

PSYCHOLOGICAL PREDICTORS OF ALCOHOL ABUSE
AMONG STUDENTS
IN A SOUTH AFRICAN UNIVERSITY

BY

MAKGATSWANE KEBBINE

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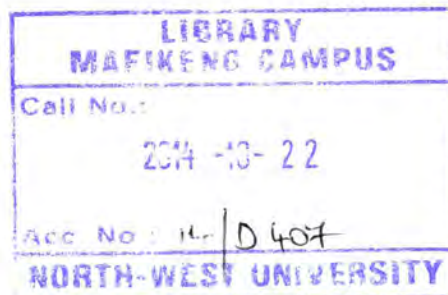
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degree of Masters of Social Sciences in Clinical Psychology, North West University,

(Mafikeng Campus)



Supervisor: Professor E. S Idemudia

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DEDICATION

This study is dedicated to my caring, loving and supportive parents (Haccius Ntwaesele and Boitumelo Joyce Keebine). My heartfelt gratitude also goes to my siblings (Oreneilwe and Aobakwe Keebine)

ACKNOWLEDGEMENT

To the Great omnipotent and omniscient Lord, You are the best and nobody can match your strength. Thank you for turning my scars into stars and for granting me the desires of my heart. I have tasted your goodness and had personal experience that your ear is not too dull to hear, nor is your hand too short to save.

Professor E.S. Idemudia, I thank you for your tremendous patience, kindness, support, guidance and most of all, fathering me. Without your guidance this would have not been possible. May the Almighty God bless you and enlarge your coast like He did that of Jabez.

- I thank my family for the love and support, I wouldn't have reached this far had it not been for your unconditional love, support, guidance and words of wisdom. Thanks for believing in me. Yes, I made it
- KhumbudzoLeburu, thank you for the kind of assistance and support you offered.
- My special gratitude goes to the following bursary schemes mentioned below. They made my academic years financially simpler: National Research Foundation (NRF), North West University (NWU) Post Graduate Bursary and the North West University (Mafikeng Campus)

SUMMARY

The aim of the study was to investigate psychological predictors of alcohol abuse among students in a South African university. The study was anchored on four hypotheses: (1) There will be a significant main effect of impulsivity on alcohol abuse, (2) There will be a significant main effect of peer group influence on alcohol abuse, (3) Males will score higher and hence tend to abuse alcohol more than females and (4) The interaction between impulsivity, peer group influence and gender will have a significant effect on alcohol abuse. The study used self-reported questionnaires with two sections- A and B. Section A contained demographic information and section B contained three scales, Index of alcohol involvement (IAI), Barratt Impulsiveness Scale (BIS-11) and the Peer Pressure Inventory (PPI).

The IAI scale which has 25 items was specifically designed and used for measuring the degree of problems associated with alcohol use and abuse. To determine the presence or absence of problems which emanate from alcohol use, IAI items were used as a sample for the purpose of this research/article. This scale is user friendly and could be used for assessing the level of alcohol consumption to help individuals who are willing to disclose their status of alcohol abuse.

One of the self-administered and most widely used questionnaires to measure impulsivity is the Barratt Impulsiveness Scale (BIS). The most recent version consisting of 30 items is the BIS-11. This scale is based on impulsivity (quick cognitive decision making) and lack of proper planning (lack of concern about the future).

It may also be used to assess long-term pattern of behaviour. Respondents may be required to answer questions about how they think or act without referring to any specific occasion.

Since the majority of university students are vulnerable to peer group pressure and influence, the peer pressure inventory (PPI) is a widely used instrument to measure the extent of peer group influence. It consists of 22-paired items which require individuals to indicate how often they conform to peer pressure and find themselves doing things without thinking of the consequences of such actions.

Psychometric properties of all the scales used are valid and reliable. Three hundred (300) student participants were randomly selected. About 41% (124) were males and 59% (176) were females. Age of the participants ranged from 17- 40 years, with mean age =21. The hypotheses were tested using a three way analysis of variance (ANOVA).

The results revealed a significant main effect of impulsivity on alcohol abuse, $F(35.696, p < 0.001)$ as well as gender, $F(20.869, p < 0.001)$ but there was no significant main effect of peer group influence on alcohol abuse. In addition, it was noted that the interaction between the three variables revealed no significance effect in predicting alcohol abuse.

It was noted in conclusion based on the results that Universities should create educational programmes which will equip new students with prevention and intervention strategies. Arrangements should be made that such strategies are scheduled for the first quarter of the year, for this is the period in which students are most vulnerable to peer pressure and conformity. It is during this critical period that assertiveness and adaptation skills are required. It is also required that new students be equipped with general life skills so that they should make informed decisions.

PREFACE

Article format

For the purpose of this dissertation, as part of the requirements for a professional master's degree, the article format as described by General Regulation A.7.5.1.b of the North West University was chosen.

Selected Journal

The targeted journal for submission of the current manuscript is Journal of Social Sciences (JSS). For the purpose of examination, tables are included in the text.

Letter of consent

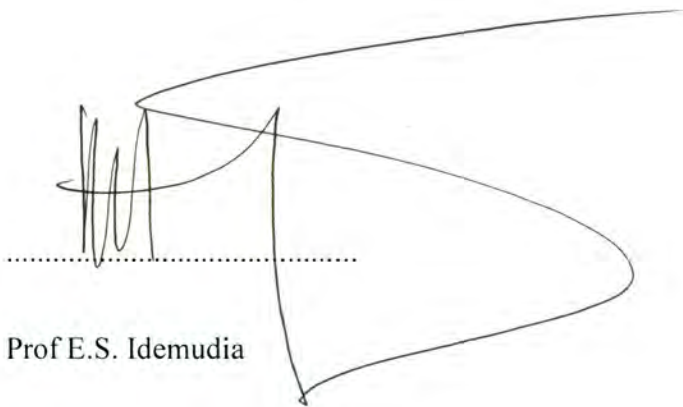
The letter of consent from the co-authors, in which they grant permission that the manuscript "PSYCHOLOGICAL PREDICTORS OF ALCOHOL ABUSE AMONG STUDENTS IN A SOUTH AFRICAN UNIVERSITY," may be submitted for purposes of thesis, is attached.

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In this thesis, page numbering is from the first page to the last. For submission to the above mentioned journal, the manuscript is numbered according to the requirements of JSS. Hence, all pages are numbered consecutively. *The reference section also follows the requirements of JSS.*

LETTER OF CONSENT

We, the undersigned, hereby give consent that MakgatswaneKeebine may submit the manuscript entitled "PSYCHOLOGICAL PREDICTORS OF ALCOHOL ABUSE AMONG STUDENTS IN A SOUTH AFRICAN UNIVERSITY," for the purpose of a thesis in fulfillment for the Masters of Social Sciences in Clinical Psychology.

