



IMPACT OF FEDERAL ROAD SAFETY COMMISSION ON ROAD TRANSPORT MANAGEMENT AND CONTROL IN OGBOMOSO, OYO STATE, NIGERIA

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Abstract

This study assessed the impact of the Federal Road Safety Commission (FRSC) on road transport management and control in Ogbomoso, Oyo State. The study examined

Keywords: FRSC, Safety, Management, Control

driver's perception of FRSC on auto-mobile accident control, assessed the FRSC public enlightenment program's positive attitude among road users, ascertained if FRSC public image promote positive road usage behaviour among

commercial vehicle drivers in Ogbomoso, Oyo State. The study was carried out in Ogbomoso Oyo State. A sample size of four hundred (400) was selected from the road users in the study area. A well-structured questionnaire was designed and administered. Descriptive and regression model was used to analyze the data collected. The findings reveal that the FRSC is perceived positively by the majority of respondents in terms of its active response in reducing automobile accidents and improving road

INTRODUCTION

Moving people, objects, or other resources from one place to another is referred to as transportation. Control and developments are essential components of contemporary society (Serdar, 2022). One of the economic movers and shakers of Nigeria is transportation. Between producers, suppliers, and industrial customers as well as between commuters on their own, transportation aids in bridging this gap. As a result, the economy as a whole will stagnate without a transportation management system (Adeniran, 2018). The Federal Road Safety Commission (FRSC) in Nigeria is a government organization tasked with promoting road safety and lowering the incidence of traffic accidents in the nation (FRSC, 2023). The commission FRSC has carried out a number of initiatives aimed at enhancing road safety, including road safety education programs, enforcement of traffic laws, and the provision of emergency services to victims of road accidents (FRSC, 2023). The FRSC also

safety. 234 strongly agreed that, FRSC is effective in reducing the number of automobile accidents in the city, 201 respondent's agreed that FRSC ensures road safety and reducing accidents, 172 strongly agreed that FRSC has the necessary resources and manpower to effectively carry out its mandate, 192 respondent's agreed that, they are satisfied with the level of collaboration

between the FRSC and other agencies responsible for road safety and 201 respondent's also agreed that FRSC's efforts have contributed to improving road safety. Regression analysis implied that, the overall goodness of fit was good as value of R^2 was 0.792 (79%), which means that, the independent variable (FRSC) explained the variations in the dependent variables (transport

management and control). The study concludes that the FRSC plays a positive and effective role in automobile accident control and road safety. Furthermore, continuous improvement in resource allocation and inter-agency collaboration for the FRSC, as well as enhancing communication strategies, public image, and engagement with road users will advance its performance.

Works closely with other governmental agencies and stakeholders to develop and implement effective road safety policies and strategies. In recent years, the FRSC has made significant progress in lowering the number of road accidents. Road traffic management and control (RTMC) is moreover a critical component of maintaining the secure and effective transportation of people and products on roads. It entails the organization, coordination, and management of transportation-related operations as well as the application of rules and legislation to assure compliance. Controlling traffic congestion is one of the main difficulties faced by RTMC. Road accidents are still a major problem, especially in developing nations like Nigeria where road safety is frequently disregarded (Amah et al., 2022). Despite the FRSC's and other stakeholders' strenuous efforts to change the trend, the frequent auto accidents in Nigeria seem to defy any remedy. Research has also revealed that the government and people of Nigeria are extremely worried about the persistently high number of traffic accidents and the needless loss of lives and property that results from them. Motor vehicle collisions in the study area occasionally resulted in complete blockages of roads.

LITERATURE REVIEW

(A) Concept of Road Safety

Road safety refers to the actions taken to lessen the amount of collisions and fatalities brought on by traffic (Toriumi et al., 2022). It is a crucial issue that has an impact on both individuals and society at large. Road accidents have increased due to the increase in the number of vehicles on the road, resulting in enormous costs to the economy, society, and health (Jafarzadeh et al., 2023). Through the application of numerous strategies, such as upgrading vehicle safety, promoting safe driving habits, and enforcing road safety rules, great progress has been made in recent years in improving road safety.

