An Open Access Journal Available Online

Cigarette Smoking and Alcohol Consumption among Commercial Drivers in Lagos, Nigeria

[1]Temitayo D. Adewuyi, [2]Olujide A. Adekeye & [3]Gbenusola A. Akinwale

[1]Department of Psychology, Lagos State University, Ojoo, Lagos State, Nigeria.
temitayo.adewuyi@lasu.edu.ng
[2]Department of Psychology, Covenant University, Ota, Ogun State, Nigeria.
jide.adekeye@covenantuniversity.edu.ng
[3]Department of Psychology, University of Lagos, Akoka,
Lagos, Nigeria. gbenuadunola@yahoo.com

Abstract

This cross-sectional survey research provided a quantitative description of cigarette smoking and alcohol consumption among commercial drivers in Lagos, Nigeria. A multi-stage purposive sampling of two hundred (200) commercial drivers from Mile 2 to Badagry was used for this study. Three hypotheses were formulated for this study. Cigarette Smoking and Alcohol Consumption Questionnaire (CSACOQ) adopted from Genacis lite-H_2O Questionnaire was used to gather information from the respondents. Both descriptive and inferential statistics of Pearson Product Moment Correlation and Multiple Regression were used to analyse the data gathered for this study. The result showed that 63.7% were heavy users, 15.6% were moderate users, and 17.7% were occasional or mild users. The researchers discovered that 60% to 70% of the commercial drivers engaged in drinking and driving. In comparison, about 40% of the commercial drivers used other psychoactive drugs such as tobacco (30.4%), cannabis (4.3%), caffeine (31.9%), sedatives (10.1%), and solvents (8.7%). The researchers believe that there is an urgent need to formulate policies in line with the ten proposed targets of WHO, (2008) resolution on strategies to reduce the harmful use of alcohol and cigarette smoking in Nigeria.

Key Words: Cigarette smoking, Alcohol Consumption and Commercial drivers

Introduction

Commercial drivers' alcohol use with other psychoactive substances such as tobacco and cannabis has continued unabated in Lagos, Nigeria, despite the Federal Road Safety Corp and Media campaigns against drunk driving. The lack of control on alcohol availability, use, and misuse contributed to the supply of beverages and cigarettes to commercial motor parks, hence the need for this study. In major cities and towns across the country, villages strategically located along highways have more than 3000 motor parks, kiosks, stores, restaurants and joints in which travellers eat, drink, and smoke without closing time, from morning throughout the night until daybreak (Adekoya et al., 2011).

For example, these motor parks are for intra and inter-state travellers in the Lagos metropolis. The major locations of these parks

are at Ojota, Maza-Maza, Mile 2, Mile 12, Jibowu, Ojuelegba, Oshodi, Iyana-Iba, Iyana Ipaja, Agege, Oworo, Sango-Ota, Abule-Egba and Ikotun. Others include, Lekki, Obalende, CMS, Owode, Ikorodu, Epe, Volks, Ajah and many others. Operators of the drinking spots are usually women and young girls who are selling all sorts of alcoholic drinks from soft drinks to beer, stout, wines, brandy, Gordon gin, Chelsea, Bertola, illicit gin locally known as "ogogoro" of various brands. Cigarettes of different brands, including Indian hemp (marijuana), cocaine, and heroin, are also not left out.

Alcohol, a thin, volatile, colourless liquid with a pungent taste, are the constituent of wine, beer, spirits, and other drinks such as local gin. In Nigeria, many people, especially commercial drivers, consume alcohol under the pretence of taking medicinal beverages known as "opa ehin", "paraga", or "fidigbodi". These drinks are popular in many neighbourhoods and sold by vendors in motor parks where commercial drivers have unhindered access (Oluwadiya & Akinola, 2012). Adekeye et al. (2015) noted that alcohol use is the most prevalent substance use behaviour among Nigerians, while marijuana is the most prevalent illicit drug in use.

