

Anxiety in Smoking Adolescents - A Comparative Study between Smokers and Non-Smokers

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Abstract:

Study Objective: The aim of this study was to identify the level of anxiety in smoking adolescents and to examine the differences in anxiety levels between smoking adolescents and non-smoking adolescents.

Study Methodology: Descriptive - Comparative Study

Study Sample: The study sample included 100 male adolescents aged 15-18 years, comprising 50 smoking adolescents and 50 non-smoking adolescents.

Measurement Tool: The Kuwait University Anxiety Scale (KUAS) was used.

Study Results:

* The level of anxiety among smoking adolescents is high.

* There are statistically significant differences in anxiety levels between smoking adolescents and non-smoking adolescents, with anxiety levels being higher among smoking adolescents than non-smoking adolescents.

Keywords: Anxiety, Smoking, Smoking Adolescents.

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Introduction:

Smoking is a dangerous global phenomenon prevalent worldwide. According to the latest report published by the World Health Organization on July 31, 2023, "Tobacco causes over 8 million deaths each year. In 2020, 22.3% of the world's population used tobacco" (World Health Organization, 2023). Thus, smoking is considered one of the greatest threats to public health worldwide, making it a global health challenge.

Smoking leads to several diseases, including heart diseases, strokes resulting in sudden death, high blood pressure, and diseases of the leg arteries. It also contributes to respiratory diseases, such as chronic cough and lung infections, and is responsible for lung cancer, throat cancer, mouth cancer, bladder cancer, and pancreatic cancer (Al-Damradash, 1982, pp. 172-173).

Studies conclusively established in 1950 that smoking is linked to cancer. Based on this evidence, the "Warning Label Act" was passed in 1965, requiring tobacco companies to place a medical warning on every cigarette pack, highlighting the health consequences of smoking (Baddar and others, 2009, p. 116).

And perhaps the most concerning aspect of the smoking issue is the epidemiological spread of smoking rates among teenagers. This was emphasized by Fernandez et al., who stated, "It is now certain that the initial onset of smoking occurs during adolescence according to (Lesourne, 1984; Chabrol, 1992; Houssmand, Bouyer, Choquet, Ledoux, 1994 et al; Choquet, 2000). It is rare to encounter those who started smoking at a later age" (Fernandez et al, 2004, p. 21).

Those who begin smoking at an early age are at risk of rapidly developing cancer, heart and vascular diseases, dental problems, respiratory system diseases, fertility and reproductive issues, erectile dysfunction, eye diseases, peptic ulcers, and osteoporosis (Minichino et al, 2013).

Thus, smoking is a major health and social problem with intertwined physical, psychological, and social causes. Quitting smoking is complex because it involves psychological and physiological dependence on nicotine and tar. It cannot be treated quickly for fear of withdrawal symptoms that can disturb the smoker's psyche and be uncontrollable (Al-Kaabi, 2011, p. 39).

Despite the significant health risks associated with smoking, a large portion of smokers, especially teenagers, continue to smoke for relaxation, enjoyment, stress reduction, and to cope with social problems. Smoking adolescents often turn to cigarettes to alleviate anxiety and seek relaxation, eventually leading to a dependency on smoking behavior. Smoking teenagers may also be more susceptible to anxiety due to their urgent and continuous need for smoking. The stronger their desire and dependence on smoking, the higher their level of anxiety.

Thus, the topic of anxiety is worthy of study among smoking adolescents. Anxiety can be both a cause and a result of their smoking behavior. Anxiety is considered one of the most significant psychological issues that smoking teenagers may face in their lives, to the extent that many psychologists argue that anxiety is the primary driving force behind all maladaptive or pathological behaviors.

Based on the aforementioned, this study aims to identify the level of anxiety among smoking teenagers and examine the differences in anxiety levels between smoking and non-smoking teenagers.

1- Study Questions:

Question 1: What is the level of anxiety among smoking adolescents?

Question 2: Are there statistically significant differences in the level of anxiety between smoking

adolescents and non-smoking adolescents?

