

Knowledge of Road Traffic Signs and Accident Prevention Practices Among Commercial Bus Drivers in Obio-Akpor Lga of Rivers State

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Abstract:

Commercial bus drivers constitute a significant portion of road users and play important role in the development of modern societies socially and economically. Like every other profession, they are exposed to occupational accidents with the attendant morbidity and mortality. This study investigated the knowledge of road signs and accident prevention practices among commercial bus drivers in Obio-Akpor local government area of Rivers State. A descriptive survey design was adopted for the study. Six research questions and four hypotheses were formulated to guide the study. The population of the study comprised of all commercial bus drivers in Obio-Akpor LGA, Rivers State. A self-structured questionnaire titled, “*Knowledge of Road Signs and Accident Prevention Practices among Commercial bus Drivers*” with a correlation coefficient of 0.81 was used to elicit information from two hundred respondents who participated in the study. Data was analysed using SPSS version 26. The research questions were answered with descriptive statistics, while the hypotheses were tested using ANOVA at 0.05 alpha level. Findings from the study revealed that majority (83.0%) of the commercial bus drivers in the study area had good knowledge of road traffic signs and 85% engaged in above fair level of accident prevention practices while driving. Age ($F= 4.696$; $p= 0.003$), educational attainment ($F= 5.040$; $p= 0.002$), years of driving experience ($F= 8.769$; $p= 0.000$) and knowledge of road traffic signs ($F= 3.375$; $p= 0.001$) had significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA, Rivers State. Based on the findings of the study, it was recommended that the Federal and State ministries of Transport and the Federal Road Safety Corps should emphasize more training on the recognition of the mandatory road signs. In addition, Non-Governmental Organisations should also be involved in organising seminars and workshops on road safety and accident prevention practices for drivers.

Keywords: Knowledge of Road signs, Commercial bus drivers, Obio/Akpor, Rivers State

Introduction

Commercial drivers play important role in the development of modern societies socially and economically. They facilitate ease of movement both of personnel and goods, as well as the transference of desired services from one location to another. They provide efficient mobility as well as accessibility to a wide variety of commercial and social activities. The measurable economic impact is due directly and indirectly on the ability of businesses to gain access to essential production inputs and marketplaces; thereby providing linkages and bridging spatial gaps that are vital to economic growth, commercial drivers remain invaluable assets that boost business performances and productivity and since road presently remains the major means of hauling more than 75% of freight and passengers in Sub-Saharan Africa, lack of commercial drivers for haulage can limit a nation's ability to utilize its natural resources, distribute food and other finished goods; integrate the manufacturing and agricultural sectors; and supply educational, medical, and other infrastructural amenities for national wealth creation [1]. The reliance on commercial bus drivers makes commercial vehicles operators an important component of the socio-economic development of the modern society. Commercial bus drivers constitute a significant portion of road users, and like every other profession, they are exposed to occupational accidents with the attendant morbidity and mortality [2].

Globally, road traffic accident claims approximately 1.35 million annually amounting to one hundred and fifty-four (154) lives every hour, and 50 million more people suffer varying degree of non-fatal injuries and more incurring disabilities as a result of the injuries sustained. Although, there has been steady decline in the Americas and Europe, there has been constant increase among developing countries with more than 93% road traffic injuries and fatalities occurring in low- and middle-income countries [3]. Africa is reported to have the highest (26.6%) burden of road accident casualties followed by South-East Asia (20.7%) and the East Mediterranean. More than half of those killed in road traffic accidents are in their productive age group of 15-44 years; and about three quarters (73%) of all road traffic deaths occur among young males under the age of 25 years who happen to be the economic backbone of most families. These group are 3 times most likely to be killed in a road traffic crash than young females [4].

