



## ORIGINAL RESEARCH PAPER

Psychology

### PERCEIVED STRESS, AGGRESSION AND LONELINESS AMONG COLLEGE STUDENTS WITH SMOKING AND NON-SMOKING BEHAVIOUR

**KEY WORDS:** Perceived Stress, Aggression, Loneliness, Smoking behavior, Non-smoking behavior, College students

**Asmita Chakraborty**

Student Kristu Jayanti College, Bangalore, India

**Dr. Sruthi Sivaraman\***

Assistant Professor, Department of Psychology Kristu Jayanti College, Bangalore, India\*Corresponding Author

#### ABSTRACT

The aim of the study is to understand the relationship between Perceived stress, Aggression and Loneliness among College Students with smoking and non-smoking behavior. The study also assesses the difference in Perceived stress, Aggression and Loneliness among College Students with smoking and non-smoking behavior. A descriptive study was carried out and the data was drawn from an online survey of 160 college students. The Perceived Stress Scale (PSS), Sheldon Cohen (1988), Aggression Questionnaire (AQ, Arnold H. Buss & W. L. Warren, 2000) and UCLA Loneliness Scale (Russell, Peplau and Cutrona, 1980), were utilized to gather the data. Pearson Product Moment Correlation were used to interpret the relationship among the variables and Independent Sample t-test were used to interpret the differences in Perceived stress, aggression and loneliness among college students with smoking and non-smoking behavior. The findings of the study indicated that there is only a significant relationship between perceived stress and loneliness. The findings also indicated that there is a significant difference in Perceived stress and aggression among college students with smoking and non-smoking behavior, but no significant difference was found in Loneliness.

#### INTRODUCTION

Stress has an effect on our body, mind and behaviour in various ways, each individual experiences stress in his/her own way resulting in physical and mental health problems; affecting relationships at home and office. Perceived stress refers to the feelings or thoughts experienced by a person about the extent of stress they are under a given point in time or over a given time period. It includes "feelings about the uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles, how much change is occurring in one's life, and confidence in one's ability to deal with problems or difficulties. It is not measuring the types or frequencies of stressful events which have happened to a person, but rather how an individual feels about the general stressfulness of their life and their ability to handle such stress" (Phillips, 2013).

Aggression is a behaviour that is forceful, hostile or attacking, it may occur either in retaliation or without provocation. Aggression involves an intension to cause harm. Aggression has been demonstrated as an act intended to increase relative social dominance and can take a variety of forms. Among all the odd human behaviours, aggression is one of the most prevalent deviant behaviour. The 1950s saw the beginning of studies into violence and how it relates to adolescents. Given that males are more aggressive than females, the majority of studies used male volunteers, and particularly young ones. However, there has been a substantial change in how violence is understood from a gender viewpoint during the past 60 years. The adjustment is in response, in part, to the rise in crime committed by young women. Statistics show that gender differences are more pronounced in adolescence than in any other stage of life.

An intense psychological discomfort called loneliness is brought on by a mismatch between expected and actual social ties. Perlman & Peplau (1981) claim that loneliness is a distressing psychological state that a person experiences when one or more crucial aspects of their social interactions are missing. Stress is quite prevalent in college students. Bazeley and Thyer opine that the "majority of stressors that felt by the students inevitably resulted from anxiety related to educational programs like exams, passing assignments etc. If a student perceived his/her stress negatively or if it is not managed appropriately, it is likely to influence his/her academic performance, academic self-efficacy and overall

health. Demands of the overall life continue to add stressors in the daily lives of college students even after their college life is over and make transition to higher education in the university and the later life.

According to CVS's research, the problem may be exacerbated by the cigarette industry's targeted marketing. For instance, only 73% of college students stated they saw tobacco advertisements once or more each week, compared to 51% of all respondents. Specifically, among students, this group's actual depictions of tobacco use climbed from 58 percent of all respondents to 79 percent. In addition to such intense promotion, there are other elements that may have an impact on college students' decision to smoke.

#### METHOD

##### Research design

In the present study, the quantitative research design was used to analyze the results of the study. In a study using a quantitative research design, a researcher explores multiple variables while using numbers and statistics to assess the results. The primary method of gathering data for measurement is through the use of images, numbers, and pie charts.

