

# Perceived Stress as Predicting and Loneliness as Mediating Factors in Development of Alcohol Abuse Among Young Adults

Hariom Sharma, Chindu Karoth, Samreen Naz

**Abstract:** This paper presents empirical evidences for development of alcohol abuse among young adults as a function of perceived stress. The role of person's loneliness is also examined for its contribution in this alcohol abuse development. Stress is a matter of subjective individual perception and is defined as stimulus or as response (Lazarus, 1966). Forty alcohol abusers were administered with perceived stress and loneliness scales along with Alcohol Use Disorder Identification Test (AUDIT). Results revealed average levels of frequency (4.97) and intensity (16.47) of alcohol abuse behavior among participants having different amounts of perceived stress and loneliness. Potential of loneliness for its mediating role in relationship of perceived stress and alcohol abuse development was explored.

**Index terms:** Alcohol abuse, Adults, Loneliness, Perceived Stress,

## I. INTRODUCTION

**A. Alcohol abuse:** The use of alcohol has remained a part of human societies throughout the history. Young adults have elevated frequency of alcohol consumption when compared to other age categories [15]. Young adulthood is a time of high vulnerability for development of dangerous and destructive habits such as abuse of alcohol and other substances having impact on physical mental and emotional well-being of men/women. Physical conflicts, alcohol drinking, aggression, substance and other medication abuses are the high-risk behaviors associated with such habits [6]. Alcoholism or Alcohol abuse as per dictionary is a "Chronic disorder marked by excessive and usually compulsive consumption of alcohol leading to psychological and physical dependence or addiction" and "Alcoholic" is a term used to refer to one who is affected with it. The magnitude of risk increases with the patterns of problems in impulse control and poor prognosis at the right time. [25] in their research found stress having a strong effect on alcohol use. Such observations suggested stress as significant factor in use

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of alcohol and also alcohol as management coping for stress. According to research findings majority of addicted adults had started alcohol or other substances consumption in their adolescence. Psychological, social as well as mental health issues of adolescence and adulthood have been noticed to be associated with drug abuse and alcohol abuse. Using drug and marijuana, cigarette smoking, and drinking alcohol in adolescents are frequent behavior in adolescence. Neurobiological and cognitive behavioral functions could negatively affect due to drug, alcohol use during adolescence.

**B. Stress:** Stress is all time topic of investigation among social scientists and is related to every human life in one or the other form. Stress is a matter of subjective individual perception. Traditionally, stress is defined as stimulus or as response in form of relationship between individual and his/her environment which is judged beyond abilities for coping [14]. Stress is explained as non-specific reaction of the human body to any demand made on it [23]. He even stated that demands include even physiological responses like moving to a cold from a warm house or even engaging in an exhilarating activity. Stress is a construct that interrupts individual's physical or mental well-being. Ever increasing academic stress among university students is big challenge nowadays. Research studies state that distress could trigger the consumption of alcohol which may lead to alcoholism. Further, alcoholism may trigger loneliness or perceived stress among the adults. So it is sensible to make the youth aware of risk of alcohol abuse. As per studies conducted on stress as a major variable, sheds light on the fact that stress itself is not always the problem, but it is a consequence of other underlying psychological issues. Be it loneliness, depression, failure or workload, "PERCIVED STRESS" happens when we identify a problem in our lives or our psyches, as far as the language we use in psychology, but are otherwise unable to manage the problem or the lack of self-confidence to face and manage the problem. It is also possible for one to be stressed out about stress itself. [13] conducted a study on college students (374 undergraduates) with hypothesis that students who adjourn their educational work are likely to have unhealthy sleep, alcoholic drinking habits, diet, smoking and work out patterns. Results revealed that procrastination has direct links to avoidant coping styles. Tendency to let undone problems that are caused anxiety, rather than having a proper glance to them are the main cause for the developmental of procrastination behavior and later the surrounding problems.

