

International Journal of **Psychology** (IJP)



**Psychological Determinants Leading To Alcohol Use
among Undergraduate Students: A Case Study of
University of Nairobi**

**Grace Kimeli, Prof. Bernard Boyo Dean, Community Life, Dr. Alice
Munene, Dr. Lincoln Khasakhala,**



Psychological Determinants Leading To Alcohol Use among Undergraduate Students: A Case Study of University of Nairobi

^{1*}Grace Kimeli

^{1*}Post graduate student Daystar University

²Prof. Bernard Boyo Dean, Community Life ³Dr. Alice Munene

Dean School of Human and Social Sciences,

⁴Dr. Lincoln Khasakhala,

Head of Department, Psychology and Counseling for the expertise

Abstract

Purpose: The purpose of this study was to establish the psychological determinants leading to alcohol use among undergraduate students.

Methodology: The study adopted a mixed research design. The study was carried out at the University of Nairobi's Main campus, School of Architecture and Engineering. Stratified random sampling technique was used in the study to select a sample size. Data were collected from the students of the faculty of Engineering, Administration staff/Counselors and Lecturers. The research tools used in data collection were questionnaires, In-depth interviews (IDI) and Focus Group Discussion (FGD). Data analysis was done using SPSS and the results were presented by use of charts, graphs, and frequency tables.

Results: The study found out that university students view alcohol use as detrimental to their academic performance. It further revealed the significant relationship that exists between stress and alcohol consumption. It emerged from the study that peer influence, parenting, University environment and availability of financial resources are contributors to use of alcohol among university students.

Unique contribution to theory, practice and policy: The findings of the study recommends that future research is needed in the area of media and alcohol advertising and its effects on consumption of alcohol, particularly, as it relates to university students.

Key words: Alcohol, Undergraduate students, Psychological determinants Performance

INTRODUCTION

Alcohol is routinely cited by researchers, college administrators and staff, and also by students themselves, as the most pervasively misused substance on college campuses (Humphrey et al 2000). Alcohol is a type of a psychoactive drug that acts to depress the central nervous system, it has a high potential of psychological dependence and leads to irreversible tissue damage (Ramalingam, 1991). College is a period of transition; and as such students live away from home and parental authority, this enable them gain autonomy to own choices and thus end up engaging in new as well as risky behaviors through the influences of their peers and the environment. Studies have shown that the rate of drinking among college students after high school surmounts the alcohol use among their non-college peers (Johnston et al, 2000).

Alcohol use and dependence is a major problem among university undergraduate students in the United States of America (Bawkin, 2002). A report on alcohol drinking problem at most Canadian University campuses, (Tamburri, 2012) indicated that alcohol drinking had come as a rite of passage among students. Each year along with the start of classes, are the inevitable pub crawls, keg parties and excessive drinking that often accompanying frosh week events. According to Tamburri,(2012) 90 percent of Canadian University students drink alcohol, with 32 percent reported to be drinking heavily at least once a month at Fanshawe University Ontario, the percentage was seen to be higher in Acadia University, Nova Scotia where it is estimated that about 51 percent of the students are involved in consumption of alcohol. Nova Scotia Department of Health and Wellness (NSDHW, 2010)

In Nigeria, alcohol is commonly used during burials, child dedication, thanksgiving, birthdays, political rallies, initiation ceremonies, weddings, festivals and other social gatherings. In the universities and other institutions of higher learning, students consume alcohol during matriculation, convocation and initiation ceremonies to clubs and societies. The types of alcohol frequently used in Nigeria are similar to other parts of Africa. The most commonly used substance in Africa is alcohol (Odejide, 2006) and the same for Nigeria (Eze, 2006, Nyamali, Morankinyo and Lawal, 2010).

It has also been noted that alcohol use is fast spreading to rural areas of Kenya especially Central, Western, Nyanza and Eastern regions, for a long time it had been predominant in the urban centers (Njonjo, 2010). Alcohol use among the undergraduate students in the universities is endangering their lives. This has caused a lot of concern as the vice has been identified as a major cause of problems experienced in Kenyan universities (Gikonyo, 2005).

