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RELATIONSHIP BETWEEN FAMILY DYSFUNCTIONING, SELF-ESTEEM AND SUBSTANCE ABUSE IN ADULTS

Original Research

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ABSTRACT

Background: Substance abuse is a growing public health concern, particularly in developing countries where young adults represent a significant portion of the population. Psychological and familial factors such as self-esteem and family functioning have been increasingly recognized as influential in substance use behavior. However, limited regional studies exist that explore these dynamics in the adult population of semi-urban areas in Pakistan, including Okara, where substance abuse trends are rising among youth and adult groups.

Objective: This study aimed to examine the relationship between family dysfunction, self-esteem, and substance abuse in adults, and to determine whether family functioning and self-esteem could significantly predict substance abuse levels.

Methods: A total of 220 participants (192 men and 28 women), aged between 18 and 44 years (M = 24.04, SD = 4.78), were recruited using non-probability random sampling from public locations and university settings in Okara, Pakistan. Data were collected using a demographic sheet, the Family Functioning Index Scale, the Rosenberg Self-Esteem Scale, and the Drug Abuse Screening Test. Statistical analysis included Pearson product-moment correlation, linear regression, and independent t-tests.

Results: Substance abuse showed a significant negative correlation with both family functioning ($r = -0.47$, $p < 0.01$) and self-esteem ($r = -0.21$, $p < 0.01$). A positive correlation was found between family functioning and self-esteem ($r = 0.31$, $p < 0.01$). Regression analysis revealed that family functioning ($\beta = -0.47$, $p < 0.001$) and self-esteem ($\beta = -0.218$, $p < 0.001$) significantly predicted substance abuse. Gender comparison showed a significant difference in self-esteem between men and women ($t(217) = -4.52$, CI [-7.76, -3.05], $p < 0.001$), with women reporting higher self-esteem.

Conclusion: The study emphasizes the importance of fostering healthy family dynamics and promoting self-esteem as preventative measures against substance abuse. Findings support the development of policy-driven mental health and family-strengthening programs aimed at adults in similar populations.

Keywords: Adults, Family Relations, Gender Identity, Mental Health, Self Concept, Substance-Related Disorders, Young Adults

