Prevalence of drug use among college students

Shikha Srivastava

PhD, Dean

Department of Applied Psychology

Galgotias University, Uttar Pradesh, India

Nishchay Kathuria

Undergraduate Student

Department of Applied Psychology

Galgotias University, Uttar Pradesh India

Abstract

The reason for this study is to take a look and identify the prevalence of drug use among college students. This study is going to cover the areas of mental health, addiction, and withdrawal from the said substances which a person might face in life and the impact it has on a person's well-being.

There are two tools used in the following study, one is Adolescent Alcohol and Drug Involvement Scale (AADIS) and the other being Ryff's Psychological Well Being Scale. In the latter respondent's rate statements on a scale of 1 to 6 with 1 indicating strong disagreement and 6 indicating strong agreement.

Keywords: Mental well-being, Drugs, Addiction, Prevalence.

A drug is, in the broadest of terms, a chemical substance that has known biological effects on humans, or other animals. In pharmacology, a drug is "a chemical substance used in treatment, cure, prevention, or diagnosis of disease or used to otherwise enhance physical and mental well-being. Pharmaceutical drugs are chemical substances that affect the function of the nervous system by altering perception, mood or consciousness.

Drugs both medicinal and recreational, can be administered in several ways, or route. Many drugs can be administered via more than one route.

Depending on the actual compound, drug abuse including alcohol may lead to health problems, social problems, morbidity, injuries, unprotected sex, violence, deaths, motor vehicle accidents, homicides, suicides, physical dependence, psychological addiction.

One such study was carried out in Calcutta in 1962-63 among the college students, which dealt with smoking and the use of amphetamine only. The problem of drug abuse among the students in India, especially among medical students, was found to be extensive because non-traditional drugs like tranquilizers, sedatives etc were readily accessible to them.

According to a prevalence study, **13.1% of the people** involved in substance abuse in India are below 20 years of age. A clinic-based survey revealed that 63.6% of the substance users seeking treatment were introduced to drugs at a young age when they were 15 years or younger.

Sikkim, Arunachal Pradesh, Nagaland, Manipur and **Mizoram** have the highest prevalence of opioid use in the general population (more than 10%). After Alcohol, Cannabis and Opioids are the next commonly used substances in India.

Studies between 1968 until 2000 have been primarily on alcohol use [Table 1]. They have varied in terms of populations surveyed (ranged from 115 to 16,725), sampling procedures (convenient, purposive and representative), focus of enquiry (alcohol use, habitual excessive use, alcohol abuse, alcoholism, chronic alcoholism, alcohol and drug abuse and alcohol dependence), location (urban, rural or both, Slums), in the screening instruments used (survey questionnaires and schedules, semi-structured interviews, quantity frequency index, Michigan Alcohol Screening Test (MAST) etc). Alcohol 'use/abuse' prevalence in different regions has thus varied from 167/1000 to 370/1000; 'alcohol addiction' or 'alcoholism' or 'chronic alcoholism' from 2.36/1000 to 34.5/1000; alcohol and drug use/abuse from 21.4 to 28.8/1000. A meta-analysis by Reddy and Chandrashekhar [26] (1998) revealed an overall substance use prevalence of 6.9/1000 for India with urban and rural rates of 5.8 and 7.3/1000 population. The rates among men and women were 11.9 and 1.7% respectively.

Table 1

Regional epidemiological studies in substance use: A summary

	Year	Center	Location	Screening instrument	Population	Prevalence/1000	Focus of enquiry
Gopinath [1]	1968	Bangalore	R	Survey questionnaire	423	2.36	Alcoholism
Elnager *et al.* [2]	1971	West Bengal	R	3 stage interviews	1383	13	Alcohol and drug addiction
Dube and Handa [3]	1971	Uttar Pradesh	R, SR and U	2 stage Interview	16725	22.8	Alcohol and drug abuse
Varghese et al. [4]	1973	Vellore	U	Mental health item sheet	2904	4.8	Chronic alcoholism
Thacore [5]	1975	Lucknow	U and R	Health	2696	18.55	Habitual excessive use A-