The morbidity and mortality burden in developing countries is reported to be rising due to combination of factors ranging from rapid motorization to bad roads, decayed traffic infrastructure as well as poor behavioural attitudes of road users. The morbidity and mortality rate is exacerbated by poor or outright lack of- or non-usage of protective devices by drivers, passengers, and/or pedestrians involved in the accidents [5]. The resultant injuries from road accidents cause considerable economic losses to the individual, their families, and the nations as a whole. These losses arise from the costs of treatments, lost productivity for those killed or disabled by their injuries, and for family members who need to take time off work or school to care for the injured. Thus, road traffic accidents could cost more than 3% of a country's gross domestic product [6].

According to Oviedo-Trespalacios et al., a driver's capability is a function of a plethora of human factor variables such as personal characteristics (age, gender, educational attainment, years of driving experience, etc.), physiological, and psychological factors. Safety on the road according to Ranck depends largely among others factors, on effective use of traffic signs by all road users, especially the commercial drivers. Merriam-Webster dictionary (n.d.) defined traffic sign as a sign usually on the side of the street or highway bearing symbols or words of warning or direction to motorists and/or pedestrians and often having a characteristic shape and colour. These signs are normally erected at the side of- or above roads to give instructions or provide information like routes, directions, and warnings to all road users (Fernandez et al., 2020). Traffic signs should be conspicuous with clear understandable messages, and non-compliance treated as violations that attract penalties which serve as deterrence [7], [8].

Hou and Yang argued that sufficient traffic signs that effectively conveyed warnings and directory information are widely deployed in public transportation infrastructures such as highways, rail lines, and airports. However, some road signs are usually ambiguous or sometimes convey redundant information while those that are clear and visible are ignored by drivers. More worrisome is the complacency of some authorities who opt not to enforce and prosecute traffic offenders [9], [10]. Thus, numerous traffic accidents have been attributed to paying inadequate attention to traffic signs either due to distractions or overconfidence [11].

Compliance with road safety and traffic signs by commercial drivers have been attributed to adequate knowledge of the importance of road traffic signs in mitigating road accidents and the attendant morbidity and mortality [12], [13]. Education attainment according to Samuel and Amini was a strong determinant of knowledge of road traffic signs and safety practices among drivers [14]. They argued that commercial drivers that were highly educated tends to observe and obey traffic signs than those with little or no formal education. Jothula and Sreeharshika reported low knowledge road safety measure among young driver and the dangers involved in ignoring traffic signs, and attributed the high accident morbidity and mortality among these young people to poor knowledge of- and non-compliance to traffic signs. However, Okafor et al., argued that poor knowledge of road traffic signs could be prove of non-familiarity, and suggested that road infrastructure which include traffic signs designs should be guided by established ergonomics principles namely sign-content compatibility, familiarity and standardization to enhance comprehension [15].

There are many other factors responsible for traffic accidents, and among them, human factor was attributed the major culprit, human factors such as attitudes and behaviours of road user towards traffic signs and safety on road are attributed to high road crash and fatality rate. Although, safer behaviours have been associated with increased promotion of good road safety attitude, bothersome has been the behaviours of some commercial drivers towards safety and traffic signs [16], [17]. Among the prominent the behaviours that predisposes commercial drivers to road traffic accident are speed-limit violation, drunk-driving, distracted driving, and road-rage which are linked to 80-90% of road traffic accidents [18], [19]. Other unsafe behaviours include improper stopping, improper turning, violations of traffic signs, usage of mobile phones while driving, ignoring priority way, traffic law violation, non-use of seatbelt, and reckless overtaking [20].

Speed violation according WHO directly influence the likelihood of road accident occurring and the severity of the consequences of the accident. It is reported that every 1% increase in mean speed produces a 4% increase in the risk of fatal accident and a 3% increase in severity of traffic accident risk. Also, in car-to-car impacts, the fatality risk for the on-board occupants is 85% at 65 km/h, while the death risk for pedestrian hit by front cars increased 4.5 times from 50km/h to 65km/h [14]. Distracted driving is another human factor that causes impaired driving, and the use of mobile phones on wheel is growing global concern for road safety. Drivers operating mobile phones while on wheel are 4 times more likely to involve in traffic accidents than drivers that do not operate phones while driving. The use of mobile phone while driving is observed to slow-down reaction times, notably breaking reaction time and reactions to traffic signals. Distracted driving was reported to be highest amongst older and younger drivers.

