

Perceived Psychosocial and Environmental Determinants of Youth Drug Abuse Risk: An Exploratory Factor Analytic Study from Central India

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Abstract

Background: Drug abuse risk by youth is increasingly conceptualized as a psycho-social and environmental behavior and less of isolated individual factors. In most of the studies particularly where direct behavioral investigation is limited the understanding of perceived risk environments provides valued insight into youth drug abuse vulnerability.

Objectives: The objective of this study is to explore latent psychosocial and environmental factors associated with youth drug abuse susceptibility using an exploratory factor analytic approach.

Methods: The cross-sectional survey was administered to parents and community members, positioned to observe youth behavior in the central part of India, with sample of 340. Perception-based indicators related to family context, peer environment, psychological distress, socio-economic stress and media exposure were analyzed using exploratory factor analysis with varimax rotation.

Results: Seven latent dimensions explaining 62.21% of total variance were identified: awareness campaigns, perceived drug-use trends, health and personal skills, regional contextual impact, environmental influence, pessimism and social rejection. Psychological and relational vulnerability dimensions particularly pessimism and social rejection emerged as salient perceived risk components, while awareness campaigns reflected a protective dimension.

Conclusions: Findings of this study suggest that the youth drug abuse susceptibility is perceived as rising from interacting psychosocial, family exposure and environmental factors rather than because of single determinants. Result supports prevention strategies that integrate mental health promotion, social inclusion and environmental risk reduction, consistent with modern addiction-risk frameworks.

Keywords: Youth substance use; perceived risk; exploratory factor analysis; psychosocial vulnerability; India

Introduction:

The drug abuse among the young generation and adolescents characterises a persistent and evolving challenges for public health (Duopah, Moran, Elmusharaf, & Kelly, 2025). The traditional theory and some prior literatures emphasized exposure driven factors like peer influence, social norms and substance reach to youth, the emerging findings indicates that the youth drug abuse is understood as coping factors and identity liked behavioural outcome (Heidari, Zareipour, Mataji-Amirrou, & Mataji-Amirrou, 2025). The early age of adulthood and adolescence are very critical phase which is marked by increased exposure to psychosocial pressures, emotional sensitivity and identity formation (Uktamovna, 2025). During this phase the substance use acts as emotional suppression strategy to regulate negative affect, improve psychological pressures and to manage feelings of uncertainty and inadequacy due to identity crisis (Yilmazer, 2025). Recent research on addiction increasingly surrounds youth substance use as contextually rooted behavior shaped by emotional distress, social belonging and environmental experiences rather than discrete causal factors (Gay, 2025). The literatures emphasize decision-making contexts, perceived norms, psychological susceptibility and environmental exposures as root cause to understand the substance-linked risk associated with youth (Hajaghaie & Haddadi, 2022). Qualitative and quantitative evidence validates that peer influence, perceived social identity, emotional distress and substance availability mutually shape drug-related consumption decisions among young (Byrne, Sani, Thain, Fletcher, & Malaguti, 2024). In this perspective the pessimism and social denial have gained importance as key psychological susceptibility constructs shaping youth substance-use trends (Harris & Weitzman, 2024). Pessimism is characterized by negative future expectations, identity crisis and reduced perceived control which is closely linked to low distress tolerance and reduced coping capacity thus increased dependence on drug abuse as emotional escape (Fazeli, Noury, & Hasani, 2024). In similar context the experiences of social rejection from peers, family members and intimate relationships erode sense of belongingness and interpersonal relations which further increases emotional distress, casual approach and risk-taking behavior (Montecillo, Pejoto, & Moral, 2024). Internalized and evolving life story research further indicates that when young experiences constrained future direction and weakened social connectedness the substance use may become embedded within restricted life constructions (Nguyen, Nguyen, & Nguyen, 2025).

