

DRUG TRAFFICKING AND THE GROWING USE OF CRYSTAL METH (ICE) AMONG UNIVERSITY STUDENTS IN SOUTH PUNJAB: A SOCIOLOGICAL PERSPECTIVE

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Abstract

The use of crystal methamphetamine commonly referred to as 'ice' has emerged as a public health and sociological problem among university students in Pakistan. This study aims to examine sociological factors associated with crystal methamphetamine use: Drug trafficking exposure, peer influence, family environment, economic stress, academic stress, and social media exposure. The study is conducted primarily based on sociological theories and is a quantitative cross sectional study (knowledge survey) conducted among 400 university students of South Punjab using multistage stratified random sampling. The data will be analyzed descriptively, correlated, chi-square and multiple regression. The purpose of this study is to determine the primary social factors related to crystal methamphetamine use and to recommend evidence-based strategies for prevention, intervention, policy planning, and institutional strategies to minimize crystal methamphetamine abuse among university students.

INTRODUCTION

Trafficking in drugs is considered one of the most significant transnational organized crimes of public health, national security and socioeconomic development in the world. The United Nations Office on Drugs and Crime (UNODC, 2024) noted that over the past decade, drug markets in Asia have been booming, especially those of methamphetamine, driven by rising demand, a variety of trafficking routes, and a large supply chain. Situated on the strategic frontline between Afghanistan, home to one of

the world's largest illicit narcotics producers, and the rest of the Golden Crescent, Pakistan is an important transit route for heroin, opiates and now more and more synthetic stimulants like methamphetamine (UNODC, 2024). The use of traditional substances has been replaced by synthetic substances because Methamphetamine is easy to make, is lucrative for criminal networks and it is easily trafficked through international networks in recent years. In Pakistan, seizures of the drug have increased, suggesting an increase in the number of trafficking operations and the

demand for the drug in Pakistan. In recent years, the developments have created methamphetamine as a serious public health problem in the country affecting adolescents and young adults (UNODC, 2024).

Pakistan has one of the youngest population in the world with almost two-third of its population below the age of 30. It is a demographic profile that creates many opportunities for socioeconomic development, but it also presents a scenario whereby young people are more vulnerable to substance abuse, particularly if young people are out of work, experiencing academic pressure, not having access to mental health services, and being prey to criminal networks. Hence, drug addiction among university students has escalated and become an important concern in the realm of educators, health care practitioners and policymakers (Ahmed et al., 2020).

Recent research in Pakistan has found that crystal methamphetamine (also referred to locally as "ice") is a drug that is being increasingly introduced into the educational system. Ansar et al. (2024) found that methamphetamine use has been rising among the university students of Punjab and academic stress (as a trigger), peer stress (as a trigger), psychological stress (as a trigger) and social stress (as a factor) play their significant role in the usage of methamphetamine. Likewise, Shahzad et al. (2024) found that the use of crystal methamphetamine had spread throughout educational institutions in South Punjab, where students often first use drugs to improve their concentration when taking exams, to deal with emotional stress, or to meet expectations from their peers. The socio-economic inequalities prevalent in South Punjab, the relative high levels of unemployment, limited availability of mental health facilities and increasing risks of drug trade with major cities in the north are some factors which make it a region of special interest for the study in question. Despite these risks, there is a lack of empirical sociological studies of university students' crystal methamphetamine consumption in South Punjab.

The majority of studies conducted in Pakistan have been on clinical population or general substance abuse with little focus on the interaction of the dynamics of trafficking and sociological factors among university students. Therefore in this study, a sociological approach was used to correlate the interaction of the macro level factors involved in drug trafficking and local drug available with micro level factors of the peers, families, academic pressure, economic stress, and social media exposure to methamphetamine use among students of University of South Punjab. In this study, the use of drugs is conceptualized as a social construct and a socially learned and structurally influenced phenomenon within multiple social environments that envelop the drug user. In particular, Bandura's theory on Social Learning, Sutherland's Differential Association theory, Merton's Strain theory, and Hirschi's Social Control theory are used to explain how students learn attitudes towards drug use, how they react to academic and economic pressures, and how they are susceptible when social bonds are weakened. The theoretical frameworks are used together to gain a holistic perspective on the sociological processes that have led to the use of crystal methamphetamine among university students. The rest of the article summarizes previous literature on drug trafficking and methamphetamine use in Pakistan, sets theoretical framework according to classical sociological and criminological theories, states the research objectives and research hypotheses and presents a quantitative method to study the relationship between the sociological risk factors and crystal methamphetamine use among the University Students of South Punjab.