2- Study Hypotheses:

Hypothesis 1: The level of anxiety among smoking adolescents is high.

Hypothesis 2: There are statistically significant differences in the level of anxiety between smoking adolescents and non-smoking adolescents.

3- The importance of the study.:

The importance of this study can be summarized as follows:

- Addressing the anxiety variable, which is considered one of the most important mood traits in contemporary personality research, and recognizing the distinct role that anxiety plays in an individual's adaptation to their environment.
- Understanding anxiety in smokers, whether anxiety serves as a cause for turning to smoking or as a consequence of addiction to smoking behavior.
- Investigating the topic of smoking as one of the most significant social, health, and behavioral problems with a global prevalence.
- Emphasizing the significance of the age group under study, as smoking behavior is primarily associated with the onset of adolescence.
- Highlighting the importance of conducting a field study on anxiety among smoking adolescents to utilize the results for the development of therapeutic programs aimed at alleviating smoking cessation symptoms.

4- Identification of Study Terms:

4-1 Anxiety:

It is an unpleasant emotional state characterized by a mixture of feelings of fear, tension, discomfort, and unease. Individuals experience anxiety when exposed to unclear threats or when facing internal conflicts with distressing thoughts. Typically, this emotional state is accompanied by psychological and physical symptoms. In this study, anxiety is operationally defined by the score obtained by smoking and non-smoking adolescents on the anxiety scale.

4-2 Smoking:

It is a behavioral habit in which individuals inhale nicotine by burning tobacco. Smoking in this study refers to the daily and regular consumption of cigarettes.

4-3 Adolescence:

It is a developmental stage in human life that falls between childhood and adulthood. Adolescence is characterized by psychological, physical, and emotional changes. According to the World Health Organization, adolescence spans from 10 to 19 years of age and can extend up to 24 years. In this study, the age of smoking and non-smoking adolescents ranged from 15 to 18 years.

5- Materials and Methods:

5-1 Study Design:

A descriptive comparative approach was employed, which involves comparing variables to describe the phenomenon under study and analyzing the data as it is, without intervention or alteration. The aim is to interpret the data clearly and precisely to arrive at accurate facts in order to address the research questions.

5-2 Study Sample:

The study sample consisted of 100 male adolescents, aged between 15 and 18 years, residing in the capital city of Algiers. This sample included 50 smoking adolescents and 50 non-smoking adolescents.

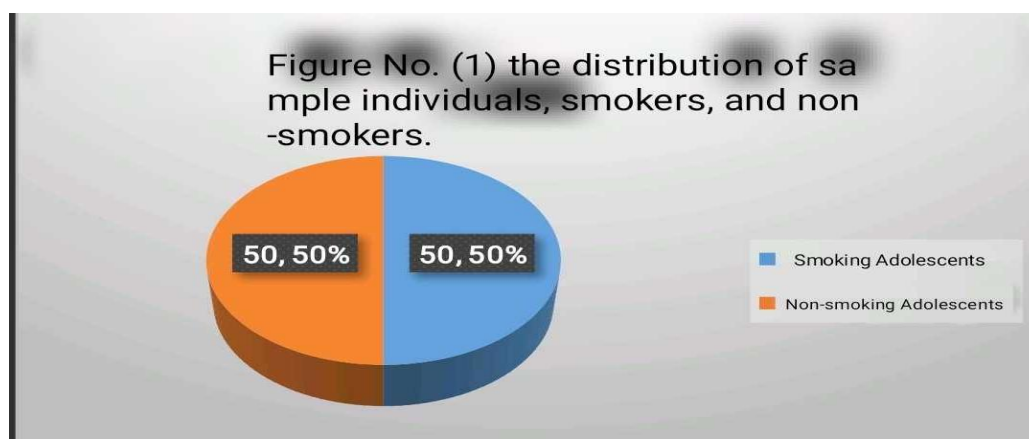


Table 1: Represents the description of the study sample

	Number	Gender	Age	Number of cigarettes smoked per day	Number of months or years of smoking
Smokers	50	Males	15-18 years old	8 to 20 cigarettes	From 5 months to 2

					years
Non-smokers	50	Males	15-18 years old	0 cigarettes	0

Based on the data presented in Table (1), the sample of non-smoking adolescents, consisting of 50 individuals, was selected based on the criteria of not having smoked at any point in their lives and having a smoking rate of 0 cigarettes per day.

The sample of smoking adolescents, also consisting of 50 individuals, was chosen because they smoke daily, with smoking rates ranging from 8 to 20 cigarettes per day. The duration of smoking initiation ranged from 5 months to 2 years.

5-3 Measurement Tool:

We utilized The Kuwait University Anxiety Scale (KUAS) as a measuring tool. It is a research instrument designed to assess readiness for anxiety in both adolescents and adults. The scale consists of 20 short statements, each answered on a four-point scale

(1 = rarely, 2 = sometimes, 3 = often, 4 = always). The scale is divided into three factors: cognitive, behavioral, and physical. Scores on the scale range from 20 to 80, with higher scores indicating higher levels of anxiety. A hypothetical mean of 50 is set as the cutoff point to consider an individual as experiencing anxiety.

The KUAS has demonstrated high levels of reliability and validity and has been applied in various Arab countries, including Algeria. Additionally, multiple versions of this scale are available in English, Spanish, and German.

5-4 Statistical Procedures:

We used the Statistical Package for the Social Sciences (SPSS) program for calculating the mean, standard deviation, and conducting the T-test.

6 - Presentation and Analysis of Results:

6-1 Presentation and Analysis of the First Hypothesis:

To examine and analyze the first hypothesis, which states that "the level of anxiety among smoking adolescents is high," we relied on the arithmetic mean of the anxiety scale and compared it to the hypothetical mean of the anxiety scale. The results are presented in Table (02):

Table No. (02): Shows the level of anxiety among smokers.

Scale	Arithmetic Mean	Standard Deviation	Hypothetical Mean	Level
Anxiety	54.92	11.10	50	High

From the results of the statistical analysis presented in Table (2), it is evident that the level of anxiety among smoking adolescents is high. This is because the average score of smoking adolescents on the anxiety scale reached (54.92), which is higher than the hypothetical mean (50).

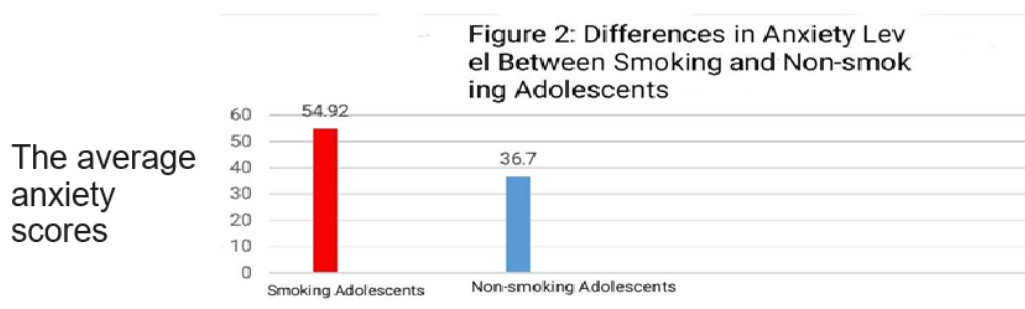
With these results, the first hypothesis, which states that anxiety among smoking adolescents is high, has been confirmed.

6-2 Presentation and Analysis of the Second Hypothesis:

To examine and analyze the second hypothesis, which suggests "significant statistical differences exist in anxiety levels between smoking adolescents and non-smoking adolescents," we relied on the T-test for assessing the significance of differences after ensuring the homogeneity between the two groups (smokers and non-smokers). We calculated the differences in the anxiety scale, and the results are presented in Table (03).

Table (03) shows the results of the T-TEST for differences in the anxiety level scale between smoking adolescents and non-smoking adolescents.

Variable	Smokers N=50		Non-smokers N=50		T-calculated	Significance level
	Mean	Standard Deviation	Mean	Standard Deviation		
Anxiety	54.92	11.10	36.70	9.69	8.738	0.01



Based on the statistical analysis results in Table (3), it is evident that there are differences

between smoking adolescents and non-smoking adolescents in the level of anxiety. This is because the calculated t-value is 8.738, which is significant at the 0.01 level. The difference favors smoking adolescents with an average score of 54.92, which is higher than the average score of non-smoking adolescents, which is 36.70. This result confirms that smoking adolescents have higher anxiety levels than non-smoking adolescents. Thus, the second hypothesis, which states that there are significant statistical differences in anxiety levels between smoking adolescents and non-smoking adolescents, has been confirmed.

7- Discussion of Results:

Through the presentation and analysis of the results of this study, the following was observed:

- The level of anxiety among smoking adolescents is high.
- There are statistically significant differences in anxiety levels between smoking and non-smoking adolescents, with the differences favoring smoking adolescents with a higher level of anxiety.
- These results can be explained through the causal relationship that links anxiety with smoking behavior and smoking with anxiety, in addition to the sensitive developmental stage of adolescence.
- Anxiety is evident during adolescence because it is a critical period in a person's life.

Anxiety is a relatively stable trait in an individual's personality. Through the results of this study, it becomes evident that smoking adolescents have a high level of anxiety. This could be a part of their personality, making them prone to persistent and continuous anxiety. Some studies (Ahmed 1988, Omar 2004, Alfakhrani 2003) have also found that smokers tend to have higher levels of anxiety and neuroticism (Daghaim, 2016, p.197).

Furthermore, anxiety in smoking adolescents can serve as both a motivator and a cause for smoking behavior to reduce anxiety, as demonstrated by studies (Shaib 1986, Elsayed 1984, El-Azabi 1987). It appears that adolescents may turn to smoking as one of the coping mechanisms to alleviate anxiety or reduce tension (Daghaim, 2016, p.197). Smoking adolescents often start smoking as a new and exciting experiment, which can eventually lead to addiction.

-Anxiety, in turn, can lead in some cases to smoking behavior, such as social anxiety. According to Dupont et al., "Adolescents and young adults with pre-existing social anxiety are more susceptible to an increased risk of developing smoking behavior and nicotine addiction, making anxiety a readiness factor for smoking" .

(Dupont.P et al, 2013, p.199).

-Smoking adolescents may be more prone to anxiety due to their urgent and continuous need for smoking. According to a study by Bonnet et al. (2020), "Individuals with anxiety disorders experience more symptoms of nicotine addiction. While smoking provides immediate relief from anxiety, in the long term, it has the opposite effect. This can lead to specific beliefs among smokers, such as 'I can't quit smoking, or else my anxiety levels will increase'" (Bonnet.N et al, 2020, P09).

Hence, we can conclude that smoking adolescents experience high levels of anxiety due to their urgent need for smoking. The more their cravings and desire for smoking increase, the higher their anxiety levels become.

-Studies have shown that smoking and nicotine addiction can elevate certain anxiety disorders. "In general, the number of smokers is higher among individuals with anxiety disorders compared to the general population. Smoking is associated with anxiety disorders resulting from nicotine addiction" (Khazaal et al, 2004, p74).

In summary, smoking adolescents have anxiety, which leads them to smoking. Additionally, smoking itself can cause anxiety in smoking adolescents due to their continuous need for this behavior. In both cases, anxiety is intertwined with smoking behavior among adolescents, either as a cause or a result.

8- Suggestions:

In conclusion of this study and based on the results obtained, we propose the following:

- The necessity of conducting in-depth studies on anxiety among adolescent smokers using larger and more comprehensive samples in terms of quantity and geographic representation.
- Studying the psychological and social reasons leading to smoking among adolescents.
- Researching psychological problems resulting from nicotine addiction, such as psychological stress, depression, aggression, school dropout, delinquency, and others.
- The importance of preparing studies on the design of counseling and therapeutic programs to address the phenomenon of smoking among adolescents.

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