

# The Effect of Smoking and Drinking Habits On the Performances of Nigerian Students

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## Abstract

This study investigates drinking and smoking habits on the performances of students in Nigeria tertiary institutions. The findings reveal a high risk of consumption of alcohol and cigarettes among the students with respect to their health and academic performances. The Chi-Square is employed and it is observed that there is a significant relationship between the type of alcoholic drink preferred and sex ( $\chi^2 = 18.38$ ,  $p$ -value = 0.001), Reading length per day and drinking ( $\chi^2 = 10.50$ ,  $p$ -value = 0.015), but the association between Drinking and CGPA ( $\chi^2 = 2.38$ ,  $p$ -value = 0.510) is obviously not significant at 5% level of significance.

**Keywords:** Smoking habit, Drinking habit, Academic performances, Relationship.

## Introduction

Alcohol plays a social role in the lives of many people in Africa. Historically, alcohol consumption has been an integral part of traditional festival and rituals in many African cultures. Nevertheless, alcohol consumption was a preserve for elders and senior members of the society during the 20<sup>th</sup> century. Young men and women were strictly not allowed to consume alcohol in many societies (Peltzer and Phaswana, 1999). According to the National Survey on Drug Use and Health (an interview survey carried out in homes), about 46 % of adults 21 years of age and older report that they did not consume any alcohol in the past month and an additional 26 percent report drinking once a week or less (NSDUH, 2002). Current statistics reveal that 21% of Canadians, 20% of Americans, and 26% of the British population ages 16 and over currently smoke (Living in Britain, 2002; Centers for Disease Control, 2004; CTUMS, 2003). Presently

there has been an epidemiological transition from the traditional pattern, in which ceremonial drinking was restricted to adults in the context of positive societal meaning, toward a rapid increase in the alcohol use and abuse among young people. Use of alcohol, Cigarettes and other drugs is fast becoming part of everyday life in many African communities (Peltzer and Phaswana, 1999). The reasons behind this transition remain multi-factorial and elusive, however, Zverev(2008) suggests economic factors, urbanization and westernisation as important drives of much concern are University students who are away from home and therefore prove to increased peer pressure. Despite this, Studies on alcohol and cigarette use among Nigerian student of institution of higher learning have hitherto remained scanty in Africa. According to McGuire and Beerman (2007) alcohol has both beneficial and harmful effects depending on the amount, frequency and circumstances in which it is consumed. In moderation (1-2 drinks/ day), alcohol reduces the risk of cardiovascular disease, gall stones, dementia ( age-related memory loss) and type 2 diabetes in middle and older adults. Moderate alcohol intake provides little, if any, health benefits among young adults (McGuire & Beerman, 2007). In fact, in addition to the increase risk of chronic diseases at an older age, alcohol drinking in young adult such as college students is associated with a wide range of delinquent and risky behaviours. (Fachet al, 2006). According to Odejide (1989), in the olden days alcohol used to be the preserve of adult males, but recent studies show that alcohol is now abused by the young ones and also the females. Habits related to diet, physical activity, tobacco use, safety and sexual behaviour might persist from adolescence to adulthood (Westhof et al, 1997). In a survey carried by Sidd et al (2009), it was concluded out that Medical students at the University of Calgary consume less alcohol and cigarettes than a comparable population. However, a high proportion of students are at risk for alcohol abuse according to the CAGE questionnaire.

The aim of this paper is to find out whether smoking and drinking habits of students have any association with their academic performances, and to detect any statistical significant relationship among their performance and any of the following factors; Age, Sex, Level, etc

## Materials and Methods

This study was carried out using a self-administered questionnaire. The questionnaire among other things included questions on socio-demographic information, such as age, status of alcohol consumption, smoking status, activities and gender of the students. The research work is carried out to cover all the registered fully time students of Federal polytechnic, Ado-Ekiti. However, not all these students are enumerated but a fractional part of 200 samples were used. Obtained nevertheless, the inference which based on the sample will be representative of all the registered students.