Knowledge of traffic signs and safety rules on the highway is important, however, knowledge alone does not necessarily translate to improved traffic behaviours among commercial drivers [21], [22]. Continuous reinforcement and educational programmes that constantly remind drivers of traffic rules can engender positive behavioural change and motivate strictly adherence to traffic regulations, thus, mitigate the morbidity and mortality regarding road traffic accidents. On the order hand, Ibrahim and Adeyemi and Adewole reiterated that knowledge improves attitude which in turn improves behaviours and practices of road safety measures that would ultimately minimises the occurrence of road traffic accidents. Thus, it is against this background that the researchers sought to investigate the knowledge of road signs and accident prevention practices among commercial bus drivers in Rivers State.

Statement of the Problem

In times past, road traffic accident was assumed to be spontaneous and unavoidable occurrences; an assertion that have been voided and risk factors identified through empirical studies. However, poor knowledge of road traffic signs among commercial drivers have been described as the major human factor contributing to increased road traffic accidents aside vehicular and environmental factors. Many commercial drivers, especially in highly commercial areas like the Obio-Akpor Local Government Area in Rivers State, appear to lack adequate knowledge of road safety signs as they are often seen overtaking at dangerous corners, distracted driving involving the use of mobile phones and other electronic gadgets, wrongful stopping, traffic light violation, non-usage of seatbelt, among others. This has played a significant role in many traffic accidents with associated loss of life and property. Fatalities, physical disability, and morbidity of road accidents mostly affect the young and economically productive age groups, and survivors who are often left behind to endure a diminished quality of life from deformities and disabilities, posttraumatic stress, and loss of personal source of income. Many families have been left behind with a heightened socioeconomic instability which may lead to physical, physiological, and psychological. Despite the efforts of regulating bodies like Federal Road Safety Corps (FRSC), many commercial drivers still engage in these risky behaviours on the highways. Could it be that these drivers do not have adequate knowledge of road traffic signs and their meanings? Or could it be that they do not understand the consequences of non-adherence to traffic signs? It is on this premise that this study sought to evaluate the knowledge of road traffic signs and accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Aims and Objectives

The aim of this study was to investigate the knowledge of road signs and accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The specific objectives of this study are to;

1. Determine the level of knowledge of road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State.
2. Ascertain the level of accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
3. Assess the influence of age on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
4. Ascertain the influence of educational attainment on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
5. Evaluate the influence of years of driving experience on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
6. Determine the influence of knowledge of road traffic signs on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Research Questions

The following research questions guided the study;

1. What is the level of knowledge of road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State?
2. What is the level of accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?
3. What is the influence of age on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?
4. What is the influence of educational attainment on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?
5. What is the influence of years of driving experience on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?
6. What is the influence of knowledge of road traffic signs on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?

Hypotheses

The following hypotheses were stated to guide the study and were tested at 0.05 alpha level.

1. Age has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
2. Educational attainment has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
3. Years of driving experience has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.
4. Knowledge of road traffic signs has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Methodology

A descriptive cross-sectional research design was adopted. This study was carried out in Obio/Akpor Local Government Area of Rivers State. The population of the study comprised of all the registered commercial bus drivers in Obio-Akpor LGA of Rivers State. Simple random sampling technique was used by the researchers to select two hundred (200) commercial bus drivers plying the Mile Three through Iwofe route in Obio-Akpor LGA of Rivers State. A self-structured questionnaire titled, "Knowledge of Road Signs and Accident Prevention Practices among Commercial bus Drivers" was used to data to collect from the respondents. and the data collected were analysed to determine the reliability of the instrument using Pearson Moment Correlation (PPMC). The correlation coefficient obtained was 0.81.

