

## IMPACT OF ROAD SAFETY EDUCATION ON COMMERCIAL DRIVERS' KNOWLEDGE AND BEHAVIOUR TOWARDS ROAD TRAFFIC CODES AND SAFETY DRIVING IN DELTA STATE

NWADINIGWE, IKECHUKWU P.;

OSARENREN, NGOZI A.; &

\*OTUAGOMA, FRIDAY A.

\*josephotuagoma@gmail.com

Department of Educational Foundations,

University of Lagos State, Nigeria.

### Abstract

*The propensity of increase in road traffic accidents and injuries poses a serious public health problem for Nigeria as a low-income country. Without sustained action, road traffic crashes may become one of the major cause of death. Consequently, this study seeks to assess the impact of road safety education of the Federal Road Safety Commission (FRSC) on commercial drivers' knowledge and behaviour towards road traffic codes and safety driving. The descriptive survey research design was adopted for the study. The population of the study comprised all commercial drivers in Delta State. A sample size of 320 respondents was selected for the study using stratified and simple random sampling techniques. Three research hypotheses were tested at 0.05 level of significance. The Drivers' Road Safety Knowledge and Attitudinal Questionnaire (DRSKAQ) was used to collect relevant data. The data were analysed using Analysis of Variance and Multiple Regression. It was found out that the FRSC education programme influence commercial drivers' behaviour towards road traffic codes and safety driving. In addition, a joint impact of commercial drivers' educational background, duration of learning road safety, behaviour and knowledge was observed on the attitude towards road safety education programme. But, the safety education programme had no influence on drivers' knowledge of road traffic codes and safety driving. It was recommended that other non-governmental agencies should support the FRSC in giving intermittent road safety education programmes to commercial drivers.*

**Keywords:** Road Safety Education, Attitude, Federal Road Safety Commission, Behaviour Driver Education

### Introduction

Road accidents are of major concern the world all over because of the significant effect on individuals, communities and the nation at large. In addition, individual, organisations, government agencies and parastatals and commercial drivers all make use of the roads to carry out their day to day activities. To ensure safe driving, road users are expected to be knowledgeable about road signs. In addition, safe driving and driver education is essential for every driver in order to ensure safe driving on the road. Adequate education for drivers would reduce accidents and deaths on our roads to a large extent.

Okafor, Odeyemi, Dolapo, Ilika and Omosun (2014) assert that millions of injuries and deaths are reported world-wide as a result of road traffic injuries (RTI). The World Health Organisation (2018) reported that more than 1.25million people die each year as a result of road traffic crashes which is a leading cause of death among people between 15 and 29 years .Also, 90% of the world's fatalities on the road occur in low- and middle income countries, even though these countries have approximately 54% of the world's vehicles. In Nigeria, Audu (2012) observed that road safety activities commenced as soon as motor vehicles were introduced in the Nigerian roads in the 19<sup>th</sup> century. The researcher reported that after independence, the

number of vehicle users nearly doubled with the resultant effect of sharp increase in the number of people involved in road traffic crashes. Sumaila (2013) reported that Nigeria ranked as the country with the second largest road network in Africa in 2011, with population density which translates to a population-road ratio of 860 persons per square kilometres indicating intense traffic pressure on the available road network.

The concept of road safety education has been found to be an important construct in driver education intervention (Carcary, Power, & Murray, 2001). Drivers' education programme is not only about teaching drivers how to drive but also aimed at developing appropriate behaviour, attitudes and decision making skills to enable them manage road traffic situation in a responsible and safe way to reduce road accident (Administrative Guidelines for Traffic Safety Education Department of Education, 2007).

The setting and content of drivers' education programme involves attitudinal behaviour of drivers towards road signs, driving rules and management of road accident free environment which starts and ends in classrooms. According to Federal Road Safety Commission (FRSC) (2007), the continuous increase in the trend of road accidents on Nigerian roads and highways led to the establishment of the Federal Road Safety Commission (FRSC) in 1988 to look into road safety matters (FRSC 2007).

One of the objectives of the commission is to educate road users most especially those often referred to as 'learners' on the importance of road discipline and proper use of the signs and highway codes. The public enlightenment unit of the FRSC is charged with this responsibility. To achieve this objective, several strategies have been used and are still being used by the FRSC public education officers to educate road users in general and commercial drivers in particular on the rules guiding road usage and the consequences of flagrant disobedience of traffic rules and regulations. These strategies include: organization of workshop/seminars/ lectures; drivers' improvement courses; organizing rallies at motor parks; literacy campaigns inculcating in the road users the knowledge of the highway traffic code and playing of jingles on radios and televisions among others (Sani, 2005).