A large, stylized handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right. A horizontal dotted line is drawn across the signature, positioned roughly in the middle of its vertical height.

Prof E.S. Idemudia

Supervisor

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Sections of Books: Cohen CP 1998. United Nations convention on rights of the child: Relevance for indigenous children. In: DK Bhera (Ed.): *Children and Childhood in Contemporary Societies*. Delhi: kamla-Raj Enterprises, pp. 173-187.

Newspaper/ Magazine: BhasinVeena 1986. Ecology and Gaddi Culture. *Hindustan Times, Weekly*, August 29, 1982, p.9.

Radio/ Television Talk: BhasinVeena 1986. Radio Talk- Gaddis of Himachal Pradesh. All India Radio "YuvVani"- 1st July, 1986.

Meeting Paper: Bhasin V, Bhasin MK, Singh IP 1978. Some problems in the education of gaddis of Bharmour, Chamba District, Himachal Pradesh. Paper presented in seminar on Education and Social Change in Himachal Pradesh (H.P.) in H.P. University, Shimla, November 13 to 16, 1978.

Report: UNESCO 1974. Report of an Expert panel on MAB Project 6: Impact of Human Activities on Mountain and Tundra Ecosystems. *MAB Report Series No. 14*, Paris: UNESCO.

Thesis/ Dissertation: BhasinVeena 1981. Ecological Influences on the Socio Cultural System of the Gaddis of Bharmour Sub-Tehsil, Chamba District, Himachal Pradesh. Ph. D. Thesis, Unpublished. Dehli: University of Delhi.

Work "in press": BhasinVeena 2004. Economic pursuits and strategies of survival among Damor of Rajasthan. *J Hum Ecol*, (in press).

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SOUTH AFRICAN UNIVERSITY

PSYCHOLOGICAL PREDICTORS OF ALCOHOL ABUSE AMONG STUDENTS IN A
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Abstract

Objectives: the specific objectives of the study are identified as follows: 1) to determine the influence of impulsivity on alcohol abuse, (2) to determine the peer group influence on alcohol abuse, (3) To determine the interplay of gender on alcohol abuse and (4) to determine whether interaction between impulsivity, peer group influence and gender has any an effect on alcohol abuse.

Method: data was collected from three hundred (300) student participants randomly selected. Age of participants ranged from 17- 40 years with mean age of 21. The statistical analysis used wasa three way analysis of variance.

Results: Results revealed a significant main effect of impulsivity on alcohol abuse, $F(35.696, p < 0.001)$ as well as gender, $F(20.869, p < 0.001)$ but there was no significant effect of peer group influence on alcohol abuse. In addition, it was noted that the interaction between the three variables had no significant effect in predicting alcohol abuse.

Recommendations: Universities should create educational programmes for students and this should be done preferably in the first quarter of the year while recognizing that there are transition issues related to entering universities and adaptation could be negatively at its peak especially during the first few months, which makes it a critical period for prevention and intervention activities.

Key words: impulsivity, peer group influence, gender, alcohol abuse, South African University.

Introduction and problem statement

Globally, alcohol use by university students has been a cause of concern for those involved in student well-being (Gill, 2002). Augustus, Rotimi and Oluwafemi (2008), in a North American study, concluded that attendance at university increases the risk of dangerous drinking. Porter, Hu Johnson and Petrillo (2009) support this notion by suggesting that the campus provides a unique environment in which large numbers of young people are exposed to the potential use of alcohol. A survey among Metropolitan University in South-Africa was conducted indicating possible trends in Student Health. The areas viewed were: Use of Nicotine, Alcohol use, Nutrition, Physical activity, Suicide, and Sexual intercourse. Alcohol findings showed: 37% consumed five or more alcoholic drinks on a single day; 46% had sexual intercourse in their lifetime; 45% of this group had their first sexual intercourse after 18; 64% of this group used condoms and 9% were told by a doctor or nurse that they had a sexually transmitted disease. About 7.5% had sexual encounters before the age of 13; 10% had seriously considered attempting suicide, and 24% of this group actually tried to commit suicide (Porter *et al.*, 2009).

In a nation-wide survey, drinking rates of young people were found to be high, especially among males. According to Peltzer and Phaswana (1999), although people drank alcohol it was basically restricted to adults and it was brewed for special traditional occasions and rituals. Despite the fact that most alcohol outlets have categorically stated that alcohol should not be sold to persons below eighteen, the rate and pattern at which youngsters are taking and abusing alcohol is alarmingly high and uncontrollable.

There are also concerns raised by third world countries about the rapid increase of alcohol use and abuse (Peltzer & Phaswana, 1999). Exposure of students to peer influence and alcohol intake

in university has been termed a 'window of vulnerability'. According to the inquiries commissioned by the University of Johannesburg, alcohol abuse plays a major role in causing tensions among students especially in student behavior (Sunday Times, 2007). Further the report by the Sunday Times (2007), state that the number of students taking alcohol in various institutions of higher learning across this country is disturbingly increasing.

Bartholow, Sher and Krull(2003) state that a large number of university students who stay in university residents or rented accommodation drink more excessively and are unable to exercise self-control regarding alcohol intake than those who live with their parents. There have been reports that students drink more excessively than their non-student counterparts and this is increasingly becoming a concern of public health distress. Heavy alcohol intake, cigarette smoking and recreational drug use are associated with unhealthy behaviour and also have negative social and health consequences (Mcgee&Kypri, 2004).

Institutions of higher learning such as universities are viewed as places where excessive alcohol can be used, as students believe it's a time before they assume parental responsibility. This notion is supported by the easy access of alcohol on university grounds (Bartholow *et al.*, 2003). Besides the negative effect (reduced school performance, lower educational and occupational attainment), wide spread use of alcohol continues among adolescents and adults (Augustus *et al.*, 2008).

According to (Gastrow, 2003) substance use and abuse is a pervasive problem in South Africa. Pletzer and Phaswana (1999) affirm this notion in that there has been a significant increase in the use and abuse of alcohol and other drugs among young South Africans. In response to this increase and rapid progression a study on the prevalence, patterns and experiences of drug use

(especially alcohol and cannabis) among South African University students at the University of the North was conducted (Peltzer&Phaswana, 1999). The findings of the study where(22.2%) of the students were using alcohol drinks, (12.8%) smoking cigarettes, (6.9%) other opiate type drugs and (6.6%) cannabis.