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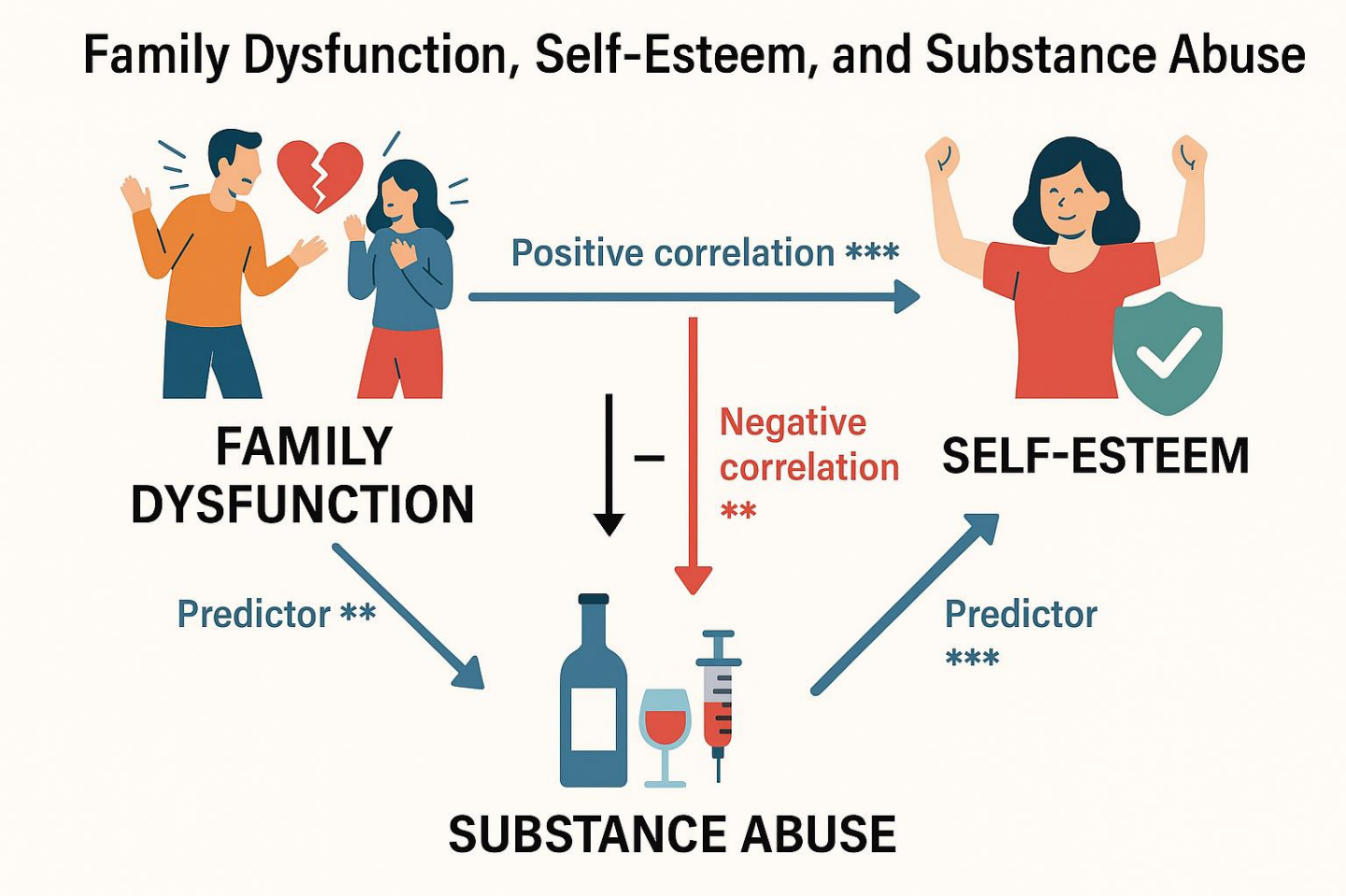

INTRODUCTION

The development of an individual begins within the family, which acts as the primary social environment where foundational emotional, behavioral, and psychological patterns are established. As children grow, they face critical developmental challenges—learning physical skills, forming emotional bonds, building trust, and cultivating a sense of identity. These milestones require consistent emotional availability and support from caregivers. In the absence of such support, children may experience feelings of neglect, emotional instability, and psychological insecurity (1). Family dysfunction as recurring unhealthy patterns of behavior, communication, or interaction that hinder the emotional and psychological growth of its members. When families are unable to function as nurturing environments due to internal conflicts, neglect, or unresolved trauma, children may grow up without the stability necessary for healthy self-perception and emotional resilience (2). A nurturing home environment lays the groundwork for the development of self-esteem, which encompasses an individual's thoughts and feelings about their own value and abilities (3,4). Self-esteem plays a pivotal role in mental well-being and adaptive social behavior. Individuals with high self-esteem are more likely to engage in healthy relationships and problem-solving behaviors, while those with low self-esteem are prone to insecurity, fear of failure, and social withdrawal (5,6). Parental involvement and family climate significantly influence this aspect of development. Dysfunctional families often fail to provide the acceptance, emotional validation, and security children need to form positive self-worth. Consequently, individuals from such backgrounds may internalize feelings of unworthiness and develop long-standing issues with self-image (7).

