

Assessment of Alcohol and Substance Use among Undergraduates in Selected Private Universities in Southwest Nigeria

Adekeye, Olujide A.¹, Adeusi, Sussan O.¹, Chenube, Olufunke O.², Ahmadu, Frederick O.³ and Sholarin, Muyiwa A.¹

1, Department of Psychology, Covenant University, Ota, Nigeria,

2, College of Education, Agbor, Delta State, Nigeria

3, Department of Sociology, Covenant University, Ota, Nigeria.

Abstract:

Introduction: The use of alcohol dates back to time immemorial. The use of alcohol and other substances such as cannabis, nicotine, ecstasy and other amphetamines among students in tertiary institutions is widespread. Use of alcohol and other substances has negative effects both on its user and the society at large; hence, the urgent need to identify factors that contribute to the continued use of these drugs

Methodology: 431 students between ages 15 and 25 ($n=431$, mean=18.7 (+/-2.3 years) were randomly selected from four private tertiary institutions in Southwest Nigeria. An adapted and validated version of the World Health Organization (WHO) questionnaire on drug use surveys was employed for data collection. Data collected were analysed using descriptive and inferential statistics.

Results: Amongst the respondents, cigarette smoking (81%) and alcohol (72%) use had the highest prevalence followed by use of coffee, energy drinks and kolanut (69%). Past and current use of alcohol occurred more among the males. There was no significant contribution of parental use ($\beta = -.145$; $t = 1.813$; $p > 0.05$) and peer influence ($\beta = 0.006$; $t = 0.164$; $p > 0.05$) on student's use of alcohol, however, age ($\beta = -.338$; $t = 4.140$; $p < 0.005$) was a strong predictor of students use of alcohol and other substances.

Conclusion: There is need for urgent public health preventive intervention on our campuses. More educational campaigns on the negative consequences of alcohol and substance use is advocated. The use of alcohol and other substances poses a grave challenge to the future of our future generations. It should be discouraged by all.

Keywords: Alcohol, substance use, universities, young people, Nigeria.

I. Introduction

Since the beginning of history, humans have searched for substances that would sustain and protect them and also act on the nervous system to produce pleasurable sensations. Drugs are believed to provide pleasure because they give inner peace and satisfaction, relax the muscles and heighten sensation (Cloninger, Sigvardsson & Bohman, 1988; Santrock, 2005). College students in Nigeria experiment with drugs without knowing which drug to take, when to take it and how to take it (Adekeye, 2012), and presently, risky alcohol use among university students has become a serious public health issue in Nigeria (Ekpenyong & Aakpege, 2014). Youth's use of drugs, alcohol and other substances is quite alarming and several researchers have reported alcohol as the drug most often used by young people. Studies have asserted that alcohol is as old as human history and in traditional societies; it was not out of place for alcohol to be brewed and served at parties and ceremonies for both adults and the young ones with the younger population enjoying adult supervision (Smart, 2007; Obot, 2000; Oshodin, 1995 & vanWolputte and Fumanti, 2010). To corroborate this assertion, Awoyinka (2012) noted that history has revealed that alcohol has been in existence in all cultures of the world, and it is believed to be the first known chemical mood modifier. In African traditional religion, alcohol occupies a prominent position in the worship of deities.

Two theories served as a background for this study- the Alcohol expectancy and the Gateway Drug theory (GDT). Alcohol expectancies refer to the anticipated behavioural, cognitive, and affective consequences of drinking. They are an individual's expectations about the effects that alcohol consumption will have on him or her. Alcohol expectancy theory relies heavily on behavioural explanations of drinking, and social influences such as family, peers, and modeling of alcohol use and these are purported to heavily impact alcohol related beliefs (Christiansen, Goldman and Inn, 1982). Subsequent research has demonstrated that alcohol expectancies influence drinking patterns across a number of populations, including children, adolescents, college students, and alcoholics. That is, a child's beliefs about the effects of alcohol predict his or her consumption later in life (Dumbili, 2013; Yu, 2003). The second theory on which this study is premised is the Gateway Drug Theory (GDT). The GDT is a proclamation that the use of softer drugs will lead to the use of harder drugs. Pudney (2002)

propounded that the use of less harmful substances may lead to a future risk of using more dangerous hard drugs and /or crime. To corroborate Pudney's hypothesis, Choo, Roh, and Robinson (2008), reported that increased involvement with legal drugs such as alcohol precedes initiation into the use of most hard drugs.

