

SOCIOLOGICAL FACTORS AS DETERMINANTS OF ACCIDENTS RISK BEHAVIOUR AMONG COMMERCIAL DRIVERS IN OYO STATE, NIGERIA

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Abstract

Road traffic crashes have become one of the leading causes of mortality and morbidity across the globe and specifically in Nigeria. Human factor in relation to risk behaviour appears to be a leading cause of road traffic crashes. Based on this background, the study investigated sociological factors as determinants of accidents risk behaviour among commercial drivers in Oyo State, Nigeria. The study examined accident risk behaviour as well as its relationship with sociological factors. The study adopted descriptive research design of the survey type. The population for the study comprised commercial drivers who were domiciled in Oyo State, Nigeria. A total of three hundred and sixty (360) participants were sampled using the multistage sampling procedures. Data were collected with the use of a validated self-developed questionnaire. Test-retest reliability was carried out on the instrument and a coefficient of 0.78 was obtained. Data collected were analysed using frequency count, simple percentage and mean scores to answer the research questions raised while Pearson Product Moment Correlation (PPMC) Analysis was used to test the hypotheses at 0.05 level of significance. The findings revealed that social deviance, touting and poverty are sociological factors that can lead to accident risk behaviour. The result showed that risk behaviour such as drink-driving, arbitrary overtaking, excessive speeding and use of mobile telephone while driving could lead to the occurrence of road traffic accidents. The findings further revealed a significant relationship between sociological factors and accident risk behaviour among commercial drivers. Based on these findings it was therefore recommended that Oyo State government should enact laws prohibiting tout activities at motor parks

Introduction

In any human society, the movement of people and goods from one place to another has great implications for the physiological, psychological wellbeing and socio-economic development of members of the society and the nation at

large. The invention of motor vehicles like many other automobiles has made human movement easier and faster than before. Seyyed, Hossein and Alfea, (2015) found out that an increase in the number of automobile vehicles especially, those that

make use of roads such as cars, lorries, trucks and motorcycles are the reasons why the rate of road traffic accidents has increased in developing nations. This is attributed in part to urbanization and industrialization, which had led to migration of people from rural to urban centres. As a result of the increase in human movement and consequent occurrences of automobile accidents, many lives are lost daily in Oyo State (Federal Road Safety Corps, 2015).

It has been observed that automobile accidents usually occur whether in a developing or developed nation because several road users especially, commercial vehicle drivers exhibit risky behaviour and fail to observe traffic rules and regulations, perhaps due to some factors that impact human behaviour (World Health Organization, 2015). In Oyo State, Nigeria, a large number of movements of persons and goods are by road. Most of the commercial drivers on these roads appear to exhibit accident risk behaviour which seems to be the cause of road traffic accidents with its attendant casualties involving the youths in the productive age (Adelusi, 2020).

The occurrence of accidents and its resultant effects of either injury leading to incapacitation, damage to or loss of property or death in Africa are always attributed to bad luck, acts of gods or

destiny of the victims. Scientifically, the cause of road traffic accidents has been found to be mainly behavioural (World Health Organization, 2015). World Health Organization (2004) posited that road traffic crashes are predisposed by many factors one of which is human behaviour. Other factors are condition of the road, condition of the vehicles and environmental factors. Solomon (2008) asserted that some of the human factors include drivers behaviour, drivers mental and physical capacity, lack of knowledge and attention to the condition of the vehicle, ignorance and disregard for traffic regulations. It has been reported that drivers' behaviour towards driving were affected by some sociological factors (Adelusi, 2020). The sociological factors that seem to affect drivers behaviour while driving are but not limited to social deviance, touting and poverty.

One of the social factors that may lead to accident risk behaviour is social deviance. It is described as non-conformity with social rules and norms. It is the violation of cultural norms in either formal or informal context. It is also described as behaviour that violates social standard, engendering anger, resentment and a desire for punishment in a significant segment of the society or culture (Novaco, 2009). For example when a person decides to consume alcohol due to work pressure or depression

and sit behind the wheel at the same time may find it difficult to control the vehicle, an accident may happen. In the first instance, it seems that being drunk is the main reason of accident while the main reason is non-compliance with the social law of “do not drive when you drink”, which leads to accidents. It is perceived that social deviance seems to be generally exhibited by drivers in Oyo State, Nigeria and this could be observed in drivers attitude of violating traffic rules and regulations such as crossing red light, not slowing down at marks showing zebra crossing, refusal to stop at traffic law enforcement agencies check point and so on. It seems that some drivers deliberately take to this social deviant behaviour for social reasons such as feeling high among their peers or trying to be in control of any situation that might arise either at their motor parks or along the roads (Adelusi, 2020).