The psychosocial processes are salient characteristics in socioeconomic and regional specific vulnerable parameters (Tong & Zhang, 2024). In fast growing and industrial regions such as central India, youths are frequently exposed to performance pressure,

employment insecurity, economic constraints, weakening family and community support systems (Irvine & Rose, 2024). Despite this, empirical research from non-metropolitan contexts remains limited in most of regions in India (Murthy & Benegal, 2022). Addressing these gaps the present study examines perceived psychosocial and environmental risk factors which are associated with youth drug abuse susceptibility in the central part of India using an exploratory factor analytic (EFA) approach (Hajaghaie & Haddadi, 2022).

Contribution of the Study

This study contributes to the youth drug abuse and addiction literatures by providing multidimensional, psychosocial informed understanding of drug abuse vulnerability (Widyarini & Utama, 2025). Firstly, this study provides a theoretical contribution by integrating psychological, social and environmental domains into a single latent structure thus moving beyond exposure specific or single-factor determinant of youth substance use. Second, this study provides methodological contribution through the use of exploratory factor analysis (EFA) as hypothesis-generating approach thus supplementing the predominantly regression specific literature and supporting construct development in under-researched area (Hajaghaie & Haddadi, 2022). Third, the findings of this empirical study extend in understanding and demonstrating the effect of pessimism and social rejection as core perceived dimensions along with environmental exposures, reinforcing adjustment oriented and environmental frameworks of drug abuse risk. Fourth, the study has practical relevance in highlighting the limitations of “awareness” only controlling strategies and underscoring the importance for interventions that integrates mental health, social inclusion and psychosocial skill development. Finally, the study is focusing on a non-metropolitan, industrial region of central India (Murthy & Benegal, 2022), the study makes population-specific contribution, addressing the underrepresentation of such subset in the global addiction literature and informing context-sensitive controlling and prevention strategies.

Literature Review

Modern study's findings support the conceptualizes adolescent and young-adult drug abuse as multi-factor behavior driven by social exposure, psychological susceptibility and broader contextual disadvantage (Goulbourne, Smith, Obasi, & Reitzel, 2026). Large cohort and epidemiological studies consistently suggest that substance-related behavior is clustered with mental health problems and other risk behavior which supports the integrated risk models rather than single-factor models (Steinhoff, Bechtiger, Ribeaud, Eisner, & Shanahan, 2022). Family members and external environments play important role in shaping youth substance-use trends and behaviour (Best, Irving, & Albertson, 2023). Parental monitoring, emotional warmth and perceived supports acts as protective and controlling factors whereas the family conflicts, weak supervision and social disconnection increase vulnerability (Turjeman, Weintraub, & Berger, 2024). Peer factor remains a robust association of initiation and increase, operating through social learning, normative expectations and identity parameters (Murthy & Benegal, 2022).

The prior literatures reframe youth drug abuse as adjustment-oriented and coping behavior which are driven by psychological susceptibility (Rao, Agrawal, & Ambekar, 2023). Constructs such as pressure intolerance, pessimism, anxiety and depressive symptoms have been linked to drug abuse through regulation paths (Uktamovna, 2025). Complementary life story construction research suggests that constrained future directions and social disconnects and refusal may reinforce exacerbates problems coping strategies along with substance use (Nguyen, Nguyen, & Nguyen, 2025). Environmental and social factors further contribute to risk of drug abuse driving the availability, control and opportunity structures. Youth residing in socioeconomical constrained, disadvantaged region and mounting performance pressures due to rapidly urbanizing regions may face compounded exposure to stressors and substances thus underscoring the need for environmental perspectives (Hajaghaie & Haddadi, 2022). Despite recognising these multidimensional factors there are few studies which have empirically consolidated these domains into latent constructs using factor analytic techniques particularly in non-metropolitan Indian contexts.

