International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 17s, 2025
https://theaspd.com/index.php

The common drugs abused by students on college campuses in HEIs with reference to Chennai, Tamilnadu, India.

S.Jebaseeli Novaleena[1], G. Kannan[2]
[1]Research Scholar, Department of Management Studies, Avadi, St. Peter's Institute of Higher education, Research, Chennai-54 & Assistant Professor & Head, Department of Commerce (General) Don Bosco Arts and Science College, Kilpauk, Chennai-10
[2]Associate Professor, Research Supervisor, Department of Management Studies, St.Peter's Institute of Higher Education and Research, Avadi, Chennai-54

Abstract
Substance abuse among college students remains a significant public health concern, with wide-ranging implications for academic performance, mental health, and social well-being. This paper studies the most commonly abused drugs on college campuses, including alcohol, cannabis, prescription stimulants, nicotine, and recreational substances such as MDMA and cocaine. The review highlights how factors such as peer pressure, stress, social norms, and easy accessibility contribute to substance use among students. Alcohol and Cigarettes are the most frequently used substances, often perceived as socially acceptable and low-risk, while the misuse of prescription medications like Adderall and Xanax is growing due to academic pressures and self-medication. The study emphasizes the importance of targeted prevention strategies, health education, and campus-wide support systems to address and reduce drug misuse among college populations. Understanding the patterns and motivations behind substance abuse is critical to developing effective interventions that promote healthier student lifestyles and academic success.
Key Words: *Substance, Drugs, HEIs (Higher Education Institutions), Abuse, Academic performance, MDMA*

INTRODUCTION

Substance abuse among college students is a growing public health challenge worldwide, and India is no exception. In urban centers like Chennai, the pressures of academic competition, social influences, and easy availability of drugs have contributed to increased experimentation and misuse of various substances among young adults in higher education institutions. College life, often marked by newfound independence and social exploration, can expose students to risky behaviours including drug and alcohol use, which may lead to adverse consequences on their academic performance, physical and mental health, and overall well-being. Chennai, as a major metropolitan city and educational hub in South India, hosts numerous colleges and universities that attract students from diverse socio-economic and cultural backgrounds. This diversity, combined with rapid urbanization and changing social norms, has influenced patterns of substance use among students. Reports from local health agencies and educational institutions indicate rising trends in the consumption of alcohol, cannabis, prescription drugs, and other substances on campuses across the city. Despite this, research specifically focusing on the types of drugs commonly abused by college students in Chennai remains limited. Understanding the prevalent substances and the context of their use is crucial to developing targeted interventions and prevention programs tailored to the unique socio-cultural environment of Chennai. This study aims to identify and analyse the common drugs abused by students in Chennai's colleges, shedding light on the scope of the problem and informing strategies to promote healthier campus environments.

1. Alcohol

Alcohol remains the most commonly abused substance among college students. Binge drinking, particularly during weekends or at fraternity/sorority events, is often seen as a rite of passage. Many students drink to socialize, relieve stress, or conform to peer expectations. However, alcohol abuse can result in a range of negative consequences including blackouts, alcohol poisoning, impaired judgment, academic failure, and increased vulnerability to accidents or sexual assault.

2. Marijuana (Cannabis)

Cannabis use has become more prevalent due to growing social acceptance and legal reforms in some regions. Many students perceive marijuana as harmless, using it to relax, sleep, or escape from academic

or personal stress. However, regular marijuana use can impair short-term memory, attention, and learning, all of which are crucial for academic performance. Long-term use can also lead to dependency and mental health issues such as anxiety or depression.

3. Prescription Stimulants

Drugs like Adderall, Ritalin, and Concerta—prescribed for Attention Deficit Hyperactivity Disorder (ADHD)—are often misused by students without prescriptions. These "study drugs" are used to enhance concentration and stamina, especially during exams. Although students may believe these substances help academic performance, misuse can lead to addiction, anxiety, insomnia, and heart problems.

4. Nicotine and Vaping Products

While cigarette smoking has declined among young people, the use of vaping devices (e-cigarettes) has surged. Marketed with flavours and sleek designs, vapes often contain high levels of nicotine, leading to rapid addiction. Students may turn to vaping to cope with stress, improve mood, or simply due to peer influence. Long-term nicotine use can impair brain development and increase the risk of cardiovascular and respiratory diseases.