The data collected was systemically coded and analysed with the aid of Statistical Product and Service Solution (SPSS) version 26. The research questions was analysed using descriptive statistical tools such as frequencies, percentages, mean and standard deviation; while the hypotheses was tested using Analysis of Variance (ANOVA) at $p \leq 0.05$ alpha level of significance.

Results and Discussion

Research Question 1: What is the level of knowledge of road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State?



Figure 1. Level of Knowledge of Road Traffic Signs among Commercial Bus Drivers

Figure 1 presents the summary on the level of knowledge of road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State. Categorisation on level of knowledge of road traffic signs was estimated by using the mean and standard deviation of the aggregated knowledge scores. Respondents with scores below the mean were categorised as “Poor”, those with scores between the mean plus standard deviation were categorised as “Fair”, while those with scores above the mean plus standard deviation were categorised as “Good”. The result as presented showed that 4.0% of the respondents had poor knowledge of road traffic signs, 13.0% had fair knowledge, while 83.0% had good knowledge of road traffic signs in the study area.

Research Question 2: What is the level of accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?

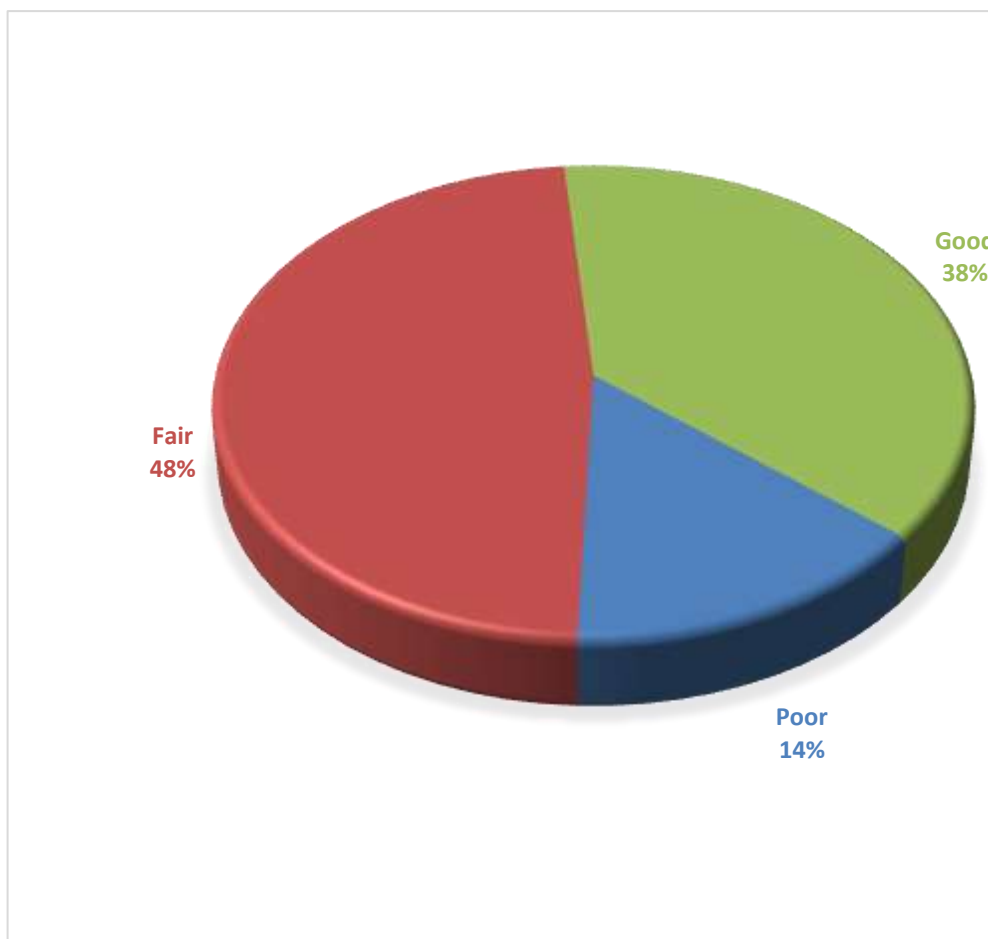


Figure 2. Level of Accident Prevention Practices among Commercial Bus Drivers

Figure 2 presents the summary on the level of accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. Categorisation on level of knowledge of accident prevention practices was estimated by using the mean and standard deviation of the aggregated accident prevention practices scores. Respondents with scores below the mean were categorised as “Poor”, those with scores between the mean plus standard deviation were categorised as “Fair”, while those with scores above the mean plus standard deviation were categorised as “Good”. The result as presented showed that 14.5% of the commercial bus drivers exhibited poor accident prevention practices, 48.0% exhibited fair accident prevention practices, while 37.8% exhibited good accident prevention practices in the study area.

Research Question 3: What is the influence of age on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?

Table 1. Influence of age on accident prevention practices among commercial bus drivers

Age (Years)	Accident Prevention Practices							
	Poor		Fair		Good		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
≤ 30	2	4.3	22	47.8	22	47.8	46	23.0
31-40	23	17.0	68	50.4	44	32.6	135	67.5
41-50	2	11.8	6	35.3	9	52.9	17	8.5
≥ 51	2	100.0	0	0.0	0	0.0	2	1.0
Total	29	14.5	96	48.0	75	37.5	200	100.0