The chi-square square tests, multiple bar charts, and pie charts were used for the non- parametric analysis, and graphical representations respectively. All the statistical computations were carried out using 95% confidence interval with statistical packages MINITAB and R.

## Test statistic

$$\chi^2_{\text{cal}} = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - e_{ij})^2}{e_{ij}} \sim \chi^2_{\alpha (r-1)(c-1)}$$

The values in the bracket are the expected values;

Obtained by:

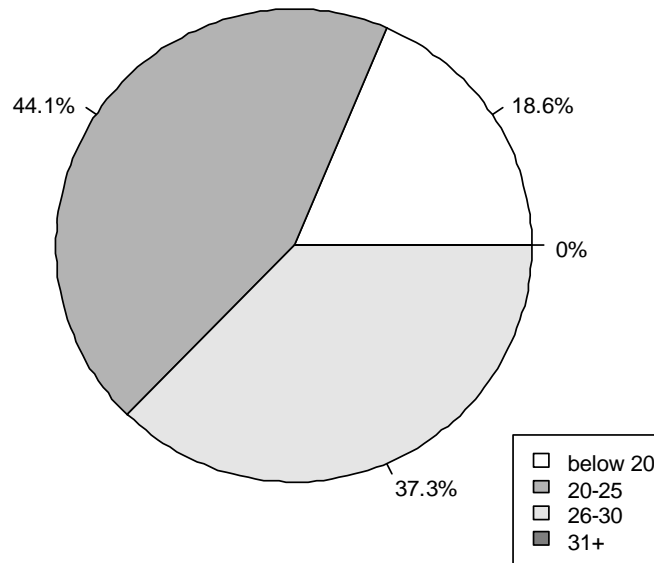
$$e_{ij} = \frac{n_{.j} \cdot n_{i.}}{N_{..}}$$

$$\chi^2_{\text{cal}} = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - e_{ij})^2}{e_{ij}}$$

### Statistical Analysis

Certain demographic characteristics collected from the respondents were compared, between students who drink and those that do not drink, between smokers and non-smokers and so on. Some of the results of tests of relationships using chi-square, and descriptive statistics using charts were presented below:

**Figure 1: % of Drinkers & smokers among students w.r.t. age**



The chart above reveals that approximately 44 percent of the smokers and drinkers among the students fall within the age group of 20-25, this group is the most active in both drinking and smoking habits, while the 31+ age group seems to not participate at all.

**Figure 2: Alcoholic drink preferred by drinkers**

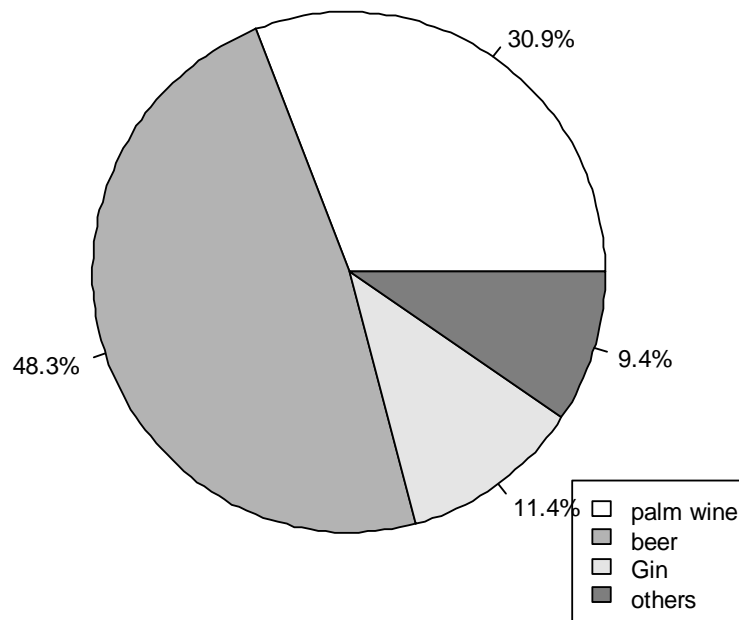


Figure 2 presents a picture of what is happening in area of the type of drink the drinkers preferred. 48 percent preferred beer, almost 31 percent wanted palm wine, while only 11 percent preferred gin.