Alcohol is as old as human history, and its consumption is culturally undertone from antiquity (Smart, 2007). Its consumption has been considered normal, especially when drunk without outright intoxication (Adewuyi, 2014). Wine, beer, spirit, and other fermented alcoholic beverages were taken in traditional societies, and some of these beverages are still used in this modern era for different purposes. In Africa, these and other alcoholic beverages, such as *palm wine, burukutu,* etc., were consumed for pleasure soon after brewing or tapping (Odejide, 2006). Though alcoholic beverages have been consumed for hundreds of years, the pattern and purpose of consumption vary considerably among societies and even within communities (Adewuyi, 2014; 2015 and Awonusi & Adegboyega, 2015). Tobacco is available in several forms, such as cigarettes, cigars, pipes, snuff and chewing (Falk, Yi & Hiller-Sturmhofel, 2007). Tobacco is taken in different formats: smoking, chewing, snuffing, licking and sucking (Hoffman & Barnes, 2001). Tobacco use is the second leading cause of death, while the harmful use of alcohol is the third leading cause of morbidity (WHO, 2010). In many cases, there is a synergism between tobacco and alcohol use. Studies in high-income countries have found that people who smoke are much more likely to drink, and vice versa (Bobo & Husten, 2000).

Drinking alcohol is culturally tolerated as part of the ceremonial lives of many ethnic groups in Nigeria (Obot, 2000). Alcoholic beverages are locally produced in Nigeria. In the Northern part of Nigeria, *pito* and *burukutu* are commonly made and consumed (Bobo & Husten, 2000). In the South, palm wine is tapped from the palm tree (Obot, 2000) while the native gin

locally called *ogogoro, kai-kai* (Korieh, 2003), *akpuru-achia*, or *Sapele water*, distilled from the fermented palm wine are widely produced and consumed, especially in the Niger-Delta area. There were no written rules prohibiting females and adolescents from drinking in this traditional era (Odejide, 2006). In most Nigerian communities, alcohol consumption is reserved for men, and it plays a crucial role in political, religious and socio-economic relationships (Oshodin, 1995). Excess consumption was not widely tolerated in many societies, while few communities permitted it (Willis, 2006). For example, alcohol abuse attracted negative sanctions as recorded in the biblical Old and New Testaments (Seller, 1987). Awosusi and Adegboyega (2015) discovered that people who consume alcohol are more likely to indulge in the habit of using tobacco. Alcohol consumption inhibits neural and cerebral functioning and offers the user a peculiar form of pleasure. It also impaired thinking, memory and decision-making (Katulanda et al., 2014). This is one major reason why alcohol consumption affects commercial drivers while driving.

The empirical study of Ipingbemi (2003) on the socio-economic characteristics and driving behaviour of commercial drivers in south-western Nigeria revealed that 60% of the commercial drivers were below the age of 45 years, and almost all the drivers drove under the influence of alcohol. The study also discovered other factors such as poor level education, vehicle age, and poor state of the road as causes of road accidents with little or no law enforcement. Adekoya et al. (2011) discovered that commercial drivers in the Ilorin metropolis drink alcohol and other psychoactive drugs such as kola nut and cigarettes while driving. The reasons given were to keep them awake and active while driving. It is also to satisfy their sexual desires. Lasebikan and Ojediran (2012) discovered that cigarette smoking, cigarette snuffing, and the combination of the two were common among the commercial drivers in the Ibadan metropolis. The study found that the prevalence of tobacco consumption among professional drivers was 41.6%, while the mean age of smoking initiation was two to three years. Ozoh, Dania, and Irusen (2014) study revealed the prevalence of cigarette smoking among the commercial drivers in the major motor parks in Nigeria and South Africa. The study of alcohol consumption and other psychoactive substance use among the tanker drivers in Lagos, Nigeria, precipitated this study.

Alcohol consumption and tobacco use have been closely linked with behaviour, culture, and differences in risk perception (Hughes et al., 1992). Uncontrolled alcohol consumption can result in addiction (Obot, 2000). The researchers observed that tobacco is a common psychoactive substance used by a commercial drivers. The prevalence of alcohol consumption and tobacco use is high among commercial drivers (Barbosa, Camps & Lopes, 2012). Observation has shown that alcohol use has an affinity for tobacco use. In

Nigeria, many alcoholics are smokers (Oluwadiya & Akinola, 2012). Studies have shown that dependence on alcohol and tobacco use is correlated. People dependent on alcohol are three times more likely than those in the general population to be smokers (Grant et al., 2004). A significant correlation was seen between alcohol and nicotine dependencies (Batel et al., 1995). Based on this background, this study aimed to determine the rate of alcohol consumption and tobacco smoking among commercial drivers in Lagos, Nigeria. Hoffman, Welte & Barnes (2001) discovered that adolescents simultaneously consume alcohol and smoke cigarettes. One habit compliments the other. The present study is built into this empirical study of Hoffman et al. (2001) to determine whether commercial drivers' drinking alcohol and smoking cigarettes complement one another.