Table 1 presents the summary on influence of age on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result as presented showed that more than half (52.9%) of commercial bus drivers between ages 41-50years exhibited good accident prevention practices, this was followed by more than two-fifth (47.8%) commercial bus drivers who were 30years and below, and less than one-third (32.6%) of those between 31-40years also exhibited good accident prevention practices. Conversely, it was also observed that all the commercial bus drivers (100.0%) who are 51 years and above exhibited poor accident prevention practices in the study area.

Research Question 4: What is the influence of educational attainment on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?

Table 2. Influence of educational attainment on accident prevention practices among commercial bus drivers

Educational Attainment	Accident Prevention Practices							
	Poor		Fair		Good		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
No formal education	2	100.0	0	0.0	0	0.0	2	1.0
Primary	6	17.6	13	38.2	15	44.1	34	17.0
Secondary	8	9.5	45	53.6	31	36.9	84	42.0
Tertiary	13	16.3	38	47.5	29	36.3	80	40.0
Total	29	14.5	96	48.0	75	37.5	200	100.0

Table 2 presents the summary on influence of educational attainment on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that all (100.0%) the commercial bus drivers with no formal education exhibited poor accident prevention practices in the study area. Conversely, more than two-fifth (44.1%) of the commercial bus drivers with primary education exhibited high level of accident prevention practices, and this was followed by more than one-third of the commercial bus drivers with secondary education (36.9%) and those with tertiary education (36.3%) exhibited high level of accident prevention practices in the study area.

Research Question 5: What is the influence of years of driving experience on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State?

Table 3. Influence of Years of driving experience on accident prevention practices among commercial bus drivers

Years of Driving Experience	Accident Prevention Practices							
	Poor		Fair		Good		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
≤ 5	16	17.8	34	37.8	40	44.4	90	45.0
6-10	11	11.6	56	58.9	28	29.5	95	47.5
≥ 11	2	13.3	6	40.0	7	46.7	15	7.5
Total	29	14.5	96	48.0	75	37.5	200	100.0

The summary on the influence of years of driving experience on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State is presented on Table 3. The result showed that more than two-fifth of commercial bus drivers with 5 years or less of driving experience and those with 11 years or more driving experience exhibited good accident prevention practices. The result also showed that more one-quarter (29.5%) of the drivers with 6-10 years of driving experience exhibited good accident prevention practices in the study area.

Research Question 6: What is the influence of knowledge of road traffic signs on accident road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State?