					questionnaire			49%; C-2%
Nandi *et al.* [6]	1975	West Bengal	R		3 schedules prepared	1060	0.94	
Lal and Singh [7]	1978	Punjab	U		QFI	6699	293	Alcohol users
Sethi and Trivedi [8]	1979	Lucknow	R		Semi structured interview	2415	21.4	Drug abusers A- 43.5%; C- 39.2%; O-1.4%
Varma et al. [9]	1980	Punjab	U and R		Structured questionnaire	1031	237	Alcohol users
Ponnudorai *et al.* [10]	1991	Madras	U		MAST	2,334	167	Alcoholism Abuse
Premaranjan et al. [11]	1993	Pondicherry	U		IPSS	115	34.5	Alcohol dependence
Jena et al. [12]	1996	Bihar	R				28.8	Alcohol/drug use
Ghulam et al. [13]	1996	Madhya Pradesh	U				370	Alcohol users
Singh *et al.* [14]	1998	Uttar Pradesh	U		Structured questionnaire	1806	104	Alcohol users

Hazarika et al. [15]	2000	Assam	R	NM	312	365	Alcohol users T-40%; A-37%; IVD-1%; IDS-1%
Sharma and Singh [16]	2001	Goa	U	RPES	4,022	1	Alcohol dependence
Mohan *et al.* [17]	2002	Delhi	U	Structured questionnaire	10,312	59	Alcohol users
Meena et al. [18]	2002	Haryana	U	WHO questionnaire	142000	198	Alcohol users
Silva *et al.* [19]	2003	Goa	U	AUDIT, GHQ-12	1013	211	Hazardous drinking of alcohol
Gupta *et al.* [20]	2003	Mumbai	U	Structured interview	50220	188	Alcohol users
Benegal *et al.* [21]	2003	Karnataka	U and R	Survey	21,276	153	Alcohol use
Chaturvedi *et al.* [22]	2004	Arunachal Pradesh	U	Pretested questionnaire	5,135	300	Substance abuse
Gururaj *et al.* [23]	2004	Bangalore	R, SR, Sl and U	Structured questionnaire	10,168	90	Alcohol users

Gururaj *et al.* [24]	2006	Bangalore	R, SR, Sl and U	Structured questionnaire	28,507	320	Alcohol users
Chavan *et al.* [25]	2007	Chandigarh	Sl, R	Semi structured Interview schedule	59470	69	Alcohol and drug dependence A-12%; O-0.4%; C-0.46%; N-0.13%

U - Urban; R - Rural; Sl - Slum; SR - Semi-rural; NM - Not mentioned

Regional studies between 2001 and 2007 continue to reflect this variability. Currently, the interest is to look at hazardous alcohol use. A study in southern rural India showed that 14.2% of the population surveyed had hazardous alcohol use on the AUDIT. A similar study in the tertiary hospital showed that 17.6% admitted patients had hazardous alcohol use.

The only incidence study on alcohol use from Delhifound that annual incidence of nondependent alcohol use and dependent alcohol use among men was 3 and 2 per 1000 persons in a total cohort of 2,937 households.

OBJECTIVES OF THE STUDY:

The objectives of the study were as follows:

• To study the prevalence of drug use among University students and comparing their psychological well-being by using Adolescent Alcohol and Drug Involvement Scale (AADIS) and Ryff's Psychological Well Being Scale.

METHODOLOGY:

SAMPLE:

The participants consisted of people from India. There were a total30 participants who participated, and their participation was voluntary. These participants were selected from a list of batch mates, colleagues, neighbors, family, friends and people from around.

TOOLS USED:

- **Adolescent Alcohol and Drug Involvement Scale (AADIS)- It is a revised tool based on Mayer and Filstead's (1979; see also Moberg, 1983) Adolescent Alcohol Involvement Scale (AAIS) and Moberg's drug specific adaptation of the AAIS, the ADIS (Moberg and Hahn, 1991). The tool has recently been verified with juveniles in state juvenile correction institutions (JCI's) in Wisconsin. The validation project used the Adolescent Diagnostic Interview-Light (ADI-L) which operationalizes DSM IV substance abuse disorder criteria as gold standard (Winters, Latimer and Stinchfield, 1999; Winters and Henly, 1993), and was conducted under the direction of Dr. Winters.**

  Ryff's Psychological Well Being Scale- The Ryff inventory consists of either 84 questions (long form) or 54 questions (medium form). There is also a short form, but it is statistically unreliable and therefore should not be used for assessment.
  Both the long and medium forms consist of a series of statements reflecting the six areas of psychological wellbeing: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance.

