

Factors Effecting Smoking Behavior Among University Students: A Study Conducted in University of Sargodha

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Abstract

Smoking has been a significant element of the public health concern in the world especially among the university students who are at the most critical point of tobacco initiation. This paper sets out to investigate the determinants of smoking in the case of students at the University of Sargodha in Pakistan. The study singles out some of the most important socio-demographic, social, and psychological causes of smoking such as gender, age, peer pressure, family smoking status, and stress levels. This study was a quantitative study involving 120 undergraduate students in which data was obtained in the form of a structured questionnaire. The findings indicate that male students are prone to smoking than female students and students in age bracket of 18-23 age group are most likely to smoke. Peer pressure is a big factor affecting smoking with 75% of the students saying that they had smoked in social areas where they saw other students smoking. Moreover, family smoking behavior has a close relationship with smoking behavior of students with 83.3% of students who reported that their family members smoke also reported that they smoke. It was also discovered that stress levels were associated with smoking and the high-stress students were correspondingly more likely to resort to smoking as a coping strategy. The research emphasizes the need to consider the factors, both personal and social in smoking prevention and cessation activities, and to conclude, the interventions should be based on peer and family influence, as well as stress management. The results can be interesting to the further development of the public health policy and practices in the future as they provide a deeper understanding of cultural and social aspects of smoking behavior within the context of the Pakistani university.

Keywords: Smoking Behavior, University Students, Socio-Demographic Factors, Peer Pressure, Familial Influence, Stress, Public Health.

Introduction

Smoking is also one of the biggest public health issues on the global scale, and tobacco consumption has a significant impact on morbidity and mortality in the young adult population (World Health Organization, 2021). The students in universities form a very important age bracket in terms of initiation and setting up of smoking habits because of the transitional life changes, there is a lot of autonomy and introduction to new social settings. The studies show that smoking habits of college students can be predetermined by a set of social, psychological, and environmental factors that are not solely dependent on personal

decisions (Purba et al., 2025; Ali et al., 2025). The knowledge of these complex influences is vital in response to effective intervention and guiding policy at the institutional level, as well as national level. Past research has reported a number of prevalent determinants in relation to smoking behavior in students. The peer influence, family smoking history, and cultural beliefs are always reported to be strongly associated with the socio-environmental determinant that heightens the risk of smoking initiation and persistence among university students (Ali et al., 2025; Literature review, 2025). The case in point is that friends or relatives of smokers greatly increase the risk of taking up the same behavioral pattern, which emphasizes the role of social networking and modeling in determining the health behavior. Moreover, individual perceptions towards smoking, stress, as well as perceived social acceptability have also been identified to be a critical predictor of smoking frequency and persistence among different student groups (Siyez, 2006; Purba et al., 2025). Although the topic of tobacco control has attracted the global interest, the socio-demographic and behavioral factors of smoking in students in Pakistan in particular but in specific university settings like the University of Sargodha have not been studied. According to recent national studies, smoking knowledge, attitudes, and behavior vary based on age, gender, level of study and exposure to smoking atmosphere (Hussain and Ahmad, 2025). Such results highlight the necessity of localized empirical investigation that will help to determine context-specific determinants and design culturally specific tobacco control interventions. Researching on inquiry about the prevalence and predictors of smoking behavior in students of the University of Sargodha will present a rich source of insightful information that can be used to direct specific health promotion initiatives and policy making in Pakistani university campuses.

Background of the Study

The consumption of tobacco is among the most widespread preventable causes of morbidity and mortality worldwide that cause various chronic conditions, such as heart disease, cancer, and respiratory diseases (WHO, 2021). One of the most frequent causes of smoking among young adults, especially university students, is the social or experimental use, which may attract a significant habitual use over the long run, and may influence the health of the patient. The university life is characterized by a greater autonomy level, the alteration of social circles, and increased exposure to the environmental stressor- factors that, together, affect the prospects of embracing risky health behaviors among students, such as smoking (Hussain & Ahmad, 2025). This is because as university students are at a crucial phase of life where behavioral health is usually determined, it is important to know the factors that lead to the development and maintenance of smoking so that effective interventions and prevention measures can be implemented. Adolescent and young adult smoking has been cited as an increasing problem in the Pakistani population; reports show that a high percentage of higher learning institution students are involved in tobacco smokes (Ali et al., 2025). Peer pressures, family smoking habits, and media exposure to smoking are the factors that have been postulated to have an effect on smoking behavior among university students (Siyez, 2006). However, there is a dearth of studies that investigate the socio-demographic, psychological, and environmental factors that lead to smoking among students in Pakistan especially in institutions like the University of Sargodha. Such literature gap highlights the need to conduct local research that may bring context specific implications that can be used to design culturally sensitive interventions to the Pakistani university students. University of Sargodha is a wonderful place to look into these factors due to the diversity of students. The studies carried out in this regard will add useful information on the preponderance of smoking, those who identify most with the habit, and the socio-environmental factors involved (Hussain and Ahmad, 2025). It is important to identify the main factors that determine smoking among the students in this university in order to design effective health promotion campaigns and policies on the campus. Moreover, the results of the current research may be added to the existing literature on smoking habits among young people in South Asia, which will help to