Cigarette smoking and alcohol consumption are today's major social development concerns (WHO, 2012). This is regardless of the fact that many anti-smoking and alcohol consumption policies have been implemented, and they appear to be achieving mixed results. However, the Lagos State government tried to promulgate a law that will prosecute commercial drivers that drive under the influence of alcohol consumption or drinking while drinking. Smoking cigarettes is prohibited in public places. The Federal Road Safety Corps (FRSC) has made a law not to issue driver's licenses to an applicant under 25 years old. Availability of the products in most motor parks in Nigeria increased the rate of

cigarette smoking and alcohol consumption among the commercial drivers, hence the need for this study.

The theoretical framework of this study was based on William Glasser's choice theory. The choice theory has to do with an individual choice out of five genetically driven needs or survival needs and four fundamental psychological needs of belonging/connecting/love; power/significance/competence; freedom/autonomy, and fun/learning out of the belief system of religious and cultural values. The four components of the choice theory are; acting, thinking, feeling, and physiological (Weinstein, 2000). Commercial drivers choose to drink alcohol or smoke cigarettes out of an internal drive to satisfy one desire or the other. The researchers observed that some commercial drivers drink alcohol and use psychoactive drugs such as tobacco, cannabis, and sedatives because of multiple sex partners and a sense of belonging among their professional peers. Some take kola nut so that they may not dose on staring. Many reasons have been given for smoking cigarettes and consuming alcohol. Some see it as fun or active duty to make as many trips as possible to meet their basic needs. The problem identified among the commercial drivers in Lagos State is the theoretical background of choice theory and conformity among fellow commercial drivers at various motor- parks, which precipitated the need for this study and the research hypotheses to solve it.

Research Hypotheses

The following hypotheses were formulated to guide the study.

1.   There is no significant relationship between cigarette smoking and alcohol consumption among commercial drivers.

2.   Religion significantly influences cigarette smoking and alcohol consumption among commercial drivers.

3.   Age significantly influences cigarette smoking and alcohol consumption among commercial drivers.

Methods

The research paradigm adopted for this quantitative study is post-positivism. The knowledge of post-positivism has to do with the scientific observation of a given phenomenon, say, cigarette smoking and alcohol consumption among commercial drivers. Post-positivism's deductive and inductive knowledge was carefully utilized during data collection within and around the motor parks and the Lagos environment. This philosophy was used as a guide to design the instruments administered to the respondents in this study. The post-positivist philosophical assumptions could be used for quantitative and qualitative research methods (Lather, 2006). It also has a specific focus for a survey and experimental studies (Creswell, 2012). We adopted quantitative cross-sectional research for this study, whereby a sample was drawn from a population at a time (Shaughessy & Zechmeister 2012). A survey design provides a quantitative or numeric description of trends,

attitudes, awareness, or opinions of a population by studying a sample of that population (Creswell, 2012). Survey research is described as the "assessment of the current status, opinions, beliefs, and attitudes through the use of questionnaires or interviews on a known population" (McMillan & Schumacher, 2001). A survey helps the researcher to ascertain the opinions or characteristics of a population of interest (Slavin, 2007).

Lagos State, the location of the study is located in the south-western part of Nigeria with the southern boundary framed by a 180-kilometre long Atlantic coastline, northern and eastern boundaries by Ogun State. At the same time, the Republic of Benin forms the western boundary. It is considered the commercial and economic capital of Nigeria with a population of 9,013,534, according to the 2006 National Population Census. The State comprises twenty local government areas (LGA's). Two adjoining LGA's, one urban and the other rural (Ojo and Badagry), were purposively selected for this study. This was because of their proximity to the border with the Republic of Benin, resulting in many migrant populations, traders, and long-distance drivers. An army cantonment and an international trade fair complex are also located. The total population of registered commercial drivers in Lagos State is about 1,561,876 (FRSC, 2016). A multi-stage purposive sampling of two hundred (200) commercial drivers from Mile 2 to Badagry was used for this study, which serves as the inclusive criteria.