RESULTS AND INTERPRETATION:

Table 1

Moderate Drug Takers

VARIABLE GROUPS	AUTONOMY	ENVIROMENTAL MASTERY	PERSONAL GROWTH	POSITIVE RELATIONS	PURPOSE IN LIFE	SELF ACCEPTANCE	DRUG SEVERITY
AUTONOMY	1		0.681*				
ENVIROMENTAL MASTERY		1					
PERSONAL GROWTH	0.681*		1			0.724*	0.665
POSITIVE RELATIONS				1	0.679*	0.740*	
PURPOSE IN LIFE				0.679*	1		
SELF ACCEPTANCE			0.724*	0.740*		1	
DRUG SEVERITY							

.

*. Correlation is significant at 0.05 level.

DESCRIPTION OF MODERATE DRUG TAKERS:
(TABLE-1):
AUTONOMY AND PERSONAL GROWTH:
The correlation between autonomy and personal growth obtained is 0.681. A person who has high autonomy has a good personal growth. Autonomy means a person who is self- determining and

independent and evaluates self by personal standards, whereas a person with good personal growth has a feeling of continued development and sees self as growing and expanding. Hence, we take it as positive orientation among the moderate drug takers. Perhaps, the absence of these factors maybe one of the reasons for their drug taking behavior and compelled them to show a positive relation between autonomy and personal growth.

PERSONAL GROWTH AND SELF ACCEPTANCE:

The correlation between personal growth and self-acceptance obtained is 0.724. A person who has high personal growth has high self-acceptance. Personal growth means a person who has high personal growth, has a feeling of continued development and sees self as growing and expanding, whereas a person with good self-acceptance possesses a positive attitude towards self and feels positive about the past life. Hence, we take it as a positive orientation among the moderate drug users. Perhaps, the absence of any of these factors may be the reasons for their drug taking behavior and compelled them to show a positive relationship between personal growth and self-acceptance.

POSITIVE RELATIONS AND GROWTH IN LIFE:

The correlation between positive relation and purpose in life obtained is 0.679. A person who has a good purpose in life maintains positive relations with people. Purpose in life means the one who has goals in life and the sense of directedness and has aims and objectives for living, whereas a person who has positive relations with others has warm, satisfying and trusting relationship with others and understands give and take of human relationships. Hence, we take it as a positive orientation among moderate drug takers. Perhaps the absence of these factors maybe one of the reasons for their drug taking behavior and compelled them to show a positive relationship between positive relations and purpose in life.

POSITIVE RELATIONS AND SELF ACCEPTANCE:

The correlation between positive relations and self-acceptance obtained is 0.740. A person who has high self-acceptance maintains good and positive relations with others. Positive relations with others. Positive relation with others means a person is warm, satisfying, has trusting relationship with others and understands give and take of human relationships, whereas a person with good self-acceptance possesses a positive attitude towards self and feels positive about the past life. Hence, we take it as a positive orientation among moderate drugs takers.

TABLE 2

Severe drug Takers

VARIABLE GROUP	AUTONOMY	ENVIROMENTAL MASTERY	PERSONAL GROWTH	POSITIVE RELATIONS	PURPOSE IN LIFE	SELF ACCEPTANCE	DRUG SEVERITY
AUTONOMY	1		0.482*				
ENVIROMENTAL MASTERY		1					
PERSONAL GROWTH	0.482*		1	0.659**	0.527**	0.482**	
POSITIVE RELATIONS			0.659**	1	0.624**	0.663*	
PURPOSE IN LIFE			0.527*	0.624**	1	0.567**	
SELF ACCEPTANCE			0.482*	0.663**	0.567**	1	
DRUG SEVERITY							1

*. Correlation is significant at the 0.05 level.

