

## **VARIOUS TYPES OF ADDICTION IN CHILDREN AND ADOLESCENTS: AN IN-DEPTH STUDY**

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### **ABSTRACT**

Primary analysis on substance abuse in school-going children indicated that in private, expensive schools, only 25% of them practised substance abuse. But the results were encouraging, as the majority of them had become 'clean' or were undergoing therapy and would soon be on the way to recovery. They indicated that the relationships that were most affected were concerning academics and parents.

**Keywords:** Substance abuse, Addiction, Vaping, Cannabis, Psychological factors in addiction, Dopamine, Emotional Dependence, Substance abuse trends, Mood-Changing Drugs, Adolescent substance abuse, Youth addiction, School-based substance use

**Research Question:** An attempt would be made to understand whether there has been an increasing incidence of addiction in school-going children and young adults. What are some of the factors that are responsible for this? What are the types of addictions these young adults get attracted to? What measures can be taken to try to control this increasing incidence? Who are the stakeholders that can make a difference, and how? Are these dependent upon the status of their income and the place of residence of these children? These and similar questions will be attempted during the research.

### **I. Introduction**

In recent years, there has been an increasing amount of substance use among Indian schoolchildren. This is highly prevalent in the age groups of 10–17 years and 18–22 years. It has been researched that both street children and school-going students in India are actively using various substances. Analysis has indicated that the prevalence among children may be as high as 82.3% in 2020. Despite these children being aware of the harmful effects of substance abuse adolescents tend to take up this habit. The use of tobacco alcohol and other substances is a

worldwide problem and they generally affect children and adolescents who are extremely vulnerable (Tsering, D., Pal, R., & Dasgupta, A. 2010). Schools have frequent programs indicating the harmful effects of drug substances but despite these efforts, there does not seem to be a decline in them attempting these harmful substances. It is important to change the approach so that there would be an effective way to reduce rather than increase the use of such substances. A staggering 1.58 crore children aged between 10 and 17 years are addicted to substances in the country this figure has been indicated by the government to the Supreme Court in December 2022 (The Deccan Herald, 2022). This data was collected from a survey conducted under the orders of the Supreme Court. The most important addiction was alcohol followed by cannabis and opioids. Besides looking at other available research, primary research was conducted amongst school-going children to understand the challenges they face and the workable solution to the problem at hand. Data was collected through an anonymous questionnaire sent to them in a Google form.

**Figure 1: Substance Abuse amongst Indian Street Children**



Source; [www.indiatoday.com](http://www.indiatoday.com)

## **II. Definition of different forms of addiction**

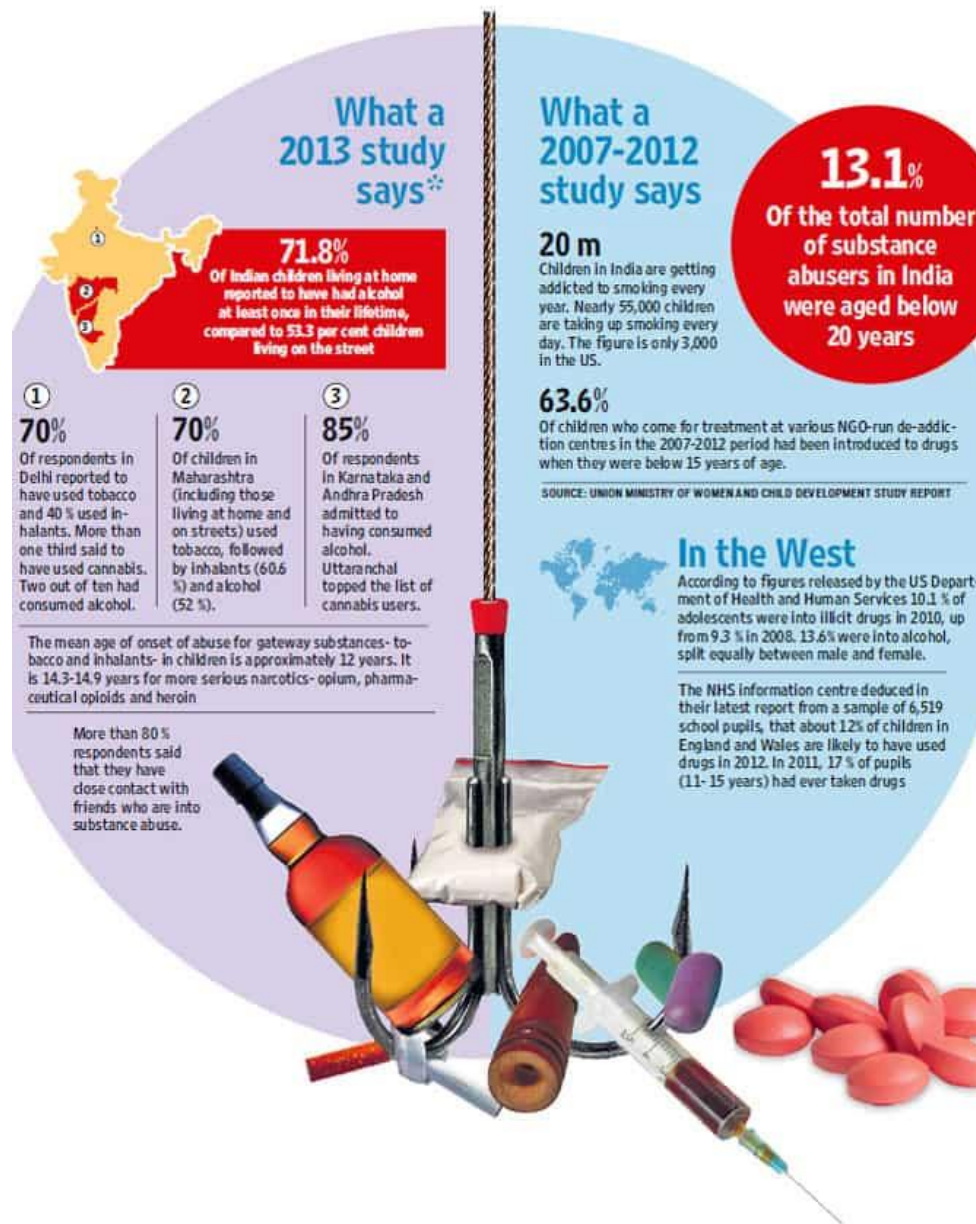
Addiction is defined as an aberrant behaviour and a social problem in mainly metropolitan cities in India. It could be defined as individual social maladjustment and could be looked at as a widespread condition that has an extremely detrimental impact on society. Addiction of any kind is the uncontrollable craving for a pleasurable activity or a habitually relieving sensation. The sustained use of any type of intoxicated material/drug or unhealthy relief mechanism develops in turn a physiological or emotional dependence (Ahuja, 1992). These substances are used by the intoxicant 'to fix' a difficult situation that he or she perceives that they are in. This type of 'quick fix' is used for;

