The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 13, Issue 3, July- September, 2025
DIP: 18.01.396.20251303, DOI: 10.25215/1303.396
https://www.ijip.in

Research Paper

The Relationship Between Substance Use (Tobacco, Alcohol, and Cannabis) and Convicted Offenders

Vivek Tiwari[1]*, Dr. Neetu Sharma[2], Dr. Manisha Tiwari[3]

ABSTRACT

Substance use has been identified as a key factor influencing criminal behavior and offender-related vulnerabilities. This study examined the relationship between tobacco, alcohol, cannabis use and offender risk among 200 convicted offenders in India. Participants were categorized into lower-risk and moderate-risk groups for each substance, and offender-related vulnerabilities were measured using the Offender Screening Tool (OST). Results indicated that moderate-risk users of all three substances exhibited significantly higher OST scores compared to lower-risk users, with alcohol showing the strongest association, followed by cannabis and tobacco. These findings suggest that elevated substance use contributes to higher criminogenic risk, emphasizing the importance of integrating substance use assessment and intervention into offender rehabilitation programs. Incorporating targeted substance use management may reduce offender vulnerability and support more effective rehabilitation and prevent recidivism.

Keywords: *Substance Use, Tobacco, Alcohol, Cannabis, Convicted Offender*

Substance use has long been recognized as a critical factor influencing crime and offending behavior. Across global contexts, tobacco, alcohol, and cannabis are among the most widely consumed psychoactive substances, which are each associated with distinct health and social consequences. In India, these substances have not only contributed to the country's growing public health burden but have also emerged as important variables in criminological research.

The National Survey on Extent and Pattern of Substance Use in India (2019), conducted by the Ministry of Social Justice and Empowerment in collaboration with AIIMS, estimated that about 160 million people use tobacco, 57 million use alcohol, and around 31 million use cannabis in various forms. These figures underscore the pervasive role of psychoactive substances in everyday life. However, their impact extends beyond health, influencing social functioning, interpersonal relationships, and legal behavior.

The link between substance use and criminal offending has been widely documented in international literature, often explained through psychopharmacological, economic-

[1]Research Scholar, Chhatrapati Shivaji Maharaj University, Navi Mumbai
[2]Assistant Professor, HOD, Department of Applied Social Science, CSMU Panvel, Navi Mumbai
[3]Associate Professor & Head, Department of Psychology, JECRC University
*Corresponding Author

Received: September 22, 2025; Revision Received: September 26, 2025; Accepted: September 30, 2025

compulsive, and systemic models. The psychopharmacological perspective argues that the pharmacological effects of substances such as alcohol and cannabis alter cognition, lower inhibitions, and increase aggression, thereby facilitating violent or impulsive crimes. The economic-compulsive model emphasizes that individuals with substance dependence may commit theft, robbery, or property crimes to sustain their habit. The systemic model highlights that the illegal drug trade itself fosters violence and organized crime. In India, each of these pathways is visible in contexts ranging from alcohol-related domestic violence to cannabis trafficking in states such as Himachal Pradesh and Uttar Pradesh.

Alcohol occupies a particularly central role in crime statistics in India. Findings from NIMHANS (2018) suggest a strong link between alcohol use disorder and violent crimes such as assault, homicide, and sexual offenses. The disinhibiting effect of alcohol intoxication impairs judgment and emotional regulation, thereby escalating the likelihood of aggressive or reckless behavior. Statistics from the NCRB (2022) show that many violent crimes in India were committed by offenders who were intoxicated at the time.

Cannabis, while not as directly linked to violent crime as alcohol, is nevertheless important in the Indian context due to its unique cultural and legal status. In India, bhang made from cannabis leaves is permitted for use in certain cultural and religious contexts, while preparations such as ganja and charas remain illegal under the NDPS Act (1985). This duality contributes to both systemic crimes (illegal cultivation, trafficking) and behavioral concerns, particularly among adolescents and young adults. Research suggests that early cannabis use is associated with poor academic performance, unemployment, and engagement in petty crime, creating indirect pathways to criminality.

Tobacco use, although legal and socially accepted, also has relevance in offender populations. While tobacco is not directly criminogenic, its high prevalence among convicted offenders reflects broader lifestyle risks and vulnerability to other forms of substance use. Moreover, tobacco addiction is closely associated with mental stress, poor health outcomes, and maladaptive coping, which may compound other criminogenic factors. In the Indian context, the intersection of substance use and crime is further complicated by socio- economic vulnerabilities such as poverty, unemployment, and low literacy, which not only increase the risk of substance dependence but also elevate the likelihood of involvement in criminal behavior. Offenders often come from marginalized communities where substance use is normalized and social support is minimal, leading to a cycle of addiction and offending.