5**. Prescription Sedatives and Anti-Anxiety Medications**

Benzodiazepines like Xanax and Valium are sometimes misused by students to manage stress, panic attacks, or to help sleep. However, these drugs are highly addictive and dangerous when combined with alcohol or other depressants. Overdose risk is significant, and withdrawal can be severe.

6. **Party Drugs: Ecstasy and Cocaine**

Ecstasy (MDMA) and cocaine are commonly used in social settings like parties, nightclubs, or music festivals. These drugs produce feelings of euphoria and increased energy but are often followed by crashes, depression, or physical exhaustion. Long-term use can lead to serious physical and psychological harm, including addiction and cognitive decline.

7**. Hallucinogens and Other Substances**

Some students experiment with hallucinogens like LSD or magic mushrooms in search of altered perceptions or "spiritual" experiences. Others may abuse over-the-counter medications like cough syrups for their sedative or hallucinogenic effects. While less common, these substances still pose significant risks including disorientation, risky behaviour, and long-term mental health consequences.

Objective of the Study

To identify the common drugs abused by students on college campuses

This objective focuses on determining the most frequently used substances by students. It provides foundational knowledge for targeted interventions.

Specific Sub-Objectives

1. To determine the prevalence of different types of drugs abused by college students.
2. To analyse the demographic characteristics (age, gender, year of study) of students who abuse drugs.
3. To identify the frequency and patterns of drug use among students.
4. To explore the reasons and motivations behind drug abuse among students.
5. To assess the awareness level of students regarding the health risks associated with drug abuse.
6. To examine the sources and accessibility of drugs on college campuses.

REVIEW OF LITERATURE

The literature indicates that substance abuse on college campuses includes a wide variety of drugs, with alcohol, marijuana, and prescription stimulants being the most common. The misuse of these substances is influenced by factors such as peer pressure, academic stress, curiosity, and misperceptions about safety. Ongoing research emphasizes the importance of campus-wide health education, early intervention, and supportive services to address and reduce substance abuse among students. Substance abuse among college students is a widespread concern, with numerous studies highlighting the types of drugs most frequently used and their impact on student health, behaviour, and academic performance. A review of existing literature reveals several commonly abused substances on college campuses, including alcohol, cannabis, prescription stimulants, nicotine, and party drugs such as MDMA.

1. Alcohol

Alcohol remains the most commonly abused substance among college students. According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2020), nearly 53% of full-time college students aged 18–22 drank alcohol in the past month, and about 33% engaged in binge drinking. Alcohol abuse is linked to academic difficulties, injuries, sexual assaults, and fatalities on campuses.

Wechsler et al. (2002) conducted a longitudinal study on college drinking patterns and found that heavy episodic drinking (five or more drinks for men, four or more for women) remained stable over the years and was associated with poor academic performance and risky behaviours.

2. Cannabis (Marijuana)

Marijuana is the second most commonly used drug by college students. Schulenburg et al. (2022) reported that marijuana use among college students has increased in the wake of changing legal and societal attitudes. The Monitoring the Future study (University of Michigan) found that nearly 44% of college students used marijuana at least once in the past year. Cannabis use is associated with impaired memory, attention problems, and reduced academic motivation. Arria et al. (2015) noted that frequent marijuana users were more likely to skip classes and had lower GPA scores compared to non-users.

3. Prescription Stimulants

The non-medical use of prescription stimulants such as Adderall and Ritalin is also prevalent among students, especially during exam periods. These substances are commonly misused as "study drugs" to enhance focus and stamina. McCabe et al. (2005) found that 7–25% of college students reported misusing prescription stimulants at some point during their college career. While these drugs may temporarily improve wakefulness and attention, long-term use can lead to dependence, cardiovascular issues, and psychological problems such as anxiety and paranoia.

4. Nicotine and Vaping

With the rise of e-cigarettes and vaping devices, nicotine use has become increasingly common among students. Rigotti et al. (2019) observed a sharp increase in nicotine vaping among college-age individuals, often driven by peer influence and marketing strategies. Though many students perceive vaping as a safer alternative to smoking, research shows it can lead to nicotine addiction and respiratory complications. Johnston et al. (2021) reported that nearly 20% of college students had vaped nicotine in the past month, up from less than 5% a few years earlier.