Table 4. Influence of knowledge of road traffic signs on accident prevention practices among commercial bus drivers

Level of Knowledge of Road Traffic Signs	Accident Prevention Practices							
	Poor		Fair		Good		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Poor	0	0.0	8	100.0	0	0.0	8	4.0
Fair	2	7.7	20	76.9	4	15.4	26	13.0
Good	27	16.3	68	41.0	71	42.8	166	83
Total	29	14.5	96	48.0	75	37.5	200	100.0

Table 4 presents the summary on influence of knowledge of road traffic signs on accident road traffic signs among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that more than two-fifth (42.8%) of the commercial bus drivers with good knowledge of road traffic signs exhibited good accident prevention behaviours. It was also observed that a fraction (15.4%) of those with fair knowledge of road traffic signs exhibited good accident prevention behaviour in the study area.

Hypothesis 1: Age has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Table 5. ANOVA on influence of age on accident prevention practices

	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	6.265	3	2.088	4.696	0.003	Significant
Within Groups	87.155	196	0.445			
Total	93.420	199				

Table 5 presents the summary of ANOVA on influence of age on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that age has

significant influence ($F= 4.696$; $p= 0.003$) on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. Therefore, the null hypothesis was rejected at 0.05 alpha level of significance.

Hypothesis 2: Educational attainment has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Table 6. ANOVA on influence of educational attainment on accident prevention practices

	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	64.667	3	21.556	5.040	0.002	Significant
Within Groups	838.208	196	4.277			
Total	902.875	199				

Table 6 presents the summary of ANOVA on influence of educational attainment on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that educational attainment has significant influence ($F= 5.040$; $p= 0.002$) on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. Therefore, the null hypothesis was rejected at 0.05 alpha level of significance.

Hypothesis 3: Years of driving experience has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Table 7. ANOVA on influence of years of driving experience on accident prevention practices

	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	306.151	11	27.832	8.769	0.000	Significant
Within Groups	596.724	188	3.174			
Total	902.875	199				

Table 7 presents the summary of ANOVA on influence of years of driving experience on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that years of driving experience has significant influence ($F= 8.769$; 0.000) on accident prevention practices among commercial bus drivers in Iwofe. Therefore, the null hypothesis was rejected at 0.05 alpha level of significance.

Hypothesis 4: Knowledge of road traffic signs has no significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State.

Table 8. ANOVA on influence of knowledge of road traffic signs on accident prevention practices

	Sum of Squares	Df	Mean Square	F	p-value	Decision
Between Groups	61.515	9	6.835	3.375	0.001	Significant
Within Groups	384.805	190	2.025			
Total	446.320	199				

Table 8 presents the summary of ANOVA on influence of knowledge of road traffic signs on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. The result showed that knowledge of road traffic signs has significant influence ($F= 3.375$; $p= 0.001$) on accident prevention practices among commercial bus drivers in Iwofe. Therefore, the null hypothesis was rejected at 0.05 alpha level of significance.

Discussion of findings

The study focused on the knowledge of road signs and accident prevention practices among commercial bus drivers in Obio-Akpor local government area of Rivers State. The study revealed that 4.0% of the respondents had poor knowledge of road traffic signs, 13.0% had fair knowledge, while 83.0% had good knowledge of road traffic signs in the study area. The finding implied that majority of the commercial bus drivers in the study area had good knowledge of road traffic signs; hence, can accurately identify these road traffic signs. The finding is in agreement with that of Emenike and Akpu who reported high level of knowledge of road traffic signs among drivers in Port Harcourt city [23].

Figure 2 revealed that more than one-third of the commercial bus drivers exhibited good accident prevention practices, and about half of the commercial bus drivers exhibited fair accident prevention practices, while a fraction exhibited poor accident prevention practices. The finding implied that majority of the commercial bus drivers engaged in above fair level of accident prevention practices while driving. This finding is at concordance with Salaudeen et al., who observed that majority of the commercial drivers demonstrated a good safety practice; while Fowode et al., asserted that the knowledge of accident prevention is very essential in the prevention of accident by commercial drivers on our highways.