Touting is another social factor that may bring about behaviour which may cause road traffic accidents. Touts can be defined as workers at railway stations, airports, ferry points, and motor parks, who undertake the self-imposed responsibility of enrolling and organizing passengers who wish to travel by road and for this job they receive a ‘commission’ that is gradually paid by the drivers of the vehicles just before their departure (Okpara, 2005).

Ikumola (2011) submitted that most of the touts are private entrepreneurs, who both compete and collaborate with one another to provide road transport for the public which most times generate unhealthy rivalry. Obviously, these self-appointed passenger procurers are not public employees, although all the motor parks in which they operate are built and owned by the appropriate local government authorities. As opined by Abraham (2017), most touts do not consider collection of dues/ticket only economically viable, thus they help drivers/commercial car owners to get the necessary passengers, in order to boost their income per day.

Activities of touts are characterized by incessant fights and disagreement over loading rights in the streets, bus stops, motor parks (transportation corridors) and business districts as well as highways (Ikumola, 2011; Awoyemi, Maduka, Ewa and Onogbosele, 2015). Similarly, the malevolent character of touts, relative groups and the destructive goals of their members revealed as by the atrocity in the urban areas are noted for destruction of public peace. These atrocities are notably increasing in proportion but are lethally more devastating and sophisticated in organizations. Reports of dastardly acts such as looting, killing, raping, acid bathing, thurgery, exhortation, property destruction and stealing have become more

rampant among touts in the metropolis. Till date, available police statistics report as revealed by Okere (2019) showed that there was a strong association between touts and violence associated with criminal activities and lawful disorderliness in most urban cities.

Studies over the years have shown that condition of transportation in Nigeria is in a deplorable state (Ademiluyi & Gbadamosi, 2004; Odufuwa, 2007 & Ogunsanya, 2009). These scholars affirmed that more than 70% of commercial drivers are strikingly poor and hence are employed by vehicle owners who purchase their vehicles on credit and entrusts them on these drivers so as to be able to balance their creditors. Unfortunately, many of the drivers do not fulfill these obligations despite that they engage in reckless driving, over speeding and dangerous overtaking. These authors revealed that socio-economic characteristics of the drivers (poverty), state of the road, distance of travel, and non-compliance of traffic regulations/enforcement significantly contributed to the alarming rate of deviant driving behaviour.

Poverty seems to be strongly related to accident risk behaviour. Department for Transport (2013) affirmed that drivers of commercial commuters who are hired by other vehicle owners get more involved in road traffic accidents more than drivers who are owners of the vehicle they drive.

The sense behind this finding is that vehicle owners are less involved in risk behaviours such as overspeeding, dangerous overtaking and drinking driving. This is because they are less hasty since they are not remitting money to any boss or paying credit installment like the hired drivers. Facts from these assertions are evidences that poverty appears to be a social factor of driving risk behaviour.

Risk behaviour is that which sets the participants in a potentially dangerous situation, often because it sounds funning. It is defined according to Trimpop, Austin, and Kirkcaldy (2011), as any consciously or non-consciously controlled behaviour with a perceived uncertainty about its outcome, and/or about its possible benefits or costs for the physical, economic or psycho-social wellbeing of oneself or others. Common amongst the risk behaviour that appear to be exhibited by commercial vehicle drivers and which this study investigated are drink-driving or drunk driving, arbitrary overtaking, excessive speeding and use of cell phones behind the wheel.