Literature Review

Drug Trafficking Trends in Pakistan and South Punjab

Geographically, Pakistan has always been a significant player in the region of the Golden Crescent of opium cultivation and illegal drug trafficking where Afghanistan, Iran, and Pakistan are involved. Historically, heroin trafficking has been a significant source of drug supply in the

region, and in recent years, there has been a notable increase in the manufacture, trafficking and use of synthetic stimulants, such as methamphetamine in South and Central Asia (UNODC, 2024). The dramatic increase in the production of methamphetamine has changed regional drug trafficking. Contrary to the case of plant-based narcotics, methamphetamine is easily made, using synthetic chemical precursors, which allows criminal networks to establish meth production plants closer to consumer markets, reducing the need to grow crops. Consequently, synthetic trafficking routes are also becoming more popular in Afghanistan and Pakistan, in addition to Afghanistan's traditional heroin trafficking routes (UNODC, 2024).

The geographical location of Pakistan offers traffickers access to various international transit routes in between South Asia, Central Asia, Middle East and Europe. Border areas, especially areas next to Afghanistan, are a way station for the importation of prohibited drugs via land and sea routes and their distribution to the domestic market. In recent years, the seizures of methamphetamine have increased greatly, and the drug has become more available in the country, resulting in trafficking (UNODC 2024). Due to its geographical location, over-urbanisation, as well as socio-economic differences, South Punjab is more vulnerable to these changes. Qualitative evidence suggests that the use of crystal methamphetamine has been increasing in local schools across the region, although there is limited epidemiological evidence.

The six factors mentioned by Shahzad et al. (2024) that are associated with the initiation of methamphetamine use among youth of South Punjab include the lack of support from family members, issues in school, experimentation with recreational drugs, issues with relationships, issues with job, and social pressure of cultural expectations. The authors also discovered that long-term drug abuse resulted in physical issues, low performance in school, delinquency, and family instability. Moreover, drug trafficking among the University students in Pakistan has been found to be a public health and educational

problem in addition to criminal justice as per studies conducted among the Pakistani University students. Ahmad et al., (2020) pointed out that having drugs readily accessible at the university campuses could heighten the risks associated with experimentation, addiction, and the long-term psycho-social impacts for university students. Similarly, Ansar et al. (2024) identified that university students in Punjab were more inclined to use crystal methamphetamine, which was closely associated with peer pressure, competitiveness, and psychological stress, suggesting a need for a multidimensional approach to prevention that addresses the role of police, mental health, and educational policies.

Theoretical Framework

In the present study, the use of crystal methamphetamine (also known as "ice") among university students in South Punjab is explained in light of four theories of sociologists and criminologists. These theories provide a multi-dimensional perspective to the development of social behaviour that highlights the interplay between the development of individual behaviour and social interaction, structural pressures and institutional influences.

Social Learning Theory

Bandura's (1977) Social Learning Theory states that human behaviour is learned by observation, imitation, and reinforcement. Most significant others, generally peers, family and influential models are observed in order to obtain new behaviours. Consequently, drug use is seen as a learned behavior, or a behavior that is developed after being repeatedly exposed to positive attitudes and values about drug use by peers and family. Peer groups are one of the key sources of behavior modelling for college students. If a repeat user sees its peers using crystal methamphetamine and having no negative effects that seem to be harmless or beneficial at the time, they may see drug use as harmless or beneficial for the purposes of getting better grades, dealing with stress or fitting in with peers. Also, social media has provided many opportunities for observational learning due to the vast amount of

drug-related content that is accessible to youth, which may even normalize or glorify drug use. Thus, the role of peer influence and the Internet could be a helpful one for explaining the initiation and maintenance of crystal methamphetamine use (Bandura, 1977).

Differential Association Theory

According to the Sutherland's 1947 Differential Association Theory, criminal and deviant behavior is learned from close social groups. When a person is given more proscribing definitions of a behaviour than conscribing, they will engage in deviant behaviour. One spends many hours in the university environment and comes into close contact with other students and roommates, close friends. If these social networks are connected to or encourage students to use drugs and try them out, then students might start to normalize drug use and experimentation. A previous study has revealed that peer pressure is one of the most significant factors among the Pakistani university students which is linked with methamphetamine consumption (Ansar et al., 2024). Therefore, Differential Association Theory states that the longer someone is exposed to a drug-using peer group the more likely they will be to pick up the attitudes, motivations, and techniques associated with the use of drugs.