Cigarette Smoking and Alcohol Consumption Questionnaire (CSACOQ) adopted from Genacis lite- H_2O Questionnaire (Greenfield et al., 2014) and available literature on cigarette smoking among commercial drivers were used to gather information from the respondents. CSACOQ was divided into three sections of A, B, and C. Section "A" has to do with the respondents' demographic data. Section "B" is the alcohol consumption description of the commercial drivers, while Section "C" describes the rate of cigarette smoking among the commercial drivers. There are twelve items in section "A". Sections "B" and "C" has twenty items, respectively. The scoring pattern of section "A" is one to two marks depending on the options. The scoring pattern of sections "B" and "C" is two to one. The highest any respondent can score is 40 marks, while the lowest is 20 marks. Respondents with a score of 30 to 40 marks are considered heavy smokers/drinkers. Those with 20 to 29 marks are considered moderate smokers/drinkers, while those with scores ranging from 10 to 19 are considered low smokers/drinkers.

In quantitative research, instrument validity is a quality criterion that indicates the degree of accuracy (Polit & Beck, 2004). Before the questionnaire was administered to the respondents, it was subjected to face and construct validity to correct any grammatical and construct errors and ensure that the instrument appropriately measured what it ought to measure. Instrument reliability is the consistency and dependability of a research instrument in measuring a variable (Brink & Rensburg, 2012). The authors explained further that reliability "is the degree to which an instrument can be depended upon to yield consistent results if used repeatedly over time on the same person or by another researcher". The reliability of an instrument was determined by a correlation measure whose value varies between 0 and 1.99. The nearer the measure is to 1, the higher the instrument's reliability (Brink et al., 2012). To ensure the reliability of the instrument used in this study, a test-retest reliability method was adopted to determine the internal consistency, reliability, and overall reliability of each subsection or construct in the questionnaires. Ethical clearance for the study was collected from the Ethical and Research Committee of Lagos State University before the commencement of the study. Permission was obtained from the National Union of Road Transport Workers (NURTW) before the commencement of the study. Informed consent was obtained from the drivers before the data collection.

Results

The results were presented based on the hypotheses formulated for the study.

Table 1:   Percentages Distribution of Age and Religion of the Respondents [N = 200]

S/N	Variables	No of Respondents	Percentages (%)
1.	**Ages**		
	20-29	16	8.2 %
	30-39	60	30 %
	40-49	69	34.5 %
	50-59	35	17.3 %
	60+	20	10 %
	Total	**200**	**100 %**
2.	**Religion**		
	Christianity	92	46.3 %
	Muslim	103	51.4 %
	Traditional	5	2.3 %
	Total	**200**	**100.0 %**

Table 1 shows that the minimum age of the commercial driver in Lagos State, Nigeria is 24.5 years. Table 1 also showed that the majority of the commercial drivers are between ages 35 to 45 years. Commercial drivers are either Christian or Muslim, according to table 1.

Table 2:   Descriptive analysis of cigarette smoking and other psychoactive substance use among commercial drivers   N = 200

Psychoactive Drugs	No of Respondents	Percentages (%)
Tobacco/Cigarette	61	30.4 %
Caffeine	64	31.9 %
Sedatives	20	10.1 %
Solvents	17	8.7 %
Cannabis	09	4.3 %
Not Smoking	29	14.5 %
Total	**200**	**100 %**

Table 2 shows that the commercial drivers in Lagos, Nigeria used other psychoactive drugs apart from cigarette smoking.

Table 3:   Descriptive analysis of alcohol consumption among commercial drivers [N = 200]

Rate of Alcohol Consumption	No of Respondents	Percentages (%)
Heavy	127	63.7 %
Moderate	31	15.6 %
Occasional/Mild	35	17.7 %
Not Drinking	7	3.5 %
Total	**200**	**100.00 %**

Table 3 shows that the majority of the commercial drivers in Lagos, Nigeria, are heavy drinkers.