3. Methods

3.1 Study design and participants

Cross-sectional exploratory research design was employed in order to explore the perceived psychosocial and environmental risk dimensions which are associated with youth drug abuse susceptibility in central part of India. Response was collected from 340 adult respondents which includes parents and community members who are considered the important observers of youth behavior within their local environment (Cochran, 1993). Participants were considered from both urban and rural areas to ensure contextual heterogeneity and the study was designed to identify latent risk dimensions rather than test causal or predictive hypotheses.

3.2 Instrument for data collection

The response was collected using a structured questionnaire developed from an extensive review of empirical studies on youth substance use considering the psychosocial susceptibility and environmental risk factors. The instrument consists of 31 perception-based items measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Items assessed awareness and prevention exposure, perceived substance-use trends, health, personal skills, regional and environmental factors, pessimism and social rejection. Clarity and content validity was checked using pilot study approach and statistics (Polit, 2006), (Polit D. F., 2007).

3.3 Statistical analysis

Data were analysed using IBM SPSS software. Descriptive statistics were computed to summarise respondent characteristics. Exploratory factor analysis (EFA) was employed to identify latent dimensions underlying youth drug abuse determinants (Kitzinger J., 1994). Principal component analysis with varimax rotation was used for factor extraction. The suitability of the data for EFA was assessed using the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity (Kaiser, 1974). Internal consistency of the extracted factors was evaluated using Cronbach's alpha. Factor retention was guided by eigenvalues greater than one, scree plot inspection, communalities and conceptual interpretability (Field, 2000). Exploratory factor analysis was selected to identify underlying patterns of perceived risk, consistent with hypothesis-generating designs frequently used in addiction and public-health research.

3.4 Conceptual framework

The study was guided by a multidimensional conceptual framework that integrates psychosocial, relational and contextual perceived risk dimensions associated with youth drug abuse vulnerability. Seven latent constructs identified through the literature review were specified as exogenous dimensions: Awareness Campaigns, Drug Use Trends, Health and Personal Skills, Regional Impact, Environmental Influence, Pessimism and Social Rejection. Socio-demographic characteristics, including age, gender, education,

occupation, family type and income, were treated as control variables. The framework conceptualises youth drug abuse as a coping-oriented and contextually embedded phenomenon, shaped by the interaction of individual vulnerabilities, social relationships and environmental exposure.

3.6 Population and research context

The target population comprised adults residing in Central part of India who were socially positioned to observe the influenced youth behaviour, including parents, peers and community members. This approach was considered in order to capture major social and environmental perspectives on youth drug abuse in the region where self-reporting by adolescents is constrained by stigma and ethical considerations. This study adopts exploratory empirical approach focused in identifying key dimensions and developing a context-specific explanatory model for youth drug abuse. Findings are intended to inform prevention strategies, community interventions and future confirmatory research in similar non-metropolitan and industrialising regions.

4. Results and Discussion

4.1 Socio Demographic Profile

The respondents comprised mostly male respondents and are representation of both nuclear and joint family structures. The response collected were from the urban and rural areas having diverse occupational and income groups. This heterogeneity provides broader contextual perspective on youth drug abuse susceptibility.

Table 1: Socio Demographic Profile

Variable	Category	Nuclear n (%)	Joint n (%)	Total n (%)
Gender	Male	143 (77.7)	115 (73.7)	258 (75.9)
	Female	41 (22.3)	41 (26.3)	82 (24.1)
Area	Urban	151 (82.1)	117 (75.0)	268 (78.8)
	Rural	33 (17.9)	39 (25.0)	72 (21.2)
Occupation	Service	138 (75.0)	105 (67.3)	243 (71.5)
	Business	46 (25.0)	51 (32.7)	97 (28.5)
Monthly income (₹)	10,000–20,000	63 (34.2)	48 (30.8)	111 (32.7)
	20,001–30,000	55 (29.9)	55 (35.3)	110 (32.4)
	30,001–40,000	42 (22.8)	46 (29.5)	88 (25.9)
	40,001–50,000	21 (11.4)	4 (2.6)	25 (7.4)
	>50,000	3 (1.6)	3 (1.9)	6 (1.8)
Age (years)	30–40	68 (37.0)	55 (35.3)	123 (36.2)
	41–45	62 (33.7)	57 (36.5)	119 (35.0)
	46–50	50 (27.2)	40 (25.6)	90 (26.5)
	≥51	4 (2.2)	4 (2.6)	8 (2.4)

