



## **Accessibility and Proximity to Drugs as Factors Influencing Drug Use Among Occupational Drivers in Uyo, Nigeria.**

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**Abstract:** *Despite considerable effort directed towards drug use and prevention in Nigeria, there is a dearth of information on usage among occupational drivers. A major concern of this study was on the accessibility and proximity to drugs as factors influencing drug use among tipper drivers in Uyo. One hundred and eleven (111) tipper drivers aged between 18-60 years participated in the study. The drivers were all males selected using convenient sampling technique with the mean (X) age of 36.5. A 2 x 2 factorial design was employed and a 2-way ANOVA was employed for data analyses. The results showed a significant effect of accessibility to drugs as influencing drug use among tipper drivers [ $F(1,107) = 25.48, P < .01$ ]. Similarly proximity to drugs was found to exert a significant effect on drug use among tipper drivers [ $F(1,107) = 5.51, P < .05$ ]. There was no significant interaction effect. The study also revealed the percentage of ease of access and proximity to the drugs under study with alcohol being the most accessible with 93.7%, cigarette 92%, and marijuana being the least accessible 41%.*

**Keywords:** Accessibility, proximity, attitude, drug use, occupational drivers.

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### **1. Introduction**

Psychoactive drugs- a chemical substance that bring about changes in brain function with the resulting effect being alteration in perception, mood, or consciousness Connor Amit, Hutchison, Sutcliffe and Oswald 2015) has been extensively used for recreational purposes, for ritual, spiritual and medicinal purposes. These psychoactive substances often bring about subjective changes both in consciousness and mood, which may offer the user are warding and pleasant feelings. Many of these substances, for example stimulants and depressants can be habit forming, causing chemical dependency and may

lead to substance abuse (MDNA, 2015). Furthermore, psychoactive drug which is structurally similar to methylamphetamine and acts as a central nervous system stimulant, producing mood enhancement, increased energy and other emphatic effects can be abused by users.

Previous studies have found that many reasons contribute to the involvement of individual in the use of psychoactive drugs. Some of the reasons include curiosity, sensation seeking, ignorance of the dangers of drug abuse, a means of forgetting worries, hardship in life and bad experience, impulsivity, without considering the possible consequences, loneliness, poor stress management skills, etc (Gordon, Conley, Gordian, 2013).

Papalia and Olds (1998) also listed a number of characteristics of individuals and environment that make them likely to misuse drugs which include, poor impulse control, association with drug users, favorable attitude towards drug abuse, etc.

Globally, illicit drug use contributes 21% cause – specific Disability Adjusted Life Years (DALYs) for young people age 10-24 years (Gore, 2011). In addition to increased risk of chronic diseases at an older age, smoking, drinking and use of illegal substance are associated with more immediate health hazard such as depression, interpersonal violence, motor vehicle crashes and drowning, risky sexual behaviour and suicide behaviour. The overall effect of alcohol and drug abuse related harm extends beyond the individual to include social and economic cost of harm to families, community and society at large (WHO, 2007). Alcohol abuse or intoxication is implicated in violence both domestic and public, unemployment, financial problem and poverty, drink-driving, road traffic accidents, industrial and work accidents, fires falls and suicide (Crombie, 2007).

One of the major causes of drugs use and abuse is the ready availability of psychoactive substance in relation to alcohol, tobacco and prescription drugs. Availability though is a very complex concept, (it) embraces not only sheer physical availability but also what can be called emotional availability whether it is or not alright to take the drugs (Gossop and Grant, 1991). To a large extent, specific drugs are used because they are available. More social groups use whatever substance they have already access to. The extent of high alcohol, tobacco and marijuana use has unduly been attributed to their levels of availability. In addition, there is evidence that the consumption of drug is influenced by its price (Gossop and Grant, 1991).

Availability can be defined in terms of access (the right and opportunity to use drug) and proximity (nearness of drug) Murray and Perry, (2005) defined availability in terms of

how much time, energy and money must be expended to obtain a commodity (drugs). The more resources required, the lower the availability.

One would assert that the proximity of individuals to illegal drugs market would be directly related to their access to those drugs, opportunity cost of obtaining the drugs, use of drug. What makes this approach naïve is that it ignores the manifold determinants of both drug supply (policing activities) and demand (normative support for use), the effect of which would mitigate or eliminate the connection between access and use (Hodder and Wallace, 1998).