Unable to manage the chaos of our own minds, feeling helpless in the face of one's own stress, the unequipped minds invariably turn to secondary solutions, the most common of which are alcoholism and drug abuse. The problem with this pseudo stress-management is that if one continues to deal with one's stress through substance abuse, the stress remains in our minds, reflecting on our lives, not dealt with, only to resurface to the front of our psyches in the absence of the substance.

**C.Loneliness:** is generally unlikable complex emotional reaction to isolation. Loneliness includes nervous outlook about a need of relationship or communication with other beings, both in the present and extending into the future [17]A regular increment in loneliness is noticed due to changing life styles. Adolescence period of human life is relatively with feeling of loneliness [1]Loneliness associates with negative emotions, e.g., depression, anxiety and fear of not being loved (Causes of loneliness may be wide-ranging including social, psychological, emotional, physiological, etc. Loneliness has link with depression, and is also considered as threat factor for suicide.

Among adults, loneliness as a key perspective of depression and alcoholism, Individuals who are isolated may account poor sleep feature, and so diminishes healing processes. Comparatively stronger inflammatory responses toward acute stress are observed among lonelier people, while for age-related diseases inflammation is established as prominent risk factor [4]

[11]revealed that alcoholics do suffer much lonely than members who doesn't use alcohol. There are no obvious relations to the exterior social situation and amount consuming alcohol. Instead, feelings of loneliness appear to be related with a common harmful perception about oneself and with a general displeasure with almost everything in life. The lonely abuser seems to be incapable to change his/her situation.

## II. REVIEW OF LITERATURE

[16]selected 452 university students by random cluster way of sampling. Participants answered on scale of feeling of loneliness, emotional regulation and drug abuse. Roles of loneliness feeling and emotion regulation difficulty for drug abuse behavior were observed. Loneliness, difficulties in emotion regulation and drug abuse behavior were observed having significant positive relationship.

[8]conducted a research on stress, depression, self-esteem and drinking problems on university students. There were 359 participants and results showed positive correlation between stress and drinking problem. There was negative correlation between stress and self-esteem, depression and self-esteem. Stress was the most powerful predictor of drinking problem found with multiple regression analysis. The conclusion was that effective management of stress and depression could be considered as the prevention program of drinking problem for university students.

[10]yielded most young people reporting drinking on social motives, whereas a few also reported drinking on enhancement motives. Very less number of participants reported drinking on coping motives.

[7]did an experimental study on alcohol and tension reduction to check tension reduction and various effects caused by alcohol and other drugs. It was found that the primary reason for the consumption of drugs was pleasure rather than the social pressure or stress though there was high level of anxiety risk reported by the samples.

## III. OBJECTIVES

In the backdrop of above literature review following objectives were framed to achieve in current research:

- To study perceived stress level, loneliness and alcohol abuse behavior among young adults.
- To examine the perceived stress as a predictor factor for alcohol abuse behavior by young adult individuals.
- To examine mediating aspect of loneliness with perceived stress in development of alcohol abuse behavior among participants under study.

## IV. HYPOTHESES

- There exists no amount of perceived stress, loneliness, and alcohol abuse behavior among young adults.
- Perceived stress does not predict the alcohol abuse behavior of young adults.
- There is no mediating role of loneliness with perceived stress in development of alcohol abuse behavior among participants under study.

## V. RESEARCH METHODOLOGY

This study followed a descriptive correlation design to determine association between perceived stress and alcohol abuse behavior of young adults. Further the loneliness was investigated towards its role in the above association between stress and alcohol abuse behavior. Different scales were administered to the participants to collect data, assess the stress level and to audit the frequency and intensity of their alcohol use. Stress and loneliness variables were further analyzed for their predictability and mediating capacity, respectively.

### A. Sampling

The sample consisted of 40 participants within the age range of 20 to 35 years. Availability of participants and consent for participation were the basis of selection in sample. The researcher also ensured ethical issues of the research, e.g., information on purpose of the study, collecting the consent form, confidentiality of data, etc.