Table 4: Pearson Product Moment Correlation analysis of cigarette smoking and alcohol consumption among commercial drivers [N= 200]

Variable	N	Mean	SD	df	t val	Sig.
Alcohol consumption	200	14.43	4.05	198	.602*	0.72
Cigarette Smoking	200	8.32	2.26			

*P > 05

In Table 4, the r calculated .602 at P=.005 is significant. The result made it obvious that a significant relationship exists between cigarette smoking and alcohol consumption among the commercial drivers in Lagos, Nigeria. Consequently, the hypothesis was rejected. This result clearly shows that alcohol use can influence tobacco smoking or vice-versa.

Table 5: Summary table of multiple regression analysis showing the significant joint influence of religion on cigarette smoking and alcohol consumption among commercial drivers

Model	Variable	R	R^2	Beta	t-value	F	P	Sig
	Religion			0.30	.534			<.05
	Cigarette Smoking	0.28	0.02	0.270	2.406	2.10	>.05	<.05
	Alcohol consumption			0.15	.266			<.05

The result in table 5 revealed that there was no significant influence of religion on cigarette smoking and alcohol consumption among commercial drivers in Lagos, Nigeria (R^2 = 0.02; F (3324) = 2.10, p> .05 sig. <.05). The stated hypothesis is thereby rejected.

Discussions

The discussion of the findings of this study was based on the formulated hypotheses tested. Tables 4 rejected the first hypothesis, which stated no significant relationship between cigarette smoking and alcohol consumption among commercial drivers. This finding was in line with the studies of Adewuyi (2015), Ipingbemi (2003), and Adekoya et al. (2011) emphasised that commercial drivers used other psychoactive drugs such as kola nut to keep themselves awake, especially on a distance journey overnight. The possible explanation for this was that cigarettes, drinks, and other psychoactive drugs are available at any time in the park. The commercial drivers even purchase them on credit to pay after the day's work.

Table 5 rejected the hypothesis, which stated that religion significantly influences cigarette smoking and alcohol consumption among commercial drivers. This study is in line with the study conducted by Ogeleyinbo (2015) among Lagos drivers on drunk driving but contrary to that of Dumbili (2013), who reported that traditional religion promotes the consumption of alcohol for rituals, marriage ceremonies, chieftaincy enthronement and the likes especially in the traditional Nigerian settings of the rural dwellers. The likely explanation for this is that commercial drivers live in a cultural setting that promotes alcohol consumption. The data collected for this study rejected this hypothesis because the study's location was in Lagos, a commercial metropolitan city of Nigeria, where Christianity and Islamic religions are the order of the day.

The last hypothesis, which stated that age significantly influences cigarette smoking and alcohol consumption among commercial drivers, was accepted in table 1. The researchers could not find any previous study to evaluate or authenticate this result. Still,

previous studies such as Ogeleyinbo (2015) discovered that drivers were initiated into alcohol consumption from 13.2 years. Laosebikan and Ojediran (2012) put the age of commercial initiation into cigarette smoking and alcohol consumption to 15.44 years plus or minus 2.4 years which is between 13.4 to 17.4 years. All these align with Adewuyi (2014) study of peer pressure and alcohol consumption on adolescents' risks behaviour among secondary school adolescents in Lagos State. Table 1 shows that the minimum age of the commercial driver in Lagos State, Nigeria is 24.5 years, while the majority of the commercial drivers fall between ages 35 to 45 years. The researchers discovered that age influences cigarette smoking and alcohol consumption, especially heavy smokers/drinkers. To authenticate this study, the researchers suggested that another study on the influence of age on cigarette smoking and alcohol consumption of commercial drivers in Lagos, Nigeria.

Conclusions

Based on the findings of this study, the following conclusions could be drawn:

- There is a significant relationship between cigarette smoking and alcohol consumption among commercial drivers.

- Religion has no significant influence on commercial drivers' cigarette smoking and alcohol consumption.

References

Adekeye, O. A., Adeusi, S. O., Chenube, O. O., Ahmadu, F. O.& Sholarin, M. A. (2015). Assessment of Alcohol and Substance Use among Undergraduates in Selected Private Universities in Southwest Nigeria. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20(3), 1-7.

- Age significantly influences cigarette smoking and alcohol consumption among commercial drivers.

Recommendations

The researchers made the following recommendations:

- There is a need for a further research study on the influence of age on cigarette smoking and alcohol consumption of commercial drivers in Lagos, Nigeria.

- There is an urgent need to formulate policies in line with the ten proposed targets of WHO, (2008) resolution on strategies to reduce the harmful use of alcohol and cigarette smoking in Nigeria.