Table 1: Contingency table for Drinking & Smoking habit and Age

		Drinking and smoking habit			
		No response	Yes	No	Total
Age	Below 20	1(2.45)	11(10.325)	23 (22.225)	35
	20-25	6(7.35)	26 (30.975)	73 (66.675)	105
	26-30	7(4.06)	22 (17.11)	29 (36.83)	58
	31+	0(0.14)	0 (0.59)	2(1.27)	2
	Total	14	59	127	200

$$\chi^2_{0.05} (6) = 12.59$$

There is independence between drinking and smoking habit and Age.

Table 2: Contingency table for type of alcoholic drink preferred and sex

		Type of alcoholic drink preferred					
		No response	Palmwine	Beer	Gin	Other	Total
Sex	Male	(33.66)24	34(30.36)	53(47.52)	15(11.22)	6 (9.24)	132
	Female	(17.34)27	12(15.64)	19(24.48)	2 (5.78)	8 (4.76)	68
	Total	51	46	72	17	14	200

$$\chi^2_{0.05} (4) = 9.488$$

There is association between type of alcoholic drink preferred and their sex.

Table 3: Contingency table for Duration and Age

Age	Duration				Total
	No response	Less than a year	2-4 year	5 & above	
Below 20	(9.275)12	(6.825)11	(13.475)11	(5.425)1	35
20-25	(27.825)29	(20.475)22	(40.425)38	(16.275)16	105
26-30	(15.37)12	(11.31)6	(22.33)26	(8.99)14	58
31+	(0.53)0	(0.39)0	(0.77)2	(0.31)0	2
Total	53	39	77	31	200

$$\chi^2_{0.05} (9) = 16.92$$

There is association between Duration and their Age.

Table 4: Contingency table for CGPA and Drink

Drinking status	CGPA				Total
	No response	1.51-2.00	2.01-2.50	2.51-& above	
Yes	53(22.165)	11(10.725)	29(25.74)	80(84.37)	43
No	8(8.835)	4(4.275)	7(10.26)	38(33.63)	57
Total	31	15	36	118	200

$$\chi^2_{0.05} (3) = 7.815$$

The relationship between last CGPA and Drinking status is not significant at 5% level of significance

Table 5: Contingency table for Average Reading Length per day and Drinking Habit.