- Heroin
- Opioids
- Hard Drugs
- Cocaine
- Smoking/ use of e-cigarettes
- Tobacco
- Alcohol
- Cannabis products like charas, bhang or ganja
- Stimulants
- Barbiturates
- And all others that the young adult is emotionally dependent on.

In metropolitan cities, street children are rampantly consuming illicit drugs and alcohol and some numbers are increasing in the case of school-going children too. Researchers have stated that maybe a large number of children tend to belong to the slum areas of metropolitan cities. These children belong to the lower-middle class society. The impact of this addiction is seen in the;

- Physical health
- Mental health
- Social behaviour

Figure 2. A study in 2013 indicated the rampant use of habit-forming substances



Source: www.hindustantimes.com

Substance abuse is the excessive use of drugs in a way that is detrimental to self, society or both. This includes physical dependence and psychological dependence. Physical dependence is further defined as the prolonged use of the drug leading to an altered physiologic state where withdrawal symptoms develop when the drug is discontinued. This dependence refers to the

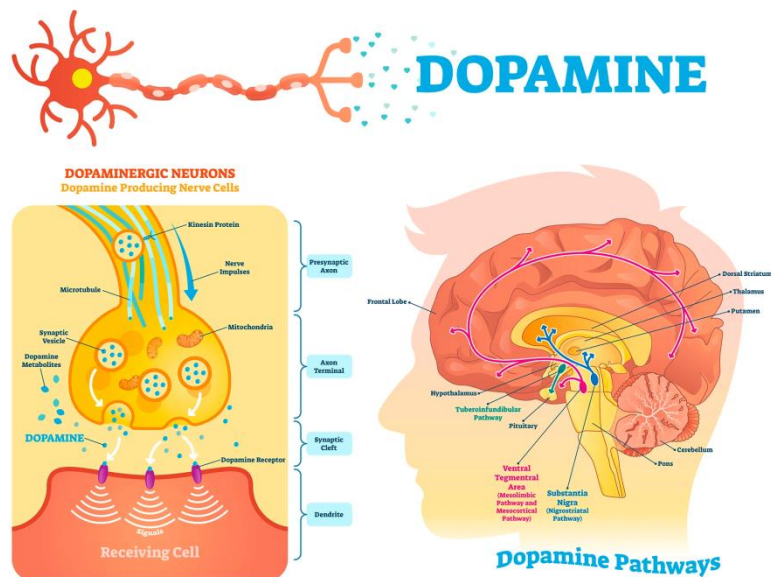


intense need to continue taking a drug (Griffin JB JR., 1990). Very often the patients themselves are unaware that they are drug dependent. Normally with substance abuse, there are strong pressures from society and legal consequences that tend to make the dependant conceal their intoxication. A large number of the patients tend to hide their state as they know what they are doing is incorrect they are scared of being criticised but they are unable to help themselves. They are also in a position of denial which makes it even more difficult for them to get help such that they can be brought out of a difficult situation.