Kirsh (1999) noted that expectancies are considered to be an important determinant of behaviour. These theories presuppose reasons why young people drink. The university environment is free and young people often use substance to reassure themselves that they are able to express their freedom, some for the first time in their lives. Modelling from adult figures and seeking a "high", rebellion, which is a part of normal adolescent processes and perception of drugs as socially acceptable are all denominators of alcohol expectancy. Many adolescents use alcohol experimentally, sometimes frequently and sometimes consuming multiple drinks per occasion, without engaging in other problem behaviours or experiencing immediate negative consequences (Getz and Bray, 2005). It is a popular belief and equally a strong conviction among higher education students that the university is a place of freedom and the perceived freedom ranges from academic to social, relationship, religious, and speech. The use of alcohol and other substances is most prominent in tertiary institutions where we have academic freedom and students do things at their own free will.

Youths who are exposed to/ or who observe adults who drink and smoke may want to experiment to see how it feels (Adekeye, 2012). If intervention is not quickly provided, this may signal the beginning of drug use and subsequently drug abuse and dependence. A major factor in the use of drugs by adolescents is concerned with sensation seeking and risk-taking tendencies and these tendencies are part of the normal developmental process for young people (Adekeye, 2012). Youths or college students are in the stage of their lives where they experiment and look for new experiences, they want to try things out for themselves rather than relying on information provided by others. This sets them up to be vulnerable to the temptation to experiment with alcohol and other drugs especially psychoactive drugs.

A drug is considered as a substance that modifies perceptions, cognitions, mood behaviour and general body functions (Balogun, 2006). Many college students use legal drugs such as caffeine, nicotine or alcohol without much thought because their use is socially acceptable. The use of tobacco, alcohol, stimulants and other substances is a worldwide phenomenon. Youths 'get high' from abusing substances such as inhalants, alcohol and cannabis among others. It is often assumed and theorized that adolescent's move and progress from legal to illegal and from less serious to more serious drugs.

In a study, Adelekan, Abiodun, Obayan, Oni and Ogunremi (1992) found that most commonly used substances with their lifetime prevalence rates were salicylate analgesics (95.2%), alcohol (77%), stimulants (69.2%), antibiotics (63.3%) and cigarettes (37.4%). Relatively low use was recorded for cannabis, organic solvents, hallucinogens, cocaine and narcotic analgesics. A study conducted among medical students in a Nigerian University shows that the most currently used substances were mild stimulants (33.3%), alcohol (13.6%), sedatives (7.3%) and tobacco (3.2%) (Makanjuola, Daramola and Obembe, 2007). High rates of alcohol use are also associated with risky sexual behaviour among University students. In a Nigerian study, Obot and Ibanga (2002) reported that over 97,000 University students are victims of alcohol-related sexual assault or alcohol abuse while several others reported being too intoxicated to know whether or not they consented to having sex (Obot, 2000). The use and abuse of alcohol has implications on the health status of students in schools, for instance, it is the cause of many social and health problems, such as increase in crime rate and high proportion of accidental injury. The thrust of this study is to determine the prevalence and predictors of alcohol and substance use among undergraduates in Nigerian universities.

Research Objectives

This research focused on two main objectives:

1. To determine the prevalence of alcohol and substance use among undergraduates in Nigerian universities
2. To explore the relationship between parental use, peer influence and gender on students' use of alcohol and other substances

Research Statements

Based on the research objectives, the present study aims to provide answers to the following:

1. Investigate the prevalence of alcohol and other drugs/substances used by students
2. Identify the reasons for drinking alcohol /substance use among students
3. Investigate the effects of the intake of alcohol and other substances
4. Identify predictors of the use of alcohol and other substances

Research Hypothesis

There is a significant combined contribution of parental use, age and peer influence on student's use of alcohol and other substances?

II. Methods

Participants:

This is a cross-sectional survey. Four hundred and thirty one (431) students were randomly selected from two frontline private universities in Southwest, Nigeria. A stratified random sampling was employed in selecting the respondents to cater for demographic variables such as current class of respondents, gender, age and parental use of alcohol and other substances. Participants' inclusion criteria included being of at least 15 years and not more than 25 years, and students in their sophomore and senior levels (2001, 3001 and 4001 for those doing a 5 year course). Of the 431 students, 306 (71%) participants were male and 125 (29%) were females. Participants' mean age was 18.7 years (SD 2.3 years). These and other demographic characteristics of the participants are presented in Table 1.