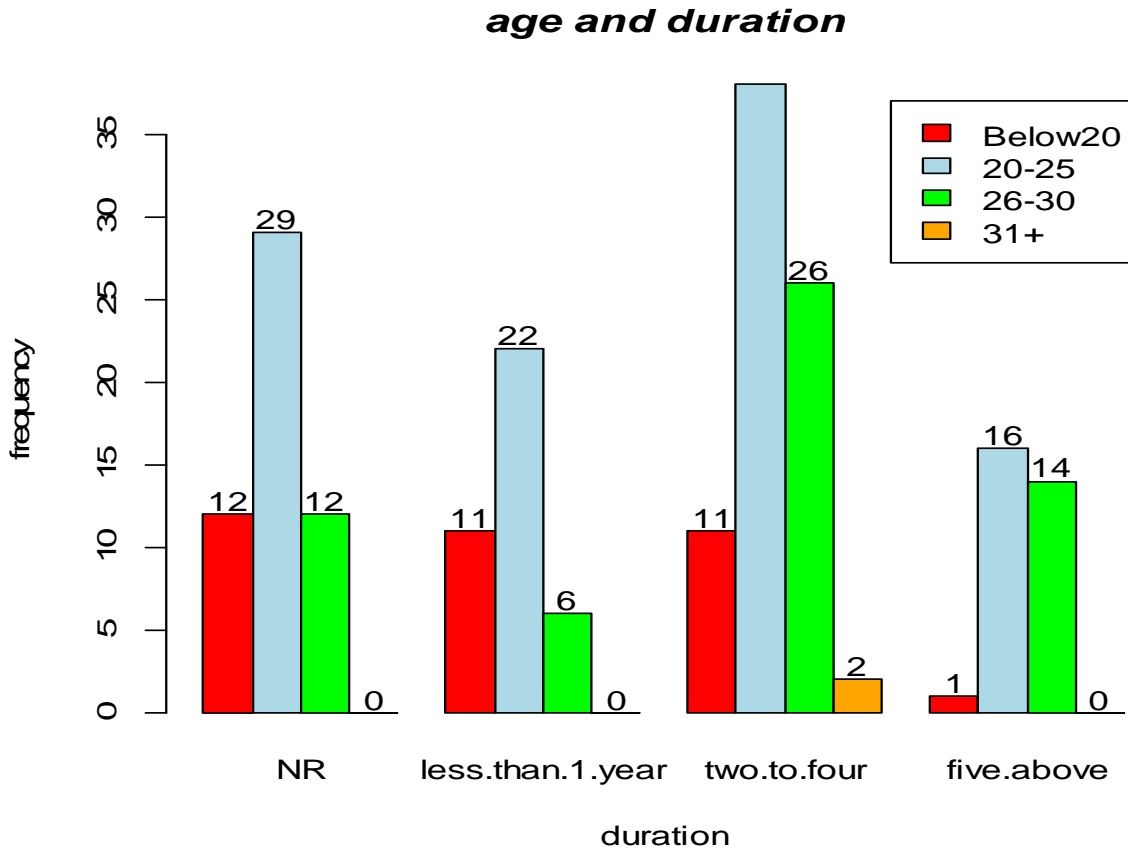
Drinking Habit	Average reading length per day			Total
	No response	Less than five hours	Five hours above	
Yes	0(2.86)	97(96.525)	46(43.615)	143
No	4(1.14)	38(38.475)	15(17.385)	57
Total	4	135	61	200

$$\chi^2_{cal} = 10.5009$$

There is a significant relationship between drinking habit and average reading length

