

## **Anxiety, Stress and Loneliness among Smoking and Non-Smoking Male College Students**

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### **ABSTRACT**

Psychological factors like anxiety, stress, loneliness, depression, self-image, and self-isolation, affect college students' substance use behaviors. Smoking has been the leading cause of preventable deaths across the world despite efforts from various agencies like the government and NGOs. This leads the researcher to further study the difference between smoking and non-smoking population. Hence, the researcher intends to study the level of anxiety, stress and loneliness among smoking and non-smoking male college students. The participants in this research were administered structured questionnaires such as BAI – Beck Anxiety Inventory, PSS – Perceived Stress Scale and UCLA Loneliness Scale, to collect demographic data. Based on their smoking status the participants were divided into smoking and non-smoking groups, with 75 participants in each group. The results indicate that there is significant difference in level of anxiety among smokers and non-smokers, there is no significant difference in level of stress among smokers and non-smokers, and there is no significant difference in level of loneliness among smokers and non-smokers. This study brings in a strong indication that level of anxiety among college students can be one of the triggering factors which maintains their smoking behaviour. The researcher in this study proves there is a significant difference in anxiety among smokers and non-smokers in college-going males. Interventions or training programs with an objective of reducing anxiety can be designed as this study strongly prompts that anxiety is higher among smoking population when compared to non-smoking.

**Keywords:** *Anxiety, Stress, Loneliness, Smoking and Non-Smoking.*

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### **I. INTRODUCTION**

#### **Aim**

**To find the difference in anxiety, stress and loneliness between smoking and non-smoking male college students.**

#### **History of Smoking Behaviour**

Smoking behaviour refers to the habit or action which includes inhaling and exhaling the smoking of tobacco or a drug. Early days, tobacco would have been bitten, moved into a hand-made cigarette or smoked in a pipe. It wasn't until the late 1800s, when the world's first cigarette-production machines were created, that the use of advanced pre-rolled and boxed cigarettes rose. This made ready for shoddy large scale manufacturing, which thus prompted an immense increment in the number of smokers around the world. The end of the nineteenth century and the first half of the twentieth century denoted a period in which smoking – never again considered an extravagance, but an ordinary fundamental – was ubiquitous. Large scale manufacturing assumed an immense part in this, however different elements incorporated another push in the promotion of cigarettes, and the developing intensity of the tobacco business in governmental issues and the media. It is said to be a pleasing and enjoyable emotion. It boosts individual mood, alleviates minor depression, gives a sense of well-being, and improves concentration. Smoking is said to be a small fit of anger because of the nicotine substance that stimulates dopamine in the brain, which is reasonable for pleasurable sensations in the individual (Diane E. Papalia). The more the individual smokes, the more nerve cells become immune to the pleasure which results in increased intake of nicotine to fulfil the desire. The main medicinal reports expressing the risks of smoking rose in the 1920s, yet it wasn't until the post-war period that these admonitions started to be considered as important. In the 60s and 80s, new enactment was acquired to guarantee that all cigarettes were marked with wellbeing cautioning. Governments over the world likewise began to drop the hammer on the promotion of tobacco. (Lloyds)

Suzanne L Tyas, Linda L Pederson (1998) researched psychosocial factors related to adolescent smoking. They proposed a theoretical framework to understand the psychological cause for the development of smoking. Data was collected through the PsyLIT, Sociological abstracts, General science index, Medline and the authors' files. The review of literature consisted of behavioural, personal, socio-demographic and environmental variables associated with smoking. The data analysis shows the association with family structure, age, personal income, parental attitudes, parental socio-economic status, ethnicity, sibling smoking, peer attitude, peer pressure, family environment, attachment to family and friends, risk behaviours, stress, distress, depression, school factors, self-esteem, lifestyle, attitude and health concerns. The clarity of whether adolescent smoking is related to psychosocial variables is unclear (Suzanne L Tyas) (Danielle).

Young people who start smoking have high chances of continuing to smoke in their adulthood, which can impair their growth and lung function (Mercola). There are various reasons behind why an individual starts smoking. Some think that it looks cool to smoke; few do it for family and friends, and/or peer pressure. Statistics show that 9 out of 10 tobacco users engage/start smoking at an early age of 18 years because they never expected to get addicted. It is easy to not start smoking than to stop smoking (Nemours).