**. Correlation is significant at 0.01 level.

DESCRIPTION OF SEVERE DRUG TAKERS:

(TABLE-2):

AUTONOMY AND PERSONAL GROWTH:

The correlation between autonomy and personal growth obtained is -0.482. The person who has less autonomy has the need for more personal growth and vice versa. Autonomy means a person who is self-determining and independent and evaluates self by personal standards, whereas a person with good personal growth has a feeling of continued development and sees self as growing and expanding. This indicates that the correlation is significant at 0.05 level. Hence, we take it as negative orientation among severe drug takers. That is why, the absence of any of these factors is one of the reasons for their drug taking behavior.

PERSONAL GROWTH AND POSITIVE RELATIONS:

The correlation between personal growth and positive relations obtained is 0.659. This indicates that the correlation is significant at 0.01 level. A person who has high personal growth has good and positive relations with others. Hence, we take it as a positive orientation among the severe drug takers. Severe drug takers who have good personal growth have positive relations with others. These factors having positive result in both moderate and severe drug takers may help them to reduce the use of drugs in a way.

PERSONAL GROWTH AND PURPOSE IN LIFE:

The correlation between personal growth and positive relations obtained is 0.527. This indicates that these two have a significant relationship at 0.01 level. Hence, we take it as positive orientation among severe drug takers. People who have good personal growth have purpose in life. These remaining unaffected by the drug use, being moderate or severe help a person to grow.

PERSONAL GROWTH AND SELF-ACCEPTANCE:

The correlation between personal growth and self-acceptance obtained is -0.482. These indicates that these two have a significant relationship at 0.05 level. Hence, we take it as negative orientation among the severe drug takers. Self-acceptance is generally found to be low in severe drug takers.

POSITIVE RELATIONS AND PURPOSE IN LIFE:

The correlation between positive relations and purpose in life is 0.624. This indicates that people who maintain positive relation with others have a purpose in life. Hence, we take it as a positive orientation among severe drug takers.

POSITIVE RELATIONS AND SELF ACCEPTANCE:

The correlation between positive relations and self-acceptance obtained is 0.663. This indicates that these two have a significant relationship at 0.01 level. This indicates that people who maintain positive relation with others have high self-acceptance and vice versa. Hence, we take it as a positive orientation among severe drug takers.

PURPOSE IN LIFE AND SELF ACCEPTANCE:

The correlation between purpose in life and self-acceptance obtained is 0.567. This indicates that these two have a significant relationship at 0.01 level. This indicate that people who have low self-acceptance do not have a purpose in life and vice versa. Hence, it can be taken as a positive orientation among severe drug takers.

DISSCUSSION:

Alcohol and drug abuse is a real problem these days. It is the cause of much suffering and dysfunction within society. This problem falls under different labels such as alcoholism, alcohol abuse, alcohol dependence, drug addiction, drug abuse, substance abuse, substance addiction, and substance dependence. The problem of drug abuse among the youth throughout the world has been a matter of great concern of the public in general and the researchers and the policy makers in general. Drug abuse among adolescents and young adults is reported to have been widespread in the western countries. Students seem to be more vulnerable to drug abuse due to biological, hormonal and psychological changes added with increased tension in academic areas during this period of life. Although very few students have been conducted in south Asian countries and as such data-based information in this regard is very scanty, nevertheless studies carried out in India revealed the prevalence of drug use among the students. One such study was carried out in Calcutta in 1962-63 among the college students, which dealt with smoking and the use of amphetamine only. The problem of drug abuse among the students in India, especially among the medical students, was found to be extensive because non-traditional drugs like tranquilizers, sedatives etc. were readily accessible to them.

Despite substantial attention to misuse of alcohol among college students, less is known about drug use on college campuses. The monitoring the future report (Johnston, O'Malley, Bachman, and Schulenberg, 2006, 2008) indicated that 37% of college students had used an illicit drug, and 19% had used an illicit drug other than marijuana in prior year. Studies have shown that marijuana is the most frequently used drug among college students and approximately 25-33% reported use in the past year and 16% in the past month (Jonston et al., 2006; Gledhill-Hoyt, Lee, Stroke, and Wechsler, 2000; Gobetti, Lo, and Globetti, 1994). In comparison to non-marijuana using college students, marijuana users perceived reduced risk of experiencing negative consequences despite already having experienced such a consequence (Kilmer, Hunt, Lee, and Neighbours, 2007). Of those students who reported drug use, almost half (44%) had driven a car while on drugs, approximately one-third reported preoccupation with drug use or trying to limit or stop use, and one-quarter had taken more drugs than they planned or had used during school or work.