Enjoyment and curiosity were found to have a major influence on the decision of substance abuse in school-going children (Yadav, P.K., Parajaul, R., 2022). These drugs are used for recreational and non-medical purposes, and the drugs that are used are illegal. Commonly abused substances range from anabolic steroids which some athletes use to boost their strength and performance to psychotropic, or mind-altering substances that produce changes in mood and feelings.

Some of these mood-changing drugs induce relaxation or sleep while others induce a feeling of exhilaration. All these drugs which are commonly abused increase the levels of dopamine. Dopamine is an organic compound that inhibits the transmission of nerve impulses in the brain.

**Figure 3. Understanding Dopamine**



Source: [www.simplypsychology.org](http://www.simplypsychology.org)

Dopamine is a neuro-modulatory molecule that plays several important roles in cells. It is an organic chemical of the catecholamine and phenethylamine families (International Journal of Innovative Research in Science, Engineering and Technology). Dopamine constitutes about 80% of the catecholamine content in the brain. In simple words, it is a neurotransmitter and a hormone that works in the brain and it helps nerve cells send messages to each other. It is produced by cells deep in the brain and acts on cells in other parts of the brain. The release of this chemical is most notably involved in part of the brain's reward system for example, sex, shopping, and smelling cookies baking in the oven lead to what is known as a 'dopamine rush'.

This feel-good neurotransmitter is also involved in reinforcement for example if one can achieve weight goals or body shape this hormone will be produced in greater quantities.

The temporary sense of well-being that is produced by the use of drugs fades when the effects of the drug have worn off. And the user is faced with the same problem that made them practice substance abuse. A chronic drug abuse consumer may likely take another dose of the drug rather than endure the pain and trouble of dealing with the original problem. When this occurs it means that the person is psychologically dependent on the drug.

Overuse of some of the drugs causes addiction which means that without the drug the user becomes very ill. For an addict the need for the drug becomes twofold;

- The sense of wellbeing
- Avoiding the physical pain by not imbibing the drug

In addition to serious health issues for the addict, there are serious public health problems that impact the entire community. It has been researched that in 2010 in the United States, there were 40 million serious illnesses by people who were drug addicts.

### **III. Reasons for Increasing Incidence**

Factors that contribute to the emergence of substance abuse are multi-factorial. The most important among them are;

- Behavioural
- Emotional
- Environmental

The younger a child is when they are initiated into alcohol and other drug use the higher the risk for serious health consequences. Alcohol and other drug use in the adolescent population carries

a higher risk for school underachievement, delinquency, teenage pregnancy and depression (Pradeep B S, 2021). Binge drinking defined as five or more drinks on one occasion remains problematic amongst school children. The fact is that early use of drugs or any substance abuse is that it places the child on a deleterious trajectory for future drug use (Blecher & Shinitzky, 1998).

Addiction develops from a complex interplay between the individual, the agent in this case drugs and alcohol and the environment.

The initiation of first drug use is determined by interaction between social, cognitive, cultural, attitudinal, personality, and developmental factors. The earliest influence to smoke, drink alcohol, or use drugs may come from *the family* (Nkporbu AK & Oti IK, 2022). Some of the factors that are related to drug use during adolescence include;

- Poor self-image
- low religiosity
- Poor school performance
- Parental rejection
- Family dysfunction
- Abuse
- Under or over-controlling parents
- Divorce

The risk factors for school-going children are much higher as there are factors like;

1. Development of conduct disorder
2. Oppositional defiant disorder
3. Attention deficit - hyperactivity disorder, ADHD in the preschool years and exists in the child throughout the child's development stages.

These disorders may initially be present as relatively mild behaviour problems and progress to severe symptoms such as stealing aggression, and substance abuse. Temperamental difficulties may increase childhood troublesome behaviour. Difficult temperament characterised by moodiness, negativity, poor compliance and provocativeness may lead to the child being

criticised and ostracised by parents this results in leads to the cohesive model of parenting that is often present in families who have children with substance abuse and delinquency.

Hyperactivity in childhood imparts a higher risk of development of adult alcoholism and substance abuse. Research has indicated that high activity levels in infants tend to lead to adult alcoholism and substance abuse. High novelty-seeking and low harm-avoidance behaviours place boys at a higher risk for early drug initiation. The early use of drugs was associated with violent behaviours.

*Peer group* plays a pivotal role in the initiation of tobacco and drug abuse. It has been seen that peer pressure may be a factor not only in drug use but also in drug abstinence. Research by Robin and Johnson indicated that peer cross-pressure was found in adolescents who believed that peers' general attitude was against drug abuse except for alcohol. There was a direct relationship between peer cross-pressure and subsequent drug use. The lower the acceptance of drug use the less frequent the drug use. The higher the perceived risk the lower the drug use. Studies have also indicated that children predisposed to use drugs may seek out others with similar inclinations. Adolescents whose drug use has been influenced by peer pressure, in the absence of psychological dysfunction are more likely to stop using drugs.