The interplay between family dysfunction and mental health becomes even more complex when substance use is introduced as a coping mechanism. According to Marlatt and Gordon (8), substance use involves the consumption of mood-altering substances and often

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emerges as a maladaptive response to psychological distress. Research shows that individuals with family histories marked by dysfunction, abuse, or neglect are at a heightened risk of substance misuse (9,10). Such environments often expose children to chronic stress, interpersonal violence, or emotional abandonment, all of which are known risk factors for substance use disorders (11). In Pakistan, data collected in collaboration with the UNODC revealed that over four million individuals were struggling with drug misuse as of 2013, highlighting the extent of this public health crisis (12). Theoretical perspectives suggest that a child's self-concept, shaped within the family, significantly influences their behavioral choices and emotional regulation (13). Children from nurturing homes learn values such as empathy, patience, and emotional control. In contrast, those from dysfunctional homes often lack emotional regulation skills and may engage in impulsive or risky behaviors, including early substance use (14,15). Studies also link low self-esteem with an increased likelihood of engaging in deviant behaviors such as substance abuse, especially among emerging adults—a period characterized by increased exposure to social pressures and experimentation (16,17).

Gender differences further complicate the issue, with evidence indicating that males with low self-esteem are more likely to use substances as a way to cope with feelings of inadequacy and social rejection (18,19). Similarly, children with learning or developmental challenges face heightened vulnerability due to repeated social comparison and marginalization (20). Research also points to a bidirectional influence—just as family dysfunction can lower self-esteem and promote substance use, substance use can further degrade self-esteem and worsen family dynamics (21). In summary, the existing literature consistently demonstrates a strong association between dysfunctional family environments, diminished self-esteem, and increased susceptibility to substance use. Although many factors contribute to substance use, including genetic predisposition, peer influence, and socio-environmental stressors, the role of the family remains a foundational determinant. Individuals raised in dysfunctional families often seek emotional regulation through substances, perpetuating a cycle of dependency and psychological distress. Therefore, this study aims to explore the relationship between family dysfunction and substance use among adults. It further seeks to examine whether self-esteem and family dysfunction can act as predictors of substance use, providing insight into the psychological mechanisms that underlie this complex relationship.

METHODS

This study employed a quantitative, correlational research design to examine the relationships between family dysfunction, self-esteem, and substance use among adults. The choice of design was grounded in its suitability for identifying associations among psychological and behavioral variables without manipulation, providing a framework to understand patterns of interaction between the constructs under investigation. The target population consisted of adults aged between 18 and 40 years, reflecting the critical developmental span where identity formation, emotional regulation, and vulnerability to substance use intersect. This age group was selected due to evidence indicating a higher prevalence of psychological distress and substance-related experimentation during these years. A total of 220 participants were recruited using purposive sampling, ensuring alignment with the study's inclusion criteria—age between 18 and 40 years, and willingness to participate. Individuals with known physical impairments or diagnosed psychiatric disorders were excluded to minimize confounding effects that could compromise the validity of psychological assessments. Participants were drawn from two primary sources: the University of Okara (n = 105) and the surrounding community population (n = 115). This sampling strategy allowed for the inclusion of both academic and non-academic individuals to increase the representativeness of the sample within the defined age range. Data collection was facilitated through a self-administered questionnaire comprising standardized, closed-ended instruments. The first section captured demographic details including age, gender, education, occupation, religion, and marital status. To assess family functioning, the Family Functioning Index (FFI) was used. This 15-item scale evaluates nuclear family dynamics such as emotional warmth, communication, and cohesion. Scores range from 0 to 10, with higher scores indicating healthier family environments. Prior validation studies report satisfactory reliability, with Cronbach's alpha coefficients typically above 0.80.