Hodder and Wallace (1998) further stated that an alternative approach to understand the relationship of drugs access to its use is to consider each as partially reflecting the other in the complex dynamics of community system e.g. policing activities and norm against use. Presumably, illicit drug market would not exist without demand nor would demand for illicit drug exist without the drug supplied by the market.

Gassop and Grant (1990) on the other hand asserted that the demand for a given drug is usually related to its price. The cheaper it is the more people are likely to use it. Conversely higher prices should help to reduce consumption level. The validity of this assumption is confirmed by data on alcohol use, which show that per capita consumption calculated from sales figures is inversely related to price changes within a single community and to price differences between different communities (Gassop and Grant, 1990). Accessibility may also refer to social aspects because drugs are more available to some social (e.g. work place) groups than others (Smart, 1980).

Without access, there can be no use and associated problems. As a social rule, when a substance is inexpensive, convenient and easily accessible, usage is more likely to occur, which increases types and rates of associated problems. Conversely, when a substance is expensive, inconvenient, and inaccessible, people are less likely to use it and problems types and rates are lowered.

Olsson (1995) drew the following conclusion, "If drugs are readily available, if the climate of the society is permissive and if subjective availability includes a readiness to try drug or abuse drugs, then large numbers are going to risk it, even if the individual's disposition (e.g. in terms of heredity, childhood, environment or personality) are not obviously present.

Factors in the social environment that are associated with increased drug use include family or peer approach or tolerance to drug use, pressure from family or peers than parents, ready access to drugs. There is evidence that these associations are fairly

constant across ethnic group with only a few exceptions (Jessor, 1976). Furthermore, intrapersonal factors that are associated with drug use include greater value on independence, lower value on achievement, lower expectations for academic achievement, greater tolerance of deviant behaviour, lower religiosity, greater criticism of social institutions, greater alienation from social conformity, greater receptivity to new ideas and experiences, greater interest in creativity and spontaneity, greater expectation of failure, low sense of psychological well being expressed through greater apathy or high levels of distress and lower conformity to social conventions (Murray, et al, 2005.)

Murray and Perry (2005) posited that identified socio-environmental antecedent suggest that drug users exist in an environment characterized by multiple models of drug users and by significant others or peers who tolerate or encourage drug use and by ready availability of drugs. Thus, work place exposes individuals to direct interaction with and association and experience with drug uses.

### **1.1 Statement of the Problem**

Motor vehicle accident is a significant cause of mortality and morbidity in our environment and driving under the influence of psychoactive substance such as alcohol has been implicated in most of the occurrence of road traffic accident, especially among occupational drivers.

In the past decade, the number of people killed and fatalities recorded have been alarming, the zenith of this menace was hit by the year 1986 (Obot 1987, Dagona, 1992). This trend of events led to the establishment of Federal Road Safety Commission (FRSC) in 1988.

Globally, the association between psychoactive substance use and accidental injury or death has been acknowledged, with efforts being made to reduce accident rates in all means of transportation. The degree of recklessness in driving by occupational drivers in this part of the country has been a concern to many because of the dangers they pose to themselves and other road users. It is a common belief that some of these occupational drivers operate under the influence of psychoactive substances. But there is yet no study that attempts at investigating issue of availability, accessibility and proximity of drugs of these occupational drivers toward their drug use and the rate at which they are exposed to psychoactive substances. This research is therefore an attempt to look at how easy and how close it is for occupational drivers to obtain drugs and what their attitude is towards drug. Thus, these research questions are postulated: Does accessibility to drug influences occupational drivers' attitude towards drug use? Does proximity to drug influences occupational drivers attitude towards drugs use?

## 1.2 Objectives of the Study

This study is aimed at investigating whether there is a relationship between accessibility and proximity to drug and attitude towards drug use.

Specifically, this study is set to answer the following research question:

- (i) To determine whether accessibility to drug influence the attitude of occupational drivers toward drugs
- (ii) To explore the effect of proximity to drugs on the attitude of occupational drivers towards drug use.