Chi-square tests indicated statistically significant differences between nuclear and joint family respondents for gender ($\chi^2 = 123.6$, $p < .001$), area ($\chi^2 = 33.5$, $p = .001$), occupation ($\chi^2 = 9.1$, $p = .003$), income ($\chi^2 = 189.8$, $p < .001$) and age group ($\chi^2 = 248.7$, $p < .001$). The socio-demographic profile summarised in Table 1 presents the 340 respondents and segmented by family type. The respondents were predominantly male which comprise 75.9% of total sample having higher proportion of respondents belonging to nuclear families which accounts to 54.2% and joint families representing 45.8%. Most participants are from urban areas which accounts to 78.8%, while approximately 20% were from rural areas. The majority of respondents were employed in the service sector which contributes to 71.5% of the total sample, while others are engaged in business activities. Monthly household income was concentrated in the lower and middle-income brackets nearly two-thirds of respondents reported earnings below ₹30,000 per month. In terms of age the most of the respondents were between 30 and 50 years and the largest representation in the 30 to 40 and 41 to 45 age groups. Building on the socio-demographic profile of the respondents, subsequent analyses focused on identifying the underlying dimensions associated with youth drug abuse across heterogeneous family, occupational and income contexts. Given the observed variation by family type, area of residence and socioeconomic characteristics, exploratory factor analysis was employed to move beyond descriptive comparisons and to uncover latent psychosocial, relational and contextual constructs that cut across demographic subgroups. This approach allowed for a more integrative examination of youth substance-use vulnerability, capturing shared patterns of awareness, environmental exposure, psychological distress and social experiences that are not fully explained by demographic characteristics alone.

4.2 Factorability and reliability of the data

Prior to factor extraction, the suitability of the data for exploratory factor analysis (EFA) was examined. The overall internal consistency of the measurement instrument was high (Cronbach's $\alpha = 0.88$), indicating strong inter-item reliability and conceptual coherence across the scale. Sampling adequacy was confirmed by a Kaiser–Meyer–Olkin (KMO) value of 0.635, exceeding the minimum recommended threshold for factor analysis. Bartlett's test of sphericity was statistically significant (χ^2 , $p < .001$), indicating that the correlation matrix was not an identity matrix and that the variables were sufficiently interrelated to justify factor extraction. Anti-image correlations further confirmed adequate individual item sampling adequacy, supporting the robustness of the analytic approach.

4.3 Factor extraction and variance explained

Exploratory factor analysis was conducted using principal component analysis with varimax rotation. Initial extraction identified eight components with eigenvalues greater than one; however, inspection of communalities, reliability estimates and factor interpretability indicated that a seven-factor solution was more parsimonious and theoretically coherent. The final seven-factor model explained 62.21% of the total variance, exceeding the commonly accepted threshold for behavioural and psychosocial research and aligning with methodological standards frequently.

The first factor accounted for the largest proportion of variance (22.03%), indicating a dominant latent dimension, while the remaining factors contributed incrementally meaningful variance, reflecting the multidimensional structure of youth drug-use vulnerability. The close correspondence between initial eigenvalues and extraction sums of squared loadings suggested minimal loss of explanatory

power during factor extraction. Visual inspection of the scree plot further supported the retention of seven factors, with a clear inflection point observed after the seventh component.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.048	22.026	22.026	7.048	22.026	22.026
2	4.021	12.565	34.591	4.021	12.565	34.591
3	2.471	7.721	42.311	2.471	7.721	42.311
4	1.724	5.388	47.699	1.724	5.388	47.699
5	1.284	4.011	51.710	1.284	4.011	51.710
6	1.219	3.810	55.520	1.219	3.810	55.520
7	1.119	3.496	59.015	1.119	3.496	59.015
8	1.024	3.199	62.214	1.024	3.199	62.214

Extraction Method: Principal Component Analysis.