In another study conducted by Marais, Claitz, Rataemane and Joubert (2002) on alcohol use among sixth year medical students at the University of the Free State (UFS), the discovery was thatthere was a significant problem with a number of sixth-year medical students (28.3%) using alcohol in a harmful way, especially when they were with friends or in a social setting.It can be noted from these findings that alcohol is the most commonly misused drug in institutions of higher learning (Berezowski, 2005)

Alcohol use amongst the student population does not only affect individuals who are directly involved but has indirect implications for educational institutions and the wider society (Ham & Hope, 2003). The purpose of this study is to investigate whether psychological factors such asimpulsivity, peer group influence and gender predict alcohol abuse among students in a South African University.

Alcohol is said to be the most widely consumed drug in the world, and its misuse is a great health concern (Goldman, Oroszi&Ducci, 2005). Although the onset of consumption occurs in adolescence, this behaviour becomes a regular habit during young adulthood (Casswell, Pledger&Pratap, 2002).The significant increases in the current use of alcohol by student's prompts the need for further studies and a platform for this study.

Alcohol abuse

Alcohol is a chemical that has pharmacological properties (it acts as a drug) powerfully modifying the function of the nervous system. Alcohol is an organic compound; the alcohol that is safe for consumption is called ethyl alcohol or ethanol. Pharmacologically, ethanol belongs to the class of sedatives-hypnotics. This classification is based on the effects that ethanol (alcohol) has on the nervous system. Sedative-hypnotics are central nervous system depressants, they induce sedation. Subjectively, the initial effects of alcohol may be experienced as euphoria and feeling care free feeling that drinkers seek (Levin, 1995).

According to Parry and Bennetts(cited in Mokgehti, 2009), alcohol consumption is historically an essential part of many societies throughout the world and is regarded as the best relaxation and therapeutic technique that enables people to socialize freely and easily. It forms the most integral aspect of social events.

The global status report on alcohol (2004) indicates that alcohol intake remains the most widely abused substance throughout the world. Mokgehti (2009) also supports the above statement by stating that, this is the most commonly used and abused psychoactive drug in South Africa.

Most students, staff, researchers and University administrators regard alcohol as the most pervasively misused substance on University campuses (Perkins, 2002).

In combination with other drugs, alcohol accounted for about a third of drug related emergency room episodes the year 2005 (Fisher & Harrison, 2009). There are three main categories of alcoholic beverages: beer, wine and distilled spirits (Walker, 2008).

The DSM-IV-TR (American Psychological Association [APA], 2000) classify alcohol related psychiatric disorders as the alcohol use disorders. According to Nolen-Hoeksema(2004), alcohol use disorders include alcohol abuse and alcohol dependency. The primary diagnostic criteria for alcohol abuse are centred on the way that alcohol interferes with individual's responsibilities. Alcohol abuse is characterized by a repeated pattern of excessive use that results in intoxication (and unwanted physical symptoms such as vomiting or hangovers).

Heavy and repeated alcohol drinking takes its toll on the abusers' social and professional life. Indeed the signs of alcohol abuse include legal problems (being arrested for public intoxication, driving while drunk), personal problems (interpersonal conflict and/ or marital discord brought on by alcohol use), and professional problems (missing work because of alcohol use/ or hangover, poor work performance, and for students, missing or failing classes because of alcohol-related problems) (Perry, 2010).

According to Thombs(1999), alcohol is considered the common entertainment aspect of most university social events. It is during events that most students become pressurized to booze.

Research by Wechsler, Lee, Kuo and Lee(2000) indicate that four out of five university students drink and tend to be approving of alcohol use. Students residing nearer to public drinking places and bars where drinking is not regulated are more likely to become addicted (Schall, Kemeny&Maltzman, 1992). According to Sue, Sue and Sue (2010), people who abuse alcohol are popularly known as alcoholics.

Impulsivity

Impulsivity is defined by Evenden (1999) as a range of events that are not properly well thought of, hastily articulated, disproportionately uncertain, or unsuitable to the circumstances and often result in detrimental outcomes. According to Whiteside and Lynam (2001), psychologists often use impulsivity to diagnose and understand various forms of pathologies. It appears in the diagnostic criteria for psychiatric disorders as varied as ADHD and substance use disorders. Research by Dawe, Loxton, Gullo, Staiger, Kambouropoulos, Perdon and Wood (2007), propose two constructs that can be used to capture impulsivity.

These are: Reward drive (RD) and rash impulsiveness (RI). According to Dawe and Loxton (2004), the first construct refers to an individual's ability to differentiate sensitivity to rewarding stimuli in the environment, for example if an individual drinks alcohol to be able to socialize and they manage to do so, they will then in turn drink at most social gatherings so as to say that being able to socialize is the reward that is driven by the alcohol. Individuals learn to differentiate certain signals from the environment for a greater or lesser reward. Gullo and Dawe (2008) describe the second construct as Rash Impulsiveness, which is an unbridged ability to slow down reward-related behaviours regardless of negative consequences.

Harnett, Lynch, Gullo, Dawe and Loxton (2013) assert that, RD influences substance misuse and has effects on positive expectancies, whilst RI influences drinking refusal and enhances self-efficacy. The model is referred to as: the 2-Component Approach to Reinforcing Substances Model; 2-CARS.

2-CARS Model

In the proposed 2- CARS model, Gullo, Dawe, Kambouropoulos, Staiger and Jackson (2010) argue that high levels of RD create biasness to remembering the good effects that alcohol gives, in turn there is a significant positive relationship between RD and positive affect. The capacity of RI to reveal a deficit in inhibitory control is associated with reduced drinking refusal and self-efficacy as individuals with poor inhibitory control feel less positive in their ability to say no to alcohol, in spite of the harmful outcomes.

The Behavioural approach system (BAS) is another system most commonly used to explain the personality trait impulsivity. The same approach is used to explain the personality trait impulsivity. According to Pickering and Gray (1999), the neural substrate of the BAS involves the dopaminergic system and the mesolimbic dopaminergic pathways. This pathway is linked to positive effects and also responds to aversive stimuli that require goal directed behaviour.

The dopamine circuits which appear prior to the consumption of reinforcing substances are activated by conditioned cues of rewards. The neural substrate of the BAS is similar to the neural pathway underlying the reinforcing effects of the natural reinforce such as sex and drug abuse. Persons who have high BAS sensitivity are more prone to experience greater affect in circumstances having signs for incentive (Childress, Mozley, McElgin, Fitzgerald, Reivich, & O'Brien, 1999, cited in Dawe, Gullo & Loxton, 2004)

Buss and Plomin (1975) on the other hand defined impulsivity as an inability to resist strong urges and a tendency to respond to stimuli without any thought or planning. A study by Lynman and Miller (2004) found that both lack of premeditation and sensation seeking were related to alcohol use.