(B) Driver Behavior

Driver behavior, according to Regan and Mitsopoulos (2001), is the activities and attitudes that drivers exhibit when operating a vehicle. It is essential to highway safety as it has a significant effect on the likelihood and seriousness of accidents (Zhao et al., 2023). Accident risk can be decreased by using safe driving techniques such using seat belts, driving within the speed limit, and avoiding distractions. On the other hand,

careless driving can raise the risk of collisions and fatalities, including texting and driving while intoxicated. According to research by Katrakazas et al. (2020), wearing a seat belt reduces the probability of a fatal injury by 45–50% in passenger automobiles and by 60–65% in light trucks and vans. Nevertheless, many drivers continue to drive without using seat belts despite the benefits of doing so being well established, especially in rural regions and among young drivers (Ogundele et al., 2019)

(C) Enforcement of Road Safety Laws

A crucial component of road safety is the enforcement of traffic laws, which ensures that drivers adhere to safe driving habits and traffic regulations (Miller et al., 2018). Road accidents, injuries, and fatalities can be decreased by effectively enforcing road safety legislation. One of the best ways to lessen the frequency of accidents brought on by excessive speed is through speed enforcement. Road safety has been found to increase and excessive speed to decrease with the use of speed cameras and other enforcement tools including mobile enforcement vans and speed-activated signs (WHO, 2021). Additionally, it has been demonstrated that the implementation of automated enforcement, such as red-light cameras and speed cameras, reduces the frequency of collisions and fatalities brought on by speeding and running red lights (Valverde et al., 2023).

(D) Road Safety in Nigeria

The Federal Road Safety Commission was established in February 1988 by Decree No. 45 of the 1988, which was later amended by Decree 35 of 1992 (FRSC, 2023). The Commission was established to regulate, enforce, and coordinate all road traffic and safety management activities in Nigeria. The Commission's vision is to eradicate traffic crashes and create a safe motoring environment in Nigeria. The Commission is responsible for producing driver's licenses, setting speed limits for roads and vehicles, providing roadside and mobile clinics for accident victims, regulating the use of seat belts and other safety devices, and more (FRSC, 2023). It is also responsible for preventing and minimizing accidents on the highways.

(E) Safe System Approach

The Safe System Approach was proposed in 2007 at the Accra Declaration for Road Safety, and it was later updated by the UN in 2010 as part of the UN Decade of Action for Road Safety 2011–2020. For low- and middle-income nations like Nigeria, the Safe System strategy is thought to be the most suitable approach for directing the management of traffic and road safety. By creating a secure operating environment, the Safe System approach often aims to create a road transportation system that can accommodate human error despite human fallibility. It acknowledges that despite their level of education and information, humans as road users are the weakest link in the transportation chain, unpredictable, and prone to error (PIARC, 2014). As a result, it is necessary to effectively manage their activities and conduct on the road to maximize safety and reduce crashes and their associated consequences.

METHODOLOGY

This study was carried out in Ogbomoso metropolis, Oyo State. Ogbomoso is the second largest city in Oyo State which accommodated the road that leads the southern to northern. The estimated population of Ogbomoso is 628,682 (WPR, 2023). Primary source of data were sourced

for the purpose of this study. A simple random sampling technique was used to select four hundred (400) road users within the study area through well-structured questionnaires. The sample size comprises of drivers, commuters, road safety officers and health workers.

RESULTS AND DISCUSSIONS

Role of FRSC in automobile accident control

Table 1.1 shows the results of the role of the Federal Road Safety Corps (FRSC) in automobile accident control. The findings consist of five statements, with respondents asked to indicate their level of agreement using a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). The total number of respondents for each statement was 380. The majority of respondents (234) strongly agreed that FRSC is effective in reducing the number of automobile accidents in the city, with 53 respondents agreed, 25 undecided, 42 disagreed, and 26 strongly disagreed. Most respondents (201) agreed that FRSC is carrying out its mandate of ensuring road safety and reducing accidents. However, 76 respondents strongly agreed, 16 are undecided, 64 disagreed, and 23 strongly disagreed. A significant number of respondents (172) strongly agreed that FRSC has the necessary resources and manpower to effectively carry out its mandate, followed by 143 respondents who agreed, 10 who are undecided, 32 who disagreed, and 23 who strongly disagreed. The majority of respondents (192) agreed that they are satisfied with the level of collaboration between the FRSC and other agencies responsible for road safety, while 124 strongly agreed, 32 are undecided, 16 disagreed, and 16 strongly disagreed. Most respondents (201) agreed that FRSC's efforts have contributed to improving road safety, with 76 respondents strongly agreed, 19 undecided, 37 disagreed, and 47 strongly disagreed.