It has been researched (Boys A, Marsden J, Strang J., 2001) that the majority of the participants used drugs to;

- Relax
- Become intoxicated
- Keep awake at night while socialising
- Enhance an activity
- Alleviate depressed mood

The concern about the widespread use of these drugs is due to the impact it has on health, educational, and political agendas in many countries. These young adults use both licit and *illicit substances*. It is essential that one should separate the two such that policy measures for both are different. Research on heavy drinkers indicated that alcohol use is related to multiple functions, on the other hand, the motive for *illicit drug* use is based on a rational appraisal process rather than a passive reaction to the context in which a substance is available. The reasons vary from extremely broad statements like "I consumed the drug to feel better" to more specific functions for its use like "self-confidence" (Boys A, Marsden J, Strang J., 2001). The above statement is a universal one for all *illicit substances*. This may not be the right approach given the diverse



effect that different drugs have on the user, eg stimulant drugs like amphetamines, ecstasy and cocaine are used for reasons related to increased nervous system arousal. Alcohol or cannabis has a sedative effect on the user and can lead to nervous system depression. There are a range of drugs that are used by young people which lead to stimulants, sedatives, or hallucinogens (Boys A, Marsden J, Strang J., 2001)

#### **IV. Instrumental drug use**

This has been denoted for the consumption of drugs that are linked to the drug effect (WHO, 1997). Examples of these are amphetamine type of stimulants vehicle drivers who report using this drug to improve concentration and relieve tiredness and also people who want to lose weight (particularly young women). They use this drug to curve their appetite. The problem that arises is that when these 'instrumental substance' uses are used for the most subtle social, or psychological purposes.

The idea is to understand the use of the word 'function' with respect to the consumption of the drug characterising primary or multiple reasons or the purpose served by the use of a particular substance in terms of the actual gains that the user perceives they will attain. Research has indicated that the drug with the highest lifetime prevalence was cannabis followed by amphetamine sulphate, cocaine hydrochloride and ecstasy. other drugs are crack cocaine, heroin and tranquillisers. What was discovered is that there were no gender differences in drug use between the genders. there were few differences observed in the frequency and intensity of use except for alcohol rare males reported drinking alcohol more frequently (Health Education Research, volume 16, issue 4, 2001). The assumption made here is that if the respondent was consuming the drug he or she had first-hand knowledge of the drug's effects before using it.

#### **Cannabis**

The survey indicated that the young adults who used cannabis were much older and they used it to feel elated- euphoric or wanted help in sleeping. Those who thought that cannabis would 'increase confidence' and 'stop worrying' tended to be a little younger than those who used the drug for earlier stated reasons.

#### **Amphetamines**

These drugs were used primarily to 'keep going', 'stay awake', 'enhance activity', 'euphoric', and 'lose weight'. The ones who used it for euphoric purposes were older versus those who used it to 'stop worrying'. The lose weight category was more women than men.

#### **Ecstasy**

The five reasons why this drug was imbibed were, 'to keep going', enhance activity', 'get intoxicated', and 'get elated'. The reasons that the drugs were consumed were determined by the age of the user.

### **LSD**

The most common use of this drug was to 'get intoxicated', 'get elated', and 'enjoy company'. Unlike the other substances, there were no gender or age differences observed in the use of this drug.

### **Cocaine**

It was for the same reasons this drug was used for ecstasy and amphetamine. The other major factor was 'to feel better'. There were different reasons given by males and females for the use of this drug.

### **Alcohol**

Many used alcohol to relax and to enjoy company as well as to increase confidence. Here too the reasons were age-specific.

Amongst all the reasons the foremost one was 'to relax'. All the drugs were used primarily to achieve the same functions. As the aim is 'to relax' one needs to research why this becomes an important factor.

## **V. Factors leading to learners abusing substances at school**

Amongst the most important factors is *poor parental monitoring*. Family rejection of sexual orientation or gender identity is associated with delinquents using substance abuse. Parents do not have knowledge of where their child is when he or she is not at home or at school, or who their child's friends are impacted adversely by a child who is likely to be at risk to imbibe drugs. These youth who perceive less parental monitoring may be more likely to engage in a number of risk behaviours that also include sexual risk-taking. A positive parent-teen relationship can be a protective factor against risky behaviour and pave the way for parents to teach their children what behaviours are acceptable either directly (communication) or indirectly (through modelling). Research has also indicated that adolescents from single-parent households are more likely to engage in sexual intercourse, are less likely to use contraception and are at a higher risk for drug use than those in a two-parent household. Adolescents without a stable family structure, such as those living in foster care or group homes are more likely to engage in delinquent behaviours of which drug abuse is one of them. The trigger for such mechanisms could be;

- lower levels of parental monitoring
- Disruptions of an established family structure
- Repeated family transitions
- Parental divorce
- Remarriage

### **Family Relationships**

Adolescents' relationships with their family members especially their family members are extremely important. Parent-child communication is extremely essential for adolescents. The reason is that values are being expressed consistently and disapproval of risk-taking behaviours is continuously being emphasised. Being model parents is another way in which one can inculcate value behaviour among adolescents. Parents and siblings who smoke are likely to have children who do the same and this is true for alcohol as well as illicit drugs. If parents have children in their teens then it is likely that their children will follow the same path. Parents are warm and supportive indicating clearly behavioural control involving limit setting and high expectations, their children are less likely to engage in risk-taking behaviours which include risky driving.

