

Understanding Youth Substance Use: Theories and Causes

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Abstract: *Youth substance use has no single cause; it emerges where individual vulnerability, close relationships, institutions and wider society interact. This article reviews the main theoretical explanations for why young people begin, continue and escalate the use of alcohol, tobacco, cannabis, opioids, sedatives and inhalants. It examines neurodevelopmental theory, the self-medication and stress-coping hypotheses, social learning theory, problem behaviour theory, social control theory and Bronfenbrenner's ecological systems model. It then integrates these perspectives into a multilevel risk-and-protection model and applies it to contemporary conditions such as digital media, urban migration, academic and occupational pressure, and easy availability. Indian national survey data are used to situate the discussion. The article argues that prevention should be multi-component, developmentally timed and non-stigmatising, strengthening protective factors as deliberately as it reduces risks.*

Keywords: youth, substance use, social learning, ecological model, risk and protective factors, prevention, India

1. Introduction

Why do some young people begin using substances, and why do a smaller number go on to harmful use or dependence? Public discussion often answers with a single cause: bad company, weak parenting, films, or a lack of willpower. Each of these contains a partial truth, but none explains why two young people in the same college, with similar friends, follow very different paths. A theoretical approach is needed because it asks how causes combine, in what order, and under what conditions.

The question matters for India, where the 2018 national survey estimated that 14.6% of people aged 10–75 currently used alcohol, 2.8% cannabis and about 2.1% opioids (Ambekar et al., 2019). The same survey found that inhalants were the only substance category used more by children and adolescents (1.17%) than by adults (0.58%). It also reported very low treatment coverage: roughly one in 38 people with alcohol dependence had received any treatment. These figures show that substance use is common, that it begins early for some substances, and that services reach few of those who need them.

Youth is also a distinct developmental period. Between the late teens and the mid-twenties, young people form identities, move towards independence, change peer groups, and face educational and occupational pressures. Arnett (2000) called this stage "emerging adulthood" and described it as a time of exploration and instability. Exploration can be healthy, but it also creates opportunities for experimentation with substances.

This article has three aims. First, it summarises the major theories that explain youth substance use. Second, it integrates them into a multilevel model of risk and protection. Third, it applies that model to contemporary society and draws implications for prevention. The article is theoretical: it synthesises existing knowledge rather than reporting new data.

2. Conceptual Clarifications

Precise terms prevent two common errors: treating every instance of use as addiction, and treating serious dependence as a simple choice.

- 1) **Use, harmful use and disorder:** "Substance abuse" is still common in titles, but current clinical and public-health writing distinguishes several points on a continuum. *Use* means consuming a psychoactive substance. *Harmful use* means use that is already damaging health or functioning. A *substance use disorder* is a clinical condition diagnosed by a qualified professional using recognised criteria, such as impaired control, continued use despite harm, tolerance and withdrawal. Many young people who try a substance never progress beyond occasional use; theory must explain both initiation and escalation.
- 2) **Youth:** Agencies define youth differently. This article focuses mainly on adolescents and young adults, roughly 15–25 years, because initiation of most substances is concentrated in this period.
- 3) **Risk and protective factors:** A *risk factor* is a characteristic associated with a higher likelihood of a problem outcome; a *protective factor* is associated with a lower likelihood or buffers the effect of risk (Hawkins et al., 1992). Neither is a cause in the strict sense. Risk factors tend to cluster, and their effect is cumulative: one risk factor rarely predicts much, but several together raise vulnerability substantially.
- 4) **Association versus causation:** Much evidence on youth substance use comes from cross-sectional surveys. These can show that, for example, peer use and personal use occur together, but not which came first. Young people may choose friends who already share their habits (selection) as well as being influenced by them (socialisation). Good theory specifies a mechanism and a time order, which allows it to be tested.

3. Theoretical perspectives

Each major theory explains a different part of the problem: the brain explains heightened sensitivity, psychology explains

motives, and social theories explain where opportunities, norms and controls come from.

3.1 Neurodevelopmental perspective

Adolescent brain development helps explain why youth is a period of heightened risk. The dual-systems model proposes that reward-related systems become highly responsive around puberty, while the prefrontal systems that support planning and impulse control mature more slowly, into the mid-twenties (Steinberg, 2017; Casey et al., 2008). The result is a developmental gap: young people are especially drawn to novel and rewarding experiences, particularly in the presence of peers, before self-regulation is fully developed.

Repeated substance use can then change the brain's reward, stress and control circuits. Koob and Volkow (2010) describe addiction as a cycle of binge or intoxication, withdrawal and negative affect, and preoccupation or anticipation. As use continues, the motive can shift from seeking pleasure to avoiding discomfort. Early initiation matters because a still-developing brain may be more vulnerable to these changes.

