchalant attitudes of some road users, lack of adequate ICT facilities as well as non availability of model driving schools serve as part of the constraints to effective achievement of FRSC objectives.
- Suggested probable solutions include the provision of adequate fund needed by the Commission, provision of adequate ICT facilities, regular training of staff, regular motivation of staff, arrest and prosecution of all traffic offenders no matter the position in the society, apprehension of staff reported or caught taking bribe, making available the translated highway code book for road users who do not understand English language and provision of model driving schools for training and retraining of drivers before they are given driving licences.

5.2 Implications of the Findings

The findings from the study imply that accident could be reduced to zero level and discipline achieved on roads if the public enlightenment programme of the FRSC is properly implemented. Nevertheless, the inadequacy or absence of certain resources could make the realization of the objectives of the programme difficult if not impossible.

There was significant difference in the level of knowledge of drivers who attended driving schools and those who did not. This implies that the private schools are still trying their best in enlightening their trainees on the knowledge of the traffic code. The attendance of driving school should be made mandatory for drivers before the issuance of licence. Model driving schools should be established or some of the private driving schools should serve as model schools which all the drivers must go through before obtaining licences.

There was a consensus among the FRSC staff on the major problems facing effective achievement of the objectives of the Commission's public enlightenment programme such as lack of fund, lack of regular training of staff, lack of model driving schools among others. If all these problems are not carefully managed by the government and the Commission, FRSC public enlightenment programme objectives might not be realised. The FRSC staff proffered solutions that could make the

Commission overcome the problems such as provision of adequate fund by the government, regular training of staff among others by the Commission to the public enlightenment department. It could be inferred that if all these solutions are strictly adhered to, the effective achievement of the public enlightenment programme objectives will be achieved.

5.3 Conclusion

Based on the data and findings from this study, it can be concluded that the objectives of the FRSC Public Enlightenment programme have not been effectively achieved as expected. The habit of most drivers on roads and highways with respect to observance of traffic rules are still bad. Some constraints hindering the effective achievement of the objectives of the programme include: lack of fund, lack of regular training of staff, lack of model driving schools, corruption, Lack of co-operation among others. Some of the possible solutions that could make the Commission to overcome the problems as suggested by road users and FRSC staff should be implemented. These are: provision of adequate fund regular training for staff, staff discipline and establishment of model driving schools for training and retraining of drivers. If all these are done, there is the probability that the public enlightenment officers will be able to carry out their duties as expected and the drivers' attitude on the road will change for good. Changes in drivers' behaviour as well as other road users' attitude will reduce road traffic crashes and injuries. The reinforcement of traffic safety law through intensive public education will lead to safer behaviour choices. Some of the strategies which have greatly increased the road users' knowledge about the proper use of roads include rallies, jingles on radios and televisions, special enlightenment campaign during festivals. It therefore portends that more enlightenment should be carried out and strategies modified.

5.4 Recommendations

Based on the findings of this study, the following recommendations are hereby made in order to improve the traffic situation on Nigerian roads and highways.

- The FRSC should enforce speed limit.
- Speed camera should be introduced to bring about reduction in road death and injuries.

- More funds should be provided by the government to the Commission, as well as other equipments needed for the enlightenment programme. This will go a long way in increasing proper implementation of the programme and effective achievement of the programme's objectives. Once funding is improved the reactivation of road infrastructures and law enforcement organizations should be undertaken concurrently. The road pavements should be technically assessed and then be reconstructed or renovated, depending on the initial assessment. Complementary road structures such as traffic signal lights, street lights, pedestrian crossing, and road barriers and markings should be put at necessary spots along the carriageways.
- New acts enabling severe punishment for erring drivers and corrupt officials should be promulgated. This is probably the most important action that needs to be undertaken to improve the behaviour of drivers in Nigeria as majority do not obey traffic laws.
- Regular programmes should be organised for the staff of the Commission to refresh their knowledge on the proper way to carry out the enlightenment programme in order to achieve positive result.
- Government should address the problem of some citizens who believed that they are above traffic rules and regulations. They should be made to understand the senselessness in believing that anybody can be above the law and its dire consequences.
- Efforts should be made to improve motivation of the staff in the Public Enlightenment Department of the FRSC to enhance effectiveness and better productivity.
- The Federal Road Safety Commission should ensure that road signs are placed at strategic points on various roads to caution road users on the dangers ahead.
- Educating the young ones about the menace of road traffic crashes is a very good step in preventing them. Starting from primary schools, road traffic education should be part of civic education or better still a subject on its own. This will expose children to a good culture of traffic right from their primary school days.
- Training and retraining of drivers, pedestrians and other road users is another strategy that is useful. Training institutes or driving schools should be

established where there would be a special training for intending drivers and also provide retraining for older drivers so as to refresh their knowledge and also keep them abreast of new developments in road safety all over the world. This will go a long way in tackling the menace of road traffic crashes in the study areas and in Nigeria at large.