Ethical Consideration

Prior to administering the questionnaire, the purpose of the study was explained to the participants. Participation was voluntary and there was no incentive given for participation. Those who agreed to participate were made to sign a consent form. Anonymity was assured by asking participants not to write their names on the questionnaire forms.

Measures

Parental use and peer influence

Parental use of alcohol and peer influence was measured using alcohol assessment questionnaire (AAQ). Some of the items for the AAQ were adapted from the World Health Organization (WHO) questionnaire designed for drug study among student population.

Reasons for Drinking Alcohol /Substance Use, Effects of the intake of Alcohol and other Substances and the prevalence of alcohol and other drugs/Substances were measured using open-ended question style where the participants provided responses to items such as "lists the drugs you have taken in the past 30 days including drinks, coffee and tobacco. The open-ended questions were pilot-tested by twenty-seven (27) students from a public university.

Psychometric Features

The alcohol assessment questionnaire (AAQ) was adapted from WHO documents and other items were generated from literature review. Twenty-one (21) items were initially generated but after preliminary study including expert opinions, the items were reduced to 18 and finally to 15 items after the pilot study analysis. The AAQ was pilot tested by administering it to 30 students who were not part of the study. The essence was to ensure that the items were not ambiguous and that they were appropriately worded. The AAQ has discriminant validity with the Family Adaptability and Cohesion Evaluation Scales (FACES IV, Olson & Gorall, 2006). The FACES IV is a 42-item self-report questionnaire measuring cohesion and flexibility. Some sample items in the AAQ include: I use alcohol and other substances because my friends do them, if a course mate or friend offer me alcohol or cigarette, I would drink or smoke, has your father taken any alcoholic beverage, how often does he take it ... The reliability of the AAQ was ascertained by employing the test-retest reliability (three-week interval) method using the Cronbach's Alpha. The test-retest returned a coefficient of 0.79 which was considered adequate for the conduct of the study.

Procedure for Data Collection/Analysis

The questionnaire forms were administered to the respondents with the aid of graduate students who are trained research assistants. The questionnaires were administered during general classes that bring students in a particular level together, and collected on the spot. This ensured 100% response rate. The data were expressed as both descriptive and inferential statistical methods, such as frequency counts and percentages and regression analysis and a P-value of ≤ 0.05 was considered as significant. All statistical analyses were performed using SPSS (SPSS version 17 for Windows, SPSS Inc., Chicago, IL).

III. Results

Table 1: Socio-Demographic Characteristics of Respondents

Sex of Participants	n = 431	Frequency	Percent
Male		306	71
Female		125	29
Total		431	100.0
Age of Participants	Mean Age = 18.7 years		
15-19		245	57
20-25		186	43
Total		431	100.0
Use of Alcohol and other substances			

Last 12 months	397	92
Past 30 days	186	43
Average Age of First drink/drug use	17.6years	

Table 1 reveals that more than half of the respondents were males (71%) and between the ages of 15 and 19 (57%). The data further revealed that there was less use of alcohol and other substances in the past 30 days (43%) as compared to the last 12 months (92%).

Research Question 1: What are the Reasons for Drinking Alcohol /Substance Use?

Table 2: Reasons for Drinking /Substance Use

Reasons for Drinking /Substance Use	Rank	Frequency (%)
To be bold and strong	1	378 (88%)
To enjoy living (life)	2	307 (71%)
My friends do it	3	298 (69%)
Curiosity(to see how it feels)	4	281 (65%)
My family members drink and/or smoke	5	211 (49%)
To get away from worries	6	191 (44%)
Because alcohol and drugs are sold nearby	7	157 (36%)
Ignorance	8	92 (21%)

Table 2 indicates reasons why students drink alcohol and use drugs. Majority of adolescents (378 or 88%) take drugs because it makes them bold and strong. This was quickly followed by 71% who reported that they use drugs to enjoy life, 298 indicated they drink because their friends drink too. More than half of the respondents (65%) indicated that they take drugs out of curiosity, while 211 students take drugs because family members drink and/or smoke.

Research Question 2: What are the Effects of the intake of Alcohol and other Substances?