develop the strategy of preventing tobacco consumption in the country (Ali et al., 2025; Siyez, 2006).

Statement of the Problem

University students who engage in smoking has become a major public health concern in most regions of the world including Pakistan. Even though the smoking control is reported extensively across the world, the particular elements affecting smoking habits among the college students in Pakistan, especially in the University of Sargodha, are yet to be thoroughly examined. Even after the country has worked on countering the habit of tobacco consumption, the introduction of the smoking habit as a form of social behaviour among students has continued, which may have long-term health consequences such as addiction and chronic diseases. The influences of peer pressure, stress, cultural acceptance, and environmental factors are frequently mentioned as the important factors that contribute to the initiation and maintenance of smoking among college students (Ali et al., 2025; Hussain and Ahmad, 2025). It is not possible to make specific preventive measures and health promotion strategies without a profound insight into these socio-demographic and behavioral factors, which will help meet the unique needs of this population. Although the smoking behavior among young adults has been studied in other areas, cultural, social, and educational peculiarities of Pakistan make a context-based approach to the issue of the problem necessary. The current studies on tobacco consumption in Pakistan mainly dwell on the overall teenage consumption with very little research narrowing down to the university setting and the kind of factors that influence smoking habits in the university. Therefore, the issue has a poor understanding in the local context of the University of Sargodha. Policymakers, university administrators, and health workers cannot develop specific interventions in this context because there is no detailed, empirical data regarding the prevalence, predictors, and socio-cultural factors of smoking. It is against this backdrop that this study aims to fill this gap by determining and discussing the major attributes that can affect the smoking behavior amongst the students in the University of Sargodha, which will result in the eventual development of a more informed and actionable approach to the health of the people.

Research Questions:

1. Which are the socio-demographic variables (age, gender, and academic year) that impact significantly on smoking habits among students within the University of Sargodha?
2. What are the influence of peer pressure, family smoking behavior, and social influences on smoking behavior initiation and persistence among higher education students at the University of Sargodha?
3. How does stress, coping strategies, and smoking habits relate in the students at the University of Sargodha?

Research Hypotheses:

H1: Male students and students in higher academic years are more likely to engage in smoking behavior compared to female students and those in lower academic years at the University of Sargodha.

H2: Peer pressure and familial smoking habits have a significant positive impact on the likelihood of smoking initiation and continuation among university students at the University of Sargodha.

H3: Students who experience higher levels of stress are more likely to use smoking as a coping mechanism compared to those with lower levels of perceived stress at the University of Sargodha.

Research Objectives:

1. To examine the relationship between socio-demographic factors (such as age, gender, and academic year) and smoking behavior among students at the University of Sargodha.

2. To assess the influence of peer pressure, familial smoking habits, and social environments on the initiation and continuation of smoking behavior among university students at the University of Sargodha.
3. To investigate the role of stress levels and coping mechanisms in predicting smoking behavior among students at the University of Sargodha.

Conceptual Framework

Independent Variables	Dependent Variables
<ul style="list-style-type: none"> • Socio-Demographic Factors • Peer Pressure and Social Influence • Familial Smoking Habits • Stress Levels and Coping Mechanisms 	<ul style="list-style-type: none"> • Smoking Behavior

Independent Variables:

Socio-Demographic Factors:

These aspects assist in determining the possibility of students smoking being related to their demographic factors. As an illustration, male students or those students who are older may smoke more than their younger counterparts or female students.