Strain Theory

The deviant behavior is a reaction to the pressure that is caused by the failure to attain the socially valued goals through legitimate means, according to Merton's Strain Theory (1938). The students of universities are also exposed to a lot of stress because of academic competition, economical problems, unemployment and expectation of the family. In the Pakistani context, the competition in school, lack of jobs, financial insecurity can be quite a struggle for students. Some of them might attempt to cope with this pressure in an unhealthy way such as using crystal methamphetamine to concentrate, stay awake during exams or to dull the emotions of being emotionally distressed. In Pakistan, there have been several empirical studies conducted, which have pointed out academic stress, financial

poverty, psychological stress as factors that led to the use of methamphetamine among the students (Ansar et al. 2024). So, Strain Theory is appropriate to explain drug use in terms of structural/structural pressure.

Social Control Theory

Hirschi's (1969) Social Control Theory focuses on the importance of social bonds to prevent individuals from engaging in deviant behaviour. Hirschi theorised that family attachment, attachment to education, engagement in traditional activities and social norms would reduce the chances of crime and drug use. For those who experience less caring from their parents, when parents are engaged in conflict, emotionally uninvolved or less supported by institutional practices, the attachment to the institutional practices may be weaker and they may feel more vulnerable to the use of drugs. Similarly, research done in Pakistan on substance use among adolescents has also found that low parental supervision and lack of family support are also crucial factors linked to the initiation of methamphetamine use (Ansar et al., 2024; Shahzad et al., 2024). Hence, the Social Control Theory has proven to be useful in clarifying its relationship and how it's a higher risk factor for crystal methamphetamine use, compared to the strengthening of less social bond.

Integrated Theoretical Perspective

There is no one sociological theory that can encompass the various aspects of crystal methamphetamine use among University students. Some theories for the causes of deviant acts include Social Learning Theory in which acts are imitated from models; Differential Association Theory in which deviant values are passed on from peers; Strain Theory explaining acts as a result of structural and psychological pressures; and Social Control Theory which centers on the protection conferred by the family and institutional attachments. All these views taken together provide a comprehensive view of structural conditions and interpersonal relationships and their interaction in order to

identify drug usage among university students of South Punjab.

Research Objectives

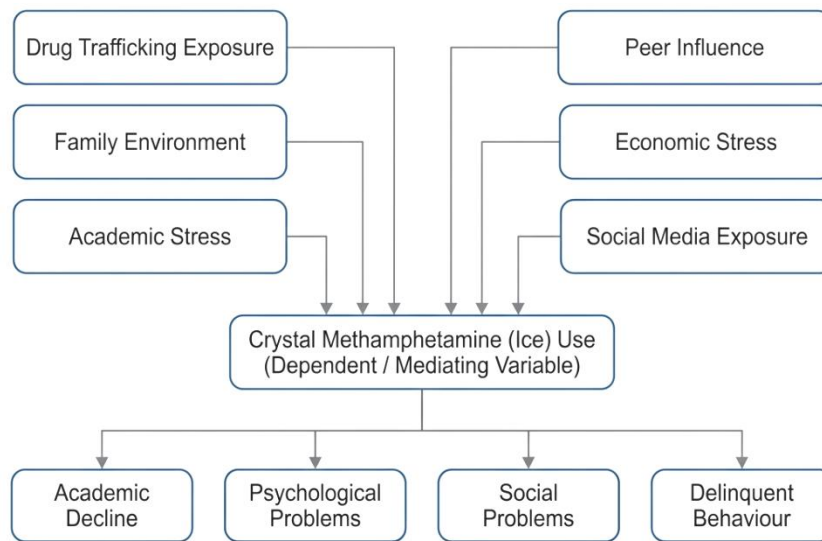
The present study seeks to achieve the following objectives:

1. To determine the prevalence and patterns of crystal methamphetamine (ice) use among university students in South Punjab.
2. To examine the relationship between exposure to drug trafficking environments and crystal methamphetamine use among university students.
3. To investigate the influence of peer pressure, family environment, academic stress, economic stress, and social media exposure on crystal methamphetamine use.