##### Sample

The total sample of the study consisted of 160 college students from India. It was further sub-divided into 2 categories with gender as 2 sub categories, i.e., 80 people with smoking behavior (40 males and 40 females) and 80 people with non-smoking behavior (40 males and 40 females).

##### Hypotheses

**Ho:** There is no significant relationship between Perceived Stress, Aggression and loneliness among college students with smoking behaviors.

**Ho1:** There is no significant differences in Perceived stress among the smoking and non-smoking college students.

**Ho2:** There is no significant differences in aggression among the smoking and non-smoking college students.

**Ho3:** There is no significant difference in loneliness among the smoking and non-smoking college students.

## Objectives

- To study the significant relationship between Perceived Stress, Aggression and Loneliness among college students with smoking behaviors.
- To study the significant differences in Perceived stress among the smoking and non-smoking college students.
- To study the significant difference in Aggression among the smoking and non-smoking college students.
- To study the significant difference in Loneliness among the smoking and non-smoking college students.

## Tools used for the study

### Perceived Stress Scale (PSS), Sheldon Cohen (1988)

The reliability of the test was found to be .78 and the validity was found to be .63. Evidence for Validity: Higher PSS scores were associated with (for example): failure to quit smoking, failure among diabetics to control blood sugar levels, greater vulnerability to stressful life-event-elicited depressive symptoms.

### Aggression Questionnaire (AQ, Arnold H. Buss & W. L. Warren, 2000)

The AQ is an updated version of the Buss–Durkee Hostility Inventory (Buss & Durkee, 1957), a long- time standard for assessing anger and aggression. The total score, internal consistency (alpha) is 0.89 & 9-week test-retest reliability is 0.80 (Buss & Perry, 1992; Harris, 1997). Validity is supported by acceptable correlations with other self-report investigate of aggression and related peer nominations of aggressive behaviour (Buss & Perry, 1992; Harris, 1997).

### Loneliness (UCLA Loneliness Scale (Russell, Peplau and Cutrona, 1980)

The reliability coefficient of the UCLA was calculated as .94 by the Retest Method and the Cronbach's Alpha Reliability Coefficient of the UCLA was found to be .96. The parallel form validity of the UCLA was tested with the Beck Depression Inventory and the correlation coefficient was found to be .77 (Demir, 1990).

## RESULTS AND DISCUSSION

The analysis was done using SPSS, descriptive statistics was carried out for socio-demographic details. In order to understand the relationship between the variables, correlation was conducted and independent sample t-test was done to identify the differences of variables on smoking and non-smoking behaviours.

**Table 1 Showing the Gender Differences in the study**

		Frequency	%
Valid	Men	69	43.1%
	Women	91	56.9%
	Total	160	100%

Table 1 shows the gender difference in the study. The total number of males were 69 and the total number of females were 91 as calculated. The female percentage were more than the males.

The total sample of the study was taken to be 160, where 80 of them were engaged into smoking behavior. Out of 80, 40 were Males and 40 were the Females. The rest 80 were the students who were not engaged into any smoking behavior. Out of 80, 40 were the Males and 40 were the Females. The males were denoted as 1 and females were denoted as 2 for the analysis. It can be interpreted from the study that, the female population were more than the males.

**Table 2 Showing the number of College Students engaged in Smoking and Non-Smoking behavior**

		Frequency	%
Valid	No	80	50%
	Yes	80	50%
	Total	160	100%

Table 2 shows the frequency of smoking and non-smoking behavior between males and females. The total number of smokers were 80 and the total number of non- smokers were 80. The total percentage was calculated to be 50%.

**Table 3 Correlation of measured variables**

Perceived Stress	Pearson Correlation	1	-.322**	-.052
	Sig. (2-tailed)		.000	.515
	N	160	160	160
Loneliness	Pearson Correlation	-.322**	1	.100
	Sig. (2-tailed)	.000		.210
	N	160	160	160
Aggression	Pearson Correlation	-.052	.100	1
	Sig. (2-tailed)	.515	.210	
	N	160	160	160

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation between the three variables, Perceived Stress, Aggression and Loneliness among college students with smoking behavior. From the table it was interpreted that there is a significant relationship between Perceived Stress and Loneliness. On the other hand, there shows no significant relationship between Perceived Stress and Aggression. The table also shows there is no significant relationship between Loneliness and Aggression as well. The Correlation is significant at the 0.01 level.

The results from table 3 demonstrated that there is no significant relationship between perceived stress and aggression and aggression and loneliness among the students. Therefore, the null hypothesis is accepted here. The results of the study demonstrated that there is a significant negative correlation between Perceived Stress and Loneliness. This interprets that, higher the level of perceived stress, lower is the level of loneliness among the college students. Therefore, here the hypothesis is rejected.

**Table 4 Difference in scores of Perceived Stress, Aggression and Loneliness among college students with smoking and non-smoking behaviors.**

	Smoking Behavior	N	Mean	Std. Deviation	Std. Error Mean
Perceived Stress	1	80	15.55	5.900	.660
	2	80	18.13	4.662	.521
Aggression	1	80	89.90	8.50	.950
	2	80	92.43	6.66	.745
Loneliness	1	80	52.18	7.64	.855
	2	80	52.34	6.51	.728

p value is significant at 0.05 level

**Table 5 Showing difference in the scores of Perceived Stress, Aggression and Loneliness between smokers and the non-smokers.**

	Smoking Behaviour		Non- Smoking Behaviour		t- test
	Mean	SD	Mean	SD	
Perceived Stress	15.55	5.90	18.13	4.66	-3.063
Aggression	89.90	8.50	92.43	6.66	-2.100
Loneliness	52.18	7.64	52.34	6.51	-.145

Table 4 shows the significant difference in the scores of Perceived Stress, Aggression and Loneliness among the college students with smoking and non-smoking behaviors. The tables show that in the Perceived Stress, the total mean of smokers is 15.55 and the total mean of non-smokers is 18.13. This shows that the students who are not engaged into smoking behaviors have high level of perceived stress than the students engaged into smoking behaviors. In the second

row, i.e., the total mean calculated for smokers is 89.9000 and for non-smokers 92.4375. This shows that students who are not engaged into smoking behaviors has higher level of aggression than the students who smokes. In the third row the total mean calculated for loneliness is 52.18 for the students engaged into smoking and 52.34 for the students who are not engaged into smoking behaviors. This shows that the level of loneliness is almost similar in both the groups.

Table 5 shows the difference in the scores between smokers and the non-smokers, their mean and SD are calculated. For Perceived Stress, the mean of the non-smoking behavior is more than the smoking behaviors, which means that the level of Perceived Stress is more in non-smokers in the study. For Aggression, the total mean calculated for non-smokers is more than the smokers, therefore the level of aggression is seen more in the non-smoking behavior students. For Loneliness, it was seen the total mean was found to be the same in both the smokers and the non-smokers, therefore the level of loneliness is same between the two groups.

The results of the study demonstrated that there is a significance difference in the perceived stress between the smokers and the non-smokers. This shows that the level of perceived stress is different in the students who engage into smoking behaviors and the students who are not into smoking behaviors. The above results interprets that the level of Perceived stress is higher in the students who are not engaged into smoking behavior than the students who are into smoking behavior. The reasons for this can be that students who smokes regularly releases their level of stress by smoking. Hence, smoking can act as a stress buster for them. Therefore, the hypothesis is rejected here.

### Implications

The results of the study can provide an insight into how the level of Perceived Stress, Aggression and Loneliness is different among college students which smoking and non-smoking behavior. The study will bring awareness into the lives of the college students who indulge themselves into smoking behaviors to escape from emotions and life hassles. Measures can be taken at the college level and even in workplaces to reduce stress among people which could be related to meeting deadlines, exam stress, personal issues or job related. Activity rooms can be implemented to provide the same. The study further allows to take place considering other factors that influence Perceived Stress, Aggression and Loneliness among college students other than smoking behavior and to a large sample and other geographical areas.

### Limitations

In the research study, the sample size taken was extremely small in order to draw valid conclusions and therefore the results may not be very generalizable. The data collection procedure has limited the ability to conduct a thorough analysis of result. The data were collected in online mode which might have neglected factors like a suitable environment, noise or any other kind of discomfort to the participants. The scope of this study is limited to only the college students population and cannot be generalized to other age groups. The age distribution could not be controlled as it was online mode. Moreover, during data collection, most of the people might have said they are not engaged in smoking behavior even when they are, mostly for social acceptance. This led to difficulties during generalizing the results.

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