Despite the growing awareness of this issue, research focusing specifically on the relationship between substance use and convicted offenders in India remains limited. Much of the existing evidence is either fragmented or focused on health outcomes rather than criminological implications. There is a need for systematic empirical studies that explore how different substances—tobacco, alcohol, and cannabis—interact with offending patterns in the Indian context.

Therefore, the present study seeks to examine the relationship between substance use and convicted offenders in India, with a specific focus on tobacco, alcohol, and cannabis. By investigating patterns of substance use among offenders and analyzing their association with criminal behavior, this research aims to contribute to the understanding of substance-related crime in India and provide a foundation for further policy and practice-oriented reforms.

Tobacco Use and Criminal Behavior

Tobacco is the most widely consumed psychoactive substance in India. The *National Survey on Extent and Pattern of Substance Use in India* (Government of India, 2019) reported that over 160 million people use tobacco, either in smoking forms (cigarettes, bidis) or smokeless forms (gutkha, khaini). While tobacco is not directly associated with violent or property crimes, its prevalence among offenders is significantly higher than among non-offenders. Studies in correctional populations in India and other South Asian countries have observed that more than 70–80% of convicted offenders reported daily tobacco use prior to their conviction (WHO SEARO, 2018).

Researchers suggest that high tobacco consumption among offenders reflects broader behavioral patterns such as impulsivity, sensation-seeking, and maladaptive coping strategies. These traits overlap with criminogenic risk factors, thereby making tobacco use a marker of vulnerability to crime (Spaulding et al., 2018). Moreover, the clustering of tobacco use with alcohol and cannabis dependence further complicates offender rehabilitation and increases the likelihood of relapse into both substance use and criminal activity.

Alcohol Use and Offending

Alcohol is strongly associated with violent behavior across different cultural contexts. In India, alcohol use has been implicated in crimes ranging from homicide and assault to sexual offenses and domestic violence. According to *NCRB Prison Statistics* (2022), a significant percentage of violent crimes were committed under the influence of alcohol. Similarly, clinical studies by the *National Institute of Mental Health and Neurosciences (NIMHANS, 2018)* demonstrated that individuals with alcohol use disorder show elevated levels of aggression, impulsivity, and poor emotional regulation compared to non-drinkers.

Alcohol's criminogenic role is explained by its psychopharmacological effects: intoxication reduces self-control, impairs judgment, and increases aggressive responses. Indian researchers have also highlighted social dimensions, such as the prevalence of illicit liquor in rural communities, where intoxication contributes to family violence and community-level disturbances (Chavan & Gupta, 2019). This reinforces the observation that alcohol consumption is not only a public health issue but also a central criminological concern.

Cannabis Use and Offenders

Cannabis has a complex cultural and legal status in India. Bhang, prepared from cannabis leaves, is legally consumed during religious festivals, while ganja and charas remain prohibited under the *Narcotic Drugs and Psychotropic Substances Act, 1985*. National data estimate that about 31 million Indians use cannabis in some form (Government of India, 2019).

Research suggests that cannabis use is linked with deviant peer associations, truancy, and petty crime among adolescents and young adults (Pedersen et al., 2010; Wright & Green, 2010). While cannabis is not as directly associated with violent crime as alcohol, chronic use has been correlated with reduced impulse control, educational failure, and unemployment—all of which increase susceptibility to offending. In India, a large proportion of cannabis-related arrests involve low-level users or small-scale possession cases, contributing significantly to the number of convicted offenders under the NDPS Act (UNODC, 2021).

International Perspectives

International evidence reinforces these patterns. Meta-analyses have consistently shown that alcohol use disorder is one of the strongest predictors of violent offending (Mayer et al., 2023). Cannabis use, though weaker in its direct link, has been associated with higher rates of delinquency and violent perpetration in youth cohorts (Sontate et al., 2021). Tobacco, while rarely considered criminogenic in itself, remains disproportionately prevalent in incarcerated populations, suggesting it as part of a lifestyle linked to risk-taking and social disadvantage (Fazel et al., 2017).

Research Objective

1. To analyze the association between tobacco use and criminal behavior among offenders.
2. To analyze the association between alcohol use and criminal behavior among offenders.
3. To analyze the association between cannabis use and criminal behavior among offenders.

