

## **ROLE OF PERCEIVED STRESS AND ABSENT INTERPERSONAL SUPPORT IN THE EXPLANATION OF ALCOHOL USE**

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### **Abstract**

*The study examined psychosocial explanations for alcohol use: role of perceived stress and interpersonal support. Participants were one hundred and eighty three (183) undergraduates drawn from University of Uyo, Akwa Ibom State Nigeria. Cross sectional design was adopted. Three instruments were used for data collection Step wise multiple regression was the main statistic used for data analysis; and in testing the two hypotheses for the study. Results of the regression analyses showed that perceived stress was a significant predictor of alcohol involvement among undergraduates ( $p < .01$ ). Interpersonal support did not significantly predict alcohol involvement among undergraduates. One good practical implication of the finding of this study is that when undergraduates perceive the normal hassles of training usually witnessed in the university as stressful; the more likely they would be involved in alcohol use. Limitations were made, while suggestions for further studies were stated.*

**Keywords:** *Perceived Stress, Interpersonal Support, Alcohol Involvement*

### **INTRODUCTION**

For many years alcohol has always been regarded as the most commonly abused substance. However, the reflection of the society's perception of the substance is that it affects virtually all individuals directly or indirectly (National Council on Alcoholism and Drug Dependence- {NCADD}, 2016). Involvement in alcohol consumption apart from biological and psychological

consideration arises from two broad reasons. The first being the general acceptance of the substance as a social beverage; while the second is its amazing level of availability. Therefore, with the weak regulation of alcohol consumption around the world, more users which could degenerate to abusers are bound to emerge. Examples of these users include student's population who enjoy liberty outside home. Unfortunately the health implication of this behavior is likely to worsen if not checked urgently. There are some psychosocial factors that account for individuals involved in alcohol use/abuse. As earlier stated people get involved in alcohol use to enjoy social situations; and these individuals enjoy some level of disinhibition (Butcher, Mineka, & Hooley, 2012); finding pleasure in it amidst how transient their period of ecstasy may be. One thing is however sure which follows from a learning theory standpoint. The pleasure they derive from alcohol use reinforces the drinking behavior of these users. This partly explains how alcohol dependence is learned, despite the fact that individuals involved are aware of the harm this poses to their life's adjustment (Gordis, 2000).

A number of psychosocial views have been advanced on why individuals get involved in alcohol use. One of such is that psychosocial and biological factors mutually influence each other in causing alcohol involvement. Biological and psychosocial factors could also explain alcohol involvement. Stable family relationships and parental guidance which are very important for adaptive development are lacking in families where alcohol is abused (Butcher, Mineka, & Hooley, 2012). Individuals from such families are susceptible to developing substance abuse and related problems like alcohol involvement (Erblich, Earleywine, & Erblich, 2001). The experiences and lessons people learn early in life play significant impacts on them as adults and this is a form of behavior perpetuation. Nielsen, Kapitany, and Elkins (2015) demonstrated through

experiment that children adopt what appear to be conventional behaviours, even when faced with a clear demonstration of their negligible value. Although some, studies indicated that people get involved in alcohol because they believe that alcohol use will lower tension and anxiety and increase sexual desire and pressure in life (Seco & Barbaree, 1995).

The reciprocal-influence model posits that the onset of alcohol involvement amongst individuals increases their popularity and acceptance by their peers. In the words of Christiansen, Smith, Rhoeling, and Goldman (1989), expectancies of social benefit influences young adults' decision to start drinking and predict their consumption of alcohol. These reasons are unfounded and results from perceived personal inadequacies, expected gains, and perhaps the desire to maximize social acceptance. Although the present study is not aimed at establishing whether alcohol use produces the satisfaction users crave, it is noteworthy that involving in alcohol consumption is harmful as the euphoria it creates is transient and disappointing because the perceived degree of benefit is not always experienced by the users. This study is specifically to investigate the roles of perceived stress and absent interpersonal support in explaining alcohol involvement.

Stress whether perceived or real is fundamentally an interactive and dynamic construct because it reflects the interaction between the organism and the environment over time (Monroe, 2008). For example while some individuals adjust adaptively by developing various coping strategies that are not very healthy following its biological cost such as suppression of the immune system (Sergeston & Miller, 2004); McEwen (1998) posited that some biological cost to stress emerge when individuals over suppress their stressful experiences called allostatic load. When we relax and not experience stress, our allostatic load is low, but when we are stressed and feeling

pressured, our allostatic load is high leading to health complications (McEwen 1998). Some individuals in order to relax their stressful experience get involved in alcohol consumption and complicate their lives the more in the process. Studies have indicated that a typical alcohol abuser is discontented with his or her life and is unable and sometimes unwilling to tolerate tension and stress (Rutledge & Sher, 2001). Hussong, Hicks, and others (2001) reported a high positive correlation between alcohol consumption and negative affectivity. This implies that people involve in alcohol use find it difficult to relax. The inherent danger however is that people who get involved with alcohol use and find it tension-reducing are bound to continue abusing alcohol even when the cues that prompted the initial involvement are absent.