- The FRSC should emphasize attendance of driving schools as pre requisite for obtaining driving licences and also conduct proper test of drivers' knowledge of the traffic code (most especially road signs) as well as driving test before the issuance and renewal of driving licences.
- Severe punishment should be given to drivers who do not obey traffic rules.
- Intensive special campaigns on proper way to use the roads to avoid crashes should not be limited to festive periods alone, but should always be carried out regularly and in different places like churches, mosques, motor parks, market places and even offices.
- The translated versions of the Highway Code into different Nigerian languages should be made available for those road users who not understand English language.
- The Commission should ensure that all road users most especially drivers have the highway traffic code booklet.
- Road safety is everybody's business and a shared responsibility. Everyone needs to join hands with the FRSC and other relevant agencies to make our roads safer to guarantee fuller lives for all travelers.

5.5 Limitations of the Study

Many factors served as constraints to the practicality of the study. The respondents include the drivers of both commercial and private vehicles as well as commuters. Thus, it took the researcher a long period to be able to convince these people that the information was for research purpose and not to implicate them. Secondly, the researcher experienced constraints in the area of observing private vehicle drivers. Therefore only commercial vehicle drivers were observed. Each driver was observed at least four times by different commuters and the researcher along with the research assistants at different times. Thirdly, a great proportion of the road users have little knowledge of what was happening on the road before the

establishment of FRSC, thus, the accident data collected from FRSC was used along with road users' perception to judge what the situation was then.

5.6 Suggestions for Further Studies

A number of suggestions are offered for further investigation:

- (1) Since this study is limited to the South-West States, further research should be conducted to ascertain the effectiveness of the FRSC public enlightenment programme vis a-vis drivers' behaviour in the other parts of the country. This will enable generalisation across the country.
- (2) Since only the public enlightenment programme of the FRSC is considered in this study, further research could be carried out on the other programmes of the Commission such as their rescue mission.
- (3) Since this study is limited to the effect of the FRSC public enlightenment on drivers behaviour alone, similar detailed evaluation of the effect FRSC public enlightenment programme on motorcycle riders could be carried out in the South-West zone of Nigeria. This will help in knowing the extent of the success of the programme on another group of road users.

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UNIVERSITY OF IBADAN

APPENDIX I
ROAD MAP OF NIGERIA



UNIVERSITY

APPENDIX II

INSTITUTE OF EDUCATION UNIVERSITY OF IBADAN DRIVERS/MOTORIST PERCEPTION OF FRSC EDUCATION PROGRAMME QUESTIONNAIRE (DMPQ)

Introduction

Dear respondents,

I am Ph.D. student of the Institute of Education, University of Ibadan carrying out a research on the public education programme of the Federal Road Safety Commission. This questionnaire is designed to find out your perception about the effect of the FRSC public education/enlightenment programme in reducing acts of indiscipline on the road to the barest minimum and accident reduction on the roads and highways and the adequacy of their various strategies. It is also designed to find out the effect of this programme on most drivers. Every answer will be treated confidentially. Thanks for your usual cooperation.