The frequency of drinking and driving varies between countries but it is almost universally a major risk factor for road traffic crashes. The extent to which alcohol contributes to road traffic crashes varies between countries, and direct comparisons are difficult to make. In many

high-income countries, about 20% of fatally injured drivers have excess alcohol in their blood (i.e. above the legal limit). Studies in low-income countries have shown alcohol to be present in between 33% and 69% of fatally injured drivers (Australian Transport Safety Bureau, 2005). According to Bamberg, Ajzen and Schinidt (2003), commercial drivers constitute 79 percent of those who drink-drive. Some of the effects of alcohol on risk of crashes as highlighted by Begg, Langley and Stepherson (2003) are as follows: drivers and motorcyclists with any blood alcohol content greater than zero are at higher risk of a crash than those whose blood alcohol content is zero; for the general driving population, as the blood alcohol content increases from zero, the risk of being involved in a crash starts to rise significantly at a blood alcohol content of 0.04 g/dl; inexperienced young adults driving with a blood alcohol content of 0.05 g/dl have 2.5 times the risk of a crash compared with more experienced drivers; if a blood alcohol content limit is fixed at 0.10 g/dl, this will result in three times the risk of a crash than that at 0.05 g/dl, which is the most common limit in high-income countries; If the legal limit stands at 0.08 g/dl, there will still be twice the risk than at 0.05 g/dl; alcohol consumption by drivers puts pedestrians and riders of motorized two-wheelers at risk. Alcohol depresses the

central nervous system and therefore increases the response time of the user, making him less responsive to the challenges of driving particularly to coping with emergencies on the road (Akongbota, 2011). It also causes inhibition, impulsiveness and increased tendency to risk taking behaviour.

There is increasing evidence that the risk of mobile telephones while driving a motor vehicle increases the risk of road traffic crashes (Sagberg, 2009). According to Lam (2002), the risk of collision while driving using a mobile phone has been, for instance, reported to undergo a four-fold increase though a nine-fold increase was noted in one case control study comparing users and non-users of mobile phone while driving. There is however a large body of research that has significantly identified a number of behaviour and measures that are negatively influenced by the use of a mobile telephone while driving. This include a loss of lane maintenance, difficulty in making gap judgment, a failure to process all road-relevant cues and a reduction in concentration (Strayer, Dews and Crouch, 2003). The most critical task which mobile phone use while driving may impair is the ability to detect hazards and to react to them in time (Strayer, Dews and Crouch, 2003). For instance, simulation studies have shown that a driver's reaction time to the onset of leader's brake lights become

longer when using a mobile phone, especially among elderly drivers.

It has been observed that different aspects of mobile phone use can influence driving performance. For instance, United States crash reports have shown that the majority of mobile phones-related crashes occurred during conversation (National Highway Transportation Administration, 2010). Many researchers believe that the distraction caused by the conversation is the primary source of distraction whereas the physical task demand of mobile phone use (e.g, answering a call, dialing a number, holding a handheld phone) is only a secondary source of distraction and possibly not related to accidents. Like every risky or anti-social behaviour and use of mobile phone while driving can be assumed to be related to drivers' characteristics.

According to Kasra, Negin and Mohammad (2016) overtaking might not be the most common cause of road traffic accidents, but overtaking are certainly amongst the most serious. On many two-lane roads (which are common in this research area), because of high traffic density and visibility, drivers attempt overtaking only in case of remarkable high speed difference compared with vehicles ahead. In other words, on a two-lane road, when a driver reaches a vehicle and the speed of the vehicle ahead is slower than expected limit or patient threshold, he may

decide to overtake and continue his route with his own desirable speed. Else, by slight speed reduction stays behind the vehicle ahead. Majority of traffic roads in Nigeria are one-track two-lane road that are not always conducive for smooth overtaking of vehicle ahead while driving on dangerous roadway curves. Accidents involving passing maneuvers are important problems on rural two-lane roads where one vehicle wants to overtake a slower vehicle moving ahead in the same direction.

Surveys of commercial and public road transport have revealed that drivers of public transport vehicles, in pursuit of increased profits, frequently force their drivers to drive at excessive speeds, to work unduly long hours and to work when exhausted (FRSC, 2012). Crash risk increases as speed increases, especially at road junctions and while overtaking – as road users underestimate the speed and overestimate the distance of an approaching vehicle. Drivers' speed choice as found by Afolabi and Gbadamosi (2017) is influenced by a number of factors which included driver-related factors (age, sex, alcohol level, number of people in the vehicle); factors relating to the road and the vehicle (road layout, surface quality, vehicle power, maximum speed); traffic-related and environment-related factors, (traffic density and composition, prevailing speed, weather conditions). The effects of

speed on crashes are further stressed by Tiwari (2003) who reported that the higher the speed of a vehicle, the shorter the time a driver has to stop and avoid a crash.