### B. Tools

- **Alcohol Use Disorder Identification Test (AUDIT)** by Babor, Higgins-Biddle, Saunders, and Monteiro (2001) is a self-report tool having 10-items which are rated on five point (0 to 4) Likert type response format. It is for the purpose of screening the excessive alcohol consumption and related vulnerabilities in various population, e.g., primary care patients, drug users, college students, individuals of low socio-economic status. The items are into three domains: hazardous alcohol use, dependence symptoms, and harmful alcohol use. The reliability ( $r = .86$ ) of the tool is high.
- **The Perceived Stress Scale (PSS)** is extensively used psychological tool to assess perception of stress among individuals. It mainly measures the intensity to which one perceives as stressful. Scale includes numbers of direct inquiry about current levels of experienced stress. All items in the scale are very easy to understand.

- **UCLA Loneliness scale**(1996) Scale consists of 20 items to assess one's subjective perception of loneliness as well as isolation from social surrounding. Participant has just to rate for each item in the questionnaire in a four-point Likert scale ranging from 1 (never) to 4 (often). Internal consistency (coefficient alpha = .96) and test-retest reliability(.73) are good.

**C. Statistical Technique**

Correlation and regression statistics were computed to examine relationships between the variables. Descriptive statistics of Mean and SD were used to analyze collected raw scores on all the variables.

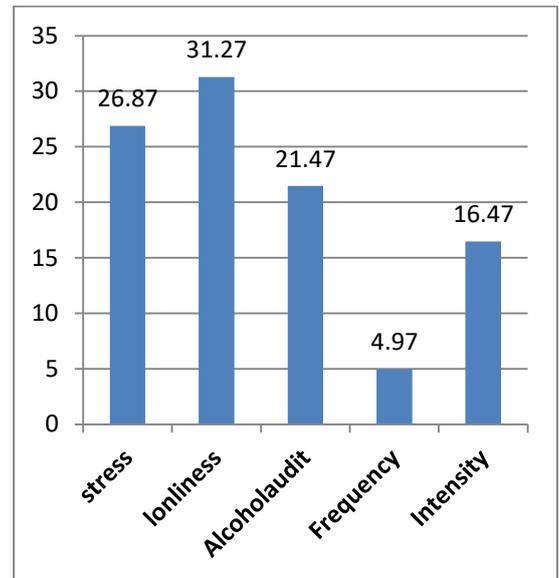
- Independent variable = Perceived stress
- Dependent variable = Alcohol consumption
- Mediating variable = Loneliness

**VI. RESULTS AND DISCUSSION**

The current study analyzed recorded data by mean, SD, and regression statistics to examine the effect of perceived stress as predicting factor and loneliness as a mediating factor in developmental of alcohol abuse among young adults.

**Objective 1: To examine the level of perceived stress, loneliness and alcohol abuse behavior among young adults.**

Variable	N	Mean	SD
Stress	40	26.87	4.46
Loneliness	40	31.28	11.79
Alcohol audit	40	21.48	5.65
Frequency	40	4.98	1.81
Intensity	40	16.48	4.48



**Fig.1. Presentation of stress, loneliness, alcohol audit, frequency and intensity of alcohol abuse behavior among the participants.**

The observation of above Table and graph demonstrates the presence of perceived stress, loneliness and also the alcohol abuse behavior among young adults. The frequency of alcohol abuse behavior is almost average (4.97) on the range of 1 (lowest) and 8 (highest) of AUDIT scale. Similarly, intensity is also average (16.47) on the range of scores 0 (lowest) and 32 (highest) of AUDIT scale. Obtaining these levels of stress, loneliness and alcohol abuse, the null hypothesis that there exist no amount of perceived stress, loneliness and alcohol abuse behavior among young adults is hereby not accepted. Participants with alcohol abuse behavior reflected amount of stress and loneliness.