Two cautions apply. Biology describes vulnerability, not destiny: most adolescents take risks without developing a disorder. And a purely biological explanation can encourage stigma if it is read as saying that some young people are "born addicts." Individual traits such as sensation seeking (Zuckerman, 1994), impulsivity and family history are better understood as factors that interact with environment.

3.2 Psychological perspectives: self-medication and stress-coping

The self-medication hypothesis proposes that some people use substances to relieve painful emotional states, and that the substance chosen may match the distress experienced (Khantzian, 1987, 1997). Alcohol or sedatives might be used to calm anxiety; stimulants might be used to counter low energy or low mood. The hypothesis helps explain why anxiety, depression and trauma frequently co-occur with substance use disorders.

The transactional model of stress and coping offers a broader frame (Lazarus & Folkman, 1984). Stress arises when a person appraises demands as exceeding their resources. Coping may be problem-focused, such as planning or seeking help, or emotion-focused, such as distraction or avoidance. Substance use can become an avoidant coping strategy when other resources are limited. Adverse childhood experiences, such as abuse, neglect and household dysfunction, are associated with later substance use in a graded way (Felitti et al., 1998), consistent with this view.

These theories have limits. Not all use is about distress: much youth use is social, celebratory or curious. The relationship is also bidirectional, because intoxication, withdrawal and conflict can produce the distress that is later blamed for use.

3.3 Social learning theory

Social learning theory proposes that substance use is learned, like other behaviour, through observation and reinforcement

(Bandura, 1977). Akers (2017) applied it directly to deviance and drug use, identifying four mechanisms:

- 1) **Differential association:** exposure to people, such as friends, siblings or parents, who use substances and hold favourable attitudes towards them.
- 2) **Definitions:** the beliefs a young person holds about whether use is acceptable, harmless or desirable.
- 3) **Imitation:** copying behaviour that is observed in admired models, including media figures.
- 4) **Differential reinforcement:** the balance of rewards (fun, acceptance, relief) and costs (punishment, illness, disapproval) actually experienced.

The theory explains why peer use is one of the strongest correlates of youth use. It also explains the role of *perceived norms*: young people often overestimate how many of their peers drink or use drugs, and acting on that inflated estimate can increase their own use (Perkins & Berkowitz, 1986). The prevention implication is clear: correcting misperceived norms, building refusal skills and changing the rewards of use.

3.4 Problem behaviour theory

Jessor and Jessor (1987) argued that substance use is rarely an isolated behaviour. It tends to occur alongside other "problem behaviours" such as early sexual activity, truancy and delinquency, forming a syndrome. Their theory organises explanations into three systems: the *personality system* (values, expectations, attitudes towards deviance), the *perceived environment system* (support and control from parents and friends, models of behaviour) and the *behaviour system* itself. Proneness arises when these systems combine to favour unconventional behaviour.

A key insight is that, for adolescents, some problem behaviours serve developmental functions. Drinking may signal maturity, independence from parents or membership in a group. Prevention that ignores these functions, and offers no alternative way to meet them, is unlikely to succeed.

3.5 Social Control Theory

Where social learning asks why people use, social control theory asks why most people do not. Hirschi (2017) proposed that conformity is maintained by four bonds to conventional society: *attachment* to parents, teachers and others; *commitment* to goals such as education and career; *involvement* in conventional activities; and *belief* in shared rules. When these bonds are weak, the restraints on deviance are weaker too.

This perspective explains why family connectedness, school engagement and structured activities are consistently protective. It also suggests why transitions, such as leaving home for college or a job in another city, can raise risk: they temporarily loosen existing bonds before new ones form.

3.6 Ecological Systems Theory

Bronfenbrenner's (2024) ecological systems model places the individual at the centre of nested environments. The *microsystem* includes family, friends and school. The

mesosystem is the connections among them, such as how well parents and teachers communicate. The *exosystem* includes settings the young person does not enter directly, such as a parent's workplace or local policy. The *macrosystem* is the wider culture, economy and law. A *chronosystem* adds change over time.

The ecological model does not replace the other theories; it provides the frame that connects them. It also links to the "risk environment" approach, which argues that drug-related harm depends on physical, social, economic and policy settings as well as on individual choice (Rhodes, 2002).