Statement of the Problem

Many university undergraduate students are using alcohol, and studies done in the past did not address the underlying factors leading to its use by university students. Even though alcohol has been used throughout most generations of mankind; the context of use was limited to special occasions and age groups. However, it is alarming to note that the context has changed, currently the age of users has drastically gone down; more young people are indulging in alcohol use and more so university students (NSDHW, 2012).

Evidence on the Kenyan situation from a recent national report, showed that 85% of university students surveyed admitted to having tried alcohol, with 40% reporting occasions of heavy drinking, while 48% indicated that they have been “drunk” in the past 60 days (NACADA,

2008). Of the alcohol related deaths, 5 are due to unintentional injury such as falls, hypothermia, and drowning, over 3 due to motor vehicle accidents (G.O.K 2009).

Alcohol use has also raised concerns to parents and employers who complain about alcohol use by the graduates they employ since most of them become underperformers (Obi et al 2013). The key question is why are university students indulging in alcohol use? Studies have been done on other aspects of alcohol, such as the prevalence of alcohol use but a gap has been left concerning the underlying factors. It is against this gap that this study was undertaken, seeking to establish the underlying factors leading to alcohol use by undergraduate students with a view to coming up with mitigating strategies and interventions to curb the vice.

Objectives of the Study

The objective of the study was to establish the psychological determinants leading to alcohol use among undergraduate students.

LITERATURE REVIEW

Theoretical Literature

Classical Conditioning Theory

This study lays its basis on the theory of classical conditioning. Classical conditioning theory involves learning a new behavior via the process of association. In simple terms two stimuli are linked together to produce a new learned response in a person or animal, which happens in three stages whereby in the first stage of it, an unconditioned stimulus produces an unconditioned response in an organism (Miller, 2005). In basic terms this means that a stimulus in the environment has produced a behavior or a response which is unlearned (i.e. unconditioned) and therefore is a natural response which has not been taught. In this respect no new behavior has been learned yet (Wolburg, 2001). Another stimulus which has no effect on a person and is called the neutral stimulus is introduced. The neutral stimulus could be a person, object, and place and so on. The neutral stimulus in classical conditioning does not produce a response until it is paired with the unconditioned stimulus (Wolburg and Treise, 2004).

In the second stage, a stimulus which produces no response (i.e. neutral) is associated with the unconditioned stimulus at which point it now becomes known as the conditioned stimulus (Mickey, 2003). Often during this stage the unconditioned stimulus must be associated with the conditioned stimuli on a number of occasions, or trials, for learning to take place. However, one-trial learning can happen on certain occasions when it is not necessary for an association to be strengthened over time (such as being sick or addicted after drinking too much alcohol). At stage three, the conditioned stimulus has been associated with the unconditioned stimulus to create a new conditioned response. In this study, alcohol use (drinking) act as the unconditioned stimuli, while not drinking the alcohol is the neutral stimuli. Memories created as a result of drinking and the effect of alcohol act as the conditioned stimuli.

Empirical Review

Some studies have looked at personality factors and their relation to adolescent alcohol consumption. Donovan et al (2000) reported that amongst the youth, there was some evidence that those who drink to excess more frequently are more likely to be assertive, outgoing, less conservative, more questioning of authority, more likely to be risk takers, and at least within

some groups, more likely to be leaders than followers. Similarly, Crundall (1995) reported heavier drinking to be associated with impulsiveness, aggression, depression, and sensation seeking.

Lower social skills in dealing with everyday problem situations have been found to be associated with various problems of behavior, low academic achievement, smoking, and alcohol use in Australia (Hover and Gaffney 2003). It has been suggested that the use of mood altering substances would be greater amongst such youth in an attempt to deal with feelings of failure and disappointment. It is also likely that lower social skills are related to lower self-efficacy in terms of resisting peer and situational influences and in planning ahead for moderate drinking.

Donovan et al (2000) reported that those with positive attitudes to college work with fairly firm post college aspirations tended to be less involved with alcohol. More importantly, positive college experiences and a focused career goal seemed to provide some protection against drinking on leaving university (Loveland-Cherry, Leech, Laetz and Dielman 1996).