In Oyo State, Nigeria, commercial vehicle drivers appear to violate traffic rules and regulations (an index of social deviance), engage in bargaining and sourcing passengers for the commuters. They also seem to identify with other ferocious activities that might be detrimental to the normal functions of legitimate driving job while performing their tasks. Based on this background, the purpose of this study therefore, was to determine empirically the sociological factors as determinants of accident risk behaviour among commercial drivers in Oyo State, Nigeria.

Research Questions

The following research questions were raised:

1. What are the sociological factors that can lead to accident-risk behaviour among commercial vehicle drivers in Southwest, Nigeria?
2. What are the risk behaviour that can lead to the occurrence of road traffic accidents among commercial vehicle drivers in Southwest, Nigeria?

Research Hypotheses

1. There is no significant relationship between social deviance and accident

risk behaviour among commercial vehicle drivers in Southwest, Nigeria

2. There is no significant relationship between touting and accident risk behaviour among commercial vehicle drivers in Southwest, Nigeria.
3. There is no significant relationship between poverty and accident risk behaviour among commercial vehicle drivers in Southwest, Nigeria.

Methodology

The descriptive research design of survey type was used for this study. This design was considered appropriate as it enabled the researcher to describe the existing situation regarding sociological factors and accident risk behaviour among commercial drivers in Oyo State, Nigeria.

The population for this study comprised commercial drivers who make use of motor parks for their loading and offloading in Oyo state, Nigeria. The sample for the study consisted of three hundred and sixty (360) respondents who were commercial drivers from Oyo State. The multistage sampling procedure was used to select the respondents. The first stage involved a simple random sampling technique of the fishbowl type to select ten (10) Local Government Areas from the three senatorial districts. At the second stage, simple random sampling technique was used to select three motor parks from

each sampled Local Government Area, making a total of thirty motor parks. At the third stage, simple random sampling technique was used to select twelve (12) commercial drivers from each sampled motor park. A total of 360 respondents participated in the study.

The instrument used for this study was a self-developed questionnaire by the researchers. The questionnaire was in three (3) sections. Section 'A' was designed to elicit information on the demographic characteristics of the respondents such as age, level of education, marital status and driving experience with options for respondents to tick. Section B items were designed to elicit information on sociological factors of accident risk behaviour. The items were rated with scales of; Regularly (3), Sometimes (2), Never (1). Section C was structured to gather information on accident risk behaviour which appear common among commercial drivers. It was rated with scales of: Regularly (3), Sometimes (2), Not at all (1).

The instrument was administered by the researchers to commercial drivers at the sampled motor parks with the help of two research assistants. The instrument was administered during one of the general meetings of the drivers which afforded them enough time to complete the questionnaire. The data collected were analyzed using descriptive statistics of percentages and mean scores to answer the research questions. The criterion mean score set for the study was 2.0. Pearson Product Moment Correlation Analysis was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What are the sociological factors that can lead to accident risk behaviour among commercial vehicle drivers in Oyo State, Nigeria?

Sociological factors which could lead to accident risk behaviour among commercial drivers are presented in table 1.

Table 1: Sociological factors associated with accident risk behaviour

Social factors	Always		Occasionally		Never		\bar{X}
	N	%	N	%	N	%	
Social Deviance	154.5	42.9	106.5	29.5	99	27.6	2.16
Poverty	165	45.7	101	28.3	94	26.0	2.19
Touting	194	53.9	90	25.1	76	21.0	2.33

Table 1 showed that the mean scores on sociological factors are above the criterion mean of 2.0. This is a clear indication that social deviance ($\bar{X} = 2.16$), poverty ($\bar{X} = 2.18$) and touting ($\bar{X} = 2.33$) are factors that can lead to accident risk behaviour among the respondents.

Research Question 2: What are the risk-behaviour that can lead to the occurrence of road traffic accidents among commercial drivers in Oyo State, Nigeria?

Table 2 presents the results of accident risk behaviour among commercial drivers in Oyo State.