The Scree-Plot shown in figure-1 below further supported the number of components investigated using exploratory factor analysis. There are 8 numbers of factors that must be kept, according to the graph of the eigen values, since the curve flattens beyond point 8 while looking for the natural bend of the graph. (Velicer & Jackson, 1990). The Rotated Component Matrix is used to assess the factors found using PCA and group statements. Because there is just one statement with a dependability of 0.766 and a very low communality for the eighth element, this statement is eliminated. The reliability and internal consistency of all 31 claims are assessed using the Cronbach's Alpha test utilising a 7-factor grouping. The loadings of the seven retrieved discovered factors are displayed in the Rotated Component Matrix table below. Greater the absolute amount of the loading, the more the component contributing to the detected variables. The loading is muted if it is less than 0.4.

4.3 Rotated factor structure and interpretation

The rotated component matrix demonstrated a well-defined and conceptually coherent factor structure, with all retained items exhibiting salient loadings (≥ 0.40) on their respective factors and minimal cross-loadings, indicating strong construct discrimination. One item initially loading on an eighth component showed low communality and limited interpretability and was therefore removed to enhance conceptual clarity and internal consistency. The final seven-factor solution showed satisfactory to high internal reliability, with Cronbach's alpha coefficients ranging from 0.75 to 0.88, supporting the stability and robustness of the extracted dimensions (Marsh, 1990).

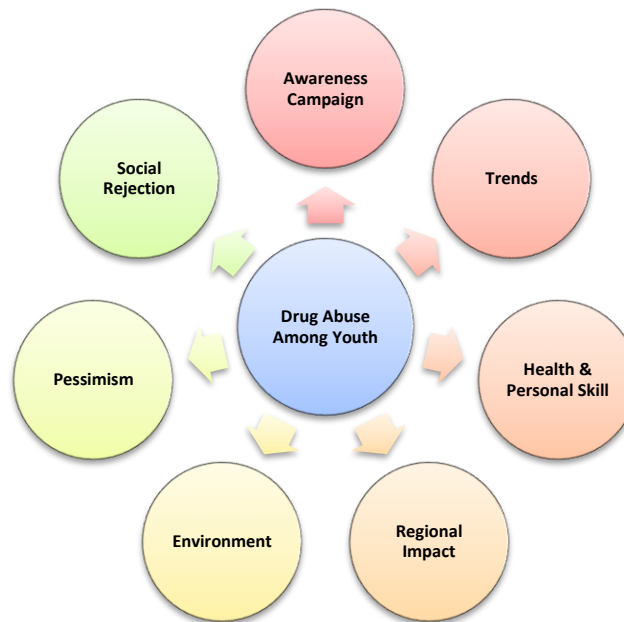
The retained factors represented distinct yet interrelated domains of youth substance-use vulnerability, encompassing Awareness Campaigns, Drug Use Trends, Health and Personal Skills, Regional Impact, Environmental Influence, Pessimism and Social Rejection. Factors related to pessimism and social rejection captured core psychological and relational vulnerability processes, consistent with coping-oriented models of substance use, whereas environmental and regional factors reflected broader contextual and exposure-based risks. In contrast, awareness campaigns emerged as a protective dimension, underscoring the potential mitigating role of prevention initiatives and access to treatment resources. Collectively, the factor structure supports a multidimensional conceptualisation of youth drug abuse that integrates psychosocial vulnerability, relational context and environmental reinforcement mechanisms, consistent with contemporary frameworks in addiction research.