PART A: BACKGROUND INFORMATION

Personal Data

1. Sex: Male [] Female []
2. When have you been driving?
Less than 5 years []
Between 5-10 years []
11-15 years []
16-20 years []
21 years and above []
3. Are you a commercial or private vehicle driver?
Private (hired) []
Public owner []
Commercial []
4. Did you attend driving school before driving? Yes []
No []
5. Through which of these FRSC public education programme strategies have you been enlightened?
Workshops []
Seminar []
Motor park rallies []
Jingles on radio/television []
Special campaign during festivity [] Posters and hand bills []
6. Do you have a copy of the Highway Code book? Yes [] No []
7. Have you ever been penalised by the FRSC officers for committing any offence. Yes () No ()

SECTION B

PART A

Instruction: Please tick (✓) as appropriate in the columns provided

Key	4	=	Very high
	3	=	High
	2	=	Low
	1	=	Very low

	Road Traffic situation	Before FRSC				After FRSC			
		Very high	High	Low	Very low	Very high	High	Low	Very low
1	Indiscriminate parking of vehicles on roads.								
2	Reckless driving								
3	Dangerous overtaking								
4	Overloading of vehicle								
5	Willful obstruction of the road								
6	Non usage of seat belt								
7	Over speeding								
8	Drunk driving								
9	Accident rate								
10	Death rate on the road								

PART B

Kindly indicate your level of agreement or otherwise by marking a tick (✓) against one of the four options.

Key 4 = **Strongly Agree**
 3 = **Agree**
 2 = **Disagree**
 1 = **Strongly Disagree**

S/ N	Drivers' perception of FRSC Public Enlightenment Strategies	4	3	2	1
1	Adequate hand bills are distributed to enlighten us on the proper use of roads				
2	The hand bills have greatly enlighten me on the importance of discipline on roads and highways				
3	The FRSC PE strategies have greatly reduced road traffic accidents.				
4	Adequate road signs and posters are placed at strategic points to notify road users on the nature of roads and highways.				
5	The road signs and posters placed at strategic points on roads have greatly enlightened me on dos and don'ts on roads				
6	Adequate jingles are played on radios and televisions by the FRSC public enlightenment unit to caution road users on roads and highways.				
7	FRSC jingles on radio and Televisions have greatly enlightened me on the need to be safety conscious on the roads.				
8	Adequate lectures/seminars are given by FRSC PE officers on the proper use of roads and highways.				
9	The various lectures given by FRSC officers have greatly increased my knowledge of the highway code.				
10	The special campaigns usually carried out by the FRSC during festive periods are adequate				
11	The special campaigns usually carried out during festive periods have greatly reduced accidents on roads and highways				

12	Rallies are often carried out by FRSC PE officers to enlighten us at our motor parks.(for commercial vehicle drivers only				
13	The FRSC rallies have greatly increased my knowledge of the highway traffic code.				
14	The FRSC public enlightenment campaigns have greatly reduced my careless attitude on roads and highways.				
15	The films usually shown to road traffic offenders by the FRSC to reduce road traffic indiscipline and accidents are adequate.				
16	The penalty fines given to road traffic offenders usually enlighten them against repeating the offence.				
	With the FRSC enlightenment programme :				
17	Most drivers now make use of seat belt.				
18	The use of G.S.M/cell phone by drivers while driving has reduced				
19	Most drivers now obey the traffic signs on the roads.				
20	Most drivers now obey speed limit on roads				
21	Most drivers now signal before changing lanes				
22	Most drivers now drive with caution on roads and highways				
23	Driving under the influence of Alcohol or drugs has reduced.				
24	Most driver now have consideration for other road users while driving				
25	Overtaking at corners /bends by drivers have greatly reduced.				
26	Traffic congestion has greatly reduced on most roads.				

- (27) What are the likely problems affecting effective achievement of FRSC public enlightenment programme's objective of ensuring that drivers obey traffic rules and regulations

**APPENDIX III
INSTITUTE OF EDUCATION
UNIVERSITY OF IBADAN**

**IBEERE NIPA BI AWON ONIMOTO SE RI ETO EKO AWON ESO OJU
ONA FUN WON SI ATI IPA TI O NKO LAYE AWON AWAKO**

Oludahun mi owon,

Mo je omo ile-iwe giga fasiti, Ibadan. Mo nse iwadi lori eko ti awon eso oju ona nko awon awako nipa bi a se le lo ona daradara lati le din ijanba ku loju titi. Awon ibeere yi wa lati mo erongba tire lori awon nkan wonyi. Gbogbo ohun ti o ba ko yio je asiri, ko nilu sita. E se pupo