Table 3: Effects of Alcohol and other Substances

Effects	Frequency (%)
1. Gets us into trouble	207 (48%)
2. Improves my grades/academic performance	121 (28%)
3. Reduces my grades/academic performance	220 (51%)
4. Interfere with quality of sleep	168 (39%)
5. Leads to more cravings	250 (58%)
6. Depresses me	194 (45%)
7. It makes me feel high	289 (67%)
8. It makes me overcome my problems	237 (55%)

Table 3 shows the effects of alcohol in the life, activity and educational attainments of students. Majority (67%) reported that it makes them feel high. Some claim that drugs enable them to overcome their problems (55%). Academically, 121 indicate that taking alcohol improves their grade while more than half of the respondents (51%) reported a decline in academic performance. Interestingly, 250 (58%) reported that taking alcohol and other drugs leads to continuous craving for these substances.

Research Question 3: What is the Prevalence of Alcohol and other Drugs/Substances used by Students?

Table 4: Substances often used by Students

Substances used by Students	Frequency (%)
Alcohol	310 (72%)
Cigarettes/Tobacco	349 (81%)
Cocaine/Heroin/Morphine	52 (12%)
Indian hemp (Marijuana)	185 (43%)
Coffee/Energy drinks/Kolanut	297 (69%)
Tranquilizers	73 (17%)
Inhalants	34 (8%)

Table 4 shows the types of drugs most abused by the sampled university students. Cigarettes constituted the most used substance (349 or 81%), followed by alcohol represented by 310 or 72% of participants. Other drugs that are used include coffee and energy drinks (69%) and marijuana (43%). Few students reported ever taking cocaine (12%), tranquilizers (17%), and inhalants (8%).

Research Question 4: Are there Age and Gender differences in the use of alcohol and other substances?

Table 5: Age and Gender differences in the use of alcohol and other substances?

Substances used by Students	Male (%)	Female (%)	Younger (%)	Older (%)
Alcohol	263 (85)	47 (15)	153 (49)	157 (51)
Cigarettes/Tobacco	288 (83)	61 (17)	233 (67)	116 (33)
Cocaine/Heroine/Morphine	52 (100)	-	13 (25)	39 (75)
Indian hemp (Marijuana)	168 (91)	17 (9)	133 (72)	52 (28)
Coffee/Energy drinks/Kolanut	219 (74)	48 (16)	128 (43)	169 (57)
Tranquilizers	71 (97)	2 (3)	32 (44)	41 (56)
Inhalants	34 (100)	-	21 (62)	13 (38)

Table 5 indicates that more males than females use alcohol and other substances. For example, in this study, 85 and 83 percent of male students drink alcohol and smoke cigarette respectively. Older students drink more alcohol (51%) while the younger ones as denoted by 15 to 19 years smoke more (67%). Older students take more of coffee, energy drinks and kolanut (57%) while younger students smokes hems (72%).

Research Hypothesis

There is a significant contribution of parental use, age and peer influence on student’s use of alcohol and other substances

Table 6: Relative Contribution of the Independent Variables to the Prediction of Alcohol and substance use

Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t-ratio	Sig.
	B	Std. Error	Beta		
(Constant)	3.015	.998		3.022	.003
Age	-.338	.082	-.200	4.140	.000
Parental use	-.145	.080	-.087	1.813	.070
Peer influence	-.006	.038	-.008	.164	.870

Dependent Variable: Students’ use of Alcohol and other Substances

Table 8: Regression Analysis on Age, Parental use, Peer influence and Students’ use of Alcohol and other Substances

R: .213 R²: .045 R² Adj: .039 Std Err: .82167					
Sources of Variation	Sum of Square	df	Mean Square	F	Sig.
Regression	13.667	3	4.556	6.748	.000
Residual	288.286	427	.675		
Total	301.954	430			

- a. Predictors: (Constant): Age, Parental use, Peer influence
- b. Dependent Variable: Students’ use of Alcohol and other Substances

Table 7 reveals that parental use of alcohol ($\beta = -.145$; $t = 1.813$; $p > 0.05$) and peer influence ($\beta = 0.006$; $t = 0.164$; $p > 0.05$) were not significant predictors of students use of alcohol and other substances. However, age ($\beta = -.338$; $t = 4.140$; $p < 0.005$) was a strong predictor of students use of alcohol. Table 8 reveals that when the three predictor variables were entered into the regression model at once, there was a significant contribution of age, parental use of alcohol and peer influence on students use of alcohol and other substances ($r = .0213$, $r^2 = .045$; $F(3, 427) = 6.748$; $p > 0.005$). In this study, 4.5 percent of the variation in students’ use of alcohol and other substances appears to be accounted for by age of the students, parental use of alcohol and peer influence. The hypothesis was sustained for age but rejected for parental use of alcohol and peer influence.