### **Non-Smoking**

A non-smoker is a person who does not smoke tobacco. It is said that "a cigarette smoker has twice the risk of having a heart attack than a non-smoker". It is easy for a non-smoker to stay away from smoking. It is proven that non-smokers have better health when compared to smokers.

Researchers in their study observed that smokers show lower levels of psychological well-being and mindfulness than non-smokers. Results indicate that in all the factors of subjective well-being scale, non-smokers have scored high when compared to smokers. Researchers proposed that the MBI (mindfulness-based intervention) may help the smokers deal with treatment and increase their level of subjective wellbeing (Viviam Vargas Barros).

### **Anxiety**

One of the main contributors to stress is anxiety. People who experience stress have an idea about the cause of stress. Anxious people are not always aware of why they feel anxious. Anxiety has various symptoms which are physical, psychological and behavioural. Physical symptoms of anxiety include sweating, palpitation, shallow breathing, stammering, tapers, muscle tension, butterflies in the stomach. Psychological symptoms of anxiety include the inability to think, excessive fear, worry, obsessive thinking. Behavioural symptoms of anxiety include avoiding situations which make the individual anxious, and can affect the individual's studies, work-life or social life. Psychoanalytic theory is used to explain anxiety (Crosta).

On average, it is said that 1 in 3 women and 1 in 5 men will experience anxiety on some stage event in their lives. Anxiety is common; the sooner you get help, you are more likely to recover (Felman). **Traci Pedersen** conducted research to find out if smokers are more prone to anxiety and depression. It is reported that 18.3 percent of smokers, 10 percent of non-smokers and 11.3 percent of ex-smokers suffer from anxiety and depression (Pedersen). **Bradley N. Collins and Stephen J. Lepore** conducted research to find out if there is an association between Anxiety and Smoking in a Sample of Urban Black Men. Results indicate that there is significant association between anxiety and smoking ( $p = .006$ ), and probable cases among current smokers are more (Lepore, 2008)

There is no single factor that causes anxiety but a combination of things that causes the individual to experience anxiety. There are various factors involved that influence a person's anxiety levels, including personality factor, the difficulty level of a situation and physical health.

### **Stress**

Stress is how a body responds to demands and threat. To tackle threat, the body's defences get into action, that is fight or flight mode, which is also known as stress response. It is the way that the body protects you in emergency situations, when you must be conscious and alert. It prepares you to be strong and defend yourself in such situations. It also prepares one to take up the challenges and perform their best. It can be bad stress or good stress. Good stress like exams can make a person do well in the exam. Bad stress like a family member getting cancer can affect one's level of productivity, quality of life, and relationships. **Parrott, Andy C** conducted research to find out if cigarette smoking causes stress. Smokers regularly say that indulging in the pattern of smoking helps them in overcoming their stress. It is said that the stress level of adult smokers is higher when it is compared to that of non-smokers. Thus, dependent smokers need an increased level of nicotine for them to feel normal. The message that "tobacco use doesn't remove stress and mood swings but instead heightens it" can help adult smokers overcome the addiction (Parrott, 1999) **Seung Ju Kim, Kyu-Tae Han, Seo Yoon Lee, Sung-Youn Chun and EunChaeol Park (Published on 17 December 2015)** conducted research to find out if second-hand smoke is associated with stress in smokers and non-smokers. The study findings were

that second-hand smoke was highly significant with high stress when compared to non-exposure (Seung Ju Kim, 2015).

Stress overload can affect various systems of the body like cognitive, emotional, physical and behavioural. Cognitive obstacles like memory problems, trouble concentrating, worrying over little things, getting anxious and nervous, can arise. Emotional problems can include sudden breakdowns, feeling lonely, unhappy etc. Physical complaints can be of pains, diarrhoea, constipation, chest pain or frequent colds. Behavioural problems can include eating or sleeping too much, not being responsible and so on. (Jeanne Segal, 2017)