APA KINNI

Mimo nipa re

1. Okunrin ni mi () Obinrin ni mi ()
2. Igba wo lo ti nwa moto O din lodun marun ()
O to odun marun si mewa ()
O to odun mokaṅla si meedogun ()
O to odun merindinlogun si ogun odun ()
O le logun odun ()
3. Iru okowo lo nwa Mo nwa oga kan ()
Oko ara mi ()
Oko ero ()
4. Se o lo si ile-iwe eko nipa moto wiwa ki o to bere si ni wa oko
Beeni () Beeko ()
5. Nipa ewo ninu awon ona yi ni o ti gba idanileko lati odo awon eso oju ona?
idanileko ()
ipolongo ni garaji ()
ipolongo lori television ati radio ()
ipolongo Pataki lasiko odun ()
nipase iwe ilewo ti won fun mi ()
6. Se o ni iwe ofin eto irinna Beeni () Beeko ()
7. Se awon eso oju ona ti mu o ri fun esun kan tabi omiran Beeni () Beeko ()

IPA KEJI

APA KINNI

Jowo fi iru ami yi (✓) si iwaju idahun ti o ba mu

- Kokoro
- 4 = O po gan
 - 3 = O po
 - 2 = Ko po
 - 1 = Kopo gan

	Koko oro	O po gan	O po	Ko po	Ko po gan	O po gan	O po	Ko po	Kop o gan
	Iwa ibaje lori titi bii:								
1	Ki a paaki moto sibi ti ko to lori titi								
2	Iwakuwa moto loju titi								
3	Yiya moto sile lona ti o lewu								
4	Kiko ofaloodu (eru ti o poju moto lo)								
5	Didi oju titi pelu moto tabi ohun miran								
6	Ailo beliti idaabobo(seat belt)								
7	Ere asapajude lori titi								
8	Mimuti wa oko								
9	Ijanba moto lori titi								
10	Iku lori titi								

APA KEJI

Jowo so bi o se faramo to tabi odikeji to nipa fifi ami yi(✓) sinu eyikeyi ti o ba fe ninu idahun merin yi.

- 4 Mo fara mo gan
- 3 Mo fara mo
- 2 Nko faramo
- 1 Nko fara mo gan

S/N	Bi awon awako se ri awon ona ti awon eso oju ona (FRSC) se ngba ko won bi a se le pa ofin irina mo	4	3	2	1
1	Awon eso oju ona ma nfun wa ni awon iwe ilewo ti nkoni nipa lilo ona daradara				
2	Awon iwe ilewo yi je kin mo awon idi pataki ti a fi ni lati lo titi daradara				
3	Awon ona ti awon eso oju ona ngba ko wa ti din ijanba moto ku lori titi				
4	Ami itonisona ati aworran lorisirisi ni won ti gbe si ibi ti o se koko legbe titi lati fi je ki a mo bi ona se ri				
5	Awon ami ati awon aworan yi ko mi bi a se le mo awon ohun ti o nbe niwaju ati ohun ti mo gbodo se pelu eyi ti nko gbodo se				
6	Orisirisi ipolongo ti o nkoni bi a se le din ijanba ku lor titi ni ile ise eso oju ona ma nse lori television ati radio lati fi ko wa.				
7	Awon ipolongo yi ko mi bi a se le se jeje lori titi lati le din ijanba ku				

8	Awon idanileko ti o se koko lori bi a se le lo ona daradara lati din ijanba ku lori titi ni awon eso oju ona se fun wa				
9	Awon idanileko yi ran mi lowo lati mo daradara nipa ofin ona ririn				
10	Awon eto ipolongo pataki ti awon eso oju ona nse lasiko odun dara pupo				
11	Awon ipolongo pataki yi din opolopo ijanba ku lori titi				
12	Awon eso oju ona ma nsaba wa polongo nipa lilo ona daradara ni garaji wa				
13	Awon ipolongo ti won ma nwa se fun wa ni garaji wa ran mi lowo lati mo nipa ofin irinna si				
14	Awon ipolongo ti awon eso oju ona nse yi ti din iwa aibikita mi ku lori titi				
15	Eto fiimu ti won ma nfihan eni ti o baru ofin oju ona ti din iwa ibaje ati ijanba oko ku lori titi				
16	Faini ti won ma nfun eni ti o baru ofin lori titi ma nko iru eni be lati mase iru nkan be mo				
	Pelu eto idanileko nipa bi a se le rin ona daradara lati din ijanba ku ti awon eso oju ona nse yi:				
17	Opolopo awako lo tin lo beliti idabobo bayi				
18	Lilo ero ibanisoro(G.S.M) ti a ba nwako ti din ku				
19	Opolopo awako loti ntele ohun ti awon ami ti o wa legbe titi nso fun won				
20	Opolopo awako lo ti ntele ofin ti o so nipa oye kilomita ti oko won ko gbodo koja				
21	Opolopo awako lo nte pointa lati so ohun ti won fe se				
22	Opolopo awako lo nwa moto pelu suuru ati pelepele lori titi bayi				
23	Mimu oti tabi ogun oloko wa moto ti din ku				
24	Opolopo awako lo nfaye gba elomiran lori titi won ba nwa moto bayi				
25	Yiya moto miran sile ni kona ti din ku gan				
26	Sunkere fakere moto loju titi ti din ku gan				