Alcohol use by adolescents is also associated with abnormalities in the volume of the prefrontal cortex, the part of the brain that controls reasoning and impulse (Medina et al., 2008). In particular, females are vulnerable to the effects of alcohol on this part of the brain. Severe or chronic alcohol use among female adolescents may limit the development of their prefrontal cortex more than it does for males. Low prefrontal cortex development may lead to deficiencies in reasoning and impulsive behavior. Alcohol can activate the pleasure-producing chemistry of the brain and release a pleasure-enhancing chemical called dopamine. Dopamine is released in the brain when an action satisfies a basic need or desire. With repeated alcohol use, the brain's natural capacity to produce dopamine is reduced. This leads to feelings of depression, anger, boredom, anxiety, and frustration (O'Connell et al, 2004).

With the use of alcohol and other drugs over time, young people may fail to advance to more complex stages of thinking and social interaction. An individual with alcohol use disorders often perform worse on memory tests and have diminished abilities to plan, and the effects may also include hallucinations, psychotic episodes, changes in sleep patterns, and changes in the ability to concentrate (Bonnie and O'Connell, 2004).

There is a body of empirical work exploring the links between personality traits and alcohol use; still the empirical evidence is contradictory and confusing (Clarke and Robertson, 2005). The most common correlates of risky drinking, as well as of academic performance of students, studied in previous research are personality traits, usually explored by using five-factor model. All five personality traits (extraversion, neuroticism, openness, agreeableness, and conscientiousness) might have positive or negative effect to risky drinking in general population, but this relationship might be significantly moderated by organizational context (Clarke and Robertson, 2005; Lajunen, 2001).

RESEARCH METHODOLOGY

The study adopted a mixed research design. The study was carried out at the University of Nairobi's Main campus, School of Architecture and Engineering. The target population for the study was the undergraduate students at University of Nairobi's Main Campus which had a total population of 9,400 undergraduate students as at 2013 (<http://www.uonbi.ac.ke> 2013). The study computed 10% of 2,900 which the student population in the school of engineering constituted.

The sample size therefore was 290 that were picked from each of the five faculties of the school. Focused group respondents were selected randomly from both set of students; that is male and female students, Mugenda and Mugenda (2003). Stratified random sampling technique was used in the study to select a sample size. Data were collected from the students of the faculty of Engineering, Administration staff/Counselors and Lecturers. The research tools used in data collection were questionnaires, In-depth interviews (IDI) and Focus Group Discussion (FGD). Data analysis was done using SPSS and the results were presented by use of charts, graphs, and frequency tables

RESULTS AND FINDINGS

Students' Use of Alcohol

Table 1 below presents the results on the use of alcohol among university students. Majority of the respondents (70%) indicated that they take alcoholic beverages. Fifty one percent of the respondents consume wines and spirits and 53% consume beer. The results also indicate that majority, 77% of the students do not take traditional brews and 86% also indicated that they do not take all kinds of alcoholic drinks, which means they are specific about the alcohol type they consume. Additionally from the results, 33% of the students indicated that they consume alcohol at least once a week. These results imply that the most consumed beverage for those who take alcohol is beer given that it had majority users of 53%.

Table 1: Use of Alcohol

Alcohol Use	N=198 Frequencies	Percentage
Indicate if you use any alcoholic beverages		
No	59	30%
Yes	139	70%
Do you use wines and spirits		
Yes	100	51%
No	97	49%
Do you take beer		
Yes	105	53%
No	93	47%
Do you take traditional brew		
Yes	43	23%
No	153	77%
Do you take all types of alcoholic beverages		
Yes	24	14%
No	171	86%
How frequent do you use the alcoholic beverage		
Everyday	23	12%
At least once a week	66	33%
Once Every Three Months	40	20%
Sometimes in a Year	12	6%
Never	57	29%