In recent years, prescription drug misuse has become increasingly prevalent among college students and has been related to poorer academic performance and high-risk behavior (Johnston et al., West, and Wechsler, 2006). Students who misused pain medications were more likely to have a lower grade point average (McCabe, Teter, and Boyd, 2005), and those who used prescription stimulants were more likely to have engaged in polydrug use, illegal activities, experienced blackouts and withdrawal symptoms (McCabe and Teter, 2007). Although some research has been conducted with college students to assess the prevalence of drug use and negative consequences, no studies have evaluated the association of these problems with the student's level of concern about their drug use or their interest in receiving help.

In contrast to the extensive college drinking assessment, prevention, and treatment literature, a review by larimar, Kilmer, and Lee (2005) emphasized both the scope of the drug problem on college campuses and the scarcity of prevention and intervention approaches. Larimer et al. (2005) emphasized the need for further research on assessment specific to drug use and drug-related negative consequences to inform the development of preventive and clinical interventions.

In a college sample of self-identified drug or medication misusers, we evaluated the extent and association of frequency of use, negative consequences, the extent of use and interest to inform prevention and treatment development for this at-risk group.

The age group of students who are most vulnerable to drug abuse is 15-17 years, said Anthony Sebastian, Director, Empowerment of Children and Human Rights Organization (ECHO). He felt that use of "ganja" was increasingly prevalent in the school and college going population and was easily available to them

through a well-connected network of peddlers in areas like Majestic, KR, Shivaji Nagar and Lingarajpuram.

One of the steps prescribed under the national policy is that the local police should pay special attention to areas surrounding schools and colleges in their efforts to tackle drug peddlers. "We have noticed suspicious persons lurking around our school campus, and we believe that they are drug peddlers. "Peddlers" are always opportunistic. Drugs are sold wherever and whenever there is a chance. We have special teams, and we pay a lot of attention on cracking down such activities, specially near educational institutions," said Pranab Mohanty, Additional Commissioner of Police (Crime). "Our focus is beyond the street level thug." As per National Crime Records Bureau, Karnataka had 225 cases booked under the Narcotic Drugs and Psychotropic Substances act in 2012. Of these, 42 cases were in Bangalore.

Whereas, when we talk about well-being, it is a multifaceted concept. It is often thought of as one of the hallmarks of the liberal arts experience, resulting from educational encounters that both guide the students in the search for meaning and direction in life and help them to realize their true potential. The Ryff is a straightforward and relatively short survey that assesses the psychological component of well-being. The review discusses the administration and cost of the Ryff; the theoretical background, development, and psychometric properties of the instrument; and possible uses of this instrument in higher education assessment settings.

With the use of Ryff's psychological well-being scale, we found out the correlation between well-being and the drug use among college students.

In this study, the results from the validation study indicate the cut off score of 37 on the AADIS is best in terms of sensitivity and specificity for DSM-IV substance use disorders. According to DSM-IV, the top 5 substances used by physicians are alcohol, marijuana, opiates-mostly prescription opiates (i.e., hydrocodone), not illicit opiates (i.e., heroin), stimulants (i.e., Ritalin, Adderall, and other amphetamines), and cocaine.

The diagnostic and Statistical Manual of mental Disorders (DSM) offers a classification system for the diagnosis of the different mental health problems. It is published by the American Psychiatric Association and is influential around the world. The first DSM appeared in 1953. Alcohol and drug abuse were classified as sociopathic personality disturbances in the first edition of the DSM. In the third edition of the book, substance dependence was given a separate classification from substance abuse. The DSM IV-TR defines substance abuse as the clinically harmful use of alcohol or drugs.