3.7 Summary of Theories

Theory	Main level	Core mechanism	Implication for prevention
Neurodevelopmental (Steinberg, 2017; Koob & Volkow, 2010)	Individual	Reward sensitivity outpaces self-control; repeated use alters brain circuits	Delay initiation; reduce access during adolescence
Self-medication and stress-coping (Khantzian, 1997; Lazarus & Folkman, 1984)	Individual	Substances used to relieve distress or avoid problems	Screen for distress; teach coping skills; provide counselling
Social learning (Bandura, 1977; Akers, 2017)	Relationships	Modelling, favourable definitions and reinforcement from peers and family	Correct misperceived norms; refusal skills; positive peer models
Problem behaviour (Jessor & Jessor, 1987)	Individual and perceived environment	Use clusters with other risk behaviours and meets developmental needs	Offer alternative routes to autonomy and belonging
Social control (Hirschi, 2017)	Relationships and institutions	Weak bonds to family, school and conventional goals reduce restraint	Strengthen family and school connectedness; structured activities
Ecological systems (Bronfenbrenner, 2024; Rhodes, 2002)	All levels	Nested environments shape exposure, norms, access and support	Multi-component programmes across family, school, community and policy

4. An integrated multilevel model

The theories above are complementary rather than competing; each describes a different level of the same system. Figure 1

integrates them. On the left, risk factors are arranged by ecological level, from society and policy down to the individual. On the right, use is shown as a pathway with four stages: exposure, initiation, continued use, and harmful use or disorder.

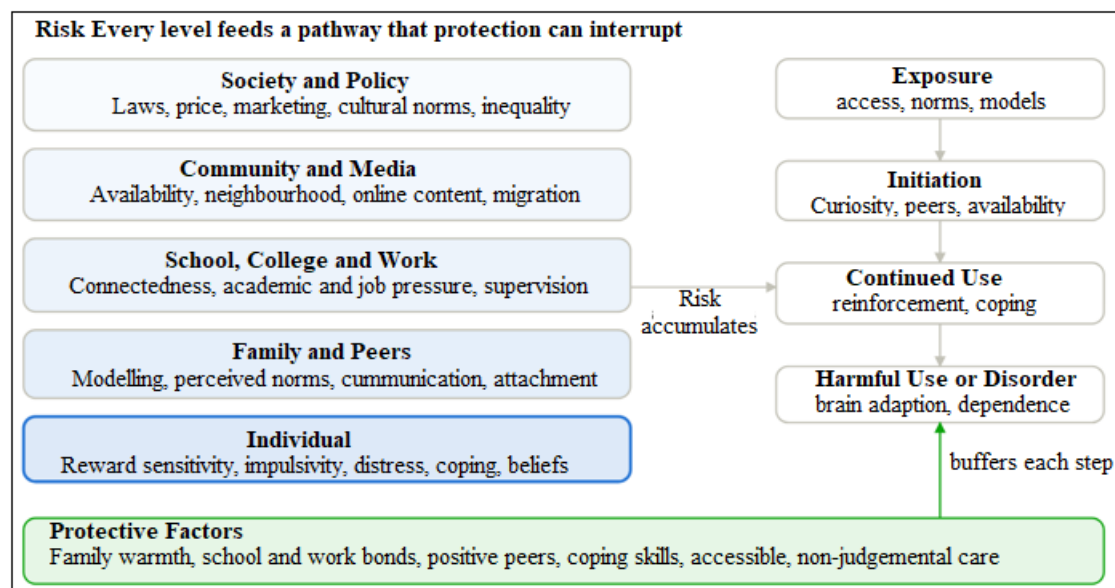


Figure 1: Integrated multilevel model of youth substance use · 5 levels, 4 stages; author's synthesis of Bronfenbrenner (2024), Hawkins et al. (1992) and Koob & Volkow (2010)

Three principles follow from the model. First, risk is cumulative: no single factor predicts much on its own, but each additional risk raises the probability of moving to the next stage (Hawkins et al., 1992). Second, different factors matter at different stages. Curiosity, peer norms and availability mainly explain initiation; reinforcement, stress and coping explain continuation; and neuroadaptation and dependence explain progression to disorder. Third, protection operates at every stage. Warm family relationships, school or work connectedness, positive peers, coping skills and accessible care can interrupt the pathway, which is why

resilience researchers describe protection as "ordinary" rather than exceptional (Masten, 2001).

The model also explains why two young people in the same setting can diverge. One may share the same peer group and stress as another but have stronger family bonds, fewer adverse experiences and better coping resources. The outcome reflects the balance of risk and protection, not any single cause.

5. Contemporary drivers

Contemporary society does not create new causes of youth substance use so much as it intensifies and reshapes the old ones. Four conditions illustrate how the theories above apply today.