### **Socio-cultural Risk and Protective Factors**

Alcohol use is greater among youth who have parents who drink alcohol. Research has indicated an increased risk for alcohol-related problems and alcohol dependence amongst springs of alcoholics. Besides the above, there may be a genetic predisposition towards alcohol use. Actions like punishment and approval of substances by the family will indicate the impact of substance abuse in adolescents.

### **Power of Peers**

This is a highly significant factor as a youth transitions into adolescence the influence of parental monitoring decreases and peer influence increases. This is important as far as peer drinking is concerned and peer beliefs about the acceptability of adolescent alcohol use. These children who show an increase in their trajectory of drinking over time also show a concomitant increase in spending time with peers who drink. This is also seen and relevant for those adolescents who face the early onset of puberty.

### **Issues that adolescents think are important**

Adolescents themselves experience changes both physiologically (hormones), and socially (less parental monitoring), an increase in risk-taking behaviours, caregiver-child conflict, and social pressure by peer groups.

### **Cognitive Development**

Clinically, trajectories of disorder beginning in childhood may worsen over time and comorbid problems like substance abuse may develop as a maladaptive coping response to existing conditions.

Adolescence marks the emergence of gender differences in the prevalence of many disorders such as depression and this needs to be addressed when treatment is being planned.

### **VI. Prevention and Treatment of this problem by various stakeholders**

Several strategies are used effectively and in combination to prevent and treat substance abuse among adolescents. These include;

- Information dissemination
- Prevention education
- Alternatives
- Problem identifications and referrals
- Community-based process

The factors that contribute to the emergence of substance abuse in the young population can be addressed through prevention and intervention programs that use research-based, comprehensive, culturally relevant, social resistance skills training and normative education in an active school-based learning format.

Pediatricians have the skill to detect drug-related problems in their patients and are knowledgeable about the extent of drug use as well as the availability of drug treatment resources in their community. These healthcare providers are very often consultants for parents, schools and the community to lecture and demonstrate on topics related to alcohol and drug abuse.

Knowledge about available drug and alcohol prevention curricula has in reality very little improvement in drug use patterns in school. To counter this limited impact proactive approaches will assist the community, *public health, school officials and parents in their decisions to select and implement prevention programs (stakeholders)*.

Protective factors to prevent drug abuse are dependent on the characteristics of the individual, family and environment. These factors instil the individual with resiliency (the ability of an individual to overcome a negative set of life circumstances). As far as adolescents are concerned this resiliency is associated with high intelligence, low novelty-seeking behaviour and avoidance of friendship with delinquent peers (Fergusson, Child Psycho-psychiatry, 1996).

The prevention programs that are in place are research-based, age-appropriate and culturally relevant, interactive resistance models. These promote;

- Protective factors which at the same time include social resistance skills training and normative education in the normal course of teaching. These teach students that most youngsters **do not use drugs**. This has to be imparted through active learning techniques by the teacher eg, small groups, role-playing, interactive learning techniques etc. The techniques will change depending on the cultural and ethnic background.
- The most vulnerable groups are children during the transition period and adolescents period. Programs are developed to target the at-risk population.
- Community organisations, media, health policy officials as well as parents have to work together in a comprehensive network of activities to prevent the temptation of drug abuse.

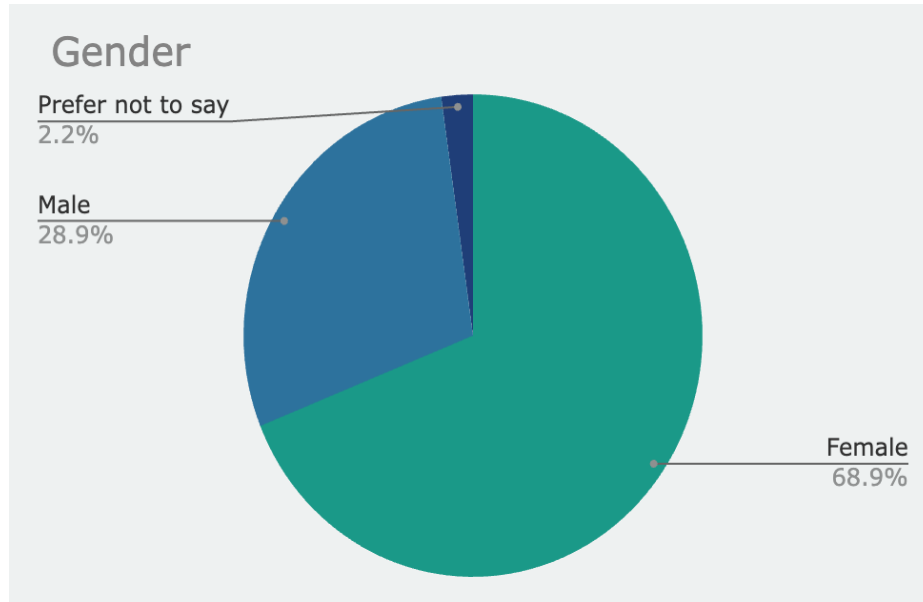
Risk factors that lead to the initiation of drug abuse are very well known. The problem is the identification of these factors which would lead to the prevention of substance abuse in young adults. This actively requires coordinated efforts by pediatric healthcare providers through child and parent curricula while collaborating with both communities and schools.