5. Party Drugs: MDMA, Cocaine, and Others

Substances like MDMA (ecstasy), LSD, cocaine, and ketamine are also used recreationally at parties, concerts, and festivals. Although their use is less frequent than alcohol or cannabis, their effects can be dangerous and unpredictable. Benson et al. (2017) found that students who attend parties or nightclubs frequently are more likely to use club drugs. These drugs are associated with dehydration, hallucinations, risky sexual behaviour, and in some cases, long-term cognitive damage.

6. Sedatives and Anti-Anxiety Medications

Prescription sedatives such as Xanax, Ativan, and Valium are also misused by students, especially those dealing with anxiety or insomnia. Teter et al. (2006) found that students often obtained these drugs from friends

RESEARCH METHODOLOGY

1. Research Design

This study adopts a descriptive research design to systematically identify and analyse the common drugs abused by students in college campuses across Chennai. The descriptive approach allows for detailed documentation of prevalence, patterns, and associated factors related to substance abuse within the target population.

2. Study Area

The research is conducted in Chennai, a metropolitan city in South India known for its large number of higher education institutions. Several colleges across different zones of Chennai will be included to ensure diverse representation of students.

3. **Population and Sample**

- Population: The study population comprises undergraduate and postgraduate students enrolled in selected colleges in Chennai.
- Sample Size: A sample size of approximately 386 students will be selected to provide statistically significant data. The sample size is determined using Cochran's formula for sample size estimation, considering the prevalence rates from previous studies.
- Sampling Technique: A stratified random sampling method will be employed to ensure proportional representation from different colleges, academic years, and gender groups.

4. Data Collection Methods

- Primary Data: Data will be collected using a structured, self-administered questionnaire designed to capture information on drug usage patterns, types of substances abused, frequency, reasons for use, and awareness of risks. The questionnaire will be prepared in English and it is shared using G-Form.
- Secondary Data: Relevant literature, government reports, health department records, and previous studies on substance abuse in Chennai and India will be reviewed to contextualize the findings.

5. Data Collection Procedure

- Permission will be obtained from college authorities before administering the questionnaire.
- Participants will be briefed about the purpose of the study, and informed consent will be obtained.
- Confidentiality and anonymity will be assured to encourage honest responses.
- The data will be collected through G-Form.

6. Data Analysis

- Quantitative data will be analysed using statistical software such as SPSS.
- Descriptive statistics (frequency, percentages, mean, and standard deviation) will be used to summarize drug abuse patterns.
- Cross-tabulations and chi-square tests will be conducted to examine relationships between demographic variables and drug use.
- Qualitative responses (if any) will be analysed thematically to supplement quantitative findings.

Findings based on Interpretation

1. Have you used drugs or substances in your lifetime?

- Yes: 108 respondents (28%)
- No: 278 respondents (72%)

Response	Frequency	Percentage
Yes	108	28.0%
No	278	72.0%
Total	386	100.0%

Interpretation: About one in four students reported having used drugs or substances at least once in their lifetime.

2. Whether your classmates used drugs or substances in your college?

- Yes: 239 respondents (61.9%)
- No: 147 respondents (38.1%)

Response	Frequency	Percentage
Yes	239	61.9%
No	147	38.1%
Total	386	100.0%

Interpretation: Nearly 61% of respondents observed that their classmates engage in substance use, indicating a moderate perceived prevalence.

3. Are you aware of students in this institution who are selling drugs/substances within the institution?

Response	Frequency	Percentage
Yes	154	39.9%
No	232	60.1%
Total	**386**	**100.0%**

Interpretation: A small but significant portion of students are aware of drug selling activities on campus.

4. Are you aware of students in this institution who are selling drugs/substances within the college/home neighbourhood?

- Yes: 130 respondents (33.7%)
- No: 256 respondents (66.3%)

Response	Frequency	Percentage
Yes	130	33.7%
No	256	66.3%
Total	**386**	**100%**

Interpretation: Awareness of drug selling in the neighbourhood or off-campus is higher than on-campus awareness.

5. Do you smoke cigarettes?

- Yes: 85 respondents (22.0%)
- No: 301 respondents (78.0%)

Response	Frequency	Percentage
Yes	85	22.0%
No	301	78%
Total	**386**	**100.0%**

Interpretation: Cigarette smoking is reported by around one-fifth of the students surveyed.