### **Loneliness**

While many definitions define it as a state of being alone or solitude, it is a state of the mind. It causes people to feel unworthy, unwanted and empty. It observed that people who are lonely often tend to crave for other's attention. Research was conducted to find out the relationship between self-esteem and loneliness amongst male college students. smokers and non-smokers. The study proved smokers have high loneliness and low self-esteem (Khushboo shah). **Stephanie R. Dyal and Thomas W. Valente** conducted the research, "A Systematic Review of Loneliness and Smoking: Small Effects, Big Implications", showing that there is a likely association between loneliness and smoking. Half of the reviews don't report significant association. Studies done on large samples, like nationally representative samples, indicate likely significant statistical findings (Valente, A systematic review of loneliness and smoking, 2016)

### **Causes of loneliness**

There was a research conducted by Mr John Cacioppo, a psychologist at University of Chicago. During his research, he found that the core cause of loneliness was strongly connected to genetics. Loneliness can affect a person psychologically, leading to depression, lack of confidence, stress etc.

### **Health consequences of loneliness**

Loneliness can affect a person's physical and mental health, and is linked to Depression & Suicide, Cardiovascular disease, Heart stroke, Increased level of stress, Decreased memory & learning, Anti-social behaviour and Substance use. These are not the only areas where loneliness takes its toll. Research by Mr John Cacioppo explained that "lonely adults tend to consume more alcohol and do fewer workouts than a person who is not lonely".

### **Loneliness can be contagious**

A study by Mr Cacioppo states that loneliness can be contagious. In his 10-year research, he found that loneliness could spread in social networks; the result showed that a whopping 52% of people are more likely to become lonely if they associate with a lonely person. (Cherry, 2016) (Papalia).

Some people who experience anxiety, stress and loneliness may use nicotine, alcohol or other drugs which help them manage their condition. People who start consuming substance to manage their condition, in some cases, may lead to substance use problems along with anxiety conditions.

## **II. METHOD**

### **Research Objectives**

- To study the level of anxiety among smokers and non-smokers;
- To study the level of stress on smokers and non-smokers;
- To study the level of loneliness on smokers and non-smoker;
- To compare the findings among smokers and non-smokers.

### **Hypothesis**

**Ho1** There is no difference in level of anxiety among smokers and non-smokers

**Ha1** There is difference in level of anxiety among smokers and non-smokers

**Ho2** There is no difference in level of stress among smokers and non-smokers

**Ha2** There is difference in level of stress among smokers and non-smokers

**Ho3** There is no difference in level of loneliness among smokers and non-smokers

**Ha3** There is difference in level of loneliness among smokers and non-smokers

### **Research Design**

The research paradigm used was **quantitative analysis** and the sampling technique used in this research was **snowball sampling**.

Snowball sampling is a non-probable sampling method and indirectly sociometrical (SINGH, Testing, Measurements and research methods in behavioural sciences). This sampling method entails the administration of the research tools to the participants, who then send it through their network to get more people, like friends, family, neighbours etc.

**Sampling**

The test was administered on 150 sample size which included 75 smokers and 75 non-smokers.

**Data Analysis**

The statistical analysis used by the researcher was independent sample t-test.

