

THE STUDY OF AGGRESSION AMONG SMOKERS AND NON-SMOKERS

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Abstract

This study aimed to investigate levels of aggression among smokers and non-smokers. It was hypothesized that there would be a significant difference between smokers and non-smokers on aggression levels. The sample consisted of 100 male students aged between 18 and 25 years, drawn from different universities in Delhi/Delhi NCR. Participants were divided into two groups: smokers and non-smokers. The assessment tools included questionnaire designed to measure aggression, which provided reliable and valid metrics for these traits. Descriptive statistics and t-tests were employed for data analysis. The results indicated significant differences in levels of aggression between smokers and non-smokers. The statistical analysis revealed that smokers scored significantly higher on aggression compared to non-smokers. This suggests that higher levels of this trait may be associated with a greater likelihood of engaging in smoking behaviour. Moreover, these findings highlight the importance of early identification and intervention. Educational institutions and mental health services should collaborate to screen for high levels of aggression and provide appropriate support to at-risk individuals. This proactive approach can help mitigate the initiation and continuation of smoking among young adults.

Keywords: aggression, smokers, non-smokers, young adults, aggression measurement.

Introduction

Tobacco kills approximately 6 million people and causes more than half a trillion dollars of economic damage each year (WHO Framework Convention on Tobacco Control, 2013). Cigarette smoking is widely regarded as a significant health threat globally, yet it remains the most prevalent form of tobacco consumption. Diverse results have been reported across cultures in smoking epidemic studies (ALA, 2011). The majority of tobacco users are found in developed countries (WHO, 2011). Many nations are implementing substantial measures to prevent and curb tobacco use.

Smoking is a critical issue worldwide, including India. Various pharmacological, social, and psychological perspectives or assumptions are linked to the initiation and maintenance of smoking. It is responsible for numerous physical and psychological health problems. The effects of smoking on human health are severe and often fatal. Approximately 6,000 chemicals are released when a cigarette burns, hundreds of which are toxic (ALA, 2011). The ingredients in cigarettes impact everything from the internal functioning of organs to the efficiency of the body's immune system (Jack, 2009). Smoking is so harmful that one cigarette can reduce a smoker's life by at least five minutes. Almost a quarter of heart disease deaths are related to smoking (Martin, 2007). According to Malhotra (2005), smoking accounts for more than 30 percent of all cancer deaths and 90 percent of lung cancer deaths. It is also linked to 75 percent of deaths from chronic bronchitis and emphysema. Brizer (2003) noted that smoking is a major cause

of premature death, with half of long-term smokers dying from excessive tobacco use.

Nicotine, the main active ingredient in tobacco, is responsible for creating nicotine dependency syndrome. According to Jack (2009), smokers are often helpless against nicotine dependency. The immediate effects of cigarette smoke led to physical and mental dependence. Strong evidence supports the existence of a nicotine dependency syndrome, which typically begins during adolescence and can persist into adulthood as a challenging and health-threatening habit (Butcher, Hooley, & Mineka, 2013). According to the DSM-V (APA, 2013), nicotine-induced organic mental disorders result from reducing or ceasing the intake of nicotine after an individual has developed a physical dependence. Nicotine dependence and withdrawal can occur with all forms of tobacco use and with nicotine replacement therapies like gum and patches.

Numerous treatment programs have been developed to help smokers quit. Smoking cessation programs use various methods, including social support groups, pharmacologic agents, self-directed change, and professional treatments employing psychological techniques such as behavioural or cognitive-behavioural interventions (Butcher, Hooley, & Mineka, 2013). Smoking is linked to psychological problems like depression, anxiety, stress, aggression, and anger (Yazici 2008; Nazar, 2008). Therefore, addressing the psychological aspects of smoking is crucial for developing effective prevention and cessation programs. Various studies have explored the association of personality factors (Terraciano & Costa, 2004) and

heritable temperament traits (Etter, Pélissolo, Pomerleau, & De Saint-Hilaire, 2003) with smoking.

Personality traits are among the many influential variables that play a significant role in smoking. Personality refers to a person's unique behavioural and cognitive patterns or their consistent ways of thinking, feeling, and acting (APA, 2013). Personality is based on an individual's distinct and consistent outlooks and actions or overall style of behaviour. While inherited or biological traits influence behaviour, they are not considered personality traits (Ritberger, 2007). Numerous personality traits are related to smoking, but aggression and impulsivity are found to be directly linked to smoking in many individuals. These traits are part of the three basic dimensions of personality described by Eysenck (1967, 1990), which include introversion-extroversion, neuroticism (emotionally stable-unstable), and psychoticism. Eysenck identified relationships between smoking and the dimensions of extroversion and psychoticism.

Aggression refers to behaviours that are hostile, destructive, and/or violent. It includes temperaments, fighting, violent arguments, and sarcasm (Eysenck & Wilson, 1975). Aggressive behaviour can inflict injury or damage on the target person or object. Examples include physical assault, throwing objects, property destruction, self-harming behaviours, and verbal threats (Pedneault, 2009). There are two broad categories of aggression: hostile, affective, or retaliatory aggression, and instrumental, predatory, or goal-oriented aggression. Empirical research indicates significant psychological and physiological differences between these types. A survey conducted on New York City students found that aggression is a predictor of smoking (Kenneth et al., 2002). A study by the Philip Morris Tobacco Company (Carolyn & Ryan, 1977) examined the relationship between smoking and personality, aggression, frustration, hyperkinesis, smoking and learned helplessness, and variations in smoking behaviour with low nicotine cigarettes.

In summary, smoking remains a critical global health issue, with substantial health and economic impacts. While various factors contribute to smoking behaviour, personality traits like aggression and impulsivity play a significant role. Addressing these traits through targeted interventions could enhance the effectiveness of smoking prevention and cessation programs.

Objective

The primary aim of this study is to explore the role of aggression in smoking behaviours among male adult students. This investigation is grounded in the hypothesis that there are significant differences

between smokers and non-smokers in terms of aggression.

1. To study smoking behaviour among male students.
2. To identify the difference in aggression levels between smoker and non-smoker.

Hypothesis

The hypothesis posits that smokers will demonstrate significantly higher levels of aggression as compared to their non-smoking counterparts. This premise is based on prior research findings that link these personality traits with an increased likelihood of smoking initiation and maintenance.

Research Design

This is a descriptive study. A total of 100 participants were recruited for the study through purposive/accidental non-random sample method. On the basis of initial interview, the participants were categorised into two groups namely, smokers and non-smokers. Then the questionnaire was sent to the subjects via email and responses received were used for data analysis.

Inclusion Criteria

1. Age range between 19 to 29 years
2. Male

Exclusion Criteria

1. No history of any traumatic brain injury
2. No history or complaint of any psychiatric illness
3. Failed to give consent

Tools Used

Aggression Scale

The Aggression Scale developed by Gyan Pyari Mathur is a psychological tool designed to measure levels of aggression in individuals. It is typically self-reported, meaning individuals complete the questionnaire themselves. The scale aims to quantify the degree of aggression in individuals, which can be useful for identifying behavioural issues, planning interventions, and conducting research. Typically, aggression scales consist of a series of statements or questions that respondents answer based on their experiences and behaviour's. These responses are then scored to provide an overall aggression level. Responses are scored on a Likert-type scale, where higher scores indicate higher levels of aggression. Scoring ranges are: Max score – 275, Minimum – 55, High aggression - 205 & above, Average aggression - 155 and 204 and Below 154 low aggressions. The scale has been

validated and tested for reliability to ensure it accurately measures aggression.

Result and Discussion

This analysis examines the relationship between smoking status and aggression scores. The study's primary objective is to determine if there is a significant difference in aggression levels between smokers and non-smokers. Participants were divided into two groups: smokers (n = 48) and non-

smokers (n = 52). Aggression scores were measured for both groups, and the data were analysed using an independent samples t-test to compare the means of the two groups.

Descriptive statistics for the aggression scores are presented in Table 1. Smokers had a mean aggression score of 179.50 (SD = 14.000), while non-smokers had a mean aggression score of 92.17 (SD = 18.642).

Table 1

Smoker/Non-smoker	N	Mean	Std. Deviation
Smoker	48	179.50	14.000
Non-smoker	52	92.17	18.642

Table 2

Test Assumptions	F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference
Equal variances assumed	3.762	.055	26.316	98	<.001	<.001	87.327	3.318
Equal variances not assumed			26.614	94.201	<.001	<.001	87.327	3.281

An independent samples t-test was conducted to compare the aggression scores for smokers and non-smokers. There was a significant difference in scores for smokers (M = 179.50, SD = 14.000) and non-smokers (M = 92.17, SD = 18.642); $t(98) = 26.316$, $p < .001$ (two-tailed). The mean difference in aggression scores was 87.327 (SE = 3.318).

The present research supports the hypothesis that there is a significant difference in aggression between smokers and non-smokers, with smokers exhibiting higher levels of aggression. The analysis showed that smokers (M = 179.50, SD = 14.000) scored significantly higher on aggression than non-smokers (M = 92.17, SD = 18.642), with a substantial mean difference of 87.33, $t(98) = 26.316$, $p < .001$.

Discussion And Conclusion

According to DSM-V (APA, 2013), certain personal characteristics, such as hormonal changes during adolescence, can contribute to aggression. Social frustration is another factor that can lead to aggressive behaviour in adolescents, with engagement in destructive activities being a manifestation of this frustration. Research by Kenneth et al. (2002) supports the notion that aggression plays a significant role in smoking initiation and continuation.

Furthermore, personality traits have been shown to strongly influence the development of various habits (Carver & Scheier, 2012). MacAndrew (1983) highlighted numerous psychosocial factors that contribute to smoking behaviour. Tyas & Pederson (1998) found that adolescent smoking was associated with various factors, including age,

family structure, parental socioeconomic status, and peer influences.

Other factors, such as learning, have been found to have stronger associations with smoking than personality traits. Giannakopoulos et al. (2010) examined the relationship between adolescents' smoking status and their emotional / behavioural problems, accounting for various confounders. They found significant associations between smoking and emotional symptoms, conduct problems, and hyperactivity/inattention.

Wills et al. (2008) studied a sample of public school students and found that good self-control could buffer the impact of risk factors on substance use. Their research demonstrated that individuals with higher self-control scores were less affected by family life events, adolescent life events, and peer substance use risk factors.

The results of this study indicate a significant difference in aggression scores between smokers and non-smokers, with smokers exhibiting significantly higher aggression. This finding is consistent with previous research suggesting a link between smoking and increased aggression. Further research is needed to explore the underlying mechanisms of this relationship and to determine if other factors, such as stress or personality traits, may also contribute to the observed differences. The link between smoking and aggression has been extensively studied over the past decade. Hicks et al. (2014) found that nicotine dependence in adolescents is associated with increased aggression, suggesting that smoking can exacerbate aggressive tendencies.

This study provides evidence that smokers have higher aggression scores compared to non-smokers. These findings highlight the importance of considering smoking status in psychological assessments of aggression and suggest potential benefits of smoking cessation programs in reducing aggression.

Aggression is the personality traits strongly associated with smoking. These traits may interfere even in cession of smoking programs. Psychologist and other professionals involved in planning of public health, therapeutic and social reengineering interventions for youth can get benefit by the results of study.

Limitations And Suggestions

This research was based on data from 100 male students. The female students were not included in the study as there would have been multiple biases in disclosing the smoking behaviour pattern.

Future studies should increase the sample size to enhance the generalizability of the findings. Although the researcher matched participants by age, more comprehensive results could be obtained using probability sampling techniques.

Conducting brief structured interviews could provide a deeper understanding of the issues. Additionally, promoting healthy activities such as sports, arts, and community social work for youth can help channel their energies positively. Mass media can play a crucial role in educating people about the dangers of smoking.

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