According to Adekoya, Adekoya, Adepoju and Owoeye (2011), Nigerian roads are dominated by combination of inexperienced, drunk and overconfident drivers who are unconcerned about the lives of other road users as well as theirs. Thus, many commercial vehicle drivers may not know more than the rudiments of moving vehicles and sounding their horns ostensibly to attract the attention of passengers thereby engaging in noise pollution. Onuka and Adeyemi (2012) corroborated this view when they States that most Nigerian drivers have no regards for road signs, driving rules and regulations.

In most cases drivers (especially commercial drivers) hardly observe speed limit and road signs on highways. Many drivers overtake anywhere and anyhow on roads and highways, while some park their vehicles carelessly on the roadsides with no thought for other road users. The traffic situation then was described as chaotic and unpredictable as public interest in road safety matters was minimal and there was no concrete and sustained policy action to address road safety questions. Hence, there was record of high rate of road traffic accident and fatalities due to non-observation of road signs and non-compliance to driving rules and regulations (FRSC, 2007).

Despite the establishment of FRSC, researchers (Adekoya, Adekoya, Adepoju Owoeye 2011; Oyeyemi, 2003; Maduagwu, 2008) revealed that there is an absence of good driving culture by the motorists on most Nigerian roads and Highways. It can be observed in Table 1 that between 2008 and 2017, a total of 154,483 accident cases were reported in Nigeria, leaving 74,874 dead and 156,357 injured.

**Table 1: Summary of Road Accidents in Nigeria Showing Number of Reported Cases and Persons Involved, 2008-2017**

Observed Years	Reported Cases			Persons Involved			
	Fatal	Serious	Minor	Total	Killed	Injured	Total
2008	3,024	5,671	2,646	11,341	6,661	27,980	34,671
2009	7,206	8,411	6,778	22,395	9,240	22,970	32,210
2010	5,401	7,432	4,373	17,206	7,697	16,171	23,868
2011	6,362	8,509	4,740	19,611	8,161	20,925	29,086
2012	6,132	7,849	4,678	18,659	8,980	16,888	25,868
2013	5,806	8,052	4,804	18,663	9,131	19,200	28,331
2014	5,789	7,223	4,785	17,797	9,390	17,413	26,803
2015	2,854	6,039	841	9,734	5440	30478	35,918
2016	2,638	5,633	1,423	9,694	5,053	30,105	35,158
2017	2,587	5,456	1,340	9,383	5,121	31,098	36,219

*Source: Nigeria Police Force Headquarters, Annex Lagos/FRSC*

Williams and O'Neill (2004) have noted that despite the absence of evidence in support of driver education it retains tremendous popular appeal as a means to improve driver safety. In an examination of driver behaviour and attitudes, Roberts and Kwan (2001) investigated the effects of classroom-based interventions and found little evidence to support the efficacy of driver training. Chidoka (2009) observed that the Federal Road Safety Commission has conceptualized, designed and implemented various public education programmes which cut across languages, cultural and religious barriers. Since the introduction of the public education programme, it is seen as an innovation that will improve drivers' behaviour on roads and highways. This educational programme may be effective in improving the driving culture of drivers, predrivers (those applying for license) in general and that of the commercial vehicle drivers in particular on Nigeria roads and highways.

A number of reasons for the ineffectiveness of driver education have been offered. For example, it has been proposed that the duration of Nigeria Highway Code courses is too short to offer much prospect of having an impact in the drivers attitude and behaviour (Okafor, Odeyemi, Dolapo, Ilika Omosun, 2014).

A related point is that any safety message communicated may be swamped by the influence of parents, peers, and other personality and social influences that shape driver behaviour.

The introduction of public education programme for drivers with particular reference on commercial motorists by FRSC is expected to improve drivers' knowledge and behaviour to road and highway. The FRSC has introduced several road safety education programmes since it was inaugurated in 1988 that would impact on the knowledge and behavior of commercial drivers with the purposed of reducing road accidents

and deaths on Nigeria roads and highways. This study seeks to evaluate the impact of FRSC education programme for commercial drivers' knowledge and behaviour towards road traffic codes and safe driving in Delta state, Nigeria.