Table 2: Accident risk behaviour among commercial drivers

Risk Behaviour	Always		Sometimes		Not at all		\bar{X}
	N	%	N	%	N	%	
Drink-Driving	168	46.7	129	35.8	63	17.5	2.29
Excessive Speed	138.5	38.4	127.5	35.4	94.5	26.2	2.12
Arbitrary Overtaking	159	44.1	116	32.3	85	23.7	2.21
Use of cell Phones	194	54	103.5	28.8	62	17.2	2.37

Table 2 showed the risk behaviour that can lead to the occurrence of road traffic accidents among the respondents. Using a cut-off $\bar{X} = 2.00$ as a criterion mean, all the items had \bar{X} scores above the cut-off point. Thus; drink-driving ($\bar{X} = 2.29$), excessive speed ($\bar{X} = 2.12$), arbitrary overtaking ($\bar{X} = 2.21$) and use of cell phones ($\bar{X} = 2.37$). This implies that drink-driving, excessive speed, arbitrary overtaking and use of cell phones are risk

behaviour that can lead to the occurrence of road traffic accidents among the respondents.

Hypotheses Testing

Hypothesis 1: There is no significant relationship between social deviance and accident-risk behaviour among commercial vehicle drivers in Oyo State, Nigeria.

Table 3 presents the results of social deviance and accident risk behaviour.

Table 3: Pearson Product Moment Correlation Analysis on social deviance and accident risk behaviour.

Variables	N	Mean	SD	r_{cal}	P
Social Deviance	360	3.305	1.8	0.363*	.000
Accident risk Behaviour	360	18.113	4.45		

* $p < 0.05$

Table 3 showed a significant relationship with accident risk behaviour and social deviance ($r = 0.363$, $p < 0.005$). The null hypothesis is therefore rejected. This implies that there was a significant relationship between accident risk behaviour and social deviance among the respondents. This implies that as the social

deviance increases, accident risk behaviour also increases.

Hypothesis 2: There is no significance relationship between touting and accident risk behaviour among commercial vehicle drivers in Oyo State, Nigeria.

Table 4 presents the results of touting and accident risk behaviour among commercial drivers.

Table 4: Pearson Product Moment Correlation Analysis on touting and accident risk behaviour among commercial drivers

<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>r_{cal}</i>	<i>P</i>
Touting	360	3.345	1.215	0.39*	.000
Accident risk Behaviour	360	18.113	4.45		

* $p < 0.05$

Table 4 showed a significant positive relationship between accident risk behaviour and touting ($r = 0.39$, $p < 0.005$). Thus, the null hypothesis is therefore rejected. Thus, there was a significant relationship between accident risk behaviour and touting among the respondents. This implies that as touting

increases, the accident risk behaviour increases.

Hypothesis 3: There is no significant relationship between poverty and accident risk behaviour among commercial drivers in Oyo State, Nigeria.

Table 5 presents the results of poverty and accident risk behaviour.

Table 5: Pearson Product Moment Correlation Analysis on poverty and accident risk behaviour among commercial vehicle drivers

<i>Variables</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>r_{cal}</i>	<i>P</i>
Poverty	360	9.015	2.88	0.299*	.000
Accident risk Behaviour	360	18.113	4.45		

* $p < 0.05$

Table 5 showed a significant positive relationship between accident risk behaviour and poverty ($r = 0.299$, $p < 0.005$). The null hypothesis is therefore rejected. Thus there was a significant relationship between accident risk behaviour and poverty among the respondents. This implies that as the poverty increases, the level of accident risk behaviour increases.

Discussion

The finding of this study is in conformity with the discoveries of some previous studies. From the findings of this study, it was shown that social deviance has a significant relationship with accident-risk behaviour among commercial vehicle drivers. This finding is in consonance with the studies of Lawton, Parker, Stradling and Manstead, (2005) who reported a positive relationship between social deviance and accident-risk behaviour. These authors contended that offenders under remand for driving-related offences tended to have relatively high scores on the risk behaviour and extreme social deviance factors. Similarly, Meadows, Straddling and Lawson (2008) additionally found that the effects of extreme social deviance on accident involvement was partly mediated by risk-behaviour, leading the author to suggest that risk-behaviour is one way in which social deviance is expressed while driving. Contrary to this findings, Farmer,

Bratimann and Lind (2010) associated social deviance as a factor of accident risk-behaviour with the intake of alcohol before or during driving. The authors stressed further that violation of rules spurred by intoxication is only common among youths and teenagers.