- There is a need for a drunk driving policy in Nigeria.

- There is a need for educational campaigns about the dangers of driving under the influence of cigarette smoking and alcohol consumption.

- Enforcement of maximum legally permissible blood alcohol concentration (BAC)

- We need to stop the sale of cigarettes and alcoholic beverages at the motor park.

Adekoya, B. J., Adekoya, A. O., Adepoju, F. G., & Owoeye, J. F. A. (2011). Driving under the influence among long-distance commercial drivers in Ilorin, Nigeria. *International Journal of Biological & Medical Research, 2*(4), 870-873.

Adewuyi, T.D.O. (2014). *Socio-demographic factors of alcohol consumption among school adolescents in Lagos State, Nigeria.* Being a paper presented on the 40th. Annual Alcohol. Epidemiology Symposium of the Kettil Bruun-Society at Campus Luigi, Lungo Dora Siena 100,

University of Torino, Italy from 9th. - 13th. June 2014.

Adewuyi, T.D.O. (2015). *Peer influence on alcohol consumption and cigarette smoking among undergraduates.* Being a paper presented at the 41st Annual Alcohol Epidemiology Symposium of the Kettil Bruun-Society at Department of Psychiatric and Psychotherapy, Ludwig-Maximillian University, Munich, Germany from 1st - 5th, June 2015.

Awosusi, A. O.; & Adegboyega, J. A. (2015). Alcohol consumption and tobacco use among secondary school students in Ekiti State, Nigeria. *International Journal of Education and Research, 3*(5), 11- 20

Batel, P., Pessione, F., Maitre, C. & Reeff, B. (1995). Relationship between alcohol and tobacco dependencies among alcoholics who smoke. *Addiction, 90*(7), 977-980

Barbosa, F. V., Campos, W. D. & Lopes, A. S. (2012). Prevalence of alcohol and tobacco use among Brazilian adolescents: a systematic review. *Rev Saude Publica. 46*(5), 01-17

Bobo, J. K. & Husten, C. (2000): Sociocultural influences on smoking and drinking. *Alcohol Research and Health, 24*(4), 225-232

Brink, H., van der Walt, C., & van Rensburg, G. (2012). *Fundamentals of research methodology for healthcare professionals* (3rd ed.). Cape Town: Juta.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Merrill.

Dumbili, E. (2013). Changing patterns of alcohol consumption in Nigeria: An exploration of responsible factors and consequences. *A Journal of the BSA Med. Soc. Group, Medical Sociology. 7*(1), 20-33

Falk, D. E., Yi, H & Hiller-sturmhofel, S. (2007). An epidemiologic analysis of co-occurring alcohol and tobacco use disorder: Findings from the national epidemiologic survey on alcohol and related conditions. *Alcohol, Research & Health. 29*(3), 162-171

Fatiregun, B.; Oyo-Ita, N. & Ikpeme (2011). Social determinants of alcohol use among drivers' in Calabar. *Medical Journal Niger Med. J. 52*(4), 244-249.

Federal Government of Nigeria (FGN), (2004). Federal Republic of Nigeria, *Official Gazette 79* (91). Federal Road Safety Commission Act (CAP 141 LFN): National Road Traffic Regulations, 2004. FGN; 2004.

FRSC (2016). Federal Road Safety Commission (FRSC), Lagos State Sector Command. Lagos State Statistic Division.

Grant B. F., Hasin, D. S., Chou, S. P., Stinson, F.S. & Dawson, D. A. (2004). Nicotine dependence and psychiatric disorders in the United States: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry. 6*1, 107–1115.

Greenfield, T. K.; Wilsnack, S. C.; & Bloomfield, K. (2014). *Alcohol's Harm to Others: Multinational Cultural Contexts and Policy Implications* (WHO-Thai Health Version 2.)

Hoffman, J. H., Welte, J. W. & Barnes, G. M. (2001). Co-occurrence of alcohol and cigarette use among adolescents. *Addictive Behaviour. 26*, 63-78.

Hughes, P. H., Brandenburg, N., Baldwin, D. C. J., Storr, C. L., Williams, K., Anthony, J. C. & Sheehan, D.V. (1992): Prevalence of substance use among US physicians. *JAMA, 267,* 2333-2339.