Magid and Colder (2007) found that Impulsivity, especially sensation seeking, to be the personality trait most consistently and strongly related to alcohol consumption among adolescents. They further state that the impulsive trait of urgency (the tendency to act impulsively to manage intense emotions) has been found to predict high levels of alcohol use.

Fillmore, Ostling, Martin and Kelly (2009) suggest that sensation-seekers experience greater reward while intoxicated. This experience of greater reward can reinforce expectations of positive outcomes, resulting in increased motivation to use alcohol. Accordingly, outcome expectancy has been found to mediate the association between impulsivity and alcohol use, such that impulsivity predicts a stronger belief in expected positive outcomes, which result in increased alcohol use.

Brennan, Walfish and Aubuchon (cited in Baer, 2002), concluded out of 20 studies that one of the most consistent findings demonstrated that a general behavior element which is described as “sensation seeking” is associated with frequent and excessive drinking. This has harmful consequences among University students. It was also realized that, heavy drinkers were described as pleasure seeking, extraverted, reckless, and defiant and out of the usual run of things. Studies on the above mentioned behaviour as well as self-reports of the same, revealed that, the sensation seeking behavior seems to be true for both men and women.

Impulsive persons have the propensity to act without planning or thinking ahead and to seek out immediate fulfillment. People with such personality have habitually been theoretically associated with the concept of sensation seeking which is also a dispositional need for high levels of alcohol intake.

Impulsivity and awareness seeking are closely related to consistent alcohol use in University students (Read, Wood, Kahler, Palfai&Maddock, 2003).Most people who have this tendency, often experience increased urge to obtain inspiration from alcohol use, and as a result become more vulnerable to excessive alcohol intake and ultimately victims of the effects thereof. Most victims however, more often than never, act on this impetus without contemplation of probable consequence.

As noted by Rogers, Moeller, Swann and Clark (2010),sensitive impulsivity may complicate the development and course of alcohol use and dependence. Impulsivity encompasses a wide range of relatively normal, non-pathological aspects of function, and maladaptive behaviours that is relevant to clinical order. However, as a scientific construct, impulsivity has been variously defined as hasty action without consideration or conscious judgment, or the propensity to act with less consideration than individuals of equal ability or knowledge.

Impetuosity or impulsiveness can also be defined as the extent to which an individual's behaviour is influenced by immediate, as opposed to delayed, consequences of planning and a tendency toward risk taking or as a failure in self-monitoring of appropriate behaviour. Patock-Peckham, King, Morgan-Lopez, Ulloa and Moses(2011), however, argue that impetuosity or impulsiveness is different from awareness seeking (i.e., boredom susceptibility and adventure seeking) and shows a tendency for unnecessary risk taking, lack of planning, and doing things without thinking them through. Impetuosity has been identified as a key forecaster of heavy episodic drinking and alcohol-related problems.

Peer group influence

Over the past 50 years, research has shown that the influence of adults has been replaced by that of peers or adolescents. This has also recently emerged as the root cause of misbehaviour and unbecoming behaviour (Neufeld & Mate, 2005). There is a shift of influence from parents to peers during university, initially due to the dependent nature of human beings since after birth parents tend to influence a child's attitude and behaviour, as the child grows they become dependent on their peers as they shed off their parental orientation (Mukama, 2010). At this stage peers become increasingly important and students have a need to establish peer network that can be a source of care. This, in turn, provides role models and social opportunities for the individual (Borsari & Carey, 2001).

According to Onwuamanam (cited in Oni, 2010), people who have high self-esteem usually make informed decisions and are not easily influenced or pressurized to conform to peer pressure. Most people who have a well-developed self-concept are assertive and are not easily persuaded to make impulsive decisions. Adams (1996) on the other hand posits that those with low self-esteem, have a tendency of making impulsive decisions, lack a sense of belonging, are easily influenced and always do or say things to please because they yearn for support and acceptance.

It has been observed that most students and adolescents have the tendency of evaluating themselves through the eyes of others, especially their peers. They seek approval and derive pleasure and gratification if their actions are approved. Victims of peer pressure always strive to please and to fit with others by doing what it takes to become attractive (Farmer, 2010).

According to Gara and Davis (2006), most peer groups are characterized by familiar customs, traditions, manners, and specific language. These may wield astonishing pressure over each other, mainly in regard to academic aspirations and attitudes towards school.

Farmer (2010) affirms that peer influence may be either good or bad. Companionship, group relations and influences are part of constructive growth. Burton, Ray and Metha (2003) however, noted that some like testing with drugs, drinking, vandalism and thieving may sometimes create pressure that is an ordinary basis for the negative behavior of students. It is worth noting that, the type of peer group one joins decides the kind of pressure one gets.

Peer pressure is defined by Adams (1996) as the power that may be exerted by a peer group over an individual and ultimately cause that person to change his/her attitude, values and behaviour. According to Harris (1998) peer pressure can cause people to do things out of their norm, e.g. take drugs, smoke, date, marry, drink, etc.

Empirical and theoretical findings explain peer pressure as a combination of three distinct influences. These distinct influences are, according to Borsari and Carey (2001) overt offers of alcohol (include being polite, e.g. buying a drink for a peer); to direct commands, (e.g. pressurizing or luring others to drink during social gatherings and parties), modelling (occurs when the students copy and emulate the behaviour of the model) and social norms (makes excessive alcohol use appear more acceptable and common). Maxwell (2002) explains that peer norms help determine whether a behaviour is fashionable, safer and popular.

A variety of factors predict the initiation and maintenance of alcohol consumption in university settings. Thombs (1999) states that peer influence has emerged as one of the most influential predictors.

The key determinant of alcohol consumption which could be enhanced by individual behaviour in peer groups themselves is peer group influence. Classic theorists and research in social psychology explain that several factors may merge to move persons to see their world as the grouping does, to presume peer group attitudes, and to act in accordance with peers expectations and behaviours(Chalder, Elgari& Bennett 2005).

Even on a University campus where individuality is encouraged by faculty, administrators, and the curriculum, young people are still susceptible to adopt peer attitudes and behaviours.

Students are largely influenced by their peers to use alcohol and other drugs. Peer influence is notably most obvious with regard to unlawful drug use (Perkins, 1997). Peer associations and influences thereof are common in University, where socialization is on its peak particularly with undergraduates who stay in students' residence. These become more susceptible to peer influence because they spend more of their time with friends than they do with their parents, siblings, and other reference groups .It is during this crucial time that, peers become pressurized to define their attitudes, identities and behaviour. Previous research on the same topic, reveals that, alcohol and other drug abuse by most university students is much closely associated with peer pressure than it is associated with family or religious influences (Perkins, 1985).