27 Awon nkan wo lo ro pe o le fa ti awon eso oju ona ko fi le se asejori daradara ninu riri pe awon awako ati gbogbo eni t o nlo ona tele ofin irinna bo se ye

APPENDIX IV

INSTITUTE OF EDUCATION UNIVERSITY OF IBADAN COMMUTERS/PEDESTRIAN PERCEPTION OF FRSC EDUCATION PROGRAMME QUESTIONNAIRE (CPPQ)

Dear respondent,

I am Ph.D. student of the Institute of Education, University of Ibadan carrying out a research on the public education programme of the Federal Road Safety Commission. This questionnaire is designed to find out your opinion about the traffic situation (in terms of drivers' behaviour) before and after the introduction of the FRSC public enlightenment programme. You are to indicate on a four-point scale the extent of your agreement or otherwise about the feelings expressed in each statement. There is no wrong or right answer, you are expected to express your feelings frankly. Every answer will be treated confidentially.

Thanks for your cooperation.

SECTION A: BACKGROUND INFORMATION

Personal Data

1. Sex: Male [] Female []
2. Educational Qualification: Primary [] Secondary [] Tertiary []

Please tick (✓) as appropriate in the columns provided.

- Very High = **4**
High = **3**
Low = **2**
Very Low = **1**

	Road Traffic situation	Before FRSC				After FRSC			
		Very High	High	Low	Very Low	Very High	High	Low	Very Low
	Acts of indiscipline on the road such as :								
1	Indiscriminate parking of vehicles								
2	Reckless driving								
3	Dangerous overtaking.								
4	Overloading of vehicles								
5	Willful obstruction of the road.								
6	Non-usage of seat belt by drivers.								
7	Over speeding								
8	Drunk driving								
9	Accident rate on the road								
10	Death rate on the roads.								

SECTION B

Kindly indicate your level of agreement or otherwise by marking a tick() against one of the four options

- Key 4 = Strongly Agree
 3 = Agree
 2 = Disagree
 1 = Strongly Disagree

	With the FRSC public enlightenment programme	4	3	2	1
11	Most drivers now make use of seat belt while driving.				
12	The use of G.S.M/cell phone by drivers while driving has reduced				
13	Most drivers now consider the right of other road users while driving.				
14	Most drivers now obey speed limit on the roads and highways.				
15	Most drivers now signal before changing lanes				
16	Most drivers now obey the traffic signs on the roads				
17	Driving under the influence of alcohol or drugs by drivers has reduced.				
18	Overtaking at corners or bends by drivers have reduced				
19	Most drivers now drive with caution on roads and highways				
20	Most drivers now obey traffic signs on roads and highways.				
21	There is increase in free flow of traffic on roads and highways.				

22. What problem(s) if any), serves as obstacles to effective achievement FRSC public enlightenment objective of achieving sanity on our roads and highways

APPENDIX V

INSTITUTE OF EDUCATION UNIVERSITY OF IBADAN

FRSC STAFF PERCEPTION OF THE EFFECTIVENESS OF THE COMMISSION'S PROGRAMME QUESTIONNAIRE (FRSCSPEQ)

Dear Respondents,

I am Ph.D. student of the Institute of Education, University of Ibadan carrying out a research on the public education programme of the Federal Road Safety Commission. This questionnaire is designed to find out your view about the effect of the public enlightenment programme of the Commission road users(most especially drivers), factors serving as constraints and probable solutions to problems hindering effective achievement of the programme's objectives (if there is any). You are to indicate on a four point scale the extent of your agreement or otherwise about the feelings expressed in each statement. There is no wrong or right answer, you are expected to express your feelings frankly. Every answer will be treated confidentially.