## 2. Theoretical Framework.

### **The Triadic Theory of Influence TTI (Flay and Petraitis, 1994)**

The Triadic Theory of Influence argues that three basic types or stream of influences contribute to substance use and its prevention (Flay and Petraitis, 1994). First there are cultural factors that might contribute primarily to attitudes towards substance use. An unfavourable (or favourable) media depiction is just one example of cultural/attitude influence, and belief or expectations about substance use would be another. Second, there are social or interpersonal factors that might contribute primarily to the social pressures people experience that lead them to believe that substance use is either acceptable or not. Growing up in a home where alcohol is not (or is) consumed is an example of such an influence. Having negligent parents or bonding with substance-using peers are two more examples of situational or micro environmental factors that might contribute to social pressures to use substances, third, there are intrapersonal factors that might affect one's motivation to use or abstain from substance or might affect one's ability to resist pressures to use substance. Weak impulse control, general sensitivity to substances, and self medication are example of intrapersonal influences.

Consistent with TTI, the major influences on adolescent smoking are social environments and three types of psychological factors (1) Interpersonal (2) Attitudinal and (3) Intrapersonal (Flay and Petraits, 1994). TTI states that examining these factors at the distal level helps in understanding the intermediate causes of smoking behaviour (Petraits, Flay and Miller, 1995). Distal-level social environments refer to the behaviours of influential role models (Petraitis et al, 1995). These include having (a) Parents who smoke and use drug (b) Close friends who use drug. Distal-level interpersonal factors refer to emotional attachments to influential role models (Flay et al, 1999). These include having (a) a weak desire to comply with parents (i.e. parent-non compliance, Martin et al, 1994) and (b) a strong desire to comply with friend (Santor, Messervey and Kusumakar, 2000). Distal-level attitudinal factors refer to general values that contribute to attitude towards drug use. These include (a) a weak desire for achievement (i.e. low achievement

motivation) and (b) Rebelliousness derived as the extent to which adolescents prefer behaviour that does not conform to authority in general (Santor et al, 2000).

### **3. Methods**

#### **Participants**

The participants for this study were one hundred and eleven occupational drivers drawn from four major sand shores around Uyo. These are Mmanta, Okpum, Ekpri Nsukara and Ntak Inyang. Participants were all males selected through convenient sampling, that is those who were present at the shore waiting for their vehicles to load or waiting for their turn and who were willing to participate in the study. The ages of the participant ranged from 18-60 years, with the mean age of 36.5 years.

#### **Instrument**

The researcher developed the instrument used for this study. The instrument measures accessibility, proximity and attitude towards drug use. The instrument is made up of 4 parts. Part one deals with demographic data, part 2 measures accessibility, part 3 measures proximity and part 4 measures attitude towards drug use. Part 2 and 3 are simple ranking and frequency table while part 4 is a 22-item questionnaire.

#### **Design**

A 2 x 2 factorial design was used so as to be able to test for the effect of the 2 levels of the independent variables.

#### **Statistics**

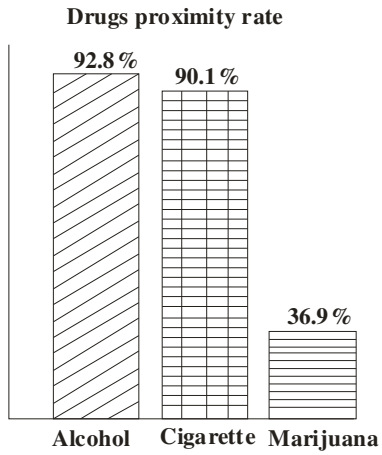
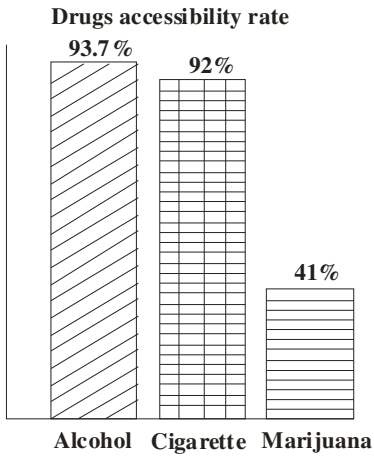
The statistics used was a 2 way ANOVA for unequal sample size.