The tendency and frequency with which peers think and operate as their peers do, especially when in contact with them, is the basic assumption of this socialization model. In such instances, peers set standards of acceptable and important behavior. According to Read *et al.* (2003)proximal reference group such as role models may serve as reference points which indirectly model behaviours and attitudes observed. Most individuals who perceive their drinking peers as mentors are more likely to drink.

In an article by Hsieh and Hollister (2004) as cited in Kimunya (2012) reviewed records of adolescents found that young men were more likely than young women to be influenced by peers to abuse substance. The findings also suggested that those linked with peers misusing alcohol were more likely to start misusing alcohol since their peers were misusing than those who were not.

The social identity theory which serves to explain why University students are influenced by peer pressure also suggests that through peer groups, the individual's self-concepts are formed. In-groups are viewed more positively than out-groups. During this transitional period, social acceptance is important for university students to be associated with the in-group. Out-groups, (freshmen and non-drinkers), may lack the social support needed. More specifically, non-drinkers would be regarded as an out-group because they do not participate in the normative behaviour of alcohol use. Subsequently, students who enter University determined to be alcohol free often give into peer pressure in order to become a part of the in-group. Feeling like an out-group is common in freshmen, they are more likely to be pressured by peers and are more susceptible to alcohol consumption because they are adapting to the university culture and attempting to develop new friendships (Palmeri, 2011).

Since most undergraduate students have a propensity to increase their use of alcohol to match what they see to be normative, the supposition has been that students who believe that others on campus drink more than they do (a common misconception) are in a disposed position. A dissimilar viewpoint, considers large other self-discrepancies in levels of alcohol utilization as symptomatic of a capacity to refuse to give in to situational pressure that favours drinking (Crawford & Novak, 2007).

Further Crawford and Novak (2007), posit that students who perceive regular drinking as a common activity often drink in order to gain social approval and avoid unconstructive peer evaluations. These often tend to overestimate the amount of alcohol consumed by others on campus and disseminate offensive drinking practices that may not concur with their fundamental attitudes.

As a result of the off-putting consequences connected to the misuse of alcohol on university campus, many institutions now have explicit policies intended to diminish student's level of alcohol utilization (Wechsler, Kelley, Wietzman, Giovanni & Sebring, 2000). Although research indicates that the rate of heavy drinking has remained relatively constant, both the percentage of regular drinkers and those who consume it for becoming intoxicated have increased since the early 1990s (Wechsler, Lee, Kuo, Sebring, Nelson & Lee, 2002).

Gender:

According to Obot and Room (2005), the notable gender difference in human social behaviour is that men are in general, more likely to indulge in alcohol more than women. Most males drink as the general perception of masculinity. Extreme drinkers, who are often men, usually cause marital and family and work place problems. It is evident that people who are involved in heavy drinking, intoxication and casual alcohol use disorders are more than those who voluntarily abstain.

Jackson, William and Gomberg, (1998) cited in Nolen-Hoeksema (2004) nationwide data show that, among different races Blacks, Hispanics, and non-Hispanic Whites, men are more likely than women to drink more.

Also in the data it was noted that age differences are also ostensible, with the greatest consumption occurring in the young adult years for both men and women, and in all three racial/ethnic groups.

According to Jenny, Mari and Kristina (2010) universal gender difference in drinking patterns across cultures is noticeable and each culture has an influence on the differences in a specific way. Social and cultural rules on how women and men should or should not drink have an influence on their drinking pattern. The variation between cultures considerably depends on how a country or cultural groups define safe drinking. This regulation can lead to protection of one of the gender from excessive drinking but at the same time leads to stigmatization. In cultures where women's drinking is judged more strictly, women's drinking results in greater guilt and shame in turn they will drink less if not at all.

Although drinking has been historically viewed as a masculine behaviour, gender-stereotyped beliefs mediated sex differences in drinking, where women who drank were presented as unfeminine. It has however, been noted that sex differences appear to be decreasing because more young women are reported to drink. Pertaining to alcohol content level consumption, research has paid attention to what males drink and suggested that males prefer to drink beer and whiskey unlike champagne as they are considered masculine (de Visser, Smith, Abraham & Wheeler, 2010).

Nolen-Hoeksema (2004) reports that, fewer women than men have alcohol related problems. Nolen-Hoeksema (2004) further argues that the cause for the above stated disparity may be that, women are less vulnerable to alcohol risk related symptoms and have protective factors.

Since women unlike men have desirable feminine traits (e.g., nurturance and warmth, are associated with less use and fewer alcohol problems) which may protect them against excessive drinking, most of them as compared to their male counter-parts, do not indulge in excessive drinking, aggressiveness, sensation seeking and do not use alcohol as an anti-depressants.

Women tend to be more expressive than their male counterparts; they find it easy to establish and maintain close friendships through which they could develop and express either physical or verbal affection, while males find it difficult to express affection through shared activities with friends(Bosari& Carey, 2006).

General observation and experience show that females are more detailed in their deliberations while men usually operate mainly with headlines. Females more often than not talk about people and relationships while males talk about general and common activities such as soccer or current news and debates. The most common context in which men could freely interact and receive support from their peers is in drinking activities (Bosari& Carey, 2006). Men receive support from friends in drinking settings than women. These settings create platform for men to enhance social reinforcements from peers.

Bosari and Carey (2006) further state that most university male students start using by taking one to four drinks per occasion. This is often done to either relieve tension or to derive social satisfaction. This tendency usually leads to disinhibition. From these findings it can be seen that first year males who want to make friends drink heavily upon arrival at university to facilitate social interaction. Thus men are more likely than women to develop friendships with individuals whom drinking is a key element of their socialization.

According to Obot and Room (2005), the probability that the universal gender differences in drinking behaviour might rise is very high. Possible causal reasons indicated in research findings are that, women are believed to have lower rates of gastric metabolism of alcohol than men, they also have smaller volumes of body water in which alcohol is distributed, and they are therefore bound to consume less alcohol than men to derive the same effects. Women are at the same time, more likely to experience unpleasant effects from alcohol than men.

Kirmani and Suma (2010) established that positive expectancies for alcohol were stronger for boys than for girls. In other studies, higher levels of expectancies were reported among boys than girls for tension reduction, social assertiveness, activity enhancement and performance enhancement.

As stated by Ham and Hope (2003), the heaviest and most frequent drinking in University has been recorded among men. Generally, male students tend to drink alcohol more than their female counterparts and it is recorded that they drink more frequently and in large quantities. Gender socialization plays an important role in explaining the gender differences with regards to the frequency and quantity of alcohol consumption; it stipulates that women may have been socialized to internalize misery and men to externalize suffering, leading to amplified drinking behaviour in men.