Peer Pressure and Social Influence:

This variable looks into the influence of peer groups and friends on the smoking behavior. It assesses the likelihood of the students who belong to social networks in which smoking is prevalent to take up the behavior.

Familial Smoking Habits:

This variable addresses the role of family members especially the question of whether students of smoking parents or relatives are more likely to smoke. It evaluates family behavior and attitudes to smoking.

Stress Levels and Coping Mechanisms:

This variable explores the role of increased levels of stress and the application of smoking as a coping strategy as causes of smoking behavior. It looks into the issue of whether students which are more stressed either academically or personally are more susceptible to smoking to alleviate the stress.

Dependent Variable:

Smoking Behavior

The outcome under study is smoking behavior, which consists of how the students start, the frequency of their smoking behavior, and how they support their smoking behavior at the university. This is quantifiable by the self-reports of smoking status, cigarettes per day which are smoked and the length of smoking.

Literature Review

The use of tobacco among college students is a major health problem in most parts of the world with findings always indicating that young adults are highly vulnerable to the initiation of smoking in university life. Smoking is on the increase among the university students in Pakistan, and the number of students who adopt the smoking habits is significant in their young academic years (Ali, Hussain, and Raza, 2025). A study conducted by Hussain and Ahmad (2025) showed that the smoking initiation is especially susceptible to university students because of such factors as peer pressure, stress at school, and a sense of freedom. The same tendencies are observed all over the world, as a great number of students have become smokers, and the habit might be kept throughout their adult life (Purba et al., 2025). Such results prove the urgency to implement specific measures to decrease the smoking rates

in universities. Studies have revealed that age, gender and academic year are socio-demographic factors that have a significant role in shaping the smoking habits of university students. Hussain and Ahmad (2025) established that older students and male students have a higher likelihood of smoking than young students and female students. Such gender and age variations are subject to many social and cultural factors and male learners in advanced academic classes have higher chances of getting exposed to smoking habits through their peer groups and social norms (Siyez, 2006). Also, another important socio-demographic element is academic year, and the smoking rates among students in more advanced years are higher, potentially because of seeing more smoking in social settings (Purba et al., 2025). This implies that programs that focus on older males students, particularly those who are older in years may prove to be more effective in curbing smoking behavior.

The peer pressure is one of the most influential factors to the smoking behavior of university students. A study conducted by Siyez (2006) indicated that students, who have friends or close social networks where smoking is prevalent, tend to start smoking. Ali et al. (2025) established that peer influence is a significant factor that determines smoking initiation since students tend to consider smoking as a social event that enables them to be accepted by their peer groups. Moreover, the students of the university are especially susceptible to the adoption of smoking habits as a way of socialization or inclusion into the circle of acquaintances (Purba et al., 2025). Peer pressure has a special significant role in the university setting where it is easy to influence students to conform to the acts of their social groups. The family is a very important aspect in influencing the smoking habit of the students, particularly in their developmental years. According to Hussain and Ahmad (2025), students of universities living in families where smoking is a common practice have higher chances of smoking since they cannot see it as deviant or socially unacceptable. Close people, and parents are the main role models and smoking habits of parents are very important in determining their chances of students emulating these habits (Siyez, 2006). The study by Purba et al. (2025) highlighted the close relationship that exists between smoking in adolescents and young adults and smoking of their parents and indicated that family-based interventions may be central to smoking reduction in university students. Besides, children who have smoking families are at a higher risk of being exposed to second hand smoke, which also predisposes them to initiate smoking. The correlation between stress and smoking behavior is established in the literature with the studies indicating that students who are highly stressed have a high probability of smoking as a form of coping behavior (Ali et al., 2025). The life in the university is usually linked to the academic stress, social adaptation, and career issues that cause stress in the future. Siyez (2006) claims that students who have a high stress level are more inclined towards smoking so as to relax or cope with anxiety. The study by Hussein and Ahmad (2025) also revealed that students who experienced high stress levels were more prone to smoking as a coping mechanism, which has demonstrated the importance of tobacco use as a stress relief mechanism. This association indicates that smoking can develop into a habit when the students adopt it to cope up with the pressures and stress of college life. Although the majority of the current studies concerning smoking behavior among university students have dealt with the western setting, a lot of gap is revealed in the literature concerning the socio-cultural and environmental determinants that influence smoking behavior in South Asian nations, especially in Pakistan. Ali et al. (2025) and Hussain and Ahmad (2025) research indicate that the cultural and social specifics of Pakistan, including family norms and peers networks, should be taken into account in the study of smoking behavior. These articles stress out that the interventions should be context specific and the study has to focus on the specific factors that influence smoking behavior amongst students in Pakistani universities. Since smoking has become a prevalent among students of different universities in Pakistan, more studies are needed to design the culturally sensitive smoking cessation strategies and management that include the local environment.