5.1 Digital media and online environments

Social media extends the reach of social learning. Young people now observe not only their own friends but large networks of peers and influencers, and posts tend to show the rewards of drinking or drug use while hiding the costs. A review by Moreno and Whitehill (2014) found that exposure to alcohol-related content online is associated with more favourable attitudes and more drinking among adolescents and young adults. Online spaces also carry marketing, misleading health claims and, for illegal substances, new routes to purchase.

The effect is not uniform. Digital platforms also deliver credible health information, peer recovery communities and access to tele-counselling. Theory predicts that the impact depends on what is viewed, how much, and whether offline relationships provide a counterweight.

5.2 Urbanisation and migration

Large numbers of young Indians move to cities for higher education or work. Social control theory predicts that such moves loosen attachment to family and community before new bonds form. Hostels, shared flats and new peer groups offer freedom and opportunity, but also less supervision, new norms and easier access. Loneliness and financial strain add stress. Migration can equally be protective when it brings

income, purpose and supportive networks; outcomes depend on the quality of the new environment.

5.3 Academic and occupational pressure

Competitive examinations, high parental expectations, insecure employment and long working hours are recurring themes in Indian youth life. Through the stress-coping lens, these pressures matter when demands exceed perceived resources. Stimulants may be misused to stay awake or improve performance; alcohol or sedatives may be used to unwind or to sleep. The theory also points to the remedy: building resources such as time management, social support and counselling reduces reliance on avoidant coping.

5.4 Availability, affordability and normalisation

Availability links individual motives to actual behaviour. A young person who is curious or distressed can only use what is accessible. Easy access, low price, weak enforcement of age limits and the social acceptance of some substances all lower the threshold for initiation. In ecological terms, these are exosystem and macrosystem factors, and they are usually beyond the reach of an individual awareness session. This is why effective prevention also includes policy measures on supply, marketing and sales to minors.

6. The Indian context

India's most comprehensive national data show that alcohol dominates substance use, followed at a distance by cannabis and opioids (Figure 2). The 2018 national survey, led by the National Drug Dependence Treatment Centre at AIIMS for the Ministry of Social Justice and Empowerment, covered all states and union territories (Ambekar et al., 2019).

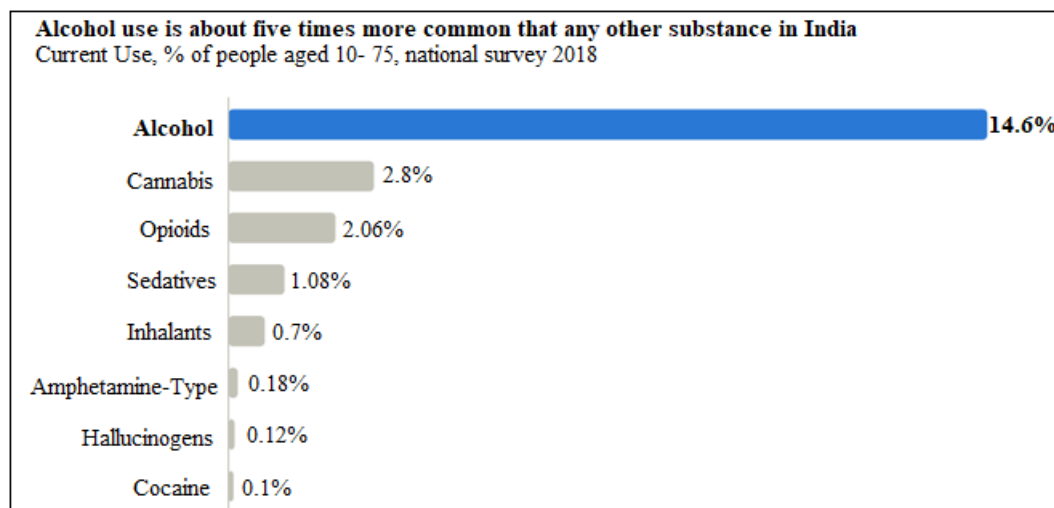


Figure 2: Source: Ambekar et al. (2019), Magnitude of Substance Use in India; national household survey conducted in 2018

Several patterns in the survey connect directly to the theories discussed above:

- **Gender norms shape exposure.** Alcohol use was about 17 times more common among men than women. Social learning and macrosystem norms, not only individual choice, explain such a large difference.
- **Some substances start early.** Inhalants were the only category used more by children and adolescents (1.17%)

than by adults (0.58%). Inhalants are cheap and legally available, which illustrates how availability and affordability shape initiation among the youngest and poorest users.