Investigations and studies constantly show that most indexes of alcohol use, and especially intense alcohol drinking, is reported to be higher among males than in females. It has further been reported that, the gender inequality increases between late teenage years and young parenthood. On the other hand, the prevalence of alcohol problems among male and female university students is reported to be alarmingly increasing.

Specific and clear guidelines on how human behaviour can be understood, predicted and changed, are also provided by the same theory. Bandura (1977, 1986) further postulates that social influences and structures within the environment may be affected and influenced by the interaction of human beliefs and cognitive capabilities. In another form of interaction between the environment and behaviour, a person's behaviour determines the environmental aspects modifying the behaviour of the individual.

Vroom (1964) states that certain personal behavioural patterns usually determine specific behavioural outcomes. The Social Learning theory emphasizes that cognitive processes which lead to behavioural outcomes be thoroughly examined. Different motivational elements that come into play should also be looked into.

Since people who drink alcohol come from diverse backgrounds, belief systems and experiences, drinking patterns and styles will always differ. The amount of alcohol consumption, reasons for alcohol intake and occasions will probably also not be the same. The Expectancy theory, which refers to information stored in memory, has emerged as a viable explanation for a wide variety of psychological phenomena. This theory predicts the relationship between events in some upcoming situation. In most instances people think that if they drink a particular beer, they will become more outgoing or keep life challenges locked up in the sub conscious mind for prolonged periods (DeBenedittis & Borjesson-Holman, 2006).

The theory may be simplified by describing it as a belief that people hold about events in the immediate environment and the world. Within Expectancy Theory, most people are believed to have high expectations of certain reinforcing effects.

Drinking men are, however, reported to be causing problems such as aggression, legal problems, and problems that endanger others compared with women (White & Jackson, 2005).

Theoretical background

Kandel's Social learning theory

Kandel (1985) aligns himself with the principles of Banduras' social learning theory. According to Kandel, peers may influence or be influenced to use alcohol, directly or indirectly. Direct peer influences explicitly focus on luring a person to drink. This often ranges from polite gestures such as offering to pay for beverages or inviting others to participate in drinking games.

Peer influences on drinking behaviours are, however not, limited to direct offers or commending to drink. Information about acceptable and admirable behaviours (those that are likely to lead to social approval and reinforcement) may be provided through actions and what is considered correct in a given social context.

According to Bandura (1977), behaviour is learnt through various modes such as observation, imitation, and modelling. It has been noted that on the whole, human behaviour is learnt observationally through modelling. An inspiration of how new and innovative behaviours are performed may be formed by observing others, and later on this coded information could serve as a guide for action. The same could however, be used to unlearn or change the behaviour. Human behaviour is described in terms of uninterrupted mutual interaction between cognitive, behavioural, and ecological influences by Social learning theory. Social learning theorists describe human behaviour as an interaction of the environment, intrinsic personal factors and individual behaviour. The interaction of behaviour and thinking patterns may influence the general behaviour of affected individuals.

influence effects, and alcohol abuse patterns with any correlation to gender differences of university students in a Southern African University.

Methodological aspect entails a different perspective and assessment of possible alcohol abuse in comparison to psychologically set standards, but rather a foretell in personality and gender.

Hypotheses

- (1) There will be a significant main effect of impulsivity on alcohol abuse.
- (2) There will be a significant main effect of peer group influence on alcohol abuse.
- (3) Males will score higher and hence tend to abuse alcohol more than females.
- (4) The interaction between impulsivity, peer group influence and gender will have a significant effect on alcohol abuse.

Methodology

Design

This study was based on cross-sectional design within a quantitative research approach. The independent variables of the study are impulsivity, peer group influence, gender while alcohol abuse is the dependent variable. For all four hypotheses, a $2 \times 2 \times 2$ analysis of variance (ANOVA) was used to test for the main and interaction effect of the variables on alcohol abuse.

Sample and characteristics

The Participants who study at the North West University (Mafikeng Campus), South Africa, were randomly selected for the study. The sample size compromised 300 students from across all faculties in the University, first year through post-graduate students were asked to participate in the study. The target population was eighteen years of age or older to participate in the study, since the South African legal drinking age is 18 (Seidman, 2009). It came out in the study that 1% of participants were of the age 17. The age range of all participants was between 17-40 years, the majority (28%) of the respondents were aged 19, Mean age = 21.41% (124) were males and 59% (176) were females.

Alcohol abuse is measured using index of alcohol involvement, a scale designed specifically for measuring the degree of problems associated with alcohol use and abuse.

Objectives of the study

The main objective of the study is to determine the effect of the three predictor variables (impulsivity, peer group influence and gender) on alcohol abuse among students in a South African University. The specific objectives of the study are identified as follows:

- (1) To determine the influence of impulsivity on alcohol abuse.
- (2) To determine the peer group influence on alcohol abuse
- (3) To determine the inter play of gender on alcohol abuse
- (4) To determine whether interaction between impulsivity, peer group influence and gender has any an effect on alcohol abuse

Significance of the study

The theoretical, practical and methodological aspects of this study make it relevant and significant. Theoretically, it adds to advancing understanding on the rapid alcohol abuse of university students in a South African University. If students have well-developed self-esteem, their personality and psychological responses to social surroundings, they will find it easier to exercise self-control and this could enable them to avert alcohol abuse. Reduced alcohol intake will spontaneously improve their health and allow them to lead holistic lifestyles.

Practically, this will also help professionals working with university students, mainly social workers and psychologists, to identify impulsivity, provide necessary intervention and help students to make informed decisions. Students will, as a result of this intervention and support be empowered to assert themselves when it comes to career choices. Theoretically, it will add more knowledge to existing theories related to this study. The study will also present psychological variables, not often investigated, which may lead to alcohol abuse and give insight to peer group

Instruments and Psychometric properties

The primary instruments used to collect data were the Index of Alcohol Involvement (IAI) (MacNeil, 1991), the Barratt Impulsiveness Scale (BIS-11) (Patton, Stanford & Barratt, 1995) and the Peer Pressure Inventory (PPI) (Clasen & Brown, 1985). The description of each instrument follows next.

Alcohol abuse: the instrument used to measure alcohol abuse is the Index of Alcohol Involvement

Index of Alcohol Involvement

Description: The IAI scale which has 25 items is specifically designed and used for measuring the degree of problems associated with alcohol use and abuse. To determine the presence or absence of problems which emanate from alcohol use, IAI items were used as a sample for the purpose of this research/article. This scale is user friendly and could be used for assessing the level of alcohol consumption to help individuals who are willing to disclose their status of alcohol abuse (MacNeil, 1991).