There is an assumption that when individuals in a bid to cope with stressful situations get involved in alcohol, it may be understood although condemnable, and perhaps may disassociate from alcohol involvement if the stressful situation has abated through a productive treatment session. But when individuals involve in alcohol use as a result of perceived stress is cited as a motivating factor; then the aftermath of this involvement may be more grave than imagined. Perceived stress is a subjective assessment of stress that incorporates feelings about the uncontrollability and unpredictability of one's life, how much one has to cope with one's life challenges, as well as a dwindled confidence in one's ability to deal with problems or difficulties. It is our contention that perceived stress as a reason for alcohol involvement may be more distressing than if individuals were to be involved in an actual stressful situation and is exploring options for tension reduction. One of the dangers of perceived stress as a risk factor to alcohol involvement is its potential to create a situation of helplessness and depression (Cohen, Kamarck, & Miller, 1983). In certain settings like the University environment, students perception of stress

and their conjecture of how to cope leads to depressive symptoms (Dyson & Renk, 2006), which may cause them to resort to alcohol use since depression is correlated with alcohol involvement (Numberger, et. al., 2002). Therefore, the first hypothesis for the present study is that perceived stress will significantly predict alcohol involvement among Nigerian students ( $H_1$ ). The problem of alcohol involvement may be aggravated when there is an absent of interpersonal support. It is true but arguable that stressed individuals resort to alcohol use because they do not know any better way to deal with their problem or that they have perceived their challenges to be very overwhelming so much so that they involve in alcohol use as an escape route. Interpersonal social support refers to resources, materials, and emotional cues made available to a person to help him overcome life's challenges (Moak & Agrawal, 2010). Individuals with Interpersonal social support (ISS) are less likely to be depressed, hence not predisposed to alcohol involvement (George, Blazer, Hughes & Fowler, 1989). According to the buffering hypothesis (Cohen & Wills, 1985) increased ISS even when it is perceived acts as protective influence against stress and guard against mental health problem. This leads to the second hypothesis tested in the present study. Absent interpersonal support will significantly predict alcohol involvement among Nigerian students ( $H_2$ ). This study is designed to investigate the role of perceived stress and absent interpersonal social support as they influence alcohol involvement with a bid to proffering suggestions on how best victims can better cope with life's challenges.

## **Method**

### **Participants**

One hundred and eighty three (183) undergraduates comprising of 100 males and 83 females took part in the study. They were students of University of Uyo, Akwa-Ibom State, Nigeria. Using simple random sampling technique, the participants were drawn from ten (10) departments in five (5) faculties (Social Science, Education, Art, Engineering, and Sciences) of the school. Both the department and faculties were randomly selected. Participant's age ranged from 16 to 37, with a mean age of 22.13. Participants were selected from various levels in the departments. Information obtained from participant's ethnic group indicated that 50% were from south-south part of Nigeria, 36% were from south east, 9% were from south west; while 5% were from northern part of the country. Cross-sectional research design was adopted for the study. Only 2.7% of the participants indicated that they were Muslims, the rest were Christians.

### **Instrument**

A questionnaire form comprising three instruments was used for data collection. The instruments includes: Index of Alcohol Involvement, Perceived Stress Scale, and Interpersonal Support Evaluation List.

Index of Alcohol Involvement is a psychological inventory designed to measure individual's use of alcohol. The inventory was developed by Sheer and Gotham (1999). It is a 25 item instrument of seven point likert type scale. Response options ranged from; *1 = Never, 2 = Very rarely, 3 = A little of the time, 4 = Some of the time, 5 = A good part of the time, 6 = Most of the time, and 7 = Always*. The instrument was found to be reliable and valid in measuring alcohol use and involvement. An item analysis done to establish its reliability for use for the present study yielded a cronbach's alpha reliability coefficient of .77, indicating that the inventory is highly reliable.

Sample item includes; “when I have a drink with friends, I usually drink more than they do”, “I feel that I drink too much alcohol”.

Perceived Stress Scale (PSS) developed by Sheldon and Cohen (1994) is the most widely used psychological instrument for measuring the perception of stress. The 10-item PSS measures global perceived stress experienced across the past 30 days, on a five-point scale ranging from “never” to “always.” Total scores range from 0 to 40. Internal consistency reliability for the current sample was  $\alpha = .84$ .