### **Research Hypotheses**

The following hypotheses were tested at 0.05 level of significance in the study:

1. There is no significant influence of drivers' perception of road safe education programme on their behaviour towards road traffic codes and safe driving.
2. There is no significant influence of drivers' perception of road safety education programme on their knowledge of road traffic codes and safety driving.
3. Drivers' educational background, duration of learning road safety, behaviour and knowledge will not significantly combine to influence their attitude to road safety education programme.

### **Methodology**

The research design adopted for the study was a descriptive survey research design. It involved using structured questionnaire on the researcher variables of interest, as there was no conscious manipulation of the variables since the interaction among them have been completed. The population for this study comprised of all commercial mini bus and luxurious vehicle drivers operating in all registered motor parks in Delta State, Nigeria.

The sample size was 320 male drivers in motor parks selected from eight motor parks in Delta State. The sampling techniques employed in the selection of participants were the stratified, simple random and purposive sampling. The initial stage of the sampling technique involved using stratified sampling where Delta State was divided into four strata. Since Delta State has 25 Local Government Area (LGA), three of the strata has six LGA while the fourth stratum has seven LGA.

The next stage of the sampling technique involved using simple random sampling, hat and draw method to select two motor parks in each of the stratum. This led to the selection of eight motor parks. The last step in the sampling technique involved using purposive sampling to select minibuses and luxurious bus drivers. Consequently, 320 commercial vehicle drivers were selected, consisting of 257 minibus drivers and 63 luxurious bus drivers.

The researcher developed "Drivers' Road Safety Knowledge and Attitudinal Questionnaire" (DRSKAQ) was used to collect relevant information. The DRSKAQ was used to gather respondents' view about drivers' perceived effectiveness of the FRSC public education programme on their general driving experience on roads and highways. It contained two sections. Section A of the instrument dealt with the drivers' personal data (e.g. gender, educational background and duration of learning) while section B consisted of 33 statements divided into two subsections on the effect of the public education programme on drivers. The two subsections are Perception of Education (which has 16-item), Knowledge of Traffic Codes (with 8-item) and drivers' behaviour towards road safety signs on the roads and highways (9-item). The response format for the instrument was a rating scale with four options of Strongly Agreed, Agreed, Disagree and Strongly Disagree. Sample of the statements in the DRSKAQ are shown in Table 2.

**Table 2: Sample of Items in the Drivers' Road Safety Knowledge and Attitudinal Questionnaire (DRSKAQ)**

SN	Statement	SA	A	D	SD
With the FRSC public education programme, most drivers:					
1	Now make use of seat belts				
2	Overtake at corners and bends				
3	Receive and make calls while driving				

The face and content validity to ascertain the validity of the DRSKAQ was done. This involved showing the instrument to FRSC officials involved in the training of drivers and Psychometricians. The corrections made by these resource persons were effected before the pilot study was conducted. A test-retest reliability was used to determine the stability of the DRSKAQ. The process involve the selection of 40 commercial drivers in a park that was not selected for the main study. The reliability coefficients are presented in Table 3.

**Table 3: Test Retest Reliability estimate of DRSKAQ (n = 40)**

Instrument	Variable	No of Items	Test position	Mean	SD	$r_{tt}$	Reliability Coefficient
DRSKAQ	Perception of Educ.	16	1 <sup>st</sup>	53.26	4.97	0.7	0.72
			2 <sup>nd</sup>	51.91	6.3		
	Knowledge of traffic codes	8	1 <sup>st</sup>	21.64	7.13	0.77	
			2 <sup>nd</sup>	20.76	5.88		
	Behaviour to road of safety signs	9	1 <sup>st</sup>	21.98	7.43	0.71	
			2 <sup>nd</sup>	23.56	9.26		

In order to facilitate the success of the questionnaire administration, the researcher ensured that he secured the cooperation of the eight inter-city motor parks used for the study. The Chairmen of the respective motor packs were briefed and told about the essence and importance of carrying out the study in their motor parks.

As a result, the Chairmen gave verbal consent and handed the researcher and the four research assistants to the elected Public Relation Officials in the eight inter-city motor parks in selected areas of Delta states. The Public Relation Officials were equally informed of the confidentiality of the information that would be provided by them as well as the commercial vehicle drivers who participated in the study.