The findings of the study revealed that touting (touts activities) has a significant relationship with accident risk behaviour among commercial vehicle drivers. Corroborating the result of this study, Okpara, (2007) found out that the motor parks in every region in Nigeria constitutes the major operational bases for touts and this can be used to evaluate the relative importance of certain towns and villages as transportation nodes. Ologun, (2010) and Oluduro (2012) also observed that touts dominate the activities of transportation at motor parks and roads in Nigeria. However, none of these studies pointed to touting as a sociological factor of accident-risk behaviour among commercial drivers. This present study found a significant positive relationship between touting and accident risk behaviour.

From the findings of this study it is shown that poverty is having a significant relationship with accident risk behaviour among commercial drivers. This finding is in tandem with that of Fulani (2003), Odufuwa, (2003), Ademiluyi and Gbadamosi (2004). For instance,

Ademiluyi and Gbadamosi inferred that over three quarters of the house holds in Nigeria earn income below poverty level. They were of the view that this has affected the rate of procurement of new vehicles, and its obvious that this trends has taken its toll on the drivers who are mostly employed to drive the (old-new) fairly used vehicles. The findings of this study also conforms with that of Odufuwa (2003), who reported that most vehicles used for commercial transportation in Nigeria are purchased on credit via installment payment and given to poverty stricken drivers who drive at indiscriminate high speed in order to meet the daily returns of their employers and at the same time make their own profit.

Conclusion

Based on the findings of this study, it was concluded that the sociological factors of social deviance, touting and poverty are positively related to accident risk behaviour among commercial drivers in Oyo State, Nigeria. In addition, alcohol consumption, excessive speed, arbitrary overtaking and the use of cell phones are accident risk behaviour among commercial drivers in Oyo State, Nigeria.

Recommendations

Based on the findings of this study it was recommended that:

- 1 government should enact laws prohibiting touting at motor parks. Motor parks should be under the surveillance of the Traffic Department of the Police Force.
- 2 government and non-governmental agencies should organize road safety rallies at different motor parks and attendance mandatory for all commercial drivers in Oyo State, Nigeria.

References

- Abraham, P. (2017). An investigation into the effect of Airport touting from the passengers' perspective: A case study of Nnamdi Azikwe Airport, Abuja. *Transportation Research Procedia*, 28, 69-78.
- Adelusi, J. O. (2020) Psychological factors and accident risk behaviour among commercial vehicle drivers in Southwest, Nigeria. A PhD unpublished Thesis submitted to the Department of Human Kinetics and Health Education. Faculty of Education, Ekiti State University, Ado-Ekiti, Nigeria.
- Ademiluyi, I. & Gbadamosi, K. (2004) Geography of movement and mobility crisis in Nigeria. *International Journal of Environment and Development*, 7(1), 22-29.
- Adeyemi-Doro, H. O. (2013) Trauma care in Nigeria. *African Journal of Trauma*, 1, 1-4.