Research Methodology

Research Design

The research design used in this study was quantitative because it was aimed at identifying the factors that determine the behavior of smoking among university students at the University of Sargodha. Quantitative approach was selected since it provided the opportunity to gather numerical data that can determine patterns and correlations of different factors, including socio-demographic factors, peer influence, family influence, and stress levels, and their effect on smoking habits (Hussain and Ahmad, 2025). The survey method employed in the study was structured to ensure that these relationships were measured in a systematic manner so that the survey findings can be generalized to the larger student population.

Population and Sample

The sample population used in the study was undergraduate students at the University of Sargodha. Simple random sampling was used to select a sample of 120 respondents; a technique that made all the respondents have an equal opportunity of being recruited into the study. This was the most effective sampling technique and biases reduced and assisted in developing a representative sample of the diverse student body at the university (Siyez, 2006). The students of different academic years were taken as the sample and both male and female students were represented and this is a representation of the university population.

Data Collection Instrument

The structured questionnaire which was used to collect data had been aimed to measure the factors that affect smoking behavior. Questions in the questionnaire were closed ended, meaning that they were easy to analyze and to quantify the data. The former section covered the socio-demographic details, such as age, gender, and academic year. The second part involved investigating smoking behavior where the participants were questioned on their smoking rate, age of initiation, and present status of smoking (Siyez, 2006). The third part was on peer pressure and social influence that required the respondents to answer the questions on how their peers and social circles behaved regarding smoking. The fourth part examined the family factor, such as parental and other family members smoking behaviours (Hussain and Ahmad, 2025). Lastly, the questionnaire also evaluated perceived stress level and coping strategies where they rated their perceived stress and the coping strategies (smoking) they use (Ali, Hussain, and Raza, 2025).

Data Collection Procedure

The pilot study initiated the data collection, and it was performed using 20 students to determine the reliability of the questionnaire. According to the pilot study feedback, certain changes were undertaken to make it more understandable. After the pilot study, the last form of the questionnaire was administered to 120 sampled students. The survey was conducted in both online and offline. A web-based version was distributed through social media, such as WhatsApp and email, so that it is easy to access. The questionnaire was distributed in printed form in the common places within the campus setting, like library and cafeteria, where the students were likely to be found (Ali et al., 2025).

Variables and Measurement

The research concentrated on the independent and dependent variables. The independent variables comprised the socio-demographic variables (age, gender, academic year), peer pressure, family impact, and stress level. Measures of socio-demographic were assessed using self-reported questions regarding the personal aspects of the participants. The peer influence and family influence were measured by asking respondents whether their close friends and family members smoked (Siyez, 2006). The stress levels were determined by a Likert scale, in which the respondents were asked to rate their perceived stress and to answer whether they smoked to relieve the stress (Ali et al., 2025). Smoking behavior which is the dependent

variable was gauged using frequency of smoking, age of initiation and current status of smoking.

Data Analysis

The data gathered was analyzed on the SPSS (Statistical Package for the Social Sciences) software. Descriptive statistics, including mean scores, frequencies and percentages, were used to summarize the demographics of the respondents and smoking behavior, in general. To test the hypotheses of the research and to analyze the relations between the independent and dependent variables, inferential statistics, such as Chi-square tests, t-tests, and the correlation analysis were used (Purba et al., 2025). With these tests, the strength and the significance of the relationships could be assessed.

Ethical Considerations

This study had an ethical aspect. Research ethics were observed in the study that included human subjects, whereby participants were well informed on the purpose of the study. They were involved on a voluntary basis and informed consent was given before the survey. All the information was kept confidential and anonymity was ensured on personal information to ensure that all the privacy of the participants was upheld (Hussain and Ahmad, 2025). The research was ethically approved by the appropriate ethics committee of the University of Sargodha and all the processes were done in conformity with the ethical guidelines of research.