A total of 320 copies of the questionnaires were originally designed for administration. However, the researcher with the help of research assistants was able to retrieve 314 copies of questionnaires from the participants. The others were either not well completed or could not be used. Some questionnaires were returned immediately while in some instances, the researcher had to wait till the following day before he could retrieve the completed questionnaires. Most importantly, the questionnaires' administration exercise was a success because the study recorded 98.1% return rate.

Data collected for the study were grouped into High, moderate and low categories. The data were analysed using analysis of variance and multiple regression. All hypotheses were tested at 0.05 level of significance.

**Test of Hypotheses**

Hypothesis 1 states that there is no significant influence of drivers' perception of road safety education programme on their behaviour towards road traffic codes and safety driving.

The hypothesis was tested using one way analysis of variance statistics. The result of the analysis is presented in Table 4.

**Table 4: Influence of drivers perception of road safety education programme on behaviour towards road traffic codes and safe driving**

Education Programme	N	$\bar{X}$	SD	
High	71	29.36	7.43	
Moderate	118	27.09	8.75	
Low	125	25.11	5.39	
Source of variation	Sum of square	Degrees of freedom	Mean of square	F-ratio
Perception of Edu. Programme	241.88	2	120.94	3.22
Within groups	11687.38	311	37.58	
<b>Total</b>	<b>11,929.26</b>	<b>313</b>		

\*Significant at 0.05, df = 2 and 311, critical F = 3.05

Table 4 shows that a calculated F – value of 3.22 resulted as the influence of drivers' perception of road traffic education programme on behaviour of drivers towards road traffic codes and safe driving. This calculated F – value of 3.22 is significant since it is greater than the critical F-value of 3.05 given 2 and 311 degrees of freedom at 0.05 level of significance. The null hypothesis was rejected .Based on significant F-value obtained further analysis of data was done using Fisher's least square method where in pair-wise comparison of group mean ( $\bar{X}$ ) was done to determine which group differ from each other on behaviour towards road traffic codes and safety driving and the trend of the difference. The result of the pair-wise comparism is presented in Table 5.

**Table 5: Pair-wise Comparism on Behaviour towards Road Traffic Codes & Safe Driving**

Categories	High	Moderate
High	-	
Moderate	2.44*	-
Low	4.67*	2.48

The result of the analysis show that drivers with high perception of road traffic education programme significantly manifest higher behaviour towards road traffic codes and driving than those with moderate perception of road traffic education programme (t=2.44; df = 187; critical t = 1.98, P< 0.05). Similarly drivers with high perception of road traffic education programme significantly manifest higher driving knowledge towards road traffic codes and safety driving than those who have low perception of the road traffic education programme (t=4.67, df = 194, critical t = 1.98, P < 0.05).

Also, drivers who have moderate perception of road traffic education programme significantly manifest better behaviour towards road traffic codes and safe driving than those with low perception of road traffic education programme ( $t = 2.48$ ,  $df = 241$ ; critical  $t = 1.98$ ,  $P < 0.05$ ).

Hypothesis 2 states that there is no significant influence of drivers perception of road safety education programme on their knowledge of road traffic codes and safety driving. The hypothesis was tested using one way analysis of variance statistics. The result of the analysis is presented in Table 6.

**Table 6: One way analysis of variance on influence of drivers perception of road safety education programme on knowledge of road traffic codes and safety driving**

Perception of Programme	N	$\bar{X}$	SD		
High	71	24.17	8.36		
Moderate	118	22.96	11.24		
Low	125	22.58	7.93		
Source of variation	Sum of square	Degrees of freedom	Mean of square	F-ratio	
Education Programme	178.34	2	89.17		
Witten groups	10841.46	311	34.86	2.56	
<b>Total</b>	<b>11019.80</b>	<b>313</b>			

\*Significant at 0.05;  $df = 2$  and  $311$ , critical  $F = 3.05$

From table 8 it could be observed that a calculated F-value of 2.56 resulted as the influence of drivers’ perception of road safety education programme on knowledge of road traffic codes and safe driving. This calculated F-value of 2.56 is not significant since it is less than critical F-critical of 3.05 given 2 and 311 degrees of freedom at 0.05 level of significance. Consequently, the null hypothesis was accepted.

**Hypothesis 3:** Drivers’ educational background, duration of learning road safety, behaviour and knowledge will not significantly influence their attitude to road safety education programme. To test this hypothesis, Multiple Correlation statistical method was used to verify whether drivers’ educational background, duration of learning road safety, behaviour and knowledge will significantly influence their attitude to road safety education programme. The results are presented in Table 7.

**Table 7: Correlation Matrix of drivers’ educational background, duration of learning road safety, behaviour, knowledge, and attitude to road safety education programme**

Variables	Educational Background	Duration of Learning	Behaviour	Knowledge	Attitude
Educational Background	1.000				
Duration of Learning	.405	1.000			
Behaviour	.235	.070	1.000		
Knowledge	.242	.055	.314	1.000	
Attitude	.177	.208	.025	.261	1.000

The results in Table 7 revealed that there was a significant relationship between drivers' educational background and their attitude to road safety education programme ( $r = 0.405$ ;  $p < 0.05$ ); between duration of learning and attitude to road safety education programme ( $r = 0.235$ ;  $p < 0.05$ ); between drivers' behaviour and attitude to road safety education programme ( $r = 0.242$ ;  $p < 0.05$ ); between drivers' knowledge and attitude to road safety education programme ( $r = 0.177$ ;  $p < 0.05$ ); between drivers' educational background and duration of learning road safety education programme ( $r = 0.208$ ;  $p < 0.05$ ); between drivers' behaviour and knowledge of road safety education programme ( $r = 0.314$ ;  $p < 0.05$ ); and between duration of learning road safety education programme and drivers' knowledge of road safety education programme ( $r = 0.261$ ;  $p < 0.05$ ). However, there was no significant relationship between duration of learning and drivers' behaviour towards road safety education programme ( $r = 0.025$ ;  $p > 0.05$ ). Further, in order to determine the combined effects of the predictor variables on attitude to road safety education programme among commercial bus drivers, Multiple Regression analysis was used and the results of the analysis were presented in Tables 8 and 9 respectively.

**Table 8: Model Summary and ANOVA of the effects of drivers' educational background, duration of learning road safety, behaviour, knowledge on their attitude to road safety education programme**

Model Squares	Sum of Squares	Df	Mean	F
Regression	994.61	4	248.65	11.64*
Residual	6600.24	309	21.36	
Total	7594.85	313		
R = 0.92	R Square = 0.85			

**\*Significant  $p < 0.05$**

- a. Predictors: (Constant), knowledge, behaviour, educational background, duration of learning, attitude
- b. Dependent Variable: Road safety education programme

Table 8 indicated that there were significant effects of educational background, duration of learning road safety, behaviour and knowledge on the prediction of drivers' attitude to road safety education programme ( $R = .925$ ;  $R^2 = .856$ ;  $R^2_{adj} = .853$ ;  $F = 687.78$ ;  $p < 0.05$ ). This implies that educational background, duration of learning road safety, behaviour and knowledge predict 85.3% of the variance in the drivers' attitude to road safety education programme.

Similarly, in order to determine the potency of the predictor variables, Beta Coefficients and t-value of educational background, duration of learning road safety, behaviour and knowledge of drivers' attitude to road safety education programme was determined and the results of the analysis are presented in Table 9.



**Table 9: Beta Coefficients and t-values of the potency of educational background, duration of learning road safety, behaviour and knowledge of drivers' attitude to road safety education programme**

Model	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	Beta	Std Error	Beta			
Drivers (Constant)	-0.11	161			-0.065	0.948
Educational Background	1.000	0.004	0.605	9.14	265.018	0.000
Duration of Learning	-0.004	0.003	-0.003	7.83	-1.222	0.222
Behaviour	-0.005	0.004	-0.003	13.2	-1.324	0.186
Knowledge	1.008	0.004	0.674	7	278.046	0.000

\*Significant,  $p < 0.05$

a. Dependent Variable: Road safety education programme

The results in Table 9 revealed that knowledge is the most significant potent predictor of drivers' attitude to road safety education programme ( $\beta = .674$ ;  $t = 278.046$ ;  $p < 0.05$ ). This is followed by educational background ( $\beta = .605$ ;  $t = 265.018$ ;  $p < 0.05$ ). However, duration of learning ( $\beta = .003$ ;  $t = -1.222$ ;  $p > 0.05$ ) and behaviour ( $\beta = .003$ ;  $t = -1.0324$ ;  $p > 0.05$ ) are not potent predictors of drivers' attitude to road safety education programme. Therefore, drivers' educational background, duration of learning road safety, behaviour and knowledge significantly influence their attitude to road safety education programme.

### Discussion of Findings

The result of the first hypothesis revealed that there is a significant influence of drivers' perception of road safety education programme on their behaviour towards road traffic codes and safe driving. Aside the education programme by the FSRC, it could also be as a result continuous effort of FRSC officials at ensuring compliance of road users on the highway. The finding aligns with Chidoka (2009) and Idoko (2010) confirmation that many drivers (most especially commercial vehicle drivers) behave irrationally on roads as they overtake at all odd spots and some even emerge from the side of the road to the main road without bothering about their own lives or those of the other road users. Similarly, it was observed that FRSC public education and training programme has improved commercial vehicle drivers' perception, behaviour, knowledge and attitude on roads and highways in Jigawa (Ibrahim, 2016).

The second hypothesis found that drivers' perception of road safety education programme do not significantly influence their knowledge of road traffic codes and safe driving. This could be due to the fact that the FRSC education programmes are usually too short to impact on the drivers. A similar observation was made by Sumaila (2013) during the study of road crashes trends and safety management in Nigeria. The researcher observed a poor driving culture of Nigerians arising from weak traffic education. Also, Agunloye's (2001) 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. According to Chidoka (2009), FRSC has conceptualized, designed and implemented various public education programmes which cut across language, cultural and religious barriers. Since the introduction of the public education programme was seen as an innovation that will improve drivers' behaviour on roads and highways, hence the programme is effective in improving driving culture of drivers in general and that of the commercial vehicle drivers in particular on Nigeria roads and highways. However, Audu (2012)

reported a significant awareness of the public on the roles and activities of FRSC during her study of the public perception of the performance of FRSC. The researcher's observations includes making the highways safe for motorists through traffic management, clearing of obstructions on the highways, giving prompt attention and care to victims of road traffic crashes as well as educating drivers, motorists and other members of the public generally on the proper use of the highways through rally, catchy messages on billboards, jingles on television and radio among others.

In the third hypo thesis, it was found that drivers' educational background, duration of learning road safety, behaviour and knowledge significantly influence their attitude to road safety education programme. This could be due to the facts that there are more than one factor that influences individual attitude and behaviour. This observation corroborates the finding of Ibrahim (2016) who observed a significant combined influence of commercial drivers' educational background, duration of learning road safety, behaviour and knowledge on the attitude to road safety education programme. Besides, the observation is in tandem with the observation of Onuka and Akinyemi (2012) about the effectiveness of FRSC public education programme. The researchers observed that the FRSC public education programme was to improved road traffic behaviour of drivers. Olumide and Owoaje (2016) similarly observed that training intervention resulted in an immediate increase in road safety. However, the researchers observed that such trainings were not sustained. In addition, Williams & O'Neill (2004) when they proposed a detailed understanding of what constitutes effective driving behaviour is a key requirement when designing a road safety driver education programme. Driving behaviour is, in effect, an expression of the driving attitudes held by an individual. Within a Training Needs Analysis (TNA), a thorough analysis of behaviours required for effective performance is conducted. This information underpins further analysis to identify the Knowledge, Skills and Attitudes (KSA) which support the desired behaviours. The Task and KSA analyses provide a sound basis from which to design a training programme by identifying the behaviours, knowledge, skills and attitudes required for effective performance. In the context of pre-driver education, this analysis could provide a set of target' attitudes that pre-driver education courses should address. Therefore, the aim of this research question was to identify existing research describing effective driving behaviour. For younger people, school-based driver education in schools and colleges leads to earlier licensing but not to a reduction in Road Traffic Injury (RTI) involvement (Roberts, Kwan & Cochrane, 2001). Among older drivers, there is strong evidence that education combined with on-road training improves driving performance and moderate evidence that it improves knowledge, although educational intervention curricula alone are not effective in reducing crashes. The reviewers conclude that the effectiveness of retraining aimed at older drivers is sufficiently encouraging to merit assertive health promotion actions regarding intervention and programme planning (Korner-Bitensky, Kua, von Zweck & Van Benthem, 2009).

### **Conclusion**

Road safety education programme influenced commercial drivers' behaviour towards road traffic codes and safe driving. In addition, commercial drivers' educational background, duration of learning road safety, behaviour and knowledge jointly induce the attitude towards road safety education programme. However, the safety education programme of FRSC does not have influence on their knowledge of road traffic codes and safety driving.

### **Recommendations**

Regular post-driving intervention programmes should be initiated for commercial drivers to assist them with the reinforcement of the knowledge gained from the road safety education on knowledge and behaviour.

Besides FRSC, Non-governmental Organisations such as the Prompt Assistance to Victims of Road Accidents (PATVORA) and the Arrive Alive Road Safety Initiative (AARSI) should be encouraged in conjunction with FRSC to continuing to conduct intermittent safety education.

## References

- Adekoya, B. J., Adekoya, A. O., Adepoju, F. G., & Owwoeye, J. F. A. (2011). Driving under influence among long distance commercial drivers in Ilorin, Nigeria. *International Journal of Biological and Medical Research*, 2(4), 870-873.
- Agunloye, O. (2001). Road traffic congestion and the quest for effective transportation. Proceedings of the National Conference of Nigerian Society of Engineers in Calabar.
- Audu, G. G. (2012). *Public perception of the performance of Federal Road Safety Corps (FRSC)*. A Research Report submitted to Administrative Staff College of Nigeria (ASCON), Topo-Badagry.
- Carcary, W. B., Power, K. G., & Murray, F. A. (2001). *The new driver project: Changing driving beliefs, attitudes and self-reported driving behaviour amongst young drivers through classroom-based pre and post driving test interventions*. Edinburgh: Scottish Executive Central Research Unit.
- Chidoka, O. (2009). Road Accidents Claim 25,939 Lives. *Federal Road Safety Commission Bulletin*, 9, 40–51.
- Federal Road Safety Commission (FRSC) (2007). *An article on FRSC Establishment Act*. Retrieved from [www.frsc.gov.ng](http://www.frsc.gov.ng).
- Ibrahim, A. (2016). Evaluating effectiveness of federal road safety commission training and education programmes for commercial vehicle drivers in Jigawa State, Nigeria. *Ife Psychologia*, 24(1), 127-139
- Idoko, C. (2010). *Fresh war against death on Nigeria roads: Begins Operation Zero Tolerance*. Retrieved from <http://www.tribune.com.ng/sat/index>.
- Korner-Bitensky, N., Kua, A., von Zweck, C. & Van Benthem, K. (2009). Older driver retraining: An updated systematic review of evidence of effectiveness. *Journal of Safety Research*, 40(2), 105–111.
- Maduagwu, M.O. (2008). *Road safety and accident reduction in Nigeria: A blueprint for the year 2010*. National Workshop (Eds) NIPPS, Kuru, Nigeria.
- Okafor, I. P., Odeyemi, K. A., Dolapo, D. C., Ilika, A. L., & Omosun, A. O. (2014). Effectiveness of road safety education in Nigeria using a quasi-experimental trial: Findings from the road safety intervention project. *African Safety Promotion Journal*, 12(1), 1-17.
- Olumide, A. O., & Owoaje, E. T. (2016). Effect of a road safety education intervention on road safety knowledge of university drivers in Ibadan, Nigeria. *Annals of Ibadan Postgraduate Medicine*, 14(1), 6-12.
- Onuka, O. U., & Adeyemi, T. F. (2012). The effectiveness of FRSC public education programme on drivers' road traffic habit in Lagos and Oyo States of Nigeria. *British Journal of Arts and Social Sciences*, 6(1), 129-139.
- Oyeyemi, B.O. (2003). *Productivity and road traffic administration in Nigeria: Impediments and strategies*. Ibadan: Clemeve Media Consult.
- Roberts, I.G., & Kwan, I. (2001). School-based driver education for the prevention of traffic crashes. *Cochrane Database of Systematic Reviews*, 3, 1-14. DOI: 10.1002/14651858 .CD003201.
- Sani, B. A. (2005). FRSC strategies for public enlightenment. *A lecture delivered at workshop for FRSC public education officers held at zone RS4 HQ Jos on 11th Jan. 2005*.
- Sumaila, A. F. (2013). Road crashes trends and safety management in Nigeria. *Journal of Geography and Regional Planning*, 6(3), 53-62. DOI: 10.5897/JGRP2013.0318
- Williams, A. F., & O'Neill, B. (2004). On-the-road driving records of licensed race drivers. *Accident Analysis & Prevention*, 6, 263-270.
- World Health Organisation (2018). *Road traffic injuries: Fact sheet*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs358/en/>