## **VII. Analysis**

The survey that was conducted amongst 45 respondents, where 68.9% were females, indicated the following;

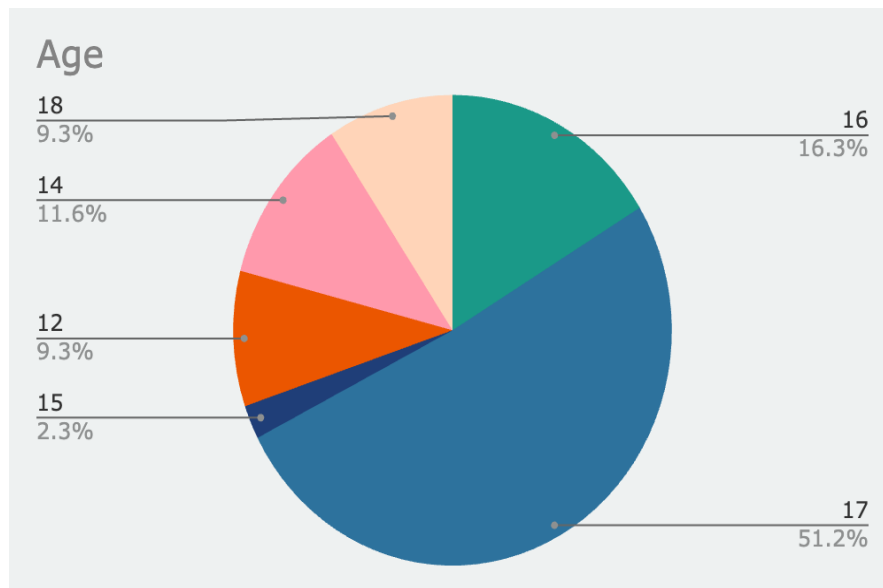


**Analysis 1**



Source: authors own

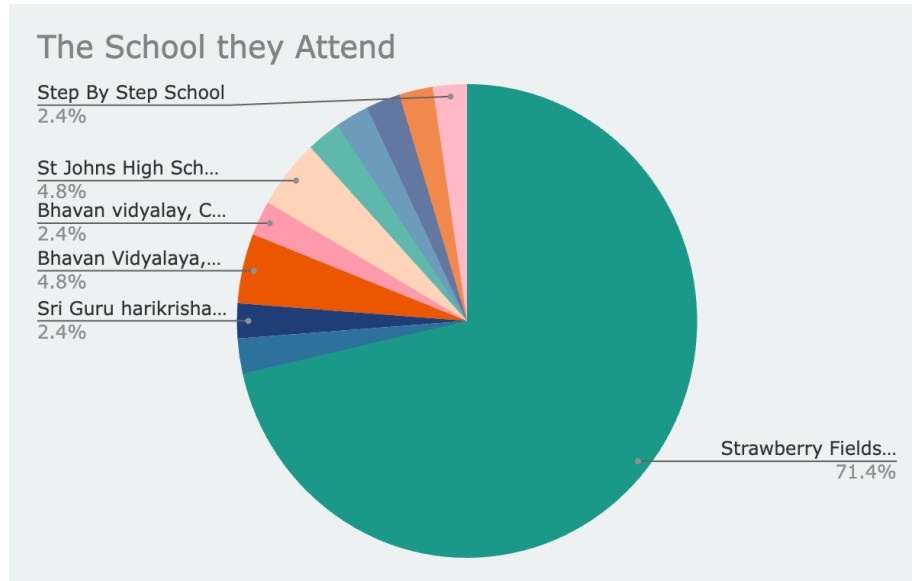
**Analysis 2**



Source: Author's Own

The age group of the respondents were primarily in the 16 to 17 years

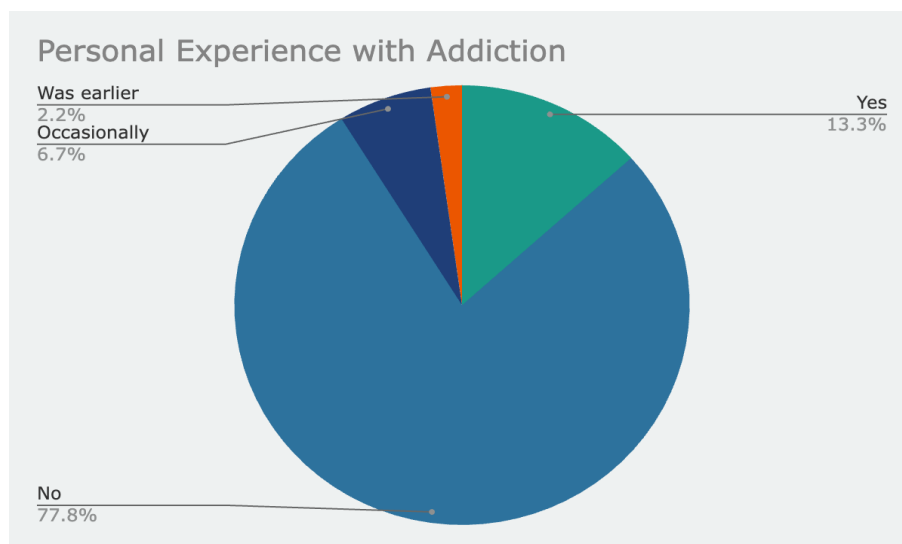
**Analysis 3**



Source: Author's Own