### **4. Results**

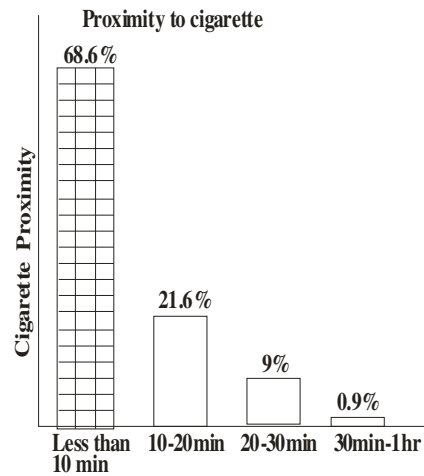
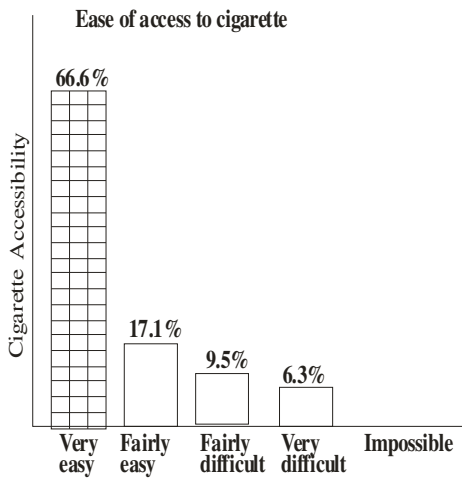
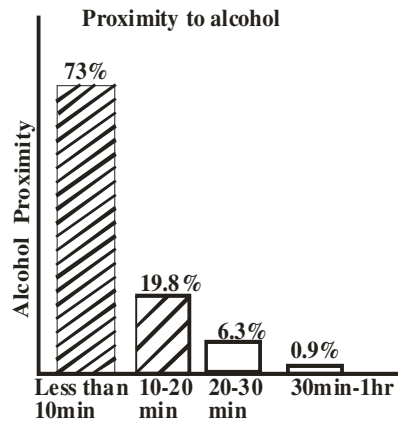
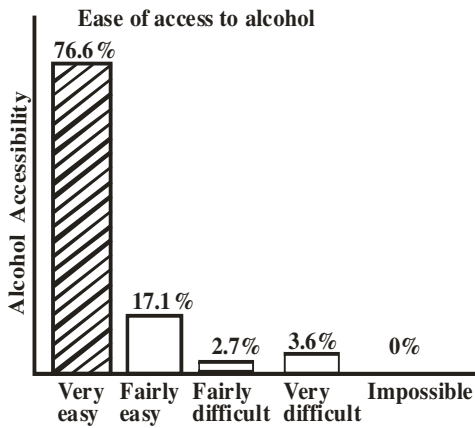
The diagrams below show the percentages of accessibility and proximity to drug.

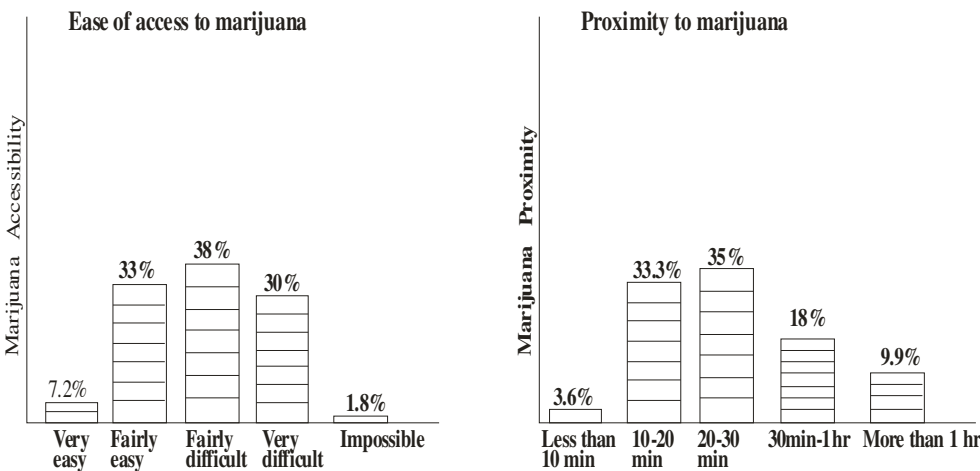
The diagrams next page, show the accessibility rates to the various drugs under study percentages, as well as their level of proximity.