Ipingbemi, O. (2003). Socio-economic characteristics and driving behaviour of commercial drivers in Southwestern Nigerian cities. *The Lancet, 361*

Korieh, C. J. (2003). Alcohol and empire:" illicit" gin prohibition and control in colonial eastern Nigeria. *African Economic History, 31,* 111-134

Katulanda, P., Ranasinghe, C., Rathnapala, A, Karunarane, N., Sheriff, R & Matthews, D. (2014). Prevalence, patterns and correlates of alcohol consumption and its association with tobacco smoking among Sri Lankan adults: a cross-sectional study. *BMC Public Health,* 14, 612-622

Lather, P. (2006). Research as praxis. *Harvard Educational Review, 56,* 257-277

Laseobikan, V. O. & Ojediran, B. (2012). Profile of problems and risk factors associated with Tobacco consumption among professional drivers in Nigeria. *International Scholarly Research Network. ISRN. Public Health.*

McMillan, J. H. & Schumacher, S. (2001). Research in education: a conceptual introduction, 5th ed. (New York: Addison Wesley Longman Inc. In K. Maree (Ed.). 2007. First steps in research. Pretoria: Van Schaik Publishers.

Obot, I. S. (2000). The measurement of drinking patterns and alcohol problems in Nigeria. *Journal of Substance Abuse, 12*, 169-181.

Odejide, A. (2006). Status of drug use/abuse in Africa: A review. *International Journal of Mental Health and Addiction, 4,* 87-102.

Odejide, O. A. (2006). Alcohol policies in Africa. *African Journal of Drug and Alcohol Studies, 5,* 27-39.

Ogeleyinbo, C. (2015). *A study of drink driving in Lagos: From the perspective of law enforcement officers.* Unpublished PhD thesis, Middlesex University, United Kingdom.

Oluwadiya, K. S. (2010). Taking alcohol by deception: An analysis of ethanol concentration of paraga, an alcoholic herbal mixture and factors associated with its use among commercial drivers in an urban centre in Nigeria. *Injury Prevention, 16*, A189-A190.

Oshodin, O. G. (1995). Nigeria. In B. D. Heath (Ed.), *International handbook on alcohol and culture* (First ed., pp. 213-223). Westport: Greenwood Press.

Oluwadiya, S. K. & Akinola, E. A. (2012). Taking Alcohol by deception: an analysis of ethanol concentration of "paraga", an alcoholic herbal mixture in Nigeria. BMC Research Notes. 5(127)

Ozoh, O. B., Dania, M. G., & Irusen, E. M. (2014). The prevalence of self-reported smoking and validation with urinary cotinine among commercial drivers in major parks in Lagos, Nigeria. *Journal of Public Health in Africa; 5,* 316.

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Appraising evidence for nursing practice* (7th ed.). Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins.

Phillips, D. C. & Burbules, N. C. (2000). *Postpositivism and educational research*. Lanham. MD: Rowman & Littlefield.

Seller, S. C. (1985). Alcohol abuse in the Old Testament. *Alcohol and Alcoholism, 20,* 69-76.

Seller, S. C. (1987). Alcohol Abuse in the New Testament. *Alcohol and Alcoholism, 22,* 83-90.

Siegel, L. J. (2000). *Choice theory: From Criminology*. (7th ed.). Belmont, CA: Wadsworth Publishing Co. USA.

Slavin, R. (2007). *Educational research in an age of accountability.* Boston: Pearson Education.

Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2012). *Research methods in Psychology, (9th Eds.).* New York: McGraw Hill

Weinstein, J. (2000). "The Place of Theory in Applied Sociology: A Reflection." *Theory and Science* 1, 1.

World Health Organization (2008). It is time to act: status report on road safety. Geneva: WHO Press.

World Health Organization, (2010). Global status report on non-communicable diseases. 2010. [August 2012]. Available at www.who.int/nmh/publications/ncd_report_full_en.pdf.

World Health Organization, (2012). From burden to best buys: Reducing the impact of non-communicable diseases in low and middle-income countries. Available at www. who.int/nmh/publications/best buys summary.pdf.

World Health Organization (WHO). (2013). *Global status report on road safety 2013: Supporting a decade of action.* Geneva: World Health Organization. Retrieved from http://who.int/violence_injury_prevention/road_safety_status/2013.