Table 3: Rotated Component Matrix

Item (abbreviated)	AC	TR	HP	RI	ENV	PES	SR
School/college awareness programs effective	0.72	–	–	–	–	–	–
Parental initiatives effective	0.73	–	–	–	–	–	–
NGO/government campaigns helpful	0.67	–	–	–	–	–	–
Drug use among youth has increased	–	0.68	–	–	–	–	–
Increase in alcohol use among youth	–	0.64	–	–	–	–	–
Increase in inhalant use among youth	–	0.69	–	–	–	–	–
Poor personal skills contribute to drug use	–	–	0.90	–	–	–	–
Illness contributes to drug use	–	–	0.91	–	–	–	–
Urban youth more addicted	–	–	–	0.80	–	–	–
Drug addiction linked to crime	–	–	–	0.66	–	–	–
Friends influence drug use	–	–	–	–	0.69	–	–
Easy availability of drugs	–	–	–	–	0.56	–	–
Poverty contributes to drug use	–	–	–	–	–	0.77	–
Job dissatisfaction contributes	–	–	–	–	–	0.57	–
Rejection from friends	–	–	–	–	–	–	0.85
Rejection from family/partners	–	–	–	–	–	–	0.81

AC = Awareness Campaigns; TR = Drug Use Trends; HP = Health & Personal Skills; RI = Regional Impact; ENV = Environmental Influence; PES = Pessimism; SR = Social Rejection.
Only loadings ≥ 0.40 are reported to enhance interpretability.

Figure 1: Conceptual Model for prevalence of drug abuse among students



Seven variables for the prevalence of drug misuse among adolescents in the state of Chhattisgarh have been identified (Sunil Kumar, 2022). The statistical analytic method used to analyse the data and create the conceptual model above employing 31 constructs or statements. Seven variables are investigated by EFA analysis employing 31 constructs or statements: Campaign for Public Awareness (AC), Trends (TR), Personal Development (HP), Regional Impact (RI), Environment (E), Pessimism (P) and Social Rejection (SR) (See Figure 2).

5. Discussion

This study helps in identifying perceived psychosocial and environmental dimensions rather than causal determinants of youth drug abuse. The findings support the multi-factor and adjustment-oriented conceptualization of drug abuse susceptibility which is consistent with contemporary addiction frameworks as generalised by (Byrne, Sani, Thain, Fletcher, & Malaguti, 2024). Pessimism and social rejection emerged as an important psychological and social susceptibility determinants similar findings were observed by (Gay, 2025). These explored factors align with evidence connected to negative future directions, emotional distress and social disconnection to increased dependence on substances for self-regulation similar factors were explored by (Goulbourne, Smith, Obasi, & Reitzel, 2026) (Uktamovna, 2025). Environmental and regional factors underscore the importance of social exposure, availability and normalization processes while health and personal skills reflect adjusting capacity and self-regulation as similar findings were observed by (Hajaghaie & Haddadi, 2022).

In contrast the awareness campaigns functioned as a protective dimension which suggests that prevention initiatives may reduce perceived risk when clubbed with supportive social and community contexts same suggestion was given by (Rao, Agrawal, & Ambekar, 2023). Thus, the findings of this study emphasize the need for integrated prevention strategies that address emotional regulation, social inclusion and environmental risk as same was suggested (Hajaghaie & Haddadi, 2022).

6. Implications for Policy Implementation

The findings suggest that the effective prevention of youth drug abuse requires integrated, multi-factor, multi-level strategies that move beyond awareness focused interventions. Practice based orientation and efforts should be prioritised for the development of psychosocial and coping skills, particularly pessimism, emotional regulation and stress management targeting the wellbeing of youth. Family oriented approaches that strengthen pressure buffer, communication, emotional support and social inclusion may help to mitigate the effects of social rejection and relational disconnection (Uktamovna, 2025). At the community level the prevention and control initiatives should address peer effects and substance availability through coordinated school and neighbourhood-based programmes. From policy framework perspectives the awareness campaigns should be clubbed with broad mental health and social support systems rather than standalone initiatives. Region-specific policies that support the access to counselling, early intervention and community supported treatment resources may be particularly effective in industrial, fast growing and socioeconomically vulnerable environment.