Thanks for your cooperation.

SECTION A: BACKGROUND INFORMATION

Personal Data

1. Sex: Male [] Female []
2. Qualification: SSCE [] NCE/OND [] HND/BA/B.Sc. /B.Ed. []
MA/MS/MED []. Others: (please specify)
.....
3. How many years have you spent working with the Commission?
1-5 years [] 5-10 years [] 11-15 [] 16-20 [] 21years and above []

SECTION B

Instruction

Kindly indicate your agreement or other wise by marking a tick (✓) against one of the four options after each statement as expressed below.

- Strongly Agree** = 4
Agree = 3
Disagree = 2
Strong Disagree = 1

S/N	With the FRSC public enlightenment programme:	4	3	2	1
1	Most drivers now drive with caution				
2	Most drivers now obey speed limit				
3	Drunk driving has greatly reduced				
4	Indiscriminate parking of vehicle has decreased				
5	The rate at which drivers are apprehended for non-usage of seat belt has reduced				
6	The rate at which drivers overtake at corners/bends on roads have reduced				
7	Most road users now obey the traffic signs				

8	Accident rate has greatly reduced				
9	Casualty rate from road accidents have reduced				
10	Most road users are now safety conscious				

11 Is there any constraint to achievement of the Commission's public enlightenment programme objectives? Yes () No ()

Strongly Agree = **4**
Agree = **3**
Disagree = **2**
Strong Disagree = **1**

	If yes, which of these factors are constraints	4	3	2	1
12	Condition of service provided by the Commission for its staff is not adequate				
13	Lack of regular programme of training for the PE staff of the commission.				
14	Inadequate fund by the Commission to carry out its programmes.				
15	Inadequate manpower on the part of the FRSC has brought a set back to their activities.				
16	Lack of adequate equipments.				
17	The indiscriminate transfer of staff				
18	Inadequate number of competent staff for carrying out the Commission's programme.				
19	Lack of staff motivation.				
20	Nonchalant attitude of most road users				
21	Lack of model driving schools by the Commission for training and retraining of drivers.				

(22) Others (Please specify) _____

(23) What are the probable solutions to effective achievement of FRSC public enlightenment programme?

**APPENDIX VI
INSTITUTE OF EDUCATION
UNIVERSITY OF IBADAN**

**DRIVERS ‘OBSERVANCE OF TRAFFIC RULES AND REGULATIONS ON
THE ROAD CHECKLIST (DOTRRRC)**

Name of Driver: Date:

.....

Observer:

Type of vehicle driven by the driver: car () bus ()

Direction: Please indicate by ticking () as appropriate the observed behaviour of your driver.

2 – Yes

1 – No

	Statement	2	1
1	Overtake another vehicle wrongly		
2	Obey road signs/pavement marking		
3	Over speed while driving		
4	Drive with worn out tyres		
5	Use GSM phone while driving		
6	Smokes or eats while driving		
7	Drive with damaged wind screen		
8	Drive recklessly		
9	Drive without wipers		
10	Used safety belt while driving.		
11	Overload his vehicles		
12	Drive under the influence of alcohol.		
13	Drive without fire extinguisher		
14	Drive without side mirrors		
15	.Drive with one hand		

APPENDIX VII

**INSTITUTE OF EDUCATION
UNIVERSITY OF IBADAN**

KNOWLEDGE OF HIGH WAY TRAFFIC CODE ASSESSMENT TEST (KHTCAT)

Instruction: Please circle the alphabet of the correct answer.

1



- (A) No Left Turn
- (B) No Right Turn
- (C) No Road
- (D) No Waiting

4



- (A) No Waiting
- (B) No Stopping
- (C) No Packing
- (D) No Entry

2



- (A) No Waiting
- (B) No Stopping
- (C) No 'U' Turn
- (D) No Right Turn

5



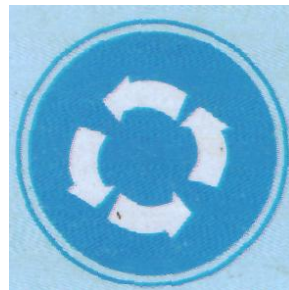
- (A) 80 Km Left
- (B) Km of Speed already covered
- (C) Speed Limit (Maximum)
- (D) Minimum Speed Limit

3



- A. Give Way to Traffic On Your Left
- B. Give Way to Traffic On Your Right
- C. No Entry to Vehicle
- D. Close To All Vehicle

6



- (A) No Turning Round
- (B) Round About
- (C) Four Lanes Way
- (D) No Waiting

7.