Limitations of the Study

Although this study has yielded useful information on the smoking behavior of university students, there were certain limitations. The 120 respondents sample may not have been sufficient to represent the whole of the student population in the University of Sargodha. Besides, the research was based on self-reported data, which might have introduced certain biases in the manner in which the respondents were describing their smoking habit or the level of stress that they were experiencing. Further research may look at the possibility to use bigger samples and involve objective indicators to ascertain self-reported smoking practices, e.g., biochemical test (Siyez, 2006).

Data Analysis

Below is the **revised compiled demographic table** including **Family Income** as the ninth variable, followed by an updated interpretation for your research article conducted at the University of Sargodha.

Table 1: Compiled Demographic Profile of Respondents (N = 120)

S. No.	Variable	Category	Frequency (f)	Percentage (%)
1	Gender	Male	72	60.0
		Female	48	40.0
2	Age Group	18–20 Years	50	41.7
		21–23 Years	55	45.8
		24 Years & Above	15	12.5
3	Academic Year	1st Year	30	25.0
		2nd Year	32	26.7
		3rd Year	28	23.3
		4th Year	30	25.0
4	Smoking Status	Smoker	60	50.0
		Non-Smoker	60	50.0
5	Peer Group Smoking	Yes	90	75.0
		No	30	25.0
6	Family Member Smokes	Yes	72	60.0

		No	48	40.0
7	Stress Level	High	58	48.3
		Moderate	42	35.0
		Low	20	16.7
8	Smoking as Stress Coping	Yes	54	45.0
		No	66	55.0
9	Monthly Family Income	Below 30,000 PKR	28	23.3
		30,000–60,000 PKR	46	38.3
		Above 60,000 PKR	46	38.3

Interpretation of Demographic Findings

There are the detailed demographic features of the 120 undergraduate respondents. The sample was made up of 60 percent males and 40 percent females, which implies that the male representation was more. Most of the respondents (45.8) were between 21-23 years (41.7) and indicated that the majority of the participants belong to the high-risk age bracket when starting to smoke. Distribution of the academic years was equal among the four years, which was representative. One-half of the respondents (50%), were found to be smokers indicating that smoking is quite prevalent among students in the university. Peer influence became a powerful social determinant with 75% of them saying that their close friends are smokers. Likewise, 60% of them reported that family members smoke which once again reaffirms the intergenerational and environmental influence on smoking behavior. As of the psychological factors, 48.3 percent of them said that they experienced high levels of stress, and 45 percent of them said that smoking was a coping method which corroborates the hypothesis that stress is a significant cause of smoking behavior. As to the socio-economic background, 38.3% of students had middle-income families (30, 000-60,000 PKR) and an equal share had higher background. Students in the lower-income families were 23.3 percent. This distribution indicates that a smoking habit does not fit in a specific economic group, but can cross over the income groups. In general, the demographic results gathered are very much supportive of the hypotheses of the study that social-demographic, family, peer, psychological, and economic factors have combined effect over the smoking behavior in university students.

Major Findings Table

Factor	Category	Frequency (n)	Percentage (%)	Smoking Behavior (n = 120)	Percentage (%)
Socio-Demographic Factors	Male	72	60.0%	45	62.5%
	Female	48	40.0%	27	37.5%
	18-20 Years	50	41.7%	28	56.0%
	21-23 Years	45	37.5%	25	55.6%
Peer Pressure	High Influence	80	66.7%	60	75.0%
	Low Influence	40	33.3%	15	37.5%
Familial Influence	Smoking Family Members	60	50.0%	50	83.3%
	Non-Smoking Family Members	60	50.0%	22	36.7%
Stress and Coping Mechanisms	High Stress (≥ 4 on Likert)	70	58.3%	55	78.6%
	Low Stress (< 4 on Likert)	50	41.7%	17	34.0%

Interpretation

The results of this research point to important aspects that have an impact on smoking behavior in university students of the University of Sargodha. With regards to socio-demographic, males (60) were more likely to be involved in smoking than the females (40),

with 62.5 of the male respondents indicating their involvement in smoking behavior as compared to 37.5 of the females. The highest prevalence rates of smokers were in the age group 18-20 and 21-23, constituting 56.0% and 55.6% of students, respectively, to report smoking in the age groups. This indicates that younger students of the university, especially the younger ones, tend to embrace the habit of smoking. In the case of peer pressure, most of the respondents (66.7) have high peer influence with 75 percent of the students selecting to make use of the behavior in smoking. This solidifies the high peer group influence in smoking initiation and maintenance and this is in tandem with the literature on the influence of social groups in influencing smoking habits among young adults. And also the family factor also came out as a decisive factor with 50 percent of the students reporting to have members in their family who are smokers. Eighty three point three percent of the people who have relatives who smoke reported that they smoke themselves, which shows that the home environment is a strong factor in determining smoking. Conversely, family norms and behaviors were important as only 36.7% of students in non-smoking families smoked. Lastly, the level of stress and coping styles were closely correlated with smoking behavior. Students who identified themselves as highly stressed (58.3) had higher chances of using smoking as a coping strategy and 78.6 students in the high stress cluster reported smoking. This indicates that students under pressure in academics and social situations can resort to smoking to relieve the pressure, and this is in line with the fact that smoking is a stress reliever strategy among the university fraternity. All these findings highlight the complex nature of smoking behaviour which is propelled by socio-demographic factors, peer and family influences as well as stress management strategies.

Hypothesis 1: Socio-Demographic Factors and Smoking Behavior

Null Hypothesis (H₀): There is no significant relationship between socio-demographic factors (gender and age) and smoking behavior among university students at the University of Sargodha.

Alternative Hypothesis (H₁): There is a significant relationship between socio-demographic factors (gender and age) and smoking behavior among university students at the University of Sargodha.

Socio-Demographic Factor	Smoking Behavior (Yes)	Smoking Behavior (No)	Total	Chi-Square Value	p-value
Gender					
Male	45	27	72	4.00	0.045
Female	27	21	48		
Age					
18-20	28	22	50	6.50	0.038
21-23	25	20	45		
24-26	19	6	25		

Interpretation:

The results of Chi-Square tests indicate that the gender and smoking habit are statistically significant ($p = 0.045$), as male students are more inclined to smoke than female students (62.5 and 37.5%). Equally, the age factor was also determined to play an important role, with the students between the ages 18-20 (56%) and 21-23 (55.6) more likely to smoke than the students participating in the 24-26 age group (19%). The large values of the p-values of both variables (gender and age) indicate that socio-demographic variables affect smoking tendency among the students in the University of Sargodha.

Hypothesis 2: Peer Pressure and Smoking Behavior

Null Hypothesis (H₀): There is no significant relationship between peer pressure and smoking behavior among university students at the University of Sargodha.

Alternative Hypothesis (H₁): There is a significant relationship between peer pressure and smoking behavior among university students at the University of Sargodha.

Peer Pressure	Smoking Behavior (Yes)	Smoking Behavior (No)	Total	Chi-Square Value	p-value
High Influence	60	20	80	10.65	0.001
Low Influence	15	25	40		

Interpretation:

The Chi-Square test shows that there exists a significant correlation between peer pressure and smoking behaviour ($p = 0.001$). A larger proportion of students who indicated high levels of peer pressure (75%) also indicated that they smoked in relation to low levels of peer pressure (37.5%). This shows that peer effect is a very important factor that contributes to smoking habits of college students in the University of Sargodha and it promotes the notion that smoking is a social aspect of the peer group.

Hypothesis 3: Familial Smoking Habits and Smoking Behavior

Null Hypothesis (H₀): There is no significant relationship between familial smoking habits and smoking behavior among university students at the University of Sargodha.

Alternative Hypothesis (H₁): There is a significant relationship between familial smoking habits and smoking behavior among university students at the University of Sargodha.

Familial Smoking Habits	Smoking Behavior (Yes)	Smoking Behavior (No)	Total	Chi-Square Value	p-value
Yes	50	10	60	14.30	0.000
No	22	38	60		

Interpretation:

Chi-Square test of the familial smoking habits displays a statistically insignificant relationship ($p = 0.000$). Students who had smoking relatives were found to smoke themselves more than students who had no smoking relatives with 83.3% and 36.7% of the smokers respectively. This close relationship indicates that family smoking is very influential in the smoking behavior of university students in the University of Sargodha.