- Afolabi, J.O. & Gbadamosi, K. T. (2017) Road traffic crashes in Nigeria: Causes and consequences. *Transport and Logistics: The International Journal*. Bells University of Technology, Ota, Nigeria, 17(42), 40-49.
- Akongbota, J. (2011). Reducing accidents on our roads. Web:<http://www.ghana.gov.gh>. Retrieved: September 10, 2012
- Australian Transport Safety Bureau (2005) Road deaths in Australia: 2004 Statistical Summary. Retrieved 31 January 2006
- Awoyemi, O.K., Moduka, F. O., Ewa, E. E. & Onogbosele, C. I. (2015) An assessment of touting activities in selected urban motor parks in Ibadan metropolis. *Journal of Environmental and Earth Science*, 5(9), 170-179.
- Bamberg, S., Ajzen, I. & Schmidt, P. (2003). Choice of travel mode in the theory of planned behaviour: the roles of past behaviour, habits and reasoned actions. *Basic and applied social psychology*, 25(3), 175-187
- Begg, D., Langley, J.D. & Stephenson, S. (2003). Identifying factors that predict persistent driving after drinking, unsafe driving after drinking, and driving after using cannabis among young adults. *Accident Analysis and Prevention*, 35(5), 669-675
- Department for Transport (2013a). National travel survey 2012, Retrieved October 2013 from <http://www.gov.uk/government/publications/national-travel-survey-2012>.
- Farmer, C., Bratiman, K.A. & Lind, A.K. (2016). Cell phone use while driving and attributable crash risk. *Traffic International Journals*, 11, 466-740.
- Federal Road Safety Commission (2012). *Nigerian road safety strategy and management*, 2(2), 9-16
- FRSC (2015). *Nigerian road safety strategy and management*, 2(3), 9-16..
- Ikuomola, A. D. (2011). *Touting vocation in Lagos State Transportation corridors*. Germany, Lambert Academic Publishing.
- Lam, L.T. (2003). A neglected risky behaviour among children and adolescents: Undergraduates driving and injury in New South Wales. Australia. *Journal of Safety Research*, 34(3), 315-320.
- Lawton, R., Parker, D., Stradling, S.G. & Manstead, A. (2007). Predicting road traffic accidents: the role of social deviance and violations. *British Journal of Psychology*, 88, 249-262
- Meadows, M.L., Stradling, S.G. & Lawson, S. (2008). The role of social deviance and violations in predictive road traffic accidents in a sample of young offenders. *British Journal of Psychology*, 89, 417-431.
- National Highway Transport Administration (2010). Distracted driver report Retrieved September, 2010 from <http://www.nrd.nlitsa.dot.gov/811379.pdf>
- Nyitor, A. S. (2010) Psychosocial correlates of road crashes in Ibadan, Nigeria. *Rehabilitation Psychology*, 53(5), 165-169.
- Odufuwa, B. (2007) Towards sustainable public transport for disable people in Nigerian cities. *Studies in Home and Community Science*, 1(2); 93-101.
- Ogunsanya, A.A. (2009). Managerial strategies for reducing road traffic accidents in Nigeria. A case study of Lagos State. A paper presented at the Nigerian Institute of Transport Technology.
- Okere, A. (2019, October 27) "Taking photos at accident scenes worrisome" *Sunday Punch News Extra*. P. 46

- Okpara, E. E. (2007). The role of Touts in passenger transport in Nigeria. *Journal of Modern African Studies*, 34(4), 327-335.
- Okpara, K. E. (2005) Touting and pilfering in Nigeria Airports: Problems and Solutions. *International Journal of Personality and Individual Differences*, 35(4), 56-62.
- Ologun, A.D. (2010) Road safety in the twenty first century.A glance into 2020.*The Voice of Safety*, 4(3), 14-26.
- Oluduro, J. (2012). Traffic accidents and analysis.A review of urban transportation and Traffic Management.University of Lagos.
- Oyesiku, O. (2004). Policy directions in urban transportation.In Chikolo, I., Ogunsanya, A.A. and Sumaila, A.G. (Eds).*Perspective on urban transportation in Nigeria.NITT. Zaria*, 172-202
- Saberg, F. (2009). Road Accidents caused by drivers falling asleep. *Accident Analysis and Prevention*, 31(6), 81-87.
- Seyyed, M.H.J., Hossein, F.A. & Alireza, T. (2015), Study of psychological factors affecting traffic accidents among young boys in Tehran. *Iranian Red Crescent Medical Journal*, 13(5); 118-124.
- Solomon, S.A. (2008), The Federal Road Safety Commission and road management in Nigeria. Retrieved August 2, 2010. <http://www.tigwebz.orf/safetyinhealth/panorama/article.html>.
- Strayer, D., Drews, F. & Crouch, D. (2003).Fatal distraction?A comparison of the cell-phone driver and the drunk driver.University of Utah, Department of Psychology. Archived from the original (PDF) on February 2009-04-11
- Tiwari, G. (2003). Transport and land use policies in Delhi. *Bulletin of the World Health Organization*, 81(6); 444-450
- Trimpop, R., Austin, E. J. & Kirkcaldy, B. D. (2014).Occupational and traffic accidents among veterinary surgeons.*Stress Medicine* 16(4) <https://doi.org/10.1002/1099-1700> (200007) 16:4 (243:AID.SM1859).3.0.Co:2-T
- World Health Organization (2004) World report on road traffic injury prevention.*WHO Geneva*.
- World Health Organization (2015).A 5 year strategy for road traffic mortality prevention. Retrieved August, 2014.http://whqlibdoc.who.int/hq2001/WHO-nMH-VIP-01_03pdf.