Interpersonal Support Evaluation List (ISEL-12) was developed by Cohen, Mermelstein, Kamarck, and Hoberman (1985). The ISEL-12 is derived from the long form of the ISEL and contains 12 items which assess perceived availability of social support on a four-point scale ranging from 0 = “definitely false” to 3 = “definitely true.” All items are summed to yield a total score (scores range 0-36). Low score on the ISEL represent absence of interpersonal support or low level of interpersonal support; while higher scores represent presence of interpersonal support (Cohen, et. al., 1985). Social network integration and life engagement are indicators of presence of interpersonal support (Cohen, 2008). Internal consistency reliability for the current sample was  $\alpha = .76$ .

## **Procedure**

The participants were approached by the researchers through their class representatives. The researchers contacted each class representative through their phone numbers obtained from their departmental secretaries after due clarifications such as motive and aim of the research. The researchers explained to each class representative the aim of the research, how it will benefit the

students and society before they give their consent to assist. Each class representative introduced the researchers to the students as well as the mission of the researchers. After which rapport was created before administering the questionnaires. Participants' consents were sought; and were equally assured that their responses will be treated with confidentiality. The participants were informed that participation in the study was voluntary. They were asked to respond truthfully as the questionnaire is for academic exercise. A questionnaire comprising three scales and demographics was administered to the participants to fill. A total of 220 copies were administered to the students (100%). Out of the 220 copies administered, 200 (90.91%) questionnaires were completed and returned. After cross checking for errors in filling the questionnaires, only 183 (83.18%) copies were properly completed and used for the study.

### **Design/Statistics**

The study adopted a Cross sectional research design. Data obtained from the study was analyzed using step wise multiple regression analysis. Statistical Package for the Social Sciences (SPSS) version 20 was employed for the data analysis.

### **Result**

Table 1. Table of correlation across variables of interest

	<b>Alcohol involvement</b>	<b>Gender</b>	<b>Age</b>	<b>Perceived Stress</b>	<b>Interpersonal support</b>
Alcohol involvement	-	-.22**	.08	.09*	-.13*
Gender		-	-.27***	.18***	.25***
Age			-	-.09	-.06
Perceived Stress				-	.21**
Interpersonal support					-

\*p< .05, \*\*p< .01, \*\*\*p< .001

The correlation table showed that alcohol involvement was significantly and negatively related to gender ( $r = -.22, p < .01$ ). Interpersonal support was also significantly and negatively related to alcohol involvement ( $r = -.13, p < .05$ ); but significantly and positively related to perceived stress ( $r = .09, p < .05$ ). The correlation as indicated tend to appear that, as perceived stress increases alcohol involvement also increases. In contrast, as interpersonal support reduces alcohol involvement increases. Gender was negatively and significantly related to age ( $r = -.27, p < .001$ ); positively and significantly related to perceived stress ( $r = .18, p < .01$ ); as well as interpersonal support ( $r = .25, p < .001$ ). Perceived stress turned out to be positively significantly related to interpersonal stress ( $r = .21, p < .01$ ). There was no significant positive relationship between age and alcohol involvement; and a negative relationship between age and perceived stress as well as interpersonal support.

Table 2. Showing the prediction of ‘Alcohol Involvement’ from control variables, perceived stress and interpersonal support

	<b>R</b>	<b>R<sup>2</sup></b>	<b>R<sup>2</sup>Δ</b>	<b>B</b>	<b>Beta(β)</b>	<b>T</b>
Model 1	.26	.066	.066			
Gender				-8.27	-.23	-3.07**
Age				.15	.03	.46
Perceived Stress				.26	.14	1.84**
Model 2	.28	.078	.012			
Interpersonal Support				-.29	-.11	-1.50

\*p< .05, \*\*p< .01, \*\*\*p< .001

Controlling for gender and age, perceived stress ( $\beta = .14, t = 1.84, p < .01$ ) entered in the first model significantly predicted alcohol involvement, making a statistically significant 2.6%

contribution as a predictor of alcohol involvement ( $R = .26$ ). This shows that the way students perceive stress around them appear to influence them to use or consume alcohol more. In contrast, interpersonal support was not statistically significant in predicting alcohol involvement among students.

### **Discussion**

The role of perceived stress and absent interpersonal support in explaining alcohol involvement among student was examined in this study. Result of the study indicated that perceived stress influences alcohol involvement. This finding confirms the result of an extant study by Rutledge and Sher (2001) that a typical alcohol abuser is discontented with his or her life and is unable and sometimes unwilling to tolerate tension and stress. As stated earlier Hussong, Hicks, and others (2001) reported a high positive correlation between alcohol consumption and negative affectivity. This implies that people involved in alcohol use find it difficult to relax. Thus, some individuals in order to relax their stressful experience get involved in alcohol consumption and complicate their lives the more in the process. But it is important to note that despite the pleasure that can be derived from alcohol consumption especially among students, researchers Rutledge and Sher (2001) observed that the positive correlation between alcohol consumption and stress implies serious health implication to individuals involved.