Self-esteem was measured using the Rosenberg Self-Esteem Scale (RSES), a widely validated 10-item instrument. Scores between 0–15 indicated low self-esteem, while 26–30 indicated high self-esteem. The RSES has demonstrated strong internal consistency ($\alpha = 0.77$) and a reproducibility coefficient of 0.90 across diverse populations. Substance use was assessed through the Drug Abuse Screening Test (DAST-10). This 10-item scale screens for the presence and severity of problems associated with drug use, excluding alcohol and tobacco. Scores of 0–2 indicated no or low risk, while scores of 9–10 reflected high severity requiring clinical intervention. The scale has been shown to have excellent internal reliability ($\alpha = 0.93$). Data were collected in structured settings to ensure uniform administration. For participants with limited literacy, clarifications were provided without altering the meaning of questions. Completion time for each questionnaire ranged from 10 to 15 minutes. All responses were anonymized to protect participant privacy. To ensure ethical compliance, prior permission was obtained from institutional authorities, and informed consent was secured from all participants. They were informed about the study's objectives, their rights to withdraw at any time, and the confidentiality of their responses. Participation was entirely voluntary, and no incentives were provided. Although individuals aged 18 to 40 years were included, a greater proportion of responses came from those aged 18 to 26, which reflects the demographic composition of the university-based recruitment setting. This emphasis on younger adults is acknowledged as a characteristic of the sample but does not conflict with the predefined eligibility criteria. Future research may aim for stratified sampling to ensure proportional representation across the full 18–40 age range. The study adhered strictly to ethical standards for research involving human subjects. Approval was obtained from an institutional review board (IRB), and all procedures were carried out in accordance with international research ethics guidelines. Participants were

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debriefed post-survey and provided with referrals for psychological support services, if needed. In summary, this methodology ensured valid, reliable, and ethically sound data collection, utilizing well-established tools to investigate the association between family dysfunction, self-esteem, and substance use in a defined adult population.

RESULTS

The study comprised 220 participants with a mean age of 24.04 years (SD = 4.78). Of the total sample, 87.3% were men and 12.7% were women. Regarding socioeconomic status, 51.4% of the participants were from middle-class backgrounds, 30.9% from lower-class, and 17.7% from upper-class families. In terms of educational status, 56.8% of the participants were educated, while 43.2% were uneducated. Descriptive statistics and reliability analysis demonstrated acceptable internal consistency across all scales used. The Self-Esteem Scale presented a Cronbach's alpha of 0.60, the Family Functioning Index showed a reliability coefficient of 0.79, and the Drug Abuse Screening Test (DAST-10) reported an alpha of 0.77, confirming all tools were suitable for the assessment of the study variables. Correlation analysis revealed statistically significant relationships among family functioning, self-esteem, and substance abuse. A positive correlation was found between family functioning and self-esteem ($r = .31$, $p < .01$), indicating that participants with better family environments had higher self-esteem levels. A significant negative correlation was observed between family functioning and substance abuse ($r = -.47$, $p < .01$), suggesting that healthier family dynamics were associated with reduced substance use. Furthermore, self-esteem was negatively correlated with substance abuse ($r = -.21$, $p < .01$), indicating that individuals with higher self-esteem were less likely to engage in substance abuse.

To further examine predictive relationships, linear regression analysis was conducted. Family dysfunction was found to be a significant negative predictor of substance abuse ($\beta = -0.474$, $p < .001$), explaining 22.4% of the variance in substance abuse scores ($R^2 = 0.224$, $F = 62.4$, $p < .001$). Similarly, self-esteem also emerged as a significant predictor of substance abuse ($\beta = -0.218$, $p < .001$), accounting for 14% of the variance ($R^2 = 0.224$, $F = 10.7$, $p < .001$). These findings support the hypothesis that both poor family functioning and low self-esteem contribute to increased substance use in adults. A gender-wise comparison of the main variables was also performed. The results indicated no statistically significant gender differences in family dysfunction or substance abuse scores. However, a significant difference was observed in self-esteem, where women reported notably higher self-esteem scores ($M = 23.32$, $SD = 12.09$) compared to men ($M = 17.91$, $SD = 4.37$), $t(217) = -4.52$, $p < .001$. The effect size for this difference was large (Cohen's $d = 5.90$), indicating a meaningful variation in self-esteem levels between genders.