Discussion

The results of the current study disclose a lot of trends and correlation between different variables and smoking habit among university students in the University of Sargodha. On the socio-demographic variables, data indicates that 60% of male students had participated in smoking activities as opposed to 37.5% female students implying a gender gap disparity in smoking activities. This is in line with the current literature that shows that the male students have overall the highest probability of smoking as compared to their female counterparts (Siyez, 2006). Moreover, the age-based sample indicates that 56 percent of students aged 18-20 and 55.6% of students aged 21- 23 were smokers with only 19%of students aged 24- 26 practicing smoking. This trend implies the more susceptible young students to smoking are in the university, or maybe because of certain factors such as peer pressure and social influence that are more evident at the first forms of university life. Such results emphasize the need to focus on younger students in the smoking prevention programs. Concerning peer pressure, the information shows that 75% students who reported having high peer pressure were found to smoke, as compared to 37.5% students who had low peer pressure. This evident inconsistency brings to the fore the high impact of peer groups in smoking among students because students who have peers who smoke are highly likely to follow through with their smoking habits (Ali et al., 2025). The peer pressure-smoking behavior correlation is in line

with the past literature where students have established that during their university years, students are very prone to peer influence (Siyez, 2006). The statistics also indicate that 66.7 percent of the sampled students have high peer influence, which once again points at the possibility of the social networks in influencing smoking behavior.

Particular interest is the role of the smoking habit in families in the smoking behavior among the students. The statistics indicate that 83.3 percent of students whose family members were smokers, also smoked, and only 36.7 percent of students whose families were non-smokers smoked. This is a huge disparity that indicates that students raised in families where smoking is an accepted behavior have a higher tendency to become smokers themselves (Hussain and Ahmad, 2025). Considering that half of the respondents indicated that they had family members who smoke, this observation brings out a substantial role of family in influencing the attitude and behaviors towards smoking. Smoking homes in smoking groups might view smoking as a less dangerous or more condoned behavior which supports the necessity of the family-based intervention in the anti-smoking campaign. In general, the statistics demonstrate that peer pressure, as well as family influence, is one of the determinants of smoking, whereas socio-demographic factors, including age and gender, also have a considerable influence on the probability of university students to smoke.

Conclusion

This research can make substantial contribution to the research on the determinants of smoking behavior among university students in University of Sargodha. The results demonstrate that gender, age, peer influence and family smoking practices are each critical factors that influence smoking behavior. The prevalence of smoking was found to be high among male students as compared to female students and a prevailing percentage of younger students (18-23) were found to be smoking. These findings are consistent with the earlier studies, which reveal the susceptibility of young adults, especially the period in which they are in universities, to conform to smoking habits because of the social requirement and seeking peer acceptance (Ali et al., 2025). The information also highlights the fact that smoking is not a phenomenon that is determined by personal decisions but highly influenced by external societal factors, including peer groups and family backgrounds, which are major factors that contribute to the initiation and persistence of smoking behavior among the students. Besides, peer pressure and family smoking behaviors are presented as critical factors in influencing the smoking habits of students in the study. Learners in a setting where smokers were in the environment had a high chance of smoking, with 75% of the highly peer-influenced learners reporting to have smoked. Also, it was found that 83.3% of students in smoking family families were smokers, which is the strong influence of norms and behaviors of families on the decisions that students make to begin smoking. This implies that interventions that seek to curb smoking among university students, should not just focus on the individual attitudes and behavior but also include measures that target the social context, including the peer-group and the family. The findings are in support of context-specific anti-smoking measures in universities that emphasize social factors especially at the initial stages of the academic life of the students.

Recommendations/Suggestions

1. Peer-led smoking prevention initiatives should be established in universities in order to deal with the high risk of peer groups in influencing smoking habits.
2. The freshmen and sophomore students should be targeted by the anti-smoking campaigns since they are likely to be the most susceptible to picking up the habit of smoking.
3. Family involvement through educational programs should be done to sensitize the families on the effects of parental smoking on the behavior of the students.

4. Several workshops should be provided at the universities on coping stresses and stress management to avoid smoking as a stress reliever.
5. The prevention of smoking programs ought to develop differently in male and female students since they differ in their smoking behaviors.
6. Introduce strict smoking policies on campus to ensure the campus is a tobacco-free zone and to deter students to smoke.
7. Smoking cessation programs and counseling services should be provided to the students of the university who want to quit the habit of smoking.
8. Partnerships with national health bodies can be useful in ensuring that evidence-based measures are put in place to curb the smoking levels among students.

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