The schools that they all studied in are high-end private schools.

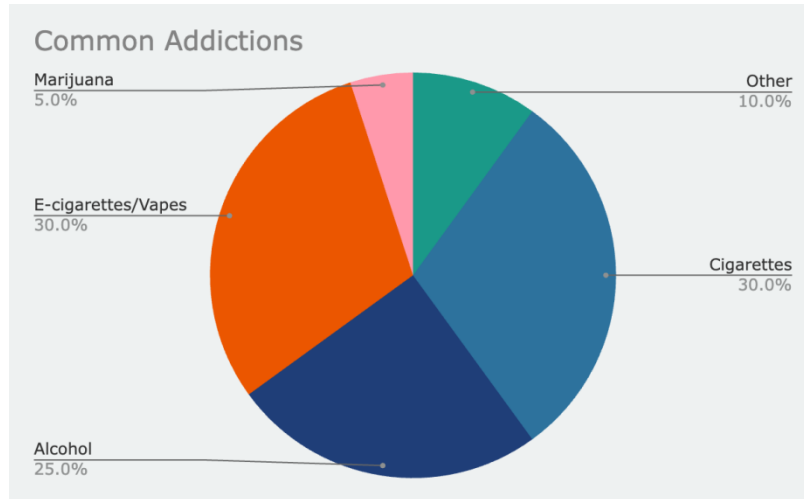
**Analysis 4**



Source: Author's Own

It was found that 77.8% of the respondents were not using any type of addiction.

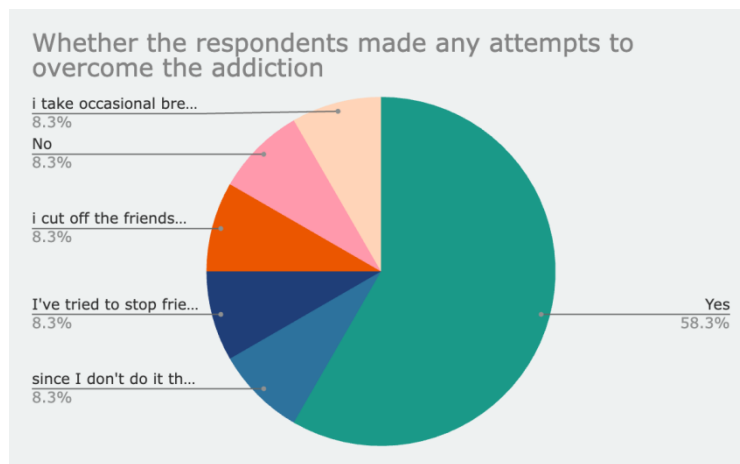
**Analysis 5**



Source: Author's Own

Out of the 22.2% who stated that they had some form of addiction, Cigarettes, E-cigarettes and Vapes were the most commonly used substance. Alcohol was the next most frequently used.