Norms: 305 undergraduate students were used in the study for IAI at a large Western university. The mean age = 24, 87 % were white, and 13% were minorities. Females made up approximately 60 % of the sample. Reliability: the IAI has an alpha of 0.90 and a very good internal consistency. A pilot study of 20 undergraduate students yielded a .89 Cronbach alpha indicating instrument is reliable for use in South Africa.

Validity: the IAI has excellent factorial and construct validity. It was correlated in predicted directions and amounts with a number of other scales of the WAS including the Generalized

Contentment Scale, the index of clinical stress, the partner Abuse scale (physical and non-physical), the Non-physical Abuse of partner Scale, and the physical Abuse of Partner Scale (Fischer & Corcoran, 2013).

Impulsivity: the instrument used to measure impulsivity was the Barratt Impulsiveness scale

Barratt Impulsiveness Scale (BIS-11)

One of the self-administered and most widely used questionnaire to measure impulsivity, is the Barratt Impulsiveness Scale (BIS). The most recent version consisting of 30 items is the BIS-11. This scale is based on impulsivity (quick cognitive decision making) and lack of proper planning (lack of concern about the future).

It may also be used to assess long-term pattern of behaviour. Respondents may be required to answer questions about how they think or act without referring to any specific occasion.

Patton *et al.* (1995) report internal consistency coefficients for the BIS-11 total score, that range from 0.79 to 0.83 for separate populations of under-graduates, substance-abuse. Reliability and validity of the BIS has repeatedly been shown in a variety of languages. All three scales of the BIS-11 measure aspects of impulsivity relating to rash behaviour or thinking.

Peer group influence: the instrument used to measure peer group influence is the peer pressure inventory

Peer Pressure Inventory (PPI)

To measure peer group influence, the Peer pressure Inventory was used. This instrument is prepared by Clasen and Brown (1985). The Peer Pressure Inventory (PPI) is a widely used instrument to measure the extent of peer group influence.

It consists of 22-paired items which require individuals to indicate how often they conform to peer pressure and find themselves doing things without thinking of the consequences of such actions. Peer Pressure Inventory has a reliability of 0.72; the content validity index of peer group influence is 0.818.

The PPI is used to measure peer group influence. The statements are in pairs and in each pair, individuals are to decide whether they were encouraged by their peers to do or not to do something. Each item is scored from -3 to +3 with the 'no influence' option scored as zero. Thus: 3 = a lot, meaning a lot of influence from peers; 2 = somewhat, meaning a bit of influence; 1 = little, meaning little influence from peers, and 0 = no influence. In addition, -1 = little, meaning that friends do not encourage you to do something; -2 somewhat, -3 - a lot.

Coding is as follows: -3=0, -2=1, -1=2, 0=3, +1=4, +2=5, +3=6. The potential range is from 0-132. Negative influence ranges from 0-44, Low influence ranges from 45-89, and positive influence range from 90-132. High scores imply positive peer group influence from positive direction or negative peer group influence from the negative direction.

Procedure

After ethical approval was obtained from the North West University with reference number (NWU-00025-14-S9) data were collected. Dates of visits were communicated to the institution concerned for data collection. The administration of the questionnaires took place during regular classes under the supervision of the researcher, one (1) master's learner was appointed to assist lecturers of the respective classes. Participants were provided with informed consent with information concerning the aim, objectives, and method of the study. Participants were in no way coerced into participating in this study.

The researcher explained to the participants that, in cases where they volunteered to participate but later on changed their minds and decided to leave, they could do that without fear of any negative consequences. Participants were ensured that strict confidentiality would be maintained and were further requested not to write their names or provide any contact information such as residential addresses that would identify them, therefore eliminating identification bias. The researcher also allayed the fears of the respondents by explaining that data collected from them would be handled with care and that analyzed research results and findings would be made known to participants.

All data is kept in an access restricted place by the second author of the study. Data is expected to be destroyed after one year commencing from the date of collection, i.e. 2015. The study was not expected to be harmful but participants were advised not to continue completing the questionnaire should it make them uncomfortable in any way and the researcher would collect them back uncompleted. Students completed the questionnaires anonymously and without any discussion or interruption of some sort. After the completion of the questionnaires, learners were thanked for their participation. Few copies of the questionnaires were returned uncompleted and the researcher thanked the participants, went ahead and looked for other students who could complete them.

Results:

The study was anchored on four hypotheses. Results are presented below:

Analysis of variance on predictors of alcohol abuse

The hypotheses stated that(1) there will be a significant main effect of impulsivity on alcohol abuse, (2) There will be a significant main effect of peer group influence on alcohol abuse, (3) Males will score higher and hence tend to abuse alcohol more than females, (4) The interaction between impulsivity, peer group influence and gender will have a significant effect on alcohol abuse. A three way analysis of variance was carried out (Table 1).

Table 1: Summary of a Three Way Analysis of Variance as Determined by Impulsivity, Peer Group Influence and Gender on Alcohol Abuse

	Source	SS	Df	MS	F	P
	Impulsivity (A)	12140.266	1	12140.266	35.696	0.001
	Peer Group Influence (B)	156.834	1	156.834	0.461	NS
	Gender (C)	7097.672	1	7097.672	20.869	0.001
Alcohol Abuse	A &B	279.608	1	279.608	0.822	NS
	A & C	122.986	1	122.986	0.362	NS
	B & C	747.230	1	747.230	2.197	NS
	A & B & C	42.731	1	42.731	0.126	NS
	Error	99309.247	292	340.100	-	-

Table 2: Summarized mean and standard deviation values of impulsivity, peer group influence and gender.

Group	N	M	SD
Low impulsivity	155	47.34	14.456
High impulsivity	145	62.03	22.981
Low peer group influence	135	55.53	19.473
High peer group influence	165	53.56	21.142
Male	124	62.02	23.674
Female	176	49.1	15.739

The results revealed a significant main effect of impulsivity on alcohol abuse, $F(35.696, p < 0.001)$, with the mean of low impulsivity being ($m=47.34, SD=14.456, N=155$) and that of high impulsivity being ($m=62.02, SD=22.981, N=145$). The analysis of suggests that those with high impulsivity are more likely to abuse alcohol (See Table 1 and Table 2).

There was no significant main effect of peer group influence on alcohol abuse, $F(0.461, (ns))$, with the mean of low group influence being ($M=55.53, SD=19.473, N=135$) and that of high peer influence being ($M=53.56, SD=21.142, N=165$) (See Table 1 and Table 2).

There was also a significant main effect of gender on alcohol abuse $F(20.869 < 0.001)$, with the mean of males being ($M=62.02, SD=23.674, N=124$) and that of females being ($M=49.1, SD=15.739, N=176$). The analysis suggests that males are more likely to abuse alcohol (See Table 1 and Table 2).