Alcohol was the most accessible (93.7%) and with the highest proximity percentage (92.8%) followed by cigarette with (93%) and (90.1%) for accessibility and proximity respectively. Marijuana was the least accessible drug and with the lowest accessibility and proximity of (41%) and (36.9%) respectively.



**Ease of Access to Individual Drugs and Proximity**





The diagrams above show the ease of access to individual drugs and proximity. For instance 76.6% of the respondent admitted that alcohol is very easy to obtain, 17.1% said it was fairly easy while 2.7% and 3.6% admitted it was fairly difficult and difficult respectively. No respondent however indicated it was impossible for him to obtain alcohol. The same explanation applies to the other charts.

**Table 1: Table of Harmonized means showing the influence of accessibility and proximity to drug on attitude to drug use.**

		Drug Accessibility			
		High	Low	Accessibility	Total
		Accessibility (a <sub>1</sub> )	(a <sub>1</sub> )		
Proximity	High (b <sub>1</sub> )	n = 98	n = 6		n = 104
		$\bar{X}$ = 73.22	$\bar{X}$ = 26.69		$\bar{X}$ = 66.53
		S.D = 15.23	S.D = 20.99		S.D = 18.70
	Low (b <sub>1</sub> )	n = 4	n = 3		n = 7
		$\bar{X}$ = 45.46	$\bar{X}$ = 27.22		$\bar{X}$ = 35.32
		S.D = 16.05	S.D = 2.08		S.D = 16.84
Total		n = 102	n = 9		n = 111
		$\bar{X}$ = 71.51	$\bar{X}$ = 26.87		$\bar{X}$ = 63.02
		S.D = 16.04	S.D = 16.82		S.D = 20.29

As revealed in table 1, the mean score for high accessibility is 71.51 while the mean score for low accessibility is 16.82. Participants with high accessibility percentage had a higher mean score on attitude towards drugs than participants with low accessibility percentage. This meant that the high accessibility to drug influenced attitude to drug positively while low access to drug influence attitude to drug use negatively.



For proximity, participant with high proximity to drugs also had a higher mean score of 66.53 for attitude towards drug use whereas participants with low proximity had a mean score of 35.32. This meant the closer a participant was to the drug the more positive his attitude towards drug use was and the less closer a participant was to drug, the more negative his attitude towards drug use.

**Table 2: 2 way-ANOVA Summary Table showing the influence of accessibility (a) and proximity (b) on attitude to drug use**

SOV	SS	Df	MS	F-test	P
A	6069.198	1	6069.198	25.488	<0.01
B	1312.863	1	1312.863	5.513	<0.05
AB	613.266	1	613.266	2.575	>0.05
S/AB	25479.173	107	238.123		

The result indicates that the high accessibility group differed significantly from the low accessibility group in their attitude towards drug use.

As stated in the hypothesis one, high access to drug will positively influence attitude towards drug use, participants with high access to drugs also had a higher mean score for attitude towards drug use, by implication, a positive attitude towards drug use. Hence the 1<sup>st</sup> hypothesis was significant  $f = 25.46$ ,  $p < 0.01$  thus accepting the 1<sup>st</sup> hypothesis.

The proximity groups also differed significantly. Participants with high proximity to drugs had higher mean score on attitude towards drugs than participants with low proximity. The second hypothesis was also significant  $f = 5.51$ ,  $p < 0.05$  and was accepted. An interaction influence of accessibility and proximity was not significant  $f = 2.51$ ,  $p > 0.05$ .

## 5. Discussion

The hypothesis 1 that easy access to drugs will positively influence attitude towards drug use was statistically significant, this was in tune with the assertion by Oslon(1995) which stated that if drug is readily available, if the climate in the society is permissive, then large numbers are going to risk using drugs.

Smart (1977) in a study involving more than 4,600 school youths to determine the effect of perceived availability on students' self reports on drug use, found that perceived availability had a significant effect on students self report of drug use.