Table2: Psychological Factors

Statement	Frequencies	Percentage
There is nothing wrong with taking alcohol		
Strongly Disagree	45	23%
Disagree	66	33%
Neutral	23	12%
Agree	23	12%
Strongly Agree	41	21%
Alcohol negatively affects academic performance		
Strongly Disagree	28	14%
Disagree	47	24%
Neutral	54	27%
Agree	58	29%
Strongly Agree	11	6%
Students who use alcohol are more inclined to anti-social behavior		
Strongly Disagree	14	7%
Disagree	18	9%
Neutral	82	41%
Agree	68	34%
Strongly Agree	15	8%
There are certain personality types that are highly susceptible to alcohol use		
Strongly Disagree	10	5%
Disagree	23	12%
Neutral	58	29%
Agree	71	36%
Strongly Agree	35	18%

Statement	Frequencies	Percentage
Alcohol use is influenced by what one expect will happen when consumed for example a feel of relaxation, courage and sociability		
Strongly Disagree	18	9%
Disagree	42	21%
Neutral	34	17%
Agree	53	27%
Strongly Agree	50	25%

Binary Logistic Regression for Psychological Factors

Results in Table 3 present the binary logistic regression for psychological factors. Respondents agreeing with the statement that “there is nothing wrong with taking alcohol” were associated with higher probability/odds of being alcohol users. This is shown by an odd ratio of 1.146 which reveals that the odds are higher by 1.146 for those agreeing compared to those disagreeing with the statement. However, the relationship was not significant as shown by a p-value of 0.285. Respondents who agreed with the statement that academic performance is negatively affected by alcohol were linked to lower odds of being alcohol users as shown by an odd ration of 0.611. This relationship was significant as the p value was 0.006. Respondents agreeing with the statement that per takers of alcohol are inclined to anti-social behavior are related to alcohol consumers as shown by an odd ration of 1.25. A p value of 0.19 indicates that there is no significant relationship between the two.

Further results indicate that respondents who agreed to the statement that “there are certain personality types that are highly susceptible to alcohol use” were associated with higher odds of taking alcohol as the odds ratio was 1.43. The relationship was significant as the p value was 0.038. Results also indicate that respondents who agreed to the statement that “alcohol use is influenced by what one expects will happen when consumed for example a feel of relaxation, courage and sociability” were associated with lower odds of taking alcohol as the odds ratio was. 0.764. The relationship was insignificant as the p value was 0.057.

Table 3: Binary Logistic Regression for Psychological Factors

Statement	Beta	S.E.	Wald	df	Sig.	Exp(B)=Odd Ratio
There is nothing wrong with taking alcohol	0.136	0.127	1.145	1	0.285	1.146
Alcohol negatively affects academic performance	-0.492	0.178	7.593	1	0.006	0.611
Students who use alcohol are more inclined to anti-social behavior	0.223	0.17	1.716	1	0.19	1.25
There are certain personality types that are highly susceptible to alcohol use	0.358	0.173	4.297	1	0.038	1.43
Alcohol use is influenced by what one expect will happen when consumed for example a feel of relaxation, courage and sociability	-0.27	0.142	3.615	1	0.057	0.764
Constant	0.94	0.782	1.444	1	0.229	2.561

Interview Guide Discussion on Psychological Factors

“The factors that lead to alcohol use may include peer influence, family background of a student and stress related to family or academics.” “The external environment has a high impact of promoting alcohol use in university students. For instance, a club within the premises of Kenya Broadcasting Corporation, within the neighborhood of the university campus, sells its alcoholic drinks at subsidized prices, which increases the chances of students to purchase the same. Further, the content received from the media, tends to affect perceptions of some students towards alcohol.”

Focused Group Discussion on Psychological Factors

The results on the effects of perception, personality traits and cognition factors on alcohol use are contently analyzed from results of focused group discussion. Additionally, some people are quickly addicted to alcohol over a very short period of time, thus it is the cognitive behavior that drives this response. Other factors such as taking stress such as sickness, financial constraints without re-evaluating alternative options may contribute to use of alcohol among individuals with the thought that alcohol will generate a calm feeling.

DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

Discussions

The objective of the study was to examine the psychological determinants leading to alcohol use among undergraduate students. Findings from the study show that students from the university view alcohol intake as a wrong decision which negatively affects performance of users in academic work. Results also led to the finding that anti-social students are more likely to succumb quickly to alcohol use. Certain personality traits (predisposition), perception, and cognition are factors that contribute to the decision on whether to consume or not to consume alcohol. Focus group discussions and interview guide responses found that peer pressure, family lifestyle or background and stress related issues are some of the psychological factors that influence alcohol use.

The relationship between stress and alcohol consumption is significant, meaning that there is a relationship between stress and alcohol consumption. Therefore, the findings of this study support those of Pohorecky (1991) Pierce et al. (1994) and Seeman and Seeman (2002) who found that financial difficulties may be related to alcohol consumption. Pierce et al. (1994) were able to show the relationship between acute changes in marital and employment status recent divorce or death of a partner; job loss and chronic status being divorced or widowed and unemployment

Conclusions

Conclusions drawn from the study show that personality traits, perception and cognitive behavior are factors that contribute to alcohol use. Based on these findings it can be concluded that the nature and magnitude of acculturation is a major contributor of behavioral tendencies that lead to alcoholism. Therefore, childhood socialization is important and related to adult hood behaviors.

Recommendations

It is recommended that continuous awareness programs need to be conducted to sensitize the students about the negative effects of alcohol use on academic performance. This is because; students who agreed with the statement that alcohol affected academic performance were less likely to be alcohol users. Awareness programs can be executed through the forms of media used by youths, such as twitter, Facebook, Instagram among others. Counseling is encouraged for those students who feel that personality types affect alcohol drinking. Further, psycho-education can be used to enhance self-discovery by individuals as students whereby they will be encouragement on how to improve their weaknesses and enhance their strengths.

REFERENCES

- Bawkin H. & R.Bawkin, (2002). *Behavior Disorders in Student*. London: W.B. Saunders. BBC News. Monday II, September; 2000. Smoking Addiction Set sin Early.
- Bonnie, R.J., and O'Connell, M.E., eds. 2004. *Reducing Underage Drinking: A Collective Responsibility*. Washington, DC: The National Academies Press.
- Clarke, S., Robertson, I.T. (2005), "A meta-analytic review of the Big Five personality factors and accident involvement in occupational and non-occupational settings", *Journal of Occupational & Organizational Psychology*, Vol. 78 pp.355-76.
- Gikonyo, M. (2005). *Alcohol and substance abusers and Parental Knowledge on Factors Predisposing the Youth to Drugs and Substance Abuse in Nairobi Province, Kenya*. *Unpublished M.ED Thesis*, Kenyatta University.
- Humphrey, J.A. and White, J.W (2000) Women's vulnerability to sexual assault from adolescence to young adulthood. *J. Adolesc. Hlth* 27: 419-424
- Johnston, T. (2000). *Adolescent Alcohol and substance abuse in Kenya: Impact on Reproductive Health*. Pathfinder International, New World Printers: Nairobi. . Kenya.
- Mickey, T.J. (2003), "A community relations campaign", *Deconstructing Public Relations*, Lawrence Erlbaum Associates, Mahwah, NJ, Chapter 7, pp.99-108.
- Miller Brewing (2005), "Live responsibly campaign", available at: www.millerbrewing.com/liveresponsibly (accessed 10 February).
- Odejide, A O. (2006) Status of drug use/abuse in Africa; A review. *Journal of Mental Health and addiction*, 4(2), 87-102.
- Ramalingam, P. (1991). *Dictionary of Psychology*, India: Academic Publishers.
- Wolburg, J.M. (2001), "The „risky business“ of binge drinking among college students: using risk models for PSAs and anti-drinking campaigns", *Journal of Advertising*, Vol. 30 No.4, pp.23-39.
- Wolburg, J.M., Treise, D. (2004), "Drinking rituals among the heaviest drinkers: college student binge drinkers and alcoholics", in Otnes, C., Lowrey, T. (Eds), *Contemporary Consumption Rituals: A Research Anthology*, Lawrence Erlbaum Associates, Mahwah, NJ, pp.3-20.