Table 1 revealed that more than half of commercial bus drivers between ages 41-50years exhibited good accident prevention practices, and this was followed by more than two-fifth commercial bus drivers who were 30years and below, while about one-third of those between 31-40years also exhibited good accident prevention practices. Conversely, it was observed that all the commercial bus drivers between ages 51years and above exhibited poor accident prevention practices in the study area. Furthermore, the result as presented on Table 5 revealed that age ($F= 4.696$; $p= 0.003$) had significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA of Rivers State. Previous studies have shown that age is an essential factor that considerably determine a person's decision-making capacity. While younger drivers have been observed to be highly energetic hence, they often hastily take irrational and impulsive decisions older drivers are often times slow; and this could be attributed to slower reaction time associated with advanced age and over-confidence from extended years of driving experience [24].

Table 2 revealed that more than two-fifth of the commercial bus drivers with primary education exhibited high level of accident prevention practices, and this was followed by more than one-third of the commercial bus drivers with secondary education and those with tertiary education exhibited high level of accident prevention practices in the study area. Conversely, all the commercial bus drivers with no formal education exhibited poor accident prevention practices in the study area. Also, further analysis using ANOVA revealed that educational attainment had significant influence ($F= 5.040$; $p= 0.002$) on accident prevention practices among commercial bus drivers in the study area. The finding concurred with that of Fowode et al., who reported that safety education had a positive impact not only on the knowledge of preventive measures but also on the practice of these accident preventive measures by commercial drivers. Giving further credence, Enyim reported positive association between educational level road safety practices among taxi drivers in Uyo metropolis, and Nwadinigwe et al., averred that educational safety programmes must have significant positive influence on drivers' attitudes for them to adhere to safety rules and accident prevention practices.

The summary on Table 3 revealed that more than two-fifth of commercial bus drivers with 5years or less of driving experience and those with 11years or more driving experience exhibited good accident prevention practices. The result also showed that more one-quarter of the drivers with 6-10years of driving experience exhibited good accident prevention practices in the study area. It was further observed that years of driving experience had significant influence ($F= 8.769$; $p= 0.000$) on accident prevention practices among commercial bus drivers in the study area. According to Sodeinde et al., years of diving experience do impart vital driving and road safety lessons to commercial drivers in the form of real-life experiences. In addition, research has shown that

inexperience commercial drivers and those with vast years of experience always over-estimate their driving skills and underestimate potential risks, thus, ignored lifesaving accident prevention measures [25].

Table 4 revealed that more than two-fifth of the commercial bus drivers with good knowledge of road traffic signs exhibited good accident prevention behaviours. It was also observed that a fraction of those with fair knowledge of road traffic signs exhibited good accident prevention behaviour in the study area. The result further revealed that knowledge of road traffic signs had significant influence ($F= 3.375$; $p= 0.001$) on accident prevention practices among commercial bus drivers in the study area. The finding agreed with previous studies which asserted that good knowledge of road traffic signs and safety measures promotes high level accident prevention practices with consequent reduction in road traffic crashes and its attendant morbidity and fatality argued and asserted that a well-designed safety educational programme can significantly improve the level of knowledge of road traffic signs and compliance with accident prevention practices among commercial drivers.

Conclusion

Based on the findings of the study, it was concluded that majority of the commercial bus drivers in the study area had good knowledge of road traffic signs and engaged in above fair level of accident prevention practices while driving. Age, educational attainment, years of driving experience and knowledge of road traffic signs had significant influence on accident prevention practices among commercial bus drivers in Obio-Akpor LGA, Rivers State

Recommendation

Based on the findings of the study, the following recommendations were made;

1. The Federal and State ministries of Transport and the Federal Road Safety Corps should emphasize more training on the recognition of the mandatory road signs.
2. Non-Governmental Organisations should also be involved in organising seminars and workshops on road safety and accident prevention practices for drivers and also get involved in the road safety campaigns by sponsoring the printing and distribution of flyers, banners and billboards.
3. The Federal Road Safety Corps should enforce the mandatory training of drivers to ensure only those who are trained and licenced are allowed on the highway to reduce accidents due to negligence.

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