Those individuals who abuse alcohol or drugs will exhibit symptoms. If an individual experiences at least one of the following symptoms during a 12-month period, they are likely to be engaging in substance abuse:

- Repeated substance abuse in situations where it could be considered hazardous. A good example of this would be people who drive their car after drinking alcohol.
- Interference with the individual's ability to fulfil their work, school or home obligations. This might include regularly turning up late for work or not spending enough time with dependent family members.
- Continued use of these substances enough though it is causing interpersonal difficulties.
- Any legal problems that occurred as a result of substance abuse.

DSM-IV Symptoms of Substance Dependence:
The criteria for substance dependence include the following:

- The individual has developed a tolerance for the substance. This means that they have to use more in order to get the same effect.

- The user continues to abuse these substances despite obvious evidence that it is causing them harm.
- The individual experiences withdrawal symptoms when they stop taking the substance.
- The user finds it difficult to cut down the amount they consume.
- Loss of interest in activities that they once enjoyed.
- Devoting increasing amounts of time to substance abuse. This includes the time spent obtaining the substance, time spent using it, and time spent recovering from its effects.

If the individual experiences three or more of the above symptoms within a 12-month period, then it indicates that they have become dependent.

In this study, it was found that the result of correlation of well-being between moderate drug takers and severe drug takers obtained was positive, which was unexpected. Few factors like self-acceptance, autonomy and personal growth had negative correlation in severe drug takers. It means that people who abuse drugs do not have these factors, or the scores are very low, which, perhaps may have led to drug abuse.

According to Hypothesis 1, severe drug takers will have low well-being as compared to moderate drug takers. In this study, the well-being of severe drug takers came out to be better than moderate drug takers.

According to Hypothesis 2, there will be a significant difference between score of moderate drug takers and severe drug takers. There was a significant difference between the scores as the number of subjects was not equal.

According to Hypothesis 3, intensity of drug intake will affect the psychological well-being of severe drug takers- higher the intensity, lower the wellbeing and vice versa. Study showed that there was no effect of intensity of drug intake on the psychological wellbeing of the person.

From this study, we can conclude that-

1. College students are addicted to drug use at severe level and need help under DSM-IV criteria for fully assessment for substance use disorders using a standard clinical assessment.
2. There are many factors that affect the drug use and abuse among college students.
3. Psychological well-being is almost equal in both severe and moderate drug takers.

CONCLUSION:

This study has concluded that both moderate and severe drug users have lower mental well-being as compared to people who have touched alcohol or any other drug in their life, and the prevalence is due to psychological factors other than curiosity, for example, emotional instability, problems at home, unsupportive parents.

REFERENCES:

- "Drug." Dictionary.com Unabridged (v 1.1), Random house, Inc., via dictionary.com. Retrieved on 20 September 2007.
- "Drug." Merriam Webster: Concise Encyclopaedia.
- "Drug." The American Heritage Science Dictionary, Houghton Mifflin Company, via dictionary.com. Retrieved on 20 September 2007.
- "Glossary of MHRA terms- P". MHRA. Retrieved 2008-11-05.
- "Recreational Drug". The Free Dictionary. Retrieved 16th March 2015.

- 2. Brands, B. Sproule, b. and Marshman, J. (Eds.). (1998). Drugs and drug abuse (3rd ed.). Ontario: Addiction Research Foundation
- American Cancer Society. (2013). Other forms of tobacco favoured by young people.
- American Journal of Applied Psychology 3.3 (2015): 47-56.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. (5th ed). Washington: American Psychiatric Publishing.
- Attema-de Jonge ME, Portier CB, Franssen EJ. Auto mutilation after consumption of hallucinogenic mushrooms, Ned Tijdehr Geneeskd. 2007;151 (52):2869-2872
- https://en.wikipedia.org/wiki/Cannabis_(drug)
- https://en.wikipedia.org/wiki/Alcohol
- https://en.wikipedia.org/wiki/Amphetamine
- https://en.wikipedia.org/wiki/Barbiturate
- https://en.wikipedia.org/wiki/Inhalant
- https://en.wikipedia.org/wiki/Nicotine
- https://en.wikipedia.org/wiki/Lysergic_acid_diethylamide
- https://www.collinsdictionary.com/dictionary/english/drug
- https://drugaware.com.au/getting-the-facts/faqs-ask-a-question/what-are-drugs/