Research Hypotheses

H1: There is a significant relationship between tobacco use and criminal behavior among convicted offenders.
H2: There is a significant relationship between alcohol use and criminal behavior among convicted offenders.
H3: There is a significant relationship between cannabis use and criminal behavior among convicted offenders.

RESEARCH METHODOLOGY

Research Design

The study adopts a **quantitative, descriptive-correlational research design** to examine the relationship between substance use and offending behavior among convicted offenders in India.

Population and Sample

The population comprises convicted offenders from selected legal jurisdictions in India. **Purposive sampling** was used to select participants who met the inclusion criteria. The sample size was 200 convicted offenders to ensure adequate representation.

Inclusion Criteria

- Convicted offenders aged 18 years or above.
- Individuals with a history of tobacco, alcohol, or cannabis use.
- Participants who voluntarily consented to participate in the study.

Exclusion Criteria

- Under-trial prisoners or individuals awaiting conviction.
- Offenders below 18 years of age.
- Individuals with severe psychiatric or neurological disorders that interfere with participation.
- Offenders with no history of substance use.

Data Collection Tools

1. **Structured Questionnaire ASSIST by WHO:** To collect socio-demographic data and substance use patterns (frequency, duration, type).
2. **Self-Reported Substance Use Inventory:** Participants reported their use of tobacco, alcohol, and cannabis, including age of initiation and quantity.
3. **Official Conviction Records:** Reviewed to confirm type of offense and legal history.

Procedure

- Participants were informed about the purpose of the study and provided consent.
- Data were collected individually and in a group through structured interviews, ensuring confidentiality.
- Each interview lasted approximately 30–45 minutes.

Data Analysis

- **Descriptive statistics** (frequency, percentage, mean, standard deviation) were used to summarize socio-demographic characteristics and prevalence of substance use.
- **Inferential statistics** (Chi-square tests, correlation analysis) were applied to examine relationships between substance use and types of criminal behavior.
- Statistical significance was set at $p < 0.05$.

RESULTS

Table. 1 Comparison of OST Scores by Tobacco Use Risk

Comparison of OST Score							
Tobacco	**Descriptives**				**t-test for Equality of Means**		
	N	**Mean**	**SD**	**Std. Error Mean**	**t value**	**df**	**P value**
Lower risk	**37**	**5.16**	**2.141**	**.352**	**3.371**	**198**	**.001**
Moderate risk	**163**	**6.10**	**2.291**	**.258**			

The comparison of OST scores across tobacco use risk levels revealed a statistically significant difference. Individuals classified under the moderate-risk category for tobacco use (N = 163) recorded a higher mean OST score (M = 6.10, SD = 2.291) than those in the lower-risk group (N= 37; M = 5.16, SD = 2.141). An independent samples t-test confirmed the significance of this difference, t(198) = 3.371, p = .001. This suggests that higher tobacco involvement is associated with elevated offender-related risks.

Table 2 Comparison of OST Scores by Alcohol Use Risk

Comparison of OST Score							
Alcohol	**Descriptives**				**t-test for Equality of Means**		
	N	**Mean**	**SD**	**Std. Error Mean**	**t value**	**df**	**P value**
Lower risk	**182**	**5.24**	**3.556**	**.227**	**3.412**	**198**	**.003**
Moderate risk	**18**	**6.78**	**3.766**	**.888**			

A similar pattern was observed for alcohol. Participants in the moderate-risk group (N = 18) reported a higher mean OST score (M = 6.78, SD = 3.766) compared with lower-risk users (N = 182; M = 5.24, SD = 3.556). The independent samples t-test confirmed this difference as statistically significant, t(198) = 3.412, p = .003. These results indicate that moderate-risk

alcohol users demonstrate increased offender-related vulnerabilities relative to lower-risk users.

Table 3 Comparison of OST Scores by Cannabis Use Risk

Comparison of OST Score							
Cannabis	**Descriptives**				**t-test for Equality of Means**		
	N	**Mean**	**SD**	**Std. Error Mean**	**t value**	**df**	**P value**
Lower risk	**179**	**5.19**	**3.132**	**.234**	**2.082**	**198**	**.047**
Moderate risk	**21**	**6.45**	**3.154**	**.688**			

For cannabis, moderate-risk users (N = 21) had a higher mean OST score (M = 6.45, SD = 3.154) compared with lower-risk participants (N = 179; M = 5.19, SD = 3.132). The t-test showed this difference was significant, t(198) = 2.082, p = .047. Although the effect size is smaller, the finding suggests that elevated cannabis use risk corresponds with higher OST scores.

DISCUSSION

The findings of the study consistently demonstrate that higher substance use risk is associated with elevated offender-related vulnerabilities among convicted offenders in India. Moderate-risk users of tobacco, alcohol, and cannabis recorded significantly higher OST scores compared to lower-risk users, suggesting a strong relationship between substance use and criminogenic risk.

For tobacco, moderate-risk users exhibited higher OST scores than lower-risk participants, indicating that while tobacco itself is not directly criminogenic, it may serve as a behavioral marker for risk-prone lifestyles. Tobacco use is often associated with other risky behaviors, stress coping mechanisms, and social environments that can contribute indirectly to criminal behavior.

Alcohol showed the strongest association with OST scores. Moderate-risk alcohol users recorded the highest OST scores among all substances, reflecting the well-documented link between alcohol consumption and aggression, impulsivity, and violent offending. These findings align with research from India and globally, which indicates that alcohol intoxication can exacerbate offender-related risks, making alcohol use a critical factor to address in rehabilitation programs.

Cannabis users in the moderate-risk category also exhibited higher OST scores than lower-risk participants, although the effect was smaller. This suggests that cannabis contributes indirectly to criminal vulnerability, likely through associated social and behavioral risk factors, such as impaired judgment, association with deviant peer groups, or involvement in illegal cultivation and distribution networks.

Overall, the study highlights the importance of incorporating substance use assessment and intervention into offender management. Addressing moderate to high levels of tobacco, alcohol, and cannabis use can not only improve the health and social outcomes of offenders but also reduce criminogenic risk and the likelihood of recidivism. These findings underscore the need for tailored rehabilitation programs that consider substance use patterns as part of comprehensive offender risk assessment and management.

CONCLUSION

The study reveals a clear and consistent relationship between substance use and offender-related vulnerability. Moderate-risk users of tobacco, alcohol, and cannabis scored significantly higher on OST measures compared to lower-risk users, indicating elevated criminogenic risk. Among the three substances, alcohol demonstrated the strongest association with OST scores, followed by cannabis and tobacco.

These results highlight the importance of integrating substance use assessment and intervention into offender rehabilitation programs in India. By targeting moderate- and high-risk substance users, rehabilitation initiatives can effectively reduce offender-related vulnerabilities, improve behavioral outcomes, and potentially decrease recidivism. Addressing substance use within the correctional and rehabilitation framework is therefore crucial for both individual rehabilitation and broader public safety.

REFERENCES

Chavan, B. S., & Gupta, S. (2019). Alcohol use and violence in India: Social and clinical perspectives. *Indian Journal of Social Psychiatry, 35*(2), 45–52.

Fazel, S., Yoon, I. A., & Hayes, A. J. (2017). Substance use disorders in prisoners: A systematic review and meta-analysis. *Addiction, 112*(10), 1725–1739. https://doi.org/10.1111/add.13877

Government of India. (2019). *National survey on extent and pattern of substance use in India*. Ministry of Social Justice and Empowerment & AIIMS.

Mayer, J., Yan, J., Hemingway, H., et al. (2023). Alcohol use disorder as a risk factor for violent offending: A cohort study. *Translational Psychiatry, 13*, 205. https://doi.org/10.1038/s41398-023-02451-8

National Crime Records Bureau. (2022). *Prison statistics India 2021*. Ministry of Home Affairs, Government of India.

National Institute of Mental Health and Neurosciences. (2018). *Alcohol and mental health: Clinical perspectives in India*. Bengaluru: NIMHANS Press.

Pedersen, W., Mastekaasa, A., & Wichstrøm, L. (2010). Cannabis and crime: Findings from a longitudinal study. *Addiction, 105*(1), 109–118. https://doi.org/10.1111/j.1360-0443.2009.02719.x

Sontate, K. V., Rahman, A., & Santora, A. (2021). Cannabis use and delinquency in youth: A longitudinal perspective. *Journal of Adolescent Research, 36*(4), 423–442.

Spaulding, A. C., Eldridge, G. D., Chico, C. E., et al. (2018). Smoking in correctional settings worldwide: Prevalence, bans, and interventions. *Epidemiologic Reviews, 40*(1), 82–95.

Wright, C., & Green, R. (2010). Cannabis use and behavioral problems among adolescents. *International Journal of Adolescent Medicine and Health, 22*(3), 367–374

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Tiwari, V., Sharma, N. & Tiwari, M. (2025). The Relationship Between Substance Use (Tobacco, Alcohol, and Cannabis) and Convicted Offenders. *International Journal of Indian Psychology*, *13*(3), 4327-4333. DIP:18.01.396.20251303, DOI:10.25215/1303.396