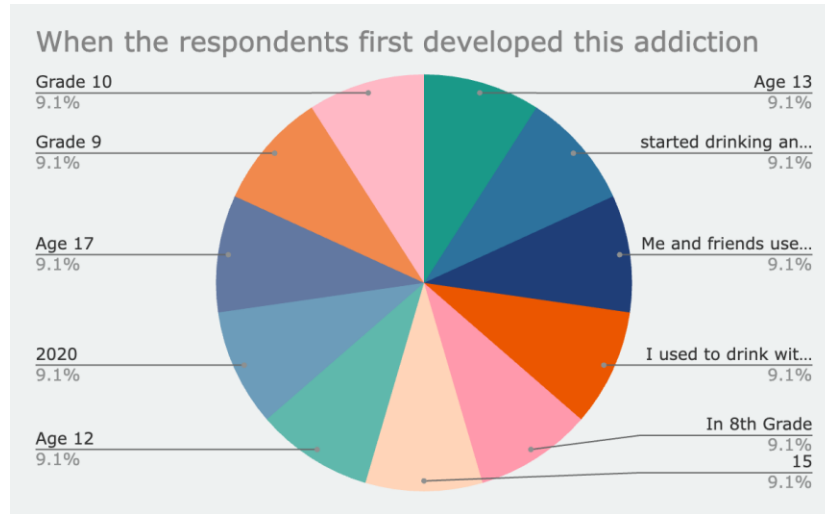
**Analysis 6**



Source: Author's Own

Out of the 22.2% that they had some form of addiction 58.3% stated that they did make a serious attempt to overcome the addiction. Some percentage of the children were completely 'clean' after help. 16.6% of respondents felt due to only occasionally using substances the problem was not big enough to overcome as of now.

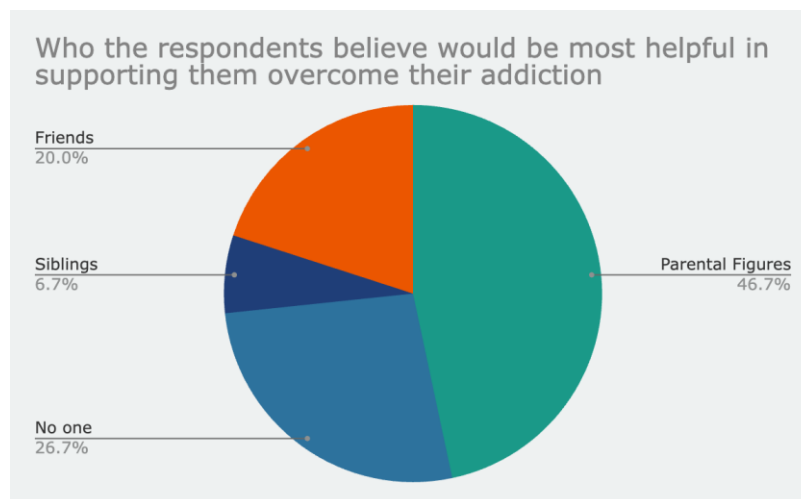
**Analysis 7**



Source: Author's Own

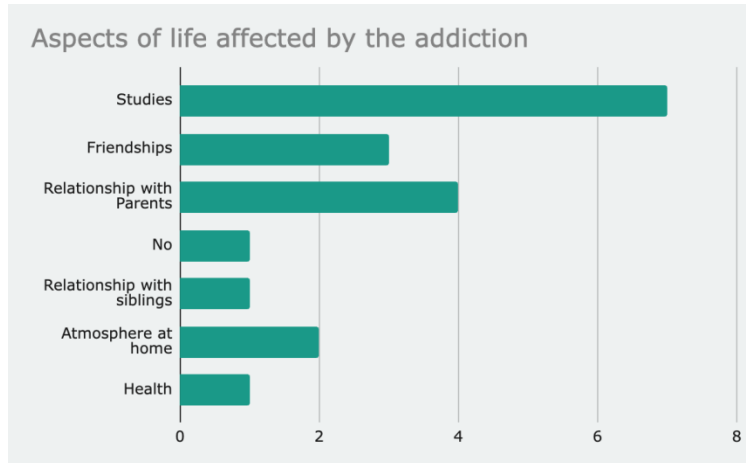
A major percentage of the respondents started in grade 9 onwards. Peer pressure and the influence of peers who had some form of addiction were frequently reported reasons for what influenced respondents to start this addiction. 'Perceived coolness' and a dysfunctional atmosphere at home were also reported factors.

**Analysis 8**



46.7% of the young adults took the help of their parents to get over their addiction. It was disturbing to know that 26.7% of them felt nobody could help them. In comparison, 20% of them leaned towards their friends to help them out of their predicament.

## Analysis 9



Source: Author's Own

A large number of the respondents felt that addiction adversely affected their studies, and second in order was their relationship with their parents. A few respondents also felt a decrease in their concentration abilities.

## VIII. Conclusion

Both the secondary research as well as the primary research conducted indicate that substance abuse is somewhat common amongst school-going adults. In the primary research that was conducted, it was heartening to know that 70+ per cent were not in any type of addiction. The remaining 25% faced similar issues that have been indicated in the literature review on this subject.

It is important to find ways and means to help these young adults. this would involve coming together with all stakeholders. The earlier the realisation of the symptoms the faster would be to help in addressing it and curing the child. The school and parents have to be extremely vigilant in catching the early symptoms. As Johnston (1997) has stated "Substance abuse in children is a complex multifactorial challenge that requires consistent and unremitting attention".

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