**Objective 2: To examine the perceived stress as a predictor factor for the frequency and intensity of alcohol abuse behavior by young adult individuals.**

The statistical interpretation of data showed negative correlation between perceived stress and alcohol consumption rate. The regression statistics showed perceived stress as insignificant predictor (R=0.068), (beta=-0.68) of alcohol abuse behavior. (Table 2.1 and 2.2). Hence, the 2<sup>nd</sup> null hypothesis that perceived stress does not predict the alcohol abuse behavior is hereby accepted. The findings are contradictory to earlier research results) where stress was found positively correlated to alcohol consumption behavior.

**Table 2.1: Regression Statistics for perceived stress as predictor for alcohol abuse behaviour.**

Summary				
Model	R	R Square	Adjusted R Square	SE of the Estimate
1	0.0687	0.0047	-0.021	5.71
a. Predictors: (Constant), perceived stress				

Table 2.2: Regression Statistic for perceived stress as predictor for alcohol abuse behaviour

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.816	5.588		4.262	.000
	Perceived stress	-.087	.205	-.069	-.425	.674
a. Dependent Variable: Alcohol audit						

**Objective 3: To investigate the mediating role of loneliness on development of alcohol abuse among participants.**

The mediating effect of the loneliness along with perceived stress was found to have slight contribution by changing the beta value in predicting the alcohol abuse intensity and frequency. The value was (R=0.079), (beta= -0.39) for loneliness and for perceived stress beta value changes to -0.058 (Table 3.1 and 3.2). Hence, the hypothesis that there is no mediating effect of loneliness with perceived stress to predict the alcohol abuse behavior is not accepted. Loneliness is sharing some amount of variance.

Table 3.1 Regression Statistics for perceived stress as predictor and loneliness as mediator for alcohol abuse behaviour.

Table 3.2: Regression statistic for perceived stress as predictor and loneliness as mediator for alcohol abuse behaviour

**VII. CONCLUSIONS**

After the quantitative study of the perceived stress and loneliness to predict the alcohol consumption it is observed that stress is negatively related to alcohol abuse related behavior. Findings are in line with the earlier research observations [7] Moreover, loneliness reduces the strength of relationship so as the prediction of alcohol abuse behavior in the participants. Interestingly, negative correlation shows that stress is not a responsible factor for

Coefficients						
Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	24.064	5.757		4.179	0.001
	Stress	-0.074	0.214	-0.058	-0.345	0.7317
	Loneliness	-0.019	0.081	-0.039	-0.233	0.8163

developing the alcohol abuse behavior among young adult participants in this research. Rather, they might be consuming alcohol due to peer pressure, leisure activity, resources availability, etc. which need further in-depth research to confirm. Furthermore, negative relationship might be because most of the subjects participated in alcohol consumption behavior as a leisure or pleasure activity or prestige activity and it needs further level of research to validate. When loneliness combined with perceived stress, there is reduction (-0.058) in strength of negative relationship causing increment in alcohol consumption among the participants and reflected the mediating patterns. These strength reduction results are in line with earlier findings

[16] As per the results of the study, assumption towards alcohol abuse behavior that perceived stress is responsible factor towards alcohol abuse behavior, was not observed in this sample.

**VIII. LIMITATIONS AND SUGGESTIONS**

To establish the negative relationships much more higher data may be collected and it should be experimental research. However, limitation that subject might respond differently in a clinical setting when compared to his/her own environmental setting, is always possible. It is the subjects' perception towards consumption of alcohol and to be considered as a subject matter for future research. If the alcohol consumption is a risk factor towards alcohol abuse behavior means the subject should be educated about the same.

Model Summary				
Model	R	R Square	Adjusted R Square	SE of the Estimate
1	0.079	0.00619	-0.04753	5.78967
a. Predictors: (Constant), loneliness, stress				

To study such a topic concern to today's life, large number of psychological traits should be taken for consideration as independent or predictor variables like personality, and

family environment, peer pressure, social learning towards consuming alcohol.

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