4. To assess the academic, psychological, social, and behavioral consequences associated with crystal methamphetamine use.
5. To explain the determinants of crystal methamphetamine use through Social Learning Theory, Differential Association Theory, Strain Theory, and Social Control Theory.

Conceptual Framework

The conceptual model is the independent variable (Drug Trafficking Exposure, Peer Influence, Family Environment, Academic Stress, Economic Stress, and Social Media Exposure) would impact the dependent variable (Crystal Methamphetamine (Ice) Use), which would impact Academic Performance, Social Relationships, Psychological Well-being, and Criminal or Delinquent Behaviour.



The conceptual model shows that structural and interpersonal factors both play a role in factoring into crystal methamphetamine use, which in turn leads to negative academic, psychological, and social outcomes.

Research Methodology

Research Design

This study is quantitative, cross sectional survey as it is related to the relationship of variable among large population at one time (Creswell & Creswell, 2023).

Study Area and Population

Target Population is the undergraduate students and postgraduate students of public and private universities of Multan, Bahawalpur and Dera Ghazi Khan (Major education centers of South Punjab).

Sample Size and Sampling Technique

The multi-stage stratified random sampling technique will be used to select students to form a sample of approximately 400 students. Stratification will be in geographical location first

then faculty and academic department. Pupils will then be selected through simple random sampling, to ensure that there is a fairly even spread of gender, subject area and socio-economic backgrounds.

Data Collection Instrument

A self-administered questionnaire with five sections that assesses the demographic characteristics, peer influence, family environment, academic stress, social media exposure and crystal methamphetamine use will be used to collect primary data. The attitudinal items will be measured on a 5-point Likert style scale from 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire will be modified, derived from the previously validated substance use and psychosocial assessment tools and customized for the context of Pakistani university. A pilot study with about 30 students will be performed to assess the reliability and clarity of the test. Cronbach's alpha will be used to assess internal consistency (Cronbach, 1951) and a Cronbach's alpha coefficient of greater than 0.70 will be accepted (Cronbach, 1951).

Data Analysis

IBM SPSS Statistics Version 27 will be used to analyse the data. Descriptive statistics (frequencies, percentages, means and standard

deviations) will be used to summarize characteristics of respondents and prevalence rates of crystal methamphetamine use. Inferential statistical analyses of the relationships between study variables will be performed using Pearson correlation, chi-square tests, and independent-samples t tests and multiple regression analyses. The probability of using crystal methamphetamine will be determined, as appropriate, using logistic regression, and then the results will be adjusted for demographics. The results will be considered as statistically significant at $p < .05$.

Ethical Considerations

Institutional Review Board (IRB) approval of data collection will be obtained prior to data collection. All respondents will give informed written consent for participation, which will be voluntary. The participant will be told that he or she is anonymous, that information will be confidential, and that the participant can withdraw from the process at any time without losing any privilege. There will be no collection of personally identifiable information and all information will be reported in summary format. If participants are uncomfortable during the data collection process they will be given information about counselling and mental health support services available.

Results and Findings

Table 1. Demographic Characteristics of Respondents (N = 400)

Characteristic	Category	N	%
Gender	Male	240	60.0
	Female	160	40.0
Age (years)	18-20	140	35.0
	21-23	160	40.0
	24-26	60	15.0
	27-30	40	10.0
Year of Study	1st Year	100	25.0
	2nd Year	120	30.0
	3rd Year	100	25.0
	4th Year	80	20.0
Department	Science	200	50.0
	Arts/Humanities	120	30.0
	Social Sciences	80	20.0

Academic representation of the respondents suggests a relatively good balance, with a small male overrepresentation (60%). The majority of individuals (40%) were aged between 21 and 23 years, which is the typical age of university-age young people. The participants were mostly

undergraduates in their early academic years (1st to 3rd year = 80%) and half a sample was from science disciplines. The distribution indicates that the results are based on a broad cross section of students from different levels and in various disciplines.

Table 2. Prevalence of Crystal Meth (Ice) Use Among Students (N = 400)

Usage Category	Frequency	%
Never used ice	300	75.0
Tried once or twice	50	12.5
Occasional user (monthly)	35	8.8
Regular user (weekly or more)	15	3.8

The crystal methamphetamine use prevalence indicates that most students (75%) had never used crystal methamphetamine (also known as “ice”). But a significant minority (25%) reported level of exposure, from experimentation to regular use. There was a smaller, but concerning,

high risk subgroup, regular users (3.8%). The results indicated that though the dependency does not prevail on a national level, there is an increasing awareness of its use, especially by university students of South Punjab, in experimental and occasional use.