- **Harm is concentrated.** About 5.2% of the population was estimated to have harmful or dependent alcohol use, meaning roughly one in three alcohol users needed help.

This fits the pathway model: most users do not progress, but a substantial minority do.

- **Regions differ sharply.** Opioid and sedative use was far higher in several north-eastern states and in Punjab than the national average, reflecting local supply routes, social conditions and history.
- **Care is scarce.** Only about one in 38 people with alcohol dependence reported receiving any treatment.

Two limitations must be kept in mind. The figures describe people aged 10–75, so they are not a youth-specific estimate. They also date from 2018 and rely on self-report, which tends to under-count stigmatised or illegal behaviour. They are best used as background context, and local youth-specific studies are needed to test the theoretical pathways in particular communities.

7. Protective factors and implications for prevention

If risk accumulates across levels, prevention must also act across levels. The theories reviewed point to protective factors at each one:

- **Individual:** emotional regulation, problem-solving and refusal skills, realistic beliefs about risk, and a sense of purpose.
- **Family:** warmth, open communication, consistent and fair supervision, and caregivers who model healthy coping.
- **Peers:** friends who disapprove of substance use and offer belonging through other activities.
- **School, college and work:** connectedness, trusted adults, structured activities, and accessible counselling.
- **Community and policy:** limits on availability and marketing to young people, safe recreational spaces, and affordable, confidential treatment services.

Prevention science organises interventions into three tiers according to where a person is on the pathway (Figure 3). *Universal* programmes reach all young people before most have started. *Selective* programmes target groups whose risk is raised, such as students living away from home or children of parents with substance problems. *Indicated* programmes respond to young people already showing early signs of use.

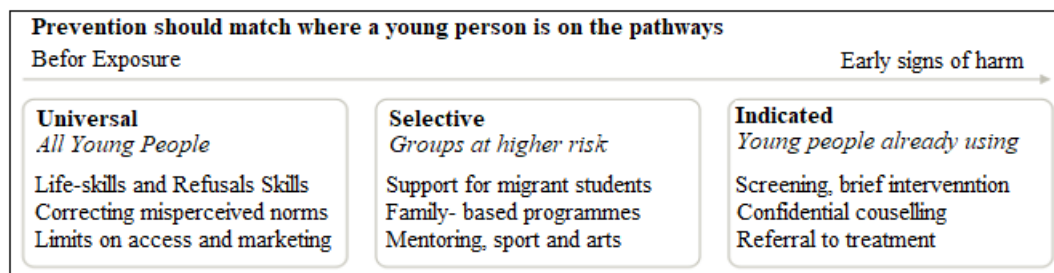


Figure 3: Prevention tiers matched to the use pathway · 3 tiers; adapted from the universal, selective and indicated framework in UNODC & WHO (2018)

Five principles emerge from the theoretical review and from international prevention standards (UNODC & WHO, 2018):

- 1) **Build skills rather than rely on fear.** Lectures and exaggerated scare tactics lose credibility with young audiences. Social learning theory favours practising refusal, coping and decision-making skills.
- 2) **Correct misperceived norms.** Showing accurate local data on how few peers actually use substances can reduce use, provided the data are reliable.
- 3) **Strengthen bonds.** Social control theory suggests that programmes linking young people to family, school and community are protective in themselves.
- 4) **Act on the environment.** Individual education cannot offset easy availability and aggressive marketing; policy measures are part of prevention.
- 5) **Reduce stigma and open the door to care.** Young people who fear humiliation, punishment or exposure delay seeking help. Confidential, non-judgemental services and respectful language are essential, especially given low treatment coverage in India.

8. Conclusion

Youth substance use is best explained not by any single theory but by the interaction the theories describe together. Neurodevelopment explains why adolescence and early adulthood are periods of heightened sensitivity. Self-

medication and stress-coping theories explain why distress and limited coping resources can turn experimentation into habit. Social learning explains how peers, families and media transmit behaviour and beliefs. Problem behaviour and social control theories explain why use clusters with other risks and why strong bonds protect. The ecological model places all of these within settings shaped by culture, economy and policy.

For contemporary India, three conclusions follow. First, explanations that blame a single cause, whether peers, parents or personal weakness, are incomplete and can be stigmatising. Second, prevention should be multi-component and developmentally timed, acting on several levels at once. Third, strengthening protective factors and access to non-judgemental care deserves as much attention as reducing risk, given the very low treatment coverage the national survey reported.

Future research should test these theoretical pathways in Indian samples using longitudinal designs that can establish time order, validated measures, and qualitative methods that capture how young people themselves understand the role of substances in their lives.

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