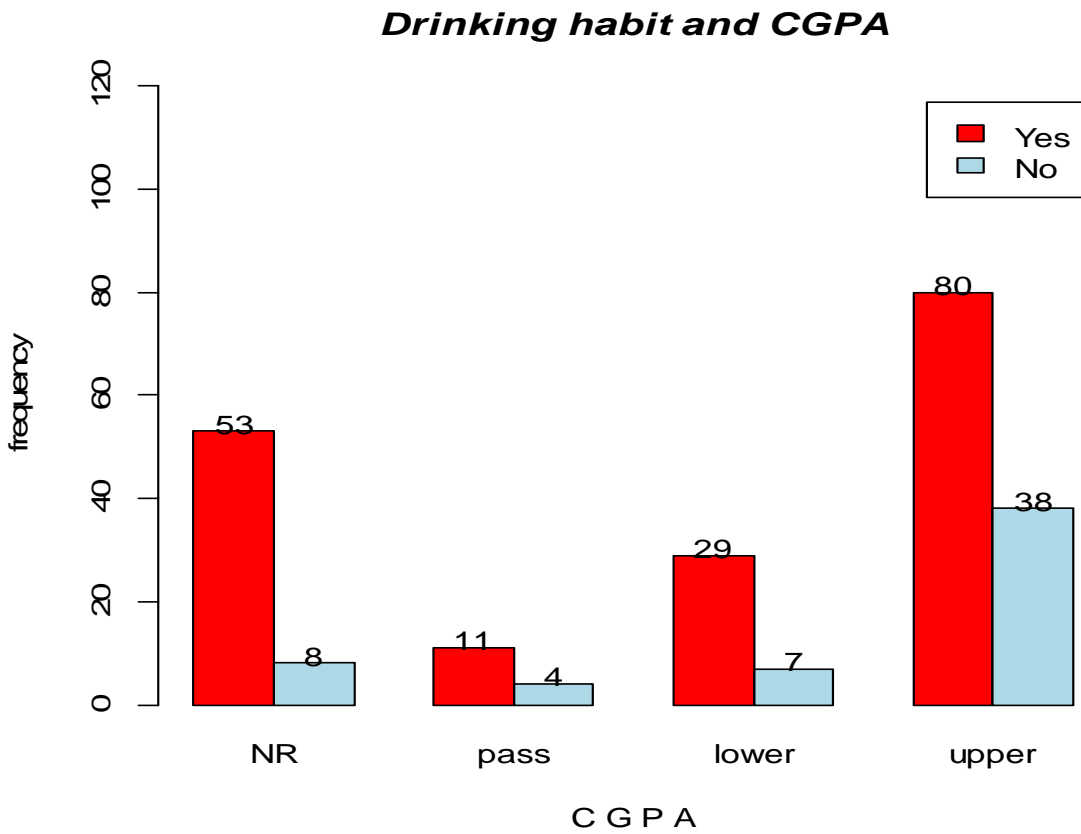


**Figure 3: Age of respondent with duration of drinking**



It can be seen from fig. 3 that age group 20 – 25 takes the mode in all the bars. Among those that have spent between one and five years in drinking alcohol, age group 20 – 25 has the highest frequency, followed by age group 26 – 30 among those that have drunk for two to five years, while below 20 and 31 and above come behind.

**Figure 4: Drinking habit and CGPA**



In Fig.4 those who drink appear to have higher frequencies than the non-drinkers with respect to their respective academic performances. This means that in the result of the analysis as does not show any effect of smoking on cumulative grand point average.

**Table 6: Results of tests of relationship among various characteristics**

S/N	VARIABLE	$\chi^2$	P-VALUE	REMARK
1	Gender and consequence	0.634	0.880	Not significant
2	Gender and preferred smoking	1.004	0.855	Not significant
3	Gender and drink preferred	18.383	0.001	significant
4	Gender and frequency of drinking	18.383	0.001	significant
5	Gender and diagnosed for disease	0.845	0.825	Not significant
6	Gender and how much	15.078	0.001	significant
7	Gender and hard drug	15.568	0.001	significant
8	Gender and which type	9.834	0.010	significant
9	Age and drinking status	1.114	0.880	Not significant
10	Age and smoking status	7.151	0.070	Not significant
11	Age and duration	17.554	0.035	significant
12	Age and academic rating	15.048	0.070	Not significant
13	Drinking and GPA	2.378	0.510	Not significant
14	Drinking and reading length per day	10.501	0.015	significant

## **Discussion of results**

The Chi-Square analyses reveal that there is independence between Drinking and Smoking habits and Age; It also reveals that there is relationship between type of alcoholic drink preferred and sex; It was also observed that there is no relationship between CGPA and Drinking Status; It was also noticed that there is no relationship between Academic Rating and Age; finally, association between Reading Ability and Drinking Habit is also significant, all at 5% level of significance.

## **Conclusion and Recommendation**

It can be concluded that smoking and drinking habit affect or influence Nigerian students of higher learning. Also irrespective of ages, there is association between drinking and smoking habit among them. We can also conclude that the type of alcoholic drink preferred has great influence on Nigeria students of higher learning and that there is no relationship between academic rating and Age. Educational leaders, educators, and other concerned organizations should establish strong programmes that aim at minimizing the impacts of smoking and drinking on the students.

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