**III. RESULTS AND DISCUSSION**

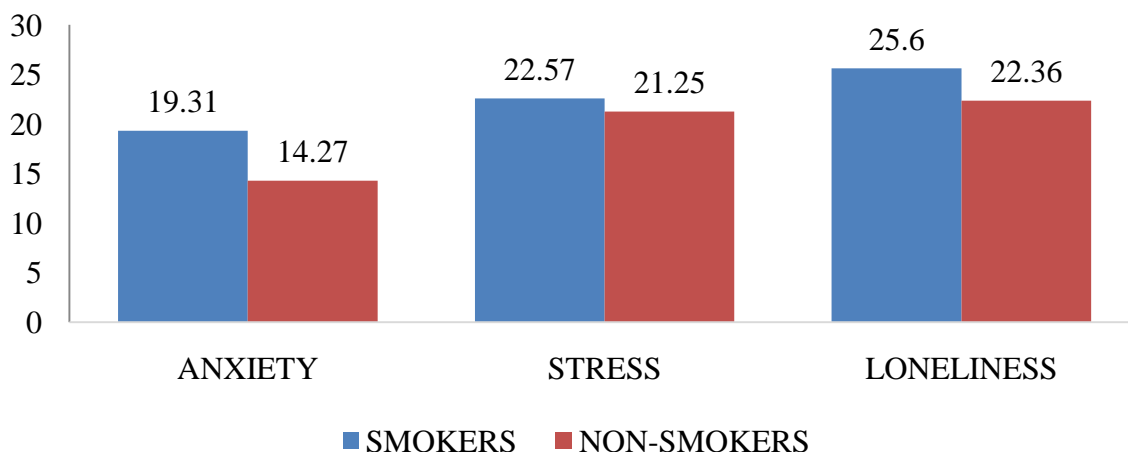
**Table 1**

*Descriptive statistics that indicates the mean score of anxiety, stress and loneliness among smokers and non-smokers*

	Smokers		Non-smokers	
	N	Mean	N	Mean
Anxiety		19.31		14.27
Stress	75	22.57	75	21.25
Loneliness		25.6		22.36

**Figure 1**

*Representation of Table 1*



*Note.* Figure 1 shows that anxiety mean is 19.31 for smokers, and 14.27 for non-smokers, stress mean in smokers is 22.57 and non-smokers is 21.25, loneliness mean in smokers is 25.60 and non-smokers is 22.36.

**Table 2**

*Independent sample T test significance*

Variables	Among smokers and non-smokers		
	t	df	Sig.(2Tailed)
Anxiety	2.933	148	0.004**
Stress	1.327	148	0.187
Loneliness	1.44	148	0.152

\*\* Indicates there is difference at 0.05 level of significant difference

**IV. DISCUSSION**

**Ho1** There is no difference in level of anxiety among smokers and non-smokers

**Ha1** There is difference in level of anxiety among smokers and non-smokers

The researcher wanted to study the difference between anxiety in smokers and non-smokers. The research finding showed significant levels of anxiety among smokers and non-smokers as 0.004, which is lower than 0.05, thus showing that there was a significant difference in anxiety among smokers and non-smokers. Smokers have high level of anxiety compared to non-smokers. Therefore, an alternative hypothesis was accepted that there was difference in level of anxiety between smokers and non-smokers.

**H02** There is no difference in level of stress among smokers and non-smokers

**Ha2** There is difference in level of stress among smokers and non-smokers

The researcher wanted to study the difference between stress in smokers and non-smokers. The research finding showed the significance level for stress among smokers and non-smokers was .187, which is more than 0.05. Thus, there was no significant difference in stress among smokers and non-smokers. Therefore, the null hypothesis was accepted.

**H03** There is no difference in level of loneliness among smokers and non-smokers

**Ha3** There is difference in level of loneliness among smokers and non-smokers

The researcher wanted to study the difference between loneliness in smokers and non-smokers. The research finding showed significance level for loneliness among smokers and non-smokers is .152 which is more than 0.05. Thus, the finding showed there was no significant difference in loneliness among smokers and non-smokers. Therefore, the null hypothesis was being accepted.

The researcher wanted to compare the findings among smokers and non-smokers. The findings showed that there was a significant difference in anxiety, but there were no significant differences found in stress and loneliness between smokers and non-smokers.

## V. SUMMARY AND CONCLUSION

The objective of this study was to find the level of anxiety, stress and loneliness among college going male smokers and non-smokers, and to compare the findings.

The limitations of the study were that probability statistics cannot be used due to the sampling method, the inference was based on the obtained sample and that determining sampling error is impossible.

Quantitative research paradigm was used using snow ball sampling technique. The test was administered on 150 sample size which included 75 smokers and 75 non-smokers. The finding of descriptive statistics and independent sample t-test indicated that there is a significant difference in level of anxiety among smokers and non-smokers. Smokers have more anxiety when compared to non-smokers. On the other hand, there is no significant difference in levels of stress and loneliness among smokers and non-smokers.

There are several implications of the findings to theory and practice that include, but are not limited to, interventions that can be planned to reduce or manage the level of anxiety among smokers, the levels of other psychological variables on smokers and non-smokers can be studied, and ex-smokers can be used as a sample population. Furthermore, the levels of psychological variables on smokers and non-smokers can be compared among male and female population and qualitative study can be done to find out to what extent individuals experience the level of psychological variables on smokers and non-smokers.

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