It was noted that the three variables showed no significant interaction and that the variables joined together had no significant effect on alcohol abuse $F(0.126, (ns))$ (See Table 1).

These results partially confirm the stated hypotheses one (1) and three (3).

Discussion and Conclusion

In summary, the study was anchored on four hypotheses: (1) there will be a significant main effect of impulsivity on alcohol abuse, (2) There will be a significant main effect of peer group influence on alcohol abuse, (3) Males will score higher and hence tend to abuse alcohol more than females, (4) The interaction between impulsivity, peer group influence and gender will have a significant effect on alcohol abuse.

This study has shown through the literature and the different theories that impulsivity, especially sensation seeking individuals are more prone to alcohol abuse. The results are also in line with the study conducted by Littlefield, Stevens and Sher (2013) which asserts that historically, alcohol misuse has been associated with traits which are broadly linked to self-control. Specifically, personality factors such as impulsivity have been robustly linked to problematic alcohol involvement. Moreover, impulsivity-like traits are believed to influence general behavioural problems. As a consequence, impulsivity, is believed to affect specific alcohol-related motivation, such as those related to internal affect regulation.

Baer (2002) concluded out of 20 studies, one of the most consistent findings which demonstrated that a general behaviour element which is described as “sensation seeking” is associated with frequent and excessive drinking. It was also realized that, heavy drinkers were described as pleasure seeking, extraverted, reckless, and defiant and out of the usual run of things.

Patock-Peckham *et al.* (2011) argue that impetuosity or impulsiveness is different from awareness seeking (i.e., boredom, susceptibility and adventure seeking) and shows a tendency for unnecessary risk taking, lack of planning, and doing things without thinking them through. Impetuosity has been identified as a key forecaster of heavy episodic drinking and alcohol-related problems.

The results of the second hypothesis which was there will be a significant main effect of peer group influence on alcohol abuse could not be in line with the findings from the literature as suggested by several authors (Borsari & Carey, 2001; Harris, 1998; & Burton *et al.*, 2003) on the influences that emerge when alcohol abuse by students is experienced by university students. The researcher is of the view that there could be a variety of distinct influences, and that results of the studies vary across countries based on different motives. The statement is also supported by Gara and Daris (2006) who assert that it all depends on what kind of customs, traditions and manners constitute the group influence.

The results of the third hypothesis also showed a significant main effect, in that males abuse alcohol more than females. These findings are in line with studies by Obot & Room (2005) that notably, gender difference in human social behaviour is that men are in general, more likely to indulge in alcohol than women. Ham and Hope (2003) support this notion by stating that the heaviest and most frequent as well as the most problematic drinking in University has been recorded among men. Generally, male students tend to drink alcohol more than their female counterparts and it is recorded that they drink more frequently and in large quantities. Gender socialization plays an important role in explaining the gender differences with regards to the frequency and quantity of alcohol consumption; it stipulates that women may have been

socialized to suppress emotions and men to express emotions, leading to amplified drinking behaviour in men.

Further, Obot and Room (2005) posit that the possible causal reasons indicated in the research findings are that, women are believed to have lower rates of gastric metabolism of alcohol than men, they also have smaller volumes of body water in which alcohol is distributed, and they are therefore bound to consume less alcohol than men to derive the same effects.

Also in line with the findings of the study the literature goes as far as suggesting that the most common context in which men could freely interact and receive support from their peers is in drinking activities (Bosari & Carey, 2006). Kirmani and Suma (2010) established that positive expectancies for alcohol were stronger for boys than for girls.

Historically, drinking has been regarded as a masculine behaviour and gender stereotyped beliefs mediated sex differences in drinking. It has however, been noted that sex differences appear to be decreasing because more young women are reported to drink (de Visser, Smith, Abraham & Wheeler, 2012).

The fourth hypothesis showed no significant results as there was no interaction between impulsivity, peer group influence and gender with alcohol abuse. It is clear that the three variables are partially the predictors of alcohol abuse and partially not.

In conclusion it can also be noted that long term use of alcohol has negative implications. Studies have shown that long-term alcohol abuse produces serious, harmful effects on a variety of the body's organ systems. Parts of the human body most affected include the liver and the immune, cardiovascular, and skeletal systems (NIAAA, 2000). Also in the DSM-IV-TR (APA, 2000) the

primary diagnostic criteria for alcohol abuse are centered on the way that alcohol interferes with the individual's responsibilities.

Alcohol abuse is characterized by a repeated pattern of excessive use that results in intoxication (and unwanted physical symptoms such as vomiting or hangovers).

Heavy and repeated alcohol drinking takes its toll on the abusers' social and professional life. Indeed the signs of alcohol abuse include legal problems (being arrested for public intoxication, driving while drunk), personal problems (interpersonal conflict and/ or marital discord brought on by alcohol use), and professional problems (missing work because of alcohol use/ or hangover, poor work performance, and for students, missing or failing classes because of alcohol-related problems).

Recommendations:

- Future studies should include the level of alcohol abuse by students on age differences as well as the impact of alcohol abuse on the academic performance of university students.
- Selling and Purchases of alcohol by minors should be strictly regulated. The findings of this study revealed that 1% of university students less than 18 years of age, have already started using alcohol..
- Health professionals like psychologists and counsellors, need to work together to help students to curb the level of alcohol abuse. This can be done by offering interaction sessions such as cognitive therapies at least once in every quarter as impulsivity seemed to be one of the alcohol abuse predictors in students.
- Universities should create educational programmes for students preferably in the first quarter of the year while recognizing that there are transition issues related to entering

universities and adaptation could be negatively at its peak especially during the first few months, that makes it a critical time for prevention and intervention activities.

- Guidance and counselling centres in higher institutions of learning should consult and involve students in the development and implementation of intervention programmes as this may yield positive results.
- Committees on alcohol concern must be established, the committees must comprise of Student Representative Council (S.R.C) and the different stakeholders. The responsibility of the Committee on Alcohol Concerns will be to: (1) review the Alcohol Policy at least once a year and to make recommendations to the Committee on life in the University regarding the Alcohol Policy or alcohol use or misuse on campus at any time; (2) adjudicate all questions of policy pertaining to the application of this policy whenever such matters cannot be resolved by the Dean of Student Affairs and the Student Representative Council (S.R.C.), (3) ensure that regulations and policies regarding the serving and consumption of alcohol on campus are realistic, clearly written and widely circulated on campus; (4) It is the responsibility of each member of the Committee to be thoroughly familiar with all parts of the Alcohol Policy, and to rigorously enforce its provisions within their own area of responsibility in the University.

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