- (A) Y Junction
- (B) T Junction
- (C) Intersection
- (D) Turn Left

10



- (A) T Junction
- (B) Turn Right
- (C) Y Junction
- (D) Diversion

8



- (A) Carriage way narrow
- (B) X Junction
- (C) Narrow bridge
- (D) Carriage Way Widens

11



- (A) One Way
- (B) General Danger
- (C) Narrow Bridge
- (D) Go Straight

9



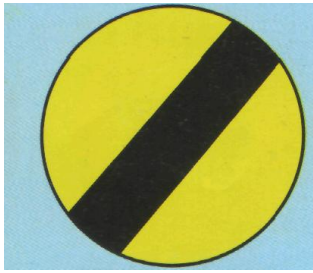
- (A) Dangerous Bend Left
- (B) Narrow Bridge
- (C) Dangerous Bend (Right)
- (D) No Bending

12



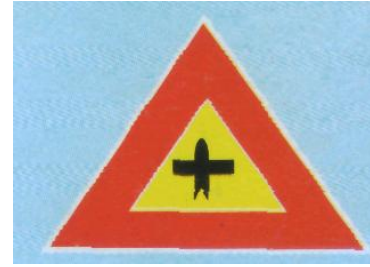
- (A) No Walking
- (B) Pedestrian Crossing
- (C) Children Crossing
- (D) Pedestrian Track

13



- (A) Give Way
- (B) No Entry for All Vehicle
- (C) No Waiting
- (D) General Danger

15



- (A) Intersection with Major Road
- (B) Intersection with Minor Road
- (C) T Junction
- (D) Cross Road

14



- (A) Long Grade Dangerous Hill
- (B) Falling Rock
- (C) Loose chipping
- (D) Uneven Road

16



- (A) Dangerous Double Bend
- (B) 'N' Junction
- (C) Railway Crossing
- (D) Uneven Road

Please circle the correct answer.

- 17 A driver can make U turn on busy roads and highways. Yes/No
- 18 It is good to rely on coffee or kolanut while making a long distance journey. Yes/No
- 19 Vehicles can be parked anywhere on roads even at junctions or bustops. Yes/No
- 20 A driver can accelerate when being overtaken. Yes /No
- 21 On the highway, the maximum speed limit for your vehicle is _
- 22 A driver is expected to put on the headlights of his vehicle when driving in the rain. Yes/No

- 23 Reversing from a side road into a major road is right. Yes/No
- 24 When driving on the express way, one must maintain a steady speed. Yes/No
- 25 If you are dazzled by the high beam of an oncoming vehicle, you should do same. Yes/No

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APPENDIX VIII



Picture Showing the Situation of one of the Motor Parks visited by the Researcher

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APPENDIX IX

KNOWLEDGE OF HIGHWAY TRAFFIC CODE ASSESSMENT TEST MARKING GUIDE

1. A
2. C
3. A
4. A
5. C
6. B
7. B
8. C
9. A
10. C
11. B
12. D
13. B
14. A
15. A
16. A
17. NO
18. NO
19. NO
20. NO
21. 80KM FOR BUS/100KM FOR CAR
22. YES
23. NO
24. YES
25. NO

APPENDIX X

Contributions to Knowledge

This study contributes to knowledge in the following ways:

- Since almost everybody is a road user, this study is of great importance. This is because the study enables the road users to know that more than fifty percent of drivers plying the roads and highways still have low knowledge of the Highway Code most especially the road signs. Hence, they have to be very careful when using the road and behave as if they are the only sane person on the road.
- Secondly, it enables the stakeholders of the public enlightenment programme to identify the strength and weaknesses of the programme. Thereby, giving them the opportunity of finding ways to refine or modify the programme in order to achieve its objectives.
- Thirdly, it enables the FRSC staff to know how road users perceive their programme and this will help them to improve upon their performance so as to achieve the programme's objectives.