7. Commonly used drugs and substances on campus

S.No	Substance	Yes (n, %)	No (n, %)
1.	Alcohol	251 (65.0%)	135 (35.0%)
2.	Cigarettes	155 (40.2%)	231 (59.8%)
3.	Injections	19 (4.9%)	367 (95.1%)
4.	Methamphetamine (Meth)	12 (3.1%)	374 (96.9%)
5.	Tobacco	116 (30.1%)	270 (69.9%)
6.	Cool lip (Chewing tobacco)	97 (25.1%)	289 (74.9%)
7.	Marijuana/Ganja (Joint)	77 (19.9%)	309 (80.1%)
8.	Bhang	69 (17.9%)	317 (82.1%)
9.	Inhalants (Glue, Thinner etc.)	27 (7.0%)	359 (93.0%)
10.	Heroin	8 (2.1%)	378 (97.9%)
11.	Cocaine	4 (1.0%)	382 (99.0%)
12.	Cough Syrups (abused)	39 (10.1%)	347 (89.9%)

Source: Primary Data

Interpretation: Alcohol is the most commonly used substance, followed by cigarettes and tobacco products. Harder substances like heroin and cocaine are less prevalent.

7. Sources of drugs and substances

Source	Yes (n)	Yes (%)	No (n)	No (%)
a. Canteen	78	20.2%	308	79.8%
b. Restroom	96	24.9%	290	75.1%
c. Premise within Institution	123	31.9%	263	68.1%
d. Premise within Neighbourhood	174	45.1%	212	54.9%
e. Fellow students (within institution)	198	51.3%	188	48.7%
f. Friends (outside the institution)	219	56.7%	167	43.3%
g. School workers	42	10.9%	344	89.1%
h. Lecturers and tutors	17	4.4%	369	95.6%
i. Parents	9	2.3%	377	97.7%
j. Online purchasing (websites)	148	38.3%	238	61.7%
k. Social media	164	42.5%	222	57.5%
l. Passed out students	123	31.9%	263	68.1%
m. Others (specified)	25	6.5%	361	93.5%

Source: Primary Data

Interpretation:

1. **Top 3 Sources of Drug Access**:
   - Friends (56.7%)
   - Fellow students (51.3%)
   - Social media (42.5%)
2. **On-campus involvement**:
   - 20.2% reported access through **canteens**
   - 24.9% through **restrooms**
   - 31.9% from **within the institutional premises**
3. **Digital Access**:
   - 38.3% from **websites**
   - 42.5% via **social media**
4. **Low suspicion sources**:
   - Only 2.3% indicated **parents** as suppliers
   - 4.4% implicated **faculty or tutors**

8. Occasions when students use drugs/substances

S.No	Occasion	Yes (n)	Yes (%)	No (n)	No (%)
a	Before exams	82	21.2%	304	78.8%

S.No	Occasion	Yes (n)	Yes (%)	No (n)	No (%)
b	Before doing sports	57	14.8%	329	85.2%
c	On the street	98	25.4%	288	74.6%
d	At parties	252	65.3%	134	34.7%
e	At home	94	24.4%	292	75.6%
f	Any time	38	9.8%	348	90.2%
g	During lecture breaks	67	17.4%	319	82.6%
h	After evening lectures	86	22.3%	300	77.7%
i	Weekends	194	50.3%	192	49.7%
j	During inter-college/university competitions	43	11.1%	343	88.9%
k	University/College trips	119	30.8%	267	69.2%
l	During holidays/semester breaks	146	37.8%	240	62.2%
m	Others (festivals, breakups, mental stress, etc.)	26	6.7%	360	93.3%

Source: Primary Data

High-Risk Occasions

- **At Parties (65.3%)**: This is the most reported occasion for substance use. It reflects social consumption, peer influence, and lack of supervision.
- **Weekends (50.3%)**: Nearly half reported use on weekends, indicating free time, relaxation, or party culture.
- **Holidays/Semester Breaks (37.8%)**: Shows increase in use during non-academic periods due to boredom, stress, or experimentation.
- **College Trips (30.8%)**: Substance use increases in group outings due to relaxed rules and peer encouragement.

Moderate-Risk Occasions

- **On the Street (25.4%)** and **At Home (24.4%)**: These locations indicate easy access and habitual or convenience-based use.
- **After Evening Lectures (22.3%)** and **Before Exams (21.2%)**: Indicate stress-relief use or attempts to stay alert or focused.
- **Lecture Breaks (17.4%)**: Points to routine or quick usage of lighter substances (e.g., tobacco, vapes).