IV. Discussion

In this study, alcohol (85%), smoking cigarette (83%), and drinking of coffee (74%) were the most consumed substances by the students. This result supports those of earlier research that reports more use of alcohol (47.9%), tobacco (43.8%) and marijuana (20%) among their sample (Olusola and Adegboyega, 2012). There were noticeable differences between older (20-25 years) and younger (15-19 years) respondents in the use of drugs. As expected, there were more male users of alcohol and other substances with females showing some preference for cigarettes (17%), coffee (16%) and alcohol (15%).

Past studies have linked parental use of alcohol and subsequent use by children (Hawkins, Catalano and Miller, 1992). Parental use of alcohol frequently predicts adolescent alcohol use (Getz & Bray, 2005). In this study, regression analysis show that only age of the respondents predicted drug use while parental use and peer influence were not significant. Although when all the three variables were entered at once, there was a combined effect. Studies differ in this respect. For example, Hawkins and Catalano (1990) argued that the two risk factors that are the strongest predictors of adolescent drug use are early initiation and having friends who use drugs. Studies show that adolescents are introduced to drugs through different means (parents, adults and friends) and for different purposes, and during adolescence, the amount of influence that parents and peers have varies (Adekeye, 2012). According to McBroom (1994), adolescents who do not do drugs or drink alcohol tend to come from families who are less likely to use drugs and alcohol while Drapela, Gebelt & McRee (2006) reports that peer associations are important determinants of adolescent smoking behaviour.

Drinking during most of the important social events was characteristic of many traditional Nigerian communities (Odejide and Olatawura, 1977 cited by Gureje & Olley, 1992). There are several reasons for drinking as reported in this study. Most respondents indicated these three reasons among others- to be bold and strong (88%), to enjoy life (71%), and to see how it feels (curiosity, 65%). This shows the positive and non-positive reasons advance for drinking among university students in Nigeria. Most people drink for social purposes and for emotional escape or coping purposes (Brennan, Walfish, and AuBuchon, 1986) and for social motives such as to make a party more enjoyable (Kuntsche, Knibbe, Gmel and Engels, 2005).

The effects of alcohol and other substance use as evidenced in this study ranges from alcohol “gets us into trouble, leads to more cravings, reduces my grades/academic performance and makes me feel high”. From the self-report, 45 percent of the students reported some form of depression from alcohol and drug use. According to Groves, Stanley and Sher (2007), chronic alcohol consumption amongst adolescents increases feeling of depression while Brennan, Walfish and AuBuchon (1986); Borsari, Murphy and Barnett (2007) and Saltz and Elandt (1986) reported that young people who drink in great quantities on a regular basis and who experience more negative consequences as a result of their drinking are more likely to be classified as impulsive, dominant, tough-minded, extraverted and sensation, pleasure or novelty seeking individuals. World Health Organization (WHO, 2014) reported that the impact of the harmful use of alcohol reaches deep into society. Thus, the harmful use of alcohol is a global problem which compromises both individual and social development, and it results in 2.5 million deaths each year. Alcohol is associated with many serious social and developmental issues, including violence, child neglect and abuse, and for adults, absenteeism in the workplace WHO (2014). Age of alcohol and drug initiation among the sampled students was 17.6 years but other studies (Saunders and Baily, 1993; Harolyn, Belcher and Shinitzky, 1998) have reported less age of initiation.

V. Conclusion

No matter the positive evidence for young people’s alcohol use, it portends danger and the consequences will significantly outweigh all positives attached to it. Hence, all efforts must be made to sensitize youths so that age of drinking and the amount or dose of alcohol and other substances consumed would be reduced. Government can legislate to stop young people from taking alcohol until they are matured enough, as this may delay the initiation of a first drink which will subsequently reduce the risk of harmful drinking. Alcoholic drinks in several forms and types are widely sold on some university campuses or very close to the campus and other stimulating and depressive substances are widely available, hence, more young people focussed enlightenment campaigns on the negative consequences of alcohol and substance use is advocated.

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