7. Conclusion

This study provides insights through empirical evidence that youth drug abuse is a multifactor process which are driven by psychological susceptibility, relational involvements and environmental framework. The identification of pessimism and social rejection as key dimensions emphasizes the importance of considering drug use as coping-oriented response to emotional distress and social disconnection rather than merely as a consequence of exposure similar findings observed (Uktamovna, 2025). The integration of psychosocial, environmental and protective factors into a single explanatory framework, this study contributes to a more nascent understanding of youth's vulnerability towards substances in non-metropolitan regions of India (Murthy & Benegal, 2022). These insights can inform the design of targeted prevention and intervention strategies that are sensitive to both individual and contextual risk processes.

8. Limitations and future research

This study is with certain limitations, which will help to guide for future research directions in the same or similar areas. The cross-sectional design and dependence on reported perceptions exclude causal inference. This study does not include the drug use behavior

directly rather considers the perceived risks which are consistent with exploratory and hypothesis approaches. As demonstrated in prior research such perception-based analyses provide valuable insight but should be supplemented by longitudinal and behavioural studies in future research.

CRedit authorship contribution statement

Sunil Kumar: Writing-review & editing, Writing-original draft, Validation, Supervision. **Sushma Singh:** Writing-review & editing, Writing-original draft, Resources, Conceptualization. **Abhishek Chakraborty:** Writing-review & editing, Visualization, Methodology, Formal analysis. Validation, Software, Data curation.

Ethical Approval: Publicly available secondary data is considered for the study.

Funding: No grant or funding received.

Declaration : All authors declare that they have no conflicts of interest.

Declarations of AI Tools: The generative artificial intelligence tools (ChatGPT by OpenAI) were used solely for language refinement, grammatical editing of the manuscript.