Table 3. Sources of Ice Supply (N = 400)

Source	Frequency	%
Friends/Peers	180	45.0
Local Dealers	120	30.0
Parties/Social Events	60	15.0
Online Platforms	20	5.0
Family Members	10	2.5
Others	10	2.5

The results showed that the primary route for obtaining crystal meth was through a peer network (45% of respondents had reported that their closest source of the drug was friends). Social gatherings made up 15% and local drug

dealers made up 30%. Supply was relatively low through the online and family channels. This underscores the importance of informal peer based distribution channels in providing access to drugs to students.

Table 4. Peer Influence Factors (Agreement Level %)

Statement	Agree (%)
Friends have offered me drugs	40.0
My close friends use ice	30.0
Friends encourage risk-taking	25.0
Social outings often involve drugs	20.0
Friends dismiss drug risks	12.5

The data shows high levels of peer related exposure to drug culture. Almost one-fifth said that their friends gave them drugs and 30% said

that their close friends use ice. These findings show the importance of peer environments in

influencing drug attitudes and behaviours of students.

Table 5. Family Environment Factors (Agreement Level %)

Statement	Agree (%)
Economic hardship at home	40.0
Lack of parental supervision	35.0
Poor communication with parents	30.0
Frequent family conflicts	25.0
Family members use drugs	15.0

Sample characteristics related to family were also seen. The most common reported problems were economic hardship (40%) and weak parental supervision (35%). Such dysfunctions and

relationships in the family can make members more susceptible to engagement in substance use behaviors.

Table 6. Academic Stress Factors (Agreement Level %)

Statement	Agree (%)
Exams cause severe anxiety	60.0
Pressure to achieve high grades	50.0
Fear of failing courses	55.0
Long study hours cause stress	45.0
Lack of faculty support	20.0

Academic stress seems to be one of the prime stress factors for students, with 60% indicating they felt stress because of exams. Additionally, over half of all respondents were afraid of failing in school. The results indicate that academic strain could be a major psychological determinant of substance use behavior.

Table 7. Social Media Exposure Related to Drugs

Statement	Agree (%)
Exposure to drug-related content online	45.0
Spend more than 3 hours daily on social media	50.0
Influenced by peers' drug posts	35.0
Seen drug promotion groups/ads	25.0
Used social media to find drugs	10.0

The data shows moderate exposure to drug-related content via the internet. Nearly 50% of the respondents indicated that they had come

across drug-related content online, indicating that social media could play a role in either normalizing or exposing to drug culture.

Table 8. Association Between Peer Influence and Ice Use

Peer Influence	Ice Use Yes (%)	Ice Use No (%)
High Influence	20.0	80.0
Low Influence	5.0	95.0

$\chi^2(1) = 19.22, p < .001$

Peer influence showed to be a significant relationship with ice use. Results showed that

exposure to higher levels of peer pressure was significantly associated with being more likely to

use crystal meth, highlighting the role of peer networks in drug initiation.

Table 9. Pearson Correlation Matrix

Variables	Ice Use	Peer Influence	Family Conflict	Academic Stress	Social Media
Ice Use (0/1)	1.00	.35**	.28**	.40**	.22**
Peer Influence	.35**	1.00	.15*	.10*	.30**
Family Conflict	.28**	.15*	1.00	.20**	.08
Academic Stress	.40**	.10*	.20**	1.00	.05
Social Media	.22**	.30**	.08	.05	1.00

Note: *p < .05, **p < .01

The results of correlation analysis showed that the use of ice is significantly and positively related to all major independent variables. Academic stress (r = .40, p < .01), peer influence (r = .35, p < .01) and family conflict (r = .28, p < .01) are most strongly related to ice use. There is a

moderately strong relationship, but with less strength, for social media exposure (r = .22, p < .01). The results indicate that the psychological and social factors are jointly associated with students' risk of using methamphetamine.

Table 10. Multiple Regression Analysis Predicting Ice Use

Predictor	β	t	p
Peer Influence	0.30	5.20	< .001
Family Conflict	0.18	3.10	.002
Academic Stress	0.25	4.50	< .001
Social Media Exposure	0.15	2.70	.008
Economic Stress	0.10	1.80	.073

Model Fit: $R^2 = .45$, $F(5, 394) = 64.5$, $p < .001$

Adjusted $R^2 \approx .44$

The regression analysis indicates that peer influence is the most important predictor of ice use ($\beta = .30$), followed by academic stress ($\beta = .25$) and family conflict ($\beta = .18$). There is also a significant, but less strong exposure effect for social media ($\beta = .15$). Economical stress does not achieve statistical significance (p = .073), which

indicates that it may have an indirect influence instead of direct. Overall, the model accounted for 45% of the variance in ice use, suggesting that the social and psychological predictors were a good predictor of methamphetamine use among university students.

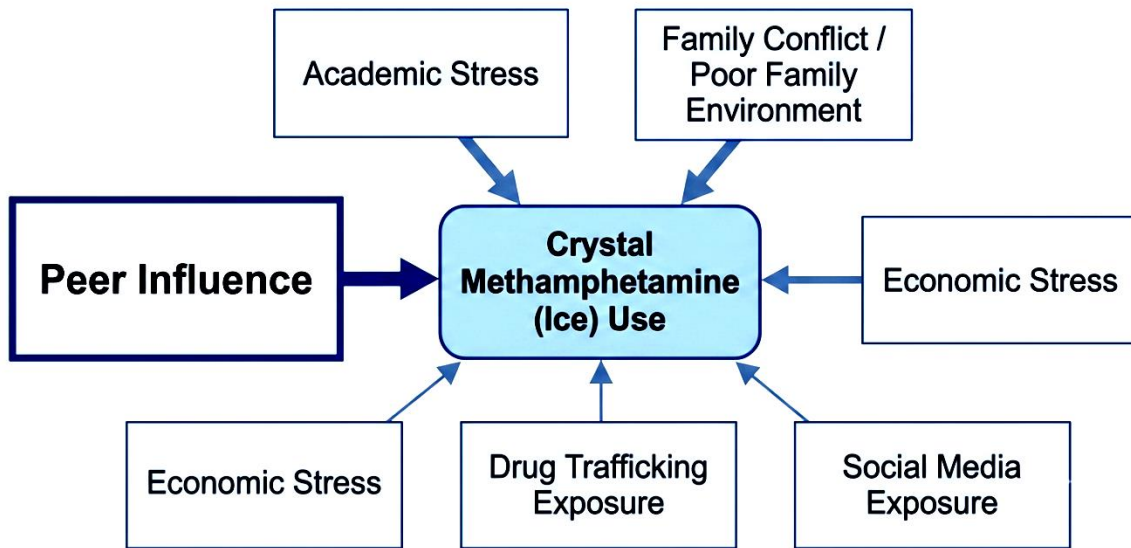


Figure 2: Major sociological causes of ice use.

This conceptual figure emphasizes the prominent sociological drivers identified (peer influence, family conflict, academic pressure).

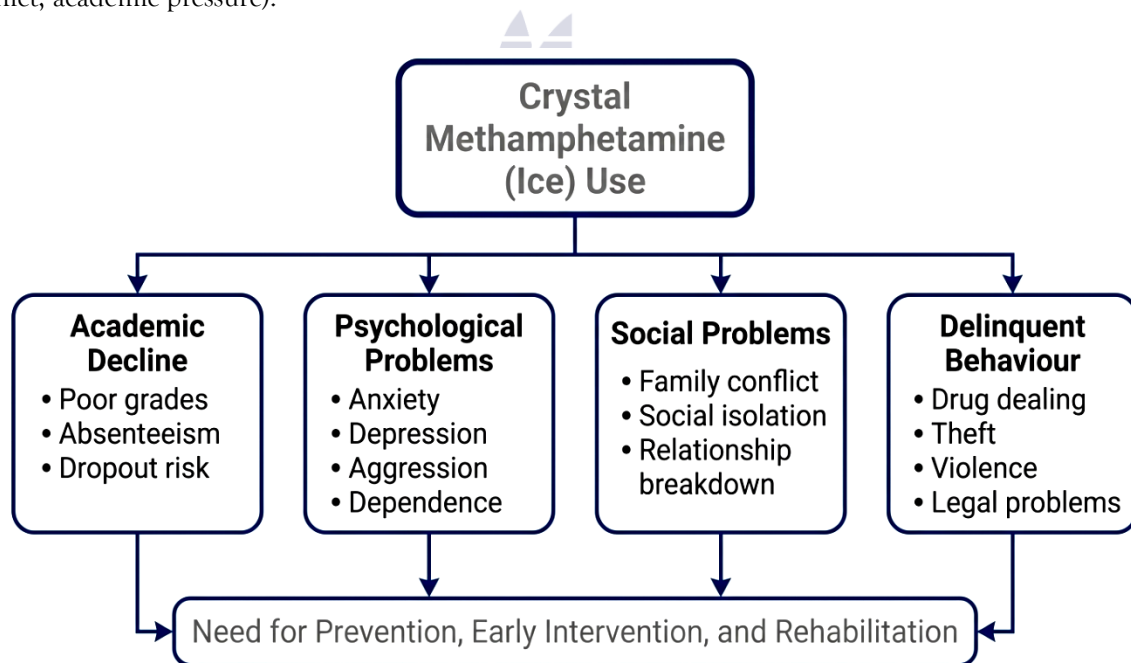


Figure 3: Consequences of ice use.

This figure symbolically represents the severe consequences (health, legal, social) of ice use and the urgency of curbing trafficking.

Discussion and Conclusion

The present study found that the usage of crystal methamphetamine ('ice') is a problem in South Punjab university students. The majority of the respondents reported they had never tried the drug at all, but a large minority had tried it and a small minority reported regular use of the drug. The above suggests that while the use of meth is not prevalent at this time, it is becoming more available and acceptable in some quarters of students. Peer groups is one of the key findings of this study. Students who indicated they were exposed to peers who used drugs were significantly more likely to use ice. This is a reminder that behaviour is influenced by a social environment; for people, it is normal and accepted behaviour within their social environment. Peer influence is not only more likely to make drugs available, it also helps to reduce the psychological barrier to drug use by "normalizing" drug use.

Academic stress also was a significant factor. High levels of exam, grade and performance related anxiety were reported by many students. Some students in these cases resort to stimulants such as crystal meth, in order to keep awake, to focus or to cope with workload stress. These practices, however, do not lead to better student learning outcomes in the long run, and can lead to dependence, impairment of cognitive functioning and poorer academic outcomes. Another factor that was important for drug use was family environment. Children who reported poor family supervision or poor family conflict were more likely to report risky behaviors, including drug use, as were those children who reported poor communication with their family. Supportive and stable family environment appears to be a protective factor while dysfunctional family environment makes them more vulnerable because they are not receiving emotional support and guidance.

A significant association with ice use was also observed with social media exposure. Many students reported that they have seen drug-related content on the Internet, such as posts that de-normalize or glamourize drug use. While peer and academic influence are stronger, social media

is a new tool to use when spreading awareness and influencing youth about drugs. It reflects the growing impact of digital environments on student's behaviour. Rising availability of crystal meth in the region has contributed significantly to these trends from a wider lens. Experimentations are easy on local networks, with peers and street level distribution. In addition to academic pressures, social influence, and availability is a significant enabler drug use among students. The results can be analyzed in theory with various sociological perspectives. Social learning processes are the processes by which students imitate others students' behavior. Stress associated with the strain can be a factor in the use of substances as coping. A close family bond is seen as important in the social control perspective, to help to avert deviant behaviour. These frameworks illustrate that meth use is a multi-factor phenomenon that is shaped by social, psychological and structural factors.

Overall, the use of crystal meth is an emerging social and public health problem among university students in South Punjab and urgently needs attention. Most students don't use them, but there is a vulnerable group that means something ought to be done. Peer networks, academic pressure, family issues and rising drug availability all play a significant role in this problem. A comprehensive approach is needed to address this issue. The university should reinforce counselling, awareness campaigns and encourage positive ways of coping with academic stress. Communication and supervision with children should be more individualized. In the community, measures should be taken to limit drug availability and monitor drug presence near educational facilities. Furthermore, traditional media and social media campaigns will help to combat the normalization of drug use. The use of crystal meth may be thought of as a socially mediated phenomenon that is influenced by many interwoven factors, rather than an isolated behavior used by students. Prevention and support systems must therefore be the focus of effective intervention to safeguard pupils from long term consequences of academic, psychological and social harm.

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