Furthermore, the findings indicate that the FRSC is generally perceived as playing a positive and effective role in automobile accident control and road safety. However, it is crucial for the organization to continue working towards improvement, resource allocation, and inter-agency collaboration to ensure that it remains effective and relevant in addressing road safety concerns.

Table 1.1: Role of FRSC in automobile accident control

S/N	ROLE	SA	A	U	D	SD	TOTAL
1	FRSC is effective in reducing the number of automobile accidents in the city	234	53	25	42	26	380
2	FRSC to carry out its mandate of ensuring road safety and reducing accidents	76	201	16	64	23	380
3	FRSC has the necessary resources and manpower to effectively carry out its mandate	172	143	10	32	23	380
4	Satisfied with the level of collaboration between the FRSC and other agencies responsible for road safety	124	192	32	16	16	380
5	FRSC's efforts have contributed to improving road safety	201	76	19	37	47	380

Source: Field Survey, (2023)

FRSC's and public enlightenment programme

Table 1.2 shows Federal Road Safety Corps (FRSC) and its public enlightenment programme. The finding consists of six questions, with respondents asked to indicate their level of agreement using a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). The total valid number of respondents for each statement is 380, except for statement 3, which has 390 respondents.

Highest number of respondents (204) strongly agreed that FRSC's public enlightenment programme has increased their awareness of road safety, followed by 83 respondents who agreed, 10 who are undecided, and 56 who disagreed, and 27 who strongly disagreed. More so, majority of respondents (197) agreed that the FRSC's public enlightenment programme has positively influenced their driving behavior, with 79 respondents strongly agreed, 24 undecided, 50 disagreed, and 30 strongly disagreed. However, many respondents (180) agreed that FRSC's public enlightenment programme promotes positive attitudes among road users, while 165 respondents strongly agreed, 20 are undecided, 10 disagreed, and 15 strongly disagreed. Meanwhile, most respondents (167) agreed that FRSC's public enlightenment programme targets the right audience, followed by 100 respondents who strongly agreed, 42 who are undecided, 37 who disagreed, and 34 who strongly disagreed.

However, a significant number of respondents (185) strongly agreed that the level of communication and engagement between FRSC is satisfactory, followed by 146 respondents who agreed, 5 who are undecided, 21 who disagreed, and 23 who strongly disagreed. Most respondents (197) agreed that the quality of messages delivered through FRSC's public enlightenment programme is satisfactory, with 80 respondents strongly agreed, 20 undecided, 52 disagreed, and 31 strongly disagreed.

This finding implies that majority of respondents have a positive perception of FRSC's public enlightenment programme, its effectiveness in promoting road safety awareness, influencing positive driving behavior, and targeting the right audience. However, there are still some respondents who disagreed or strongly disagreed, suggesting that there is room for improvement in the programme's communication and messaging strategies.

Table 1.2: FRSC's and public enlightenment programme

S/N	QUESTION	SA	A	U	D	SD	TOTAL
1	FRSC's public enlightenment programme has increased my awareness of road safety	204	83	10	56	27	380
2	The FRSC's public enlightenment programme has influenced my behaviour positively while driving	79	197	24	50	30	380
3	FRSC's public enlightenment programme is in promoting positive attitudes among road users	165	180	20	10	15	390
4	FRSC's public enlightenment programme targets the right audience	100	167	42	37	34	380
5	the level of communication and engagement between the FRSC is satisfactory	185	146	5	21	23	380
6	the quality of the messages delivered through the FRSC's public enlightenment programme is satisfactory	80	197	20	52	31	380

Source: Field Survey, (2023)

FRSC's public image and road users' behaviour

Table 1.3 shows the result on the Federal Road Safety Corps (FRSC) public image and its influence on road users' behavior, particularly among commercial vehicle drivers. The survey consists of six questions, with respondents asked to indicate their level of agreement using a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD).

The total number of valid respondents for each statement was 380, except for statement 3, which has 378 respondents.

It was revealed that majority of respondents (201) agreed that the FRSC's public image promotes responsible driving among commercial vehicle drivers, with 130 respondents strongly agreed, 12 undecided, 21 disagreed, and 16 strongly disagreed. Furthermore, (200) respondents agreed that the FRSC's public image influences the behavior of commercial vehicle drivers, while 48 respondents strongly agreed, 24 are undecided, 40 disagreed, and 68 strongly disagreed. 178 respondents strongly agreed that road users are aware of the FRSC's role and responsibilities, followed by 100 respondents who agreed, 17 who are undecided, 56 who disagreed, and 27 who strongly disagreed.