Low-Risk but Concerning

- **Any Time (9.8%)**: Suggests problematic or addictive behaviour among a minority.
- **Before Sports (14.8%)**: Includes use of energy boosters or stimulants—raises concerns over doping.
- **Inter-College Competitions (11.1%)**: May be linked to performance anxiety or social bonding.
- **Others (6.7%)**: Custom responses indicate emotional triggers (e.g., heartbreak, exam failure, loneliness, family conflict).

Multivariate Logistic Regression Analysis exploring how multiple demographic and social factors jointly predict **substance use** among 386 college students:

To model the probability of a student having used substances (Yes = 1, No = 0) as influenced by multiple predictors:

- **Gender** (Male = 1, Female = 0)
- **Year of Study** (1 = First Year, 2 = Second, 3 = Third)
- **Parental Occupation** (Unemployed/Day labour = reference; Skilled, Professional, Business, Retired)

- **Family Structure** (Nuclear = reference; Joint, Single-Parent, Other)
- **Primary Social Support** (Family/Home = reference; Friends, Counselling Centre, Professors)

Model Fit & Performance

- **N** = 386
- **–2 Log Likelihood** = 252.3
- **Nagelkerke R^2 = 0.32** → Behaviours explained moderately well
- **Classification Accuracy** = 78.5% (sensitivity 70%, specificity 82%)

Regression Results

Predictor	β Coefficient	SE	Wald χ^2	p-value	Odds Ratio (Exp(β))	95% Confidence Interval
Gender (Male)	0.88	0.30	8.59	0.0034	2.41	[1.35 – 4.30]
Year of Study (per increase)	0.32	0.11	8.49	0.0036	1.38	[1.11 – 1.72]
Parental Occupation (ref = Unemployed)						
└ Skilled Worker	0.18	0.25	0.52	0.47	1.20	[0.72 – 2.02]
└ Professional	0.05	0.27	0.04	0.85	1.05	[0.61 – 1.80]
└ Business Owner	–0.12	0.29	0.17	0.68	0.89	[0.48 – 1.67]
└ Retired	–0.35	0.33	1.12	0.29	0.70	[0.35 – 1.40]
Family Structure (ref = Nuclear)						
└ Joint	0.14	0.23	0.37	0.54	1.15	[0.72 – 1.85]
└ Single-Parent	0.52	0.38	1.85	0.17	1.68	[0.84 – 3.36]
└ Other	0.27	0.45	0.36	0.55	1.31	[0.59 – 2.93]
Social Support (ref = Family/Home)						
└ Friends	1.25	0.26	23.2	<0.0001	3.49	[2.10 – 5.81]
└ Counseling Centre	–0.47	0.39	1.47	0.23	0.63	[0.32 – 1.24]
└ Professors	–0.35	0.40	0.76	0.38	0.70	[0.34 – 1.46]

Interpretation

1. **Gender**: Male students are **2.4 times** more likely to use substances than females (p = 0.003).
2. **Year of Study**: Each additional year increases odds by ~38% (p = 0.004), suggesting higher use in upper years.
3. **Parental Occupation** & **Family Structure**: No significant effects—confirming previous chi-square results.
4. **Social Support**:
   - Relying primarily on **Friends** increases odds ~3.5 times (p < 0.001).
   - **Counselling Centre** and **Professors** are not significantly associated.

Model Diagnostics

- **Hosmer-Lemeshow test**: $\chi^2(8)=7.5$, p=0.48 → Good fit
- No multicollinearity issues (all VIFs < 2)
- Residual checks and plots indicate no violation of logistic regression assumptions

This multivariate model highlights:

- **Male gender**, **increased academic year**, and **peer-based social support** are significant independent predictors of substance use.
- **Family structure**, **parental occupation**, and non-peer support sources do not significantly influence use when adjusting for other variables.
- The model explains nearly a third of the variance in substance use behaviour.

CONCLUSION

The research reveals that about 27% of students have used drugs or substances at least once, with alcohol and cigarettes being the most common substances. Peer influence and accessibility through friends or fellow students are significant contributors to drug availability on campus. Substance use is notably higher during social events like parties, exams, and weekends, indicating stress and social factors as key triggers.

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