The second hypothesis that proximity to drug will influence the attitude towards drug use, was also significant at  $f = 5.51$   $p < 0.05$ . That meant that the closer the occupational

drivers are to drugs, the more positive their attitude would be towards its use. This agreed with the survey using high school student by National Survey on American attitude on substance abuse XVII, using 800 high school students, it was found that 86% of American high school students said that some classmates drink, use drugs and smoke during the school day. Additionally, 44% of high students knew students who sold drugs at their school. Asked what drugs students sold on school grounds, 91% said marijuana 24% said prescription drug and 91% reported cocaine while 7% reported ecstasy. The survey also revealed that 52% of high school students said that there was a place on school ground or near school grounds where students can go to use drugs, drink, or smoke on school day.

The result obtained in the study also showed the level of exposure of occupational drivers to psychoactive substances, with access to alcohol and cigarette as high as 93.7% and 93% respectively. This finding is in line with the study conducted by Bimisio, (2007) to determine the prevalence of drug use among long distance drivers using 95 respondents, the result showed that the most currently used psychoactive substances were mild stimulants – cigarette, alcohol.

In a study conducted across the European Union member nations by the European commission using over 12,000 youths using telephone interview web-based assisted telephone interview (WebCATI). Findings showed that having access to alcohol and tobacco seemed to cause no problem for young people in European Union. A vast majority thought that it would be very easy for them to obtain alcoholic drinks (82%) or tobacco products (81%). These numbers did not significantly differ across age group.

The ease of access and proximity to marijuana was seen to be lower (41%) and (36.9%) respectively. This could be explained in terms of the fact that marijuana is an illegal drug and its sales and use is punishable by law, whereas alcohol and tobaccos are not illicit drugs. But the degree of access to marijuana despite the illegality was still comparatively high.

Relating to marijuana in particular, several researchers have surveyed the general driving population about their use of the drug prior to driving. Three Canadian studies have shown drivers to report having driven a vehicle during the previous 12 months under the influence of marijuana at rates of 1.5% to 2.9% 6-8. A recent review of drug use impaired driving and traffic accidents by the European Monitoring Centre for Drugs and Day Addiction (EMCDDA) revealed that between 0.3% and 7.4% of drivers tested positive for marijuana across seven roadside surveys conducted between 1997 and 2007 in Australia, Denmark, the Netherlands, Norway, the United Kingdom and the United States

using blood, urine or saliva tests (309% on average; Australia had the lowest rate among these studies).

## **6. Conclusion and Recommendations**

This research was aimed at investigating the influence of accessibility and proximity to drug on attitude toward drug use among occupational drivers in Uyo.

One hundred and eleven participants, all males were used for the study using convenient sampling, with the mean age of 36.5. The instrument used for the study was developed by the researcher. Pilot test was carried out using 20 drivers to test the validity and reliability of the instrument. Cronbach's alpha coefficient of 0.95 was obtained.

The hypothesis that easy access to drug will have a positive influence on attitude towards drug use was found to be statistically significant  $F(1,107) = 25.43, p < 0.01$ ) also the second hypothesis which stated that proximity to drug will influence attitude to drug use was found to be statistically significant at  $F(1,107) = 5.51, p < 0.05$ ) there was no significant interaction effect of accessibility and proximity to drugs on attitude towards drug use  $F(1,107) = 2.57, p > 0.05$ .

It has been proved that occupational drivers have high access and proximity to psychoactive substance and also have positive attitude towards drug use. From the study, it is observed that drink/drug driving is common among occupational drivers. There is, therefore, the need for public awareness campaigns on road safety and health consequences of psychoactive substance to occupational drivers. Government and agencies involved like Federal Road Safety Commission (FRSC) and National Drug Law Enforcement Agency (NDLEA) should enforce laws on driving under the influence of alcohol.

There should be regular monitoring of Blood Alcohol Concentration (BAC) of drivers and defaulters punished. Government should regulate the price of legal drugs such as alcohol and cigarette, this means ensuring that those who drink do so at lower levels, particularly those drinking at chronic, heavy and risky levels. These heavy drinkers are responsible for consuming most of the alcohol sold and it is cheap alcohol that they predominantly choose to drink. The rise of very cheap, affordable alcohol has led to an increase in consumption and hence a tripling of alcohol related mortality over the years.

This leaves government with a clear policy choice to take concerned, evidenced-based and consistent action to reduce drug abuse to a much lower level or to allow wholly avoidable drug related deaths to continue to rise.

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