References

1. Best, D., Irving, J., & Albertson, K. (2023). Recovery capital and social identity: The role of social networks in addiction recovery. *Current Opinion in Psychology*, 51, 101576.
2. Byrne, C. J., Sani, F., Thain, D., Fletcher, E. H., & Malaguti, A. (2024). Psychosocial factors associated with overdose subsequent to Illicit Drug use: a systematic review and narrative synthesis. *Harm reduction journal*, 21(1), 81.
3. Cochran, W. G. (1993). *Sampling Techniques* (Second ed.). New York: John Wiley & Sons, Inc.
4. Duopah, Y. A., Moran, L., Elmusharaf, K., & Kelly, D. (2025). Illicit drug use in Limerick City: a stakeholder and policy analysis using multiple streams model. *The International Journal of Health Planning and Management*, 40(1), 86-107.
5. Fazeli, H. R., Noury, A. G., & Hasani, J. (2024). Craving, distress tolerance, emotion dysregulation, and experiential avoidance among patients in early recovery from opioid use disorder in residential programs. *Journal of Substance Use*, 29(3), 369-375.
6. Field, A. (2000). Comparing several means: ANOVA (GLM 1) 1st ed., London. In F. A, *Discovering Statistics Using SPSS for Windows*, (1st ed., pp. 243-294). London: SAGE Publications Ltd.
7. Gay, M. (2025). Reconstructing the final narrative: how psychological autopsies reconstruct the final narratives of youth across diverse sociocultural context. *Vulnerable Children and Youth Studies*, 1-24.
8. Goulbourne, T. D., Smith, N. G., Obasi, E. M., & Reitzel, L. R. (2026). The indirect effects of discrimination on substance use in bisexual adults through internalized binegativity, concealment, and distress tolerance. *Addictive Behaviors Reports*, 23, 1-8.
9. Hajaghaie, E., & Haddadi, A. (2022). Mental Health Among Men Who Have Sex with Men Under the Influence of Psychoactive Substances: a Systematic Review. *The role of biological differences in sexual self-concept and mental health in homosexual and heterosexual women*, 4(2), 120-138.
10. Harris, N. A., & Weitzman, E. R. (2024). Intensifying substance use trends among youth: A narrative review of recent trends and implications. *Current Psychiatry Reports*, 26(12), 822-831.
11. Heidari, M., Zareipour, M., Mataji-Amirrou, M., & Mataji-Amirrou, M. (2025). Exploring Peer Influence: A Phenomenological Analysis of Adolescent Propensities for Association with Deviant Peers and Substance Use. *Deviant Behavior*, 1-23.
12. Irvine, A., & Rose, N. (2024). How does precarious employment affect mental health? A scoping review and thematic synthesis of qualitative evidence from western economies. *Work, Employment and Society*, 38(2), 418-441.
13. Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.
14. Kitzinger, J. (1994). The methodology of focus groups: the importance of interaction between research participants. *Sociology of health & illness*, 16(1), 103-121.
15. Marsh, H. (1990). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review*, 2, 77-172.
16. Montecillo, M. J., Pejoto, J. L., & Moral, R. V. (2024). Belongingness matters: A qualitative exploration of peer acceptance and rejection among high school students. *Eureka: Journal of Educational Research*, 3(1), 93-100.
17. Murthy, P., & Benegal, V. (2022). Substance use disorders in India: Current status and future challenges. *Indian Journal of Psychiatry*, 64(S2), S257-S264.
18. Nguyen, K. V., Nguyen, M. V., & Nguyen, T. H. (2025). Investigating the impact of internal organizational communication on mental ill health: the role of employees' sense of belonging. *Engineering, Construction and Architectural Management*, 1-21.
19. Polit, D. F. (2006). The content validity index: are you sure you know what's being reported? Critique and recommendations. *Research in nursing & health*, 29(5), 489-497.
20. Polit, D. F. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in nursing & health*, 30(4), 459-467.
21. Rao, R., Agrawal, A., & Ambekar, A. (2023). Youth substance use in India: Epidemiology, psychosocial correlates, and policy implications. *Indian Journal of Social Psychiatry*, 39(3), 161-169.
22. Steinhoff, A., Bechtiger, L., Ribeaud, D., Eisner, M., & Shanahan, L. (2022). Patterns of polysubstance use from adolescence to young adulthood: A population-based cohort study. *Addictive Behaviors*, 126.
23. Sunil Kumar, S. G. (2022). Post Covid Trends on Behavioural Finance: A Bicliometric Analysis. *Education and Society*, 71-79.
24. Tong, R., & Zhang, B. (2024). Cumulative risk assessment for combinations of environmental and psychosocial stressors: A systematic review. *Integrated Environmental Assessment and Management*, 20(3), 602-615.
25. Turjeman, Y. L., Weintraub, N., & Berger, I. (2024). Psychological distress and coping among young adults: Implications for substance-use vulnerability. *Frontiers in Psychology*, 15, 1298846.
26. Uktamovna, R. Z. (2025). The transformative journey of adolescence: a study of the physical, cognitive, emotional, and social changes during the teenage years. *Spanish Journal of Innovation and Integrity*, 39, 169-172.
27. Velicer, W., & Jackson, D. (1990). Component Analysis Versus Common Factor-Analysis - Some Further Observations. *Multivariate Behavioral Research*, 25(1), 97-114.
28. Widayarni, N., & Utama, J. S. (2025). Risk and Protective Factors in Substance Abuse: Systematic Literature Review. *Personifikasi: Jurnal Ilmu Psikologi*, 16(1), 99-125.
29. Yilmazer, E. (2025). Emotion Regulation in Clinical Populations: Mechanisms, Challenges, and Therapeutic Interventions. *Current Research in Social Sciences*, 11(1), 1-38.