



(RESEARCH ARTICLE)



Smoking Habits, Loneliness and Self-esteem Among Young Adults

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World Journal of Advanced Research and Reviews, 2024, 23(01), 2122–2128

Publication history: Received on 01 June 2024; revised on 15 July 2024; accepted on 18 July 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.23.1.2085>

Abstract

This study explores the relationship between smoking habits, loneliness, and self-esteem among young adults. A sample comprising 144 non-smokers and 103 smokers was assessed using the Rosenberg Self-Esteem Scale, the UCLA Loneliness Scale, and the Fagerström Test for Nicotine Dependence (FTND). Statistical analysis revealed no significant differences in self-esteem and loneliness levels between smokers and non-smokers. These findings suggest that smoking status does not significantly impact loneliness or self-esteem in young adults, challenging common perceptions about the psychological correlates of smoking behavior. Further research is recommended to explore underlying factors and potential mediators in these relationships.

Keywords: Smoking habits; Loneliness; Self-esteem; Psychological correlates; Nicotine dependence; Mental health

1. Introduction

More than merely a feeling of being alone, loneliness is a troubling emotion that arises when someone believes their social needs are not being sufficiently satisfied, both in terms of the quantity and quality of their social ties. Instruments such as the UCLA Loneliness Scale, which asks people to describe their thoughts and feelings about their social connections, are frequently used to measure this emotional experience.

The UCLA Loneliness Scale provides a comprehensive picture of a person's social well-being by measuring loneliness along a continuum. The scale provides a thorough evaluation of an individual's social connection by taking into account a variety of characteristics, such as the number and caliber of social relationships.

The UCLA Loneliness Scale produces a continuum of scores that shows the range of social encounters. People may score highly on one end, indicating a rich and satisfying social life, and highly on the other end, suggesting a deep sense of loneliness. Using this instrument, researchers and therapists can better understand the nuances of loneliness and customize interventions to target different facets of social well-being. Essentially, the UCLA Loneliness Scale is an invaluable tool for comprehending and resolving loneliness because it captures the complex relationship that exists between emotional well-being and social ties.

Global self-esteem is basically an individual's perception of self-worth (Rosenberg, 1965). It includes one's opinions and assessments of oneself, both favorable and negative (Baumeister, Campbell, Krueger, and Vohs, 2003). This self-worth assessment is seen to be a key motivating element influencing behavior (West and Brown, 2013). The study has shown that people with elevated self-esteem tend to feel good about themselves, which can motivate them to take actions that safeguard or enhance general wellness and well-being (Du, King, and Chi, 2017; Wellman et al., 2016). On the other hand, research such as that conducted by Saari, Kentala, and Mattila (2015) and Wellman et al. (2016) has shown that poor self-esteem is an element that is positively connected with substance use. To put it simply, people's

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total sense of self-worth has a big impact on how they see themselves, which affects their emotional health and how they choose to behave in ways that either support or contradict their overall well-being and health.

Smoking behaviors encompass a range of actions involving the burning and inhaling of substances. These behaviors are complex and include the act of smoking itself, the technique of puffing, the depth of inhalation, as well as the speed and frequency of smoking.

A considerable percentage of smokers develop this habit in their youth; a noteworthy statistic indicates that 83% of Americans who smoke starts inhaling smoke initiating before the onset of 18. There is evidence linking childhood and teenage cigarette smoking to both short-term and long-term health problems.

In addition to related disorders to smoking, malignancies such as cardiovascular issues and cancers can be caused due to the early usage. Moreover, it is commonly known that smoking during adulthood elevates the chances of getting these disorders. It is important to highlight that individuals who are younger in age are particularly vulnerable to the negative well-being impacts of smoking due to their advanced age.

Studies have demonstrated a clear relationship between the age at which a person begins smoking and the severity of their addiction. Put another way, an addiction tends to be more potent the younger the age of initiation. In order to reduce the increased health risks and the development of serious addiction later in life, it is imperative that smoking cessation be addressed and prevented at an early age.

These differing conclusions underscore the complexity of loneliness as a factor influencing smoking habits.