However, stressors whether perceived or real varies on its debilitating effect on individuals (Sacco, Bucholz, & Harrington, 2014). Studies suggest that type of stressors an individual perceive or

experience may play a role in stress-related drinking. For example, Shaw and colleagues (2011) found that changes in financial strain were associated with increased odds of heavy drinking. Like Dyson & Renk (2006) stated, students perception of stress and their conjecture within the university environment as well as how to cope lead to depressive symptoms. This according to Numberger, et. al., (2002) may cause them to resort to alcohol use since depression is correlated with alcohol involvement. Users find solace in the intoxicating effect of alcohol and perhaps form a vicious cycle of alcohol involvement as long as their perceived problem last. Through repeated experience of apparent short term benefit of alcohol involvement, dependence occurs as a way of coping especially in the absence of other coping skills (Osmany, Ali, Rizvi, Khan, & Gupta, 2014).

The result of this study further showed that interpersonal support is not significant in influencing alcohol involvement. This invariably implies that absent interpersonal support may be less likely to lead to alcohol involvement. The finding is contrary to the study of Platt, Solan, and Costanzo (2010) which reveals that living near one's relatives is associated with abstaining from alcohol; indicating the importance of interpersonal support from friends and relatives hence explaining that the cues that motivate individuals to resorting to alcohol is actually mediated by absent interpersonal support. Similarly, study on interpersonal support have proven that close friends living nearby who have not developed dependency in alcohol is associated with decreased drinking (Platt et. al., 2010). Cross (1995) however disagrees that interpersonal support is not associated with stress and alcohol involvement and in helping individuals adopt more healthy coping strategies than involving in alcohol.

Since absence of interpersonal support is not significant in influencing alcohol involvement, it is therefore important that wherever one finds oneself becomes very important.

Notwithstanding, every society/environment despite how individualistic still provides interpersonal support. But Koyama (2005) in her study reported that international students in American Universities are prone to alcohol use. Koyama attributed this involvement to the influence of acculturation stress which according to her is associated with absent interpersonal support. Therefore, the non-significant role of absent interpersonal support in influencing alcohol involvement may be related to culture where the study was conducted, which is more communalistic than individualistic. The position of this study in the light of this seeming contradiction is that, apart from the idiosyncrasies of the individuals who get involved in alcohol use, there may be different threshold of stress for alcohol involvement that can be handled by interpersonal support while individualistic disposition can also play a role in people not getting involved in alcohol use.

The finding of this study has some practical implications. First, the present finding as well as the past noted stress as a key factor that predisposes students to engage in alcohol use. This implies that if the level of stress faced by Nigerian students in and around campuses are not properly addressed, there will be high increase in alcohol abuse and misuse among students. This is particularly so as regular use of alcohol could graduate a student to becoming addict or abuser. Also, students' health conditions may be affected drastically with increasing alcohol use. Apart from health implication, increase in alcohol use among students may lead to poor academic engagement. And when Nigerian students engage poorly in academic activities, research orientation will be affected and the future of the country will as well be jeopardized. Similarly, increased alcohol involvement among students as a result of stress could dispose students to think of leaving school as an option thereby becoming school drop outs and constituting nuisances in

the society. One other important implication is that if stress or stress related activities is not reduced minimally among students of nowadays, they will find it difficult to cope with studies and schools will continue to produce incompetent students.

Like every other research, the present study is not without limitations. The study failed to use the full version of interpersonal support evaluation list which could have explained which dimension of interpersonal support is significant or not in alcohol use. Although stress was found to influence alcohol involvement among students, the study did not provide explanation on the level of stress that actually predisposes students to involve in alcohol usage.

Based on the limitations, the study recommends that future researches such as this on alcohol use should consider using full version of interpersonal support evaluation list. Increase in number of participants should be used to involve more participants and wider coverage of different ethnic groups to ensure better representative sample. The study equally advocates that government at all levels should adopt policies that govern use of alcohol in and around campuses, while providing necessary amenities that enhance learning and ensure stress free learning environment. It is important to note that private owners of educational institutions, and school managements should play a role in the later. Similarly, there should be regular workshops, seminars, as well as orientations to students at various campuses on the dangers of alcohol use especially as an escape from stress or stress related activities.

## **Conclusion**

Stress has been shown as a key factor playing role in alcohol use among students; and that when students perceive their academic environment and activities as stressful, they resort to alcohol use.

Interestingly the finding of the study showed that alcohol use among students is a bad behavior that needs to be discouraged. In particular, students of nowadays seem very less adaptive to any form of stress. Therefore, presence of stress constitutes serious dangers to health conditions of Nigerian students presently; decrease in productivity, and likelihood of academic disengagement reoccurring. Hence, the study advocates that both stress and alcohol use in and around campuses in the country should be adequately addressed to enhance our society.

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