However, highest respondents (145) agreed that the FRSC's public image is an important factor in promoting road safety among commercial vehicle drivers, with 120 respondents strongly agreed, 32 undecided, 43 disagreed, and 40 strongly disagreed. Furthermore, 170 respondents agreed that the level of enforcement and monitoring of commercial vehicle drivers are satisfactory, while 114 respondents strongly agreed, 41 are undecided, 45 disagreed, and 10 strongly disagreed. Many respondents (180) agreed that FRSC's public image affects the willingness of commercial vehicle drivers, followed by 130 respondents who strongly agreed, 32 who are undecided, 17 who disagreed, and 21 who strongly disagreed.

In summary, the findings show that the majority of respondents perceived FRSC's public image as having a positive influence on the behavior of commercial vehicle drivers, promoting responsible driving, and contributing to road safety. The respondents also generally believe that road users are aware of FRSC's role and responsibilities, and that the level of enforcement and monitoring of commercial vehicle drivers is satisfactory. However, some respondents disagreed or strongly disagreed with these statements, indicating potential areas for improvement in FRSC's public image and enforcement strategies.

Table 1.3: FRSC's public image and road users' behaviour

S/N	QUESTION	SA	A	U	D	SD	TOTAL
1	The FRSC's public image promotes responsible driving among commercial vehicle driver	130	201	12	21	16	380
2	FRSC's public image influences the behaviour of commercial vehicle drivers	48	200	24	40	68	380
3	Road users are aware of the FRSC's role and responsibilities	178	100	17	56	29	380
4	The FRSC's public image is an important factor in promoting road safety among commercial vehicle drivers	120	145	32	43	40	380
5	the level of enforcement and monitoring of commercial vehicle drivers are satisfactory	114	170	41	45	10	380
6	FRSC's public image affects the willingness of commercial vehicle drivers	130	180	32	17	21	380

Source: Field Survey, (2023).

Regression analysis and the result were presented in table 1.4 – 1.6. The result revealed R is 0.821 which imply that the overall goodness of fit was good. An R^2 of 0.792 (79%), this means that the

independent variables (FRSC) of the study can explain the variations in the dependent variable (transport management and control) while the rest is explained by other factors or variables not captured in this current study. Findings indicate that a unit change in FRSC led to a positive change in the transport management and control. Findings indicate that the overall model of analysis of variance was significant. This was supported by an F statistic of 18.343 and p value of 0.000. The reported probability was less than the conventional probability of 0.05 (5%) significance level. Each independent variables are all positively significant at $\alpha=0.05$ with p-value = 0.000. Hence, there is a positive and significant relationship between FRSC and transport management and control in Ogbomoso, Oyo State, Nigeria.

Table 1.4: Regression Models

MODEL	R	R SQUARE	ADJUSTED SQUARE	F	STD. ERROR OF THE ESTIMATE
1	.821 ^a	.792	.231		1.736

a. Predictors: (constant), FRSC

Table 1.5: ANOVA^a

MODEL	SUM OF SQUARES	OF DF	MEAN SQUARE	F	SIG.
REGRESSION	324.232	1	324.232	997.127	.000 ^b
RESIDUAL	123.238	379	0.32517		
TOTAL	447.470	380			

a. Dependent variable: transport management and control

Table 1.6: Coefficients^a

MODEL	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	T	SIG.
	B	Std. Error	Beta		
(CONSTANT)	.322	.323		.343	.000
TRANSPORT MANAGEMENT AND CONTROL	.362	.19	.212		

Source: Field survey, (2023)

SUMMARY AND CONCLUSION

The findings of the study revealed that, the role of the Federal Road Safety Corps (FRSC) in automobile accident control: The majority of respondents have a positive perception of FRSC's effectiveness in reducing automobile accidents and improving road safety. This implies that the FRSC's efforts and initiatives are recognized and appreciated by the public. The positive public perception could potentially encourage the FRSC to maintain or even enhance its efforts in promoting road safety.

Also, since most respondents believe that FRSC has the necessary resources and manpower to effectively carry out its mandate, it is essential for the organization to continue investing in capacity building, training, and infrastructure development. This will ensure that FRSC remains well-equipped to handle the challenges associated with road safety and accident control. Based

on the findings of the study, it can be concluded that, FRSC is generally perceived as playing a positive and effective role in automobile accident control and road safety. Meanwhile, FRSC's public enlightenment programme is generally perceived as effective in promoting road safety awareness, influencing positive driving behavior, and targeting the right audience.

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