Table: Descriptive Statistics of the Study Variable (N=220)

Variables	F	%	M	SD
AGE			24.04	4.78
Gender				
Men	198	87.3		
Women	28	12.7		
Socio economic status			5.48	.29
Lower class	68	30.9		
Middle class	113	51.4		
Upper class	39	17.7		
Education				
Educated	125	56.8		
Uneducated	95	43.2		

Note: f= Frequency, %= Percentage, M=Mean, SD=Standard Deviation

Table: Descriptive statistics and Cronbach's Alpha of Study scales

Scales	N	M	SD	α	Kurtosis	Skewness	Ranges Actual/Potential
Self Esteem scale	10	18.70	6.06	.60	18.96	3.160	56,57
Family Function information scale	5	6.86	2.8	.79	-.562	-.698	10, 10

Drug Abuse screen test	10	4.0	2.80	.77	-1.048	.314	10, 10

Note: N=No. of items, M=Means, SD=Standard Deviation, α Cronbach's alpha

Table: Pearson Product Moment Correlation among family dysfunctioning, self Esteem and substance abuse (N=220)

Measures	1	2	3
FD	-	-	-
SE	.31**	-	-
SA	-.47**	-.21**	-

**p<.01

Table: Linear Regression on family dysfunctioning as Predictors of substance abuse (N=220)

	B	B	SE	R2	F
Constant	7.27		.446	.224	62.4
Family Dysfunctioning	-.47	-.474	.060		

Note: B=Unstandardized beta, □= Standardized Beta, SE-Standard error; ***p<.001

Table: Linear Regression on Self Esteem as Predictors of substance abuse (N=220)

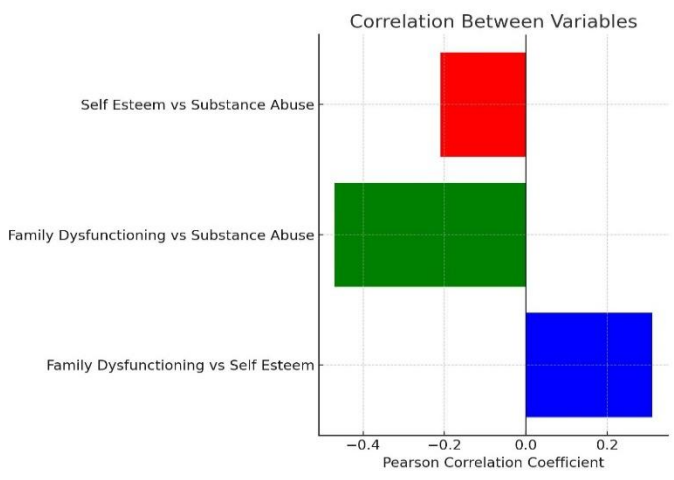
	B	B	SE	R2	F
Constant	5.85		.591	.224	10.7
Self Esteem	-.09	-.218	.030		

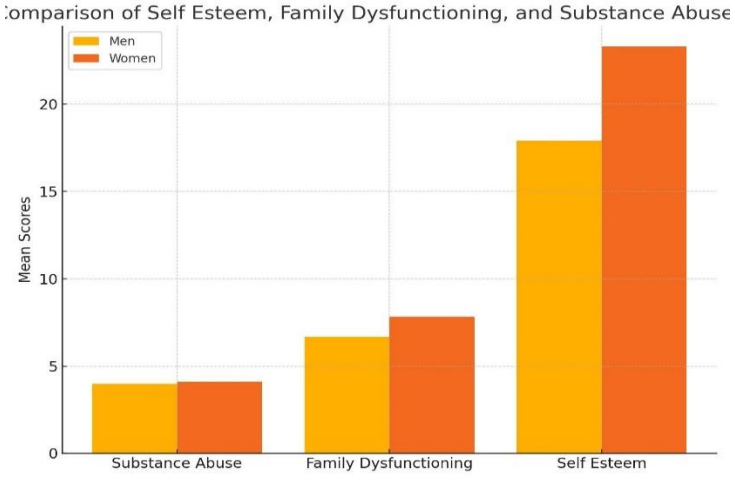
Note: B=Unstandardized beta, □= Standardized Beta, SE-Standard error; ***p<.001

Table: Mean Comparison of Gender on Family dysfunctioning, Self Esteem and Substance Abuse

Measures	Men		Women				
	(n=192)		(n= 28)				Cohen's D
	M	SD	M	SD	T (217)	P	
SA	3.99	2.8	4.10	2.72	-.19	.93	2.81
FD	6.68	2.86	7.82	2.40	-1.96	.30	2.81
SE	17.91	4.37	23.32	12.09	-4.52	.00	5.90