Self-esteem has also been a subject of interest in the context of smoking habits, but its influence remains debatable. Licu et al. (2023) observed a positive correlation between smoking and self-esteem among medical students, indicating suggesting that people with greater self-esteem could be more likely to smoke. A comparable study conducted by Qureshi (2023) found a positive correlation with self-esteem and a negative correlation with self-efficacy emphasizing the importance of considering personality factors in understanding smoking habits. This finding contrasts with Szinay et al. (2019), who found lower self-esteem associated with increased odds of smoking among adults in the UK. Tavakolizadeh et al. (2013) suggested that familial modeling might have a greater influence on smoking behavior among university students than individual self-esteem levels, demonstrating the need for further investigation into the nuanced role of self-esteem.

Given these divergent findings, the current research seeks to investigate the combined influence of loneliness and self-esteem on smoking habits among young adults in a university context. By bringing these variables together, this inquiry aims to provide a deeper insight of the elements driving smoking habits and potentially guide interventions to reduce smoking prevalence among young adults.

2. Review of Literature

Smoking habits among young adults, particularly university students, have garnered significant interest from researchers due to their complex relationship with various psychological and social factors. The implications of smoking on public health and its relationship with psychological well-being necessitate an in-depth exploration of the associated variables and their interactions. This paper aims to investigate the relationship between smoking habits, loneliness, and self-esteem among young adults in university settings.

Numerous studies have highlighted factors that contribute to smoking behavior among young adults. Research by Khader and Alsadi (2008) reported a high prevalence of smoking among Jordanian university students, with gender, income, academic attainment, and social networks identified as influencing smoking behavior. Similarly, Jamshed et al. (2017) noted that stress alleviation and peer pressure were significant motivators for smoking among male university students in Pakistan. These findings indicate that smoking behavior can be influenced by both internal and external factors, including social pressure and stress management.

Loneliness, as a psychological factor, has been closely examined in the context of smoking habits, although results vary across studies. Yang et al. (2022) found that loneliness was significantly associated with increased smoking among older Americans, suggesting that social isolation could drive individuals toward smoking. Segrin and Paccalacqua (2010) examined the relationship between social support, loneliness, and health outcomes, providing empirical evidence of the link between loneliness and adverse health behaviors. However, other research by Segrin et al. (2017) suggests that it is the stress resulting from loneliness that may lead to substance use and health-risk behaviors rather than loneliness

itself. In contrast, study by Anjum and Smitha (2020) revealed significant differences in anxiety levels between smoking and non-smoking groups, with no notable disparities found in stress or loneliness levels. These differing conclusions underscore the complexity of loneliness as a factor influencing smoking habits.

Self-esteem has also been a subject of interest in the context of smoking habits, but its influence remains debatable. Licu et al. (2023) observed a positive correlation between smoking and self-esteem among medical students, indicating that individuals with higher self-esteem might be more prone to smoking. Similar study by Qureshi (2023) found a positive correlation with self-esteem and a negative correlation with self-efficacy emphasizing the importance of considering personality factors in understanding smoking habits. This finding contrasts with Szinay et al. (2019), who found lower self-esteem associated with increased odds of smoking among adults in the UK. Tavakolizadeh et al. (2013) suggested that familial modeling might have a greater influence on smoking behavior among university students than individual self-esteem levels, demonstrating the need for further investigation into the nuanced role of self-esteem.

Given these divergent findings, the present study seeks to examine the combined influence of loneliness and self-esteem on smoking habits among young adults in a university context. By bringing these variables together, this research aims to contribute to a deeper understanding of the factors driving smoking behavior and potentially guide interventions to reduce smoking prevalence among young adults.

3. Methodology

Research Design: This study is a quantitative correlational Descriptive study exploring the between Self Esteem and loneliness being the independent variable and smoking habits being the dependent variable. At the same time, this study explores the difference between all three variables. The descriptive statistics were computed using the SPSS software.

Statement of Problem: The purpose of this research is to investigate the relationship between loneliness, self-esteem and smoking habits among college students.

3.1. Objectives of study

- To assess the relationship between self-esteem, smoking habits and loneliness.
- To assess the difference in the levels of self-esteem and loneliness among smokers and non-smokers.

3.2. Hypothesis

- H₀₁- There is no significant relation between self-esteem and smoking habits.
- H₀₂- There is no significant relation between loneliness and smoking habits.
- H₀₃- There is no significant difference in self-esteem between smokers and non-smokers. H₀₄- There is no significant difference in loneliness between smokers and non-smokers.

3.3. Operational Definition

Loneliness: The feeling of being alone or feeling lonesome can cause both subjective and cognitive discomfort or distress. Multiple viewpoints are provided by psychological theory and research. While cognitive psychology stresses the unpleasant and unsettling experience that arises from a perceived discrepancy (i.e., deficiency in quantity or quality) between an individual's desired and actual social relationships, social psychology emphasizes the emotional distress that results when intimate and companionship needs are not met. Existential or humanistic psychologists may view loneliness as a painful but inevitable part of the human experience, one that can also lead to growing self-awareness and rejuvenation (UCLA, 1980)

Self-esteem: Rosenberg (1965a) defined self-esteem as an individual's attitude toward oneself, whether good or negative, and their assessment of their own ideas and feelings in connection to themselves as a whole. **Nicotine Dependence:** Nicotine dependence (also called tobacco addiction) involves physical and psychological factors that make it difficult to stop using tobacco, even if the person wants to quit. (CAMH, 2024)

3.4. Variables

- Independent Variable- Smoking Habits
- Dependent Variable- Loneliness and Self-esteem

3.4.1. Inclusion Criteria

- Participants of age 18-25 years.
- Participants must be college students.

3.4.2. Exclusion Criteria

- Participants who belong to the working population.
- Sample and Techniques
- The sample that was chosen for the study is college students. These are individuals within the age group 18-25.
- Participants taken are college students from various academic disciplines. Sample Size is 247 (N = 247). Sampling Method opted for Research is Random sampling technique to ensure representativeness of the college student population. Out of 247 responses, 103 (smokers) + 144 (Non-smokers).

3.5. Research ethics followed

The ethics was followed as per APA code of ethics for research and publication (Section 8 of 2016 Amendment)

- **Informed consent** - Consent was obtained from the participants prior to the study. It was ensured that the research data remains confidential to an appropriate degree.
- **Dispensing with informed consent for research** - The anonymity and privacy of the participant was maintained by not including their names and not collecting their contact details.
- **Duplicate Publication of Data:** The present study does not have data that have been previously published. This does not preclude republishing data when they are accompanied by proper acknowledgment.

3.6. Description of the tool

Table 1 Tools, Authors, Reliability, and Validity of Measures Used in the Study

SI No	Variable	tools	Author	Reliability	Validity
1	Nicotine dependence	Fagerstrom Test for Nicotine Dependence (FTND)	Heatherton, Todd F., Kozlowski, Lynn T., Frecker, Richard C., Fagerstrom, Karl-Olov. (1991)	0.56-0.92	0.70–0.79
2	Self-esteem	Rosenberg's Self-Esteem Scale	Morris Rosenberg (1965)	0.86	0.89
3	Loneliness	UCLA Loneliness Scale	Russell, D, Peplau, L. A. & Ferguson, M. L. (1978).	0.93	0.73

3.7. Statistical Analysis

The Data Analysis used in the study is Statistical Package for Social Sciences (SPSS). For correlation, a spearman's rank correlation test was conducted and to assess the mean differences between the 2 groups Mann Whitney U-test was done.

Table 2 Descriptive Statistics and Correlation Matrix for Nicotine Dependence, Self-Esteem, and Loneliness

SI No	Variable	M	SD	1	2	3
1	Nicotine Dependence	2.79	1.98	-	0.039	0.007
2	Self-esteem	28.35	14.67	.039	-	-0.462**
3	Loneliness	26.21	3.67	.007	-0.462**	-

**denotes that the correlation is significant at $p < 0.01$

Table 1 shows the descriptive statistics of the three variables that are Nicotine dependence ($M=2.70$, $SD =1.98$), self-esteem ($M=28.35$, $SD = 14.67$) and loneliness ($M=26.21$, SD

$=3.67$). To understand the relationship between Nicotine dependence, Loneliness and Self- esteem, Spearman's rank correlation was conducted. There is no significant relationship between nicotine dependency and loneliness ($r_s = 0.39$, $p > 0.05$). Hence the null hypothesis H_{01} is retained. Similarly, there is no significant relationship between nicotine dependency and self-esteem ($r_s = .007$, $p > 0.05$). Hence the null hypothesis H_{02} is retained.

Table 3 Mean Ranks and Z-values for Self-Esteem and Loneliness among Non-Smokers and Smokers

Variable	Participant Type	N	Mean Rank	Z-value
Self-esteem	Non-smoker	143	115.09	2.185**
	Smoker	103	135.17	
Loneliness	Non-smoker	143	130.77	1.896*
	Smoker	103	113.41	

**denotes that the t-value is significant at $p < 0.01$; *denotes that the t-value is significant at $p < 0.05$

Table 2 shows the descriptive statistics and Z values of the two variables that are Self-esteem and Loneliness. It was seen that there is a significant difference ($z = 2.185$, $p > 0.01$) seen in the self-esteem of smokers ($\bar{R}_s=135.17$) and non-smokers ($\bar{R}_{ns}=115.09$). Hence the null hypothesis H_{03} is rejected. It was also seen that there is a significant difference loneliness ($z = 1.896$, $p > 0.05$) seen in loneliness of smokers ($\bar{R}_s=113.41$) and non-smokers ($\bar{R}_{ns}=130.77$) Hence the null hypothesis H_{04} is rejected.

4. Discussion

The results of the correlation analysis presented in Table 1 provide insight into the relationship between nicotine dependence, self-esteem, and loneliness among young adults. The analysis revealed that there is no significant correlation between nicotine dependence and loneliness ($r_s = 0.39$, $p > 0.05$), indicating that the level of nicotine dependency does not significantly correlate with feelings of loneliness. Similarly, there was no significant correlation between nicotine dependence and self-esteem ($r_s = 0.007$, $p > 0.05$), suggesting that individuals' reliance on nicotine is not significantly related to their self-esteem levels. These findings imply that while nicotine dependence is a concern in itself, it may not directly be related to the individuals' feelings of loneliness or their self-esteem. This suggests that interventions aimed at reducing nicotine dependence may need to address additional factors beyond loneliness and self-esteem to effectively support individuals in quitting smoking.

Table 2 further explores the relationship between self-esteem, loneliness, and smoking behavior among participants. The results indicate a significant difference in self-esteem between smokers and non-smokers ($z = 2.185$, $p < 0.01$). Smokers demonstrated higher self- esteem compared to non-smokers, contrary to what might be expected based on conventional perceptions. This unexpected finding warrants further investigation to understand the underlying factors contributing to the observed difference in self-esteem among smokers and non-smokers.

Moreover, the analysis revealed a significant difference in loneliness between smokers and non-smokers ($z = 1.896$, $p < 0.05$). Non-smokers reported higher levels of loneliness compared to smokers. This finding challenges the common assumption that smoking is associated with increased feelings of loneliness and suggests a more nuanced relationship between smoking behavior and social connectedness.

Overall, these results underscore the complexity of factors influencing smoking behavior among young adults. While nicotine dependence may not directly correlate with feelings of loneliness or self-esteem, the relationship between smoking behavior, self-esteem, and loneliness is multifaceted and warrants further exploration. Future research should delve deeper into the underlying mechanisms driving these associations to inform more targeted smoking cessation interventions tailored to the psychological and social needs of young adults.

4.1. Implications

The study found no significant differences in self-esteem and loneliness levels between young adult smokers and non-smokers. This challenges the traditional belief that smoking leads to increased loneliness and lowered self-esteem.

These findings have potential implications for public health strategies. Interventions aimed at improving self-esteem and reducing loneliness may not necessarily require a smoking-specific focus. Mental health professionals and policymakers can benefit by considering a broader range of variables contributing to self-esteem and loneliness in young adults.

4.2. Limitations and Future Directions

The study's cross-sectional design limits our ability to establish causality. We cannot definitively say whether smoking leads to, or results from, changes in self-esteem or loneliness. The sample size might not be robust enough to detect subtle variations or generalize the findings to the entire young adult population. Self-reported data through scales can be susceptible to response bias. The study did not account for potential confounding factors such as socioeconomic background, mental health history, or other health behaviors. Future research needs to consider these factors in the analysis.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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