Note: CI=Confidence Interval, LL= Lower Limit, UL= Upper limit, ***p<.001





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DISCUSSION

The findings of the present study highlighted significant associations among family dysfunction, self-esteem, and substance abuse in adults, aligning with a growing body of literature that recognizes the role of familial and psychological factors in shaping behavioral outcomes. The negative correlation between family functioning and substance abuse indicated that individuals from more cohesive and supportive family environments were less likely to engage in drug use. This association confirms earlier observations that dysfunctional family patterns—marked by poor communication, emotional neglect, or unresolved conflict—contribute to emotional distress and increased susceptibility to maladaptive coping behaviors such as substance abuse (16,17). A significant inverse relationship was also observed between self-esteem and substance abuse, indicating that individuals with higher self-worth and confidence reported lower levels of drug use. This reinforces previous studies suggesting that low self-esteem acts as a psychological vulnerability, increasing the likelihood of turning to substances for emotional relief, especially during distressing or socially challenging situations (18,19). The study further validated the hypothesis that higher family functioning positively correlates with higher self-esteem, emphasizing the protective role of a stable familial environment in fostering psychological resilience. Gender-based analysis revealed that women demonstrated significantly higher self-esteem scores than men, although no meaningful gender differences were found in substance use or family dysfunction scores. This observation resonates with earlier reports that men are more likely to suppress emotional vulnerabilities and resort to substances as coping mechanisms in response to low self-worth (20,21). These results underscore the importance of adopting gender-responsive approaches when designing preventive or therapeutic interventions. The strengths of the study lie in its focus on a relatively under-researched region of Pakistan and its use of standardized, psychometrically validated tools to measure the core variables. By examining a sample from the Okara region, the study contributed to addressing a critical research gap and offered context-specific insights into psychological and behavioral health patterns in young adults. However, several limitations merit consideration. The cross-sectional and correlational nature of the study restricts the ability to infer causality among variables. Although strong associations were established, the directionality and potential temporal shifts in these relationships remain unexplored. A longitudinal or experimental design would be more effective in capturing developmental changes and cause-effect dynamics over time.

The study was also constrained by its limited geographical scope and sample size. With only 220 participants, primarily from a single district, the generalizability of findings to the wider population remains limited. Future research should involve larger, multi-site samples across diverse urban and rural areas in Pakistan to ensure broader representativeness. Moreover, the influence of potential confounding variables—such as age, education level, and socioeconomic status—was not controlled during analysis. These demographic factors may have moderated or influenced the relationships among the core variables, possibly affecting the accuracy of the findings. Incorporating multivariate models or stratified sampling techniques in future investigations could provide greater clarity. Another important limitation relates to the exclusive reliance on quantitative methods. Although standardized tools allow for efficient data collection and statistical analysis, self-reported measures are susceptible to social desirability bias and may not capture the depth and nuance of participants' experiences. Incorporating qualitative approaches such as in-depth interviews or focus groups in future studies would enrich the understanding of how individuals internalize family dysfunction and cope with low self-esteem in relation to substance use. The study offers meaningful implications for intervention and prevention efforts. Strengthening family support systems, promoting open communication, and addressing intergenerational patterns of dysfunction could serve as preventive buffers against drug use. Equally important is the implementation of self-esteem enhancement programs within academic institutions, rehabilitation centers, and community health settings. Such initiatives may be particularly beneficial for male populations, who appear to exhibit lower self-worth and may be more prone to self-medication with substances. Further research should also explore culturally sensitive and age-appropriate interventions, especially given the sociocultural complexity of substance use in Pakistan. Examining the influence of religiosity, social stigma, and peer pressure within specific age groups or ethnic communities could provide more targeted and effective solutions (22). In conclusion, the study confirmed that both family functioning and self-esteem are significant predictors of substance abuse among adults. Addressing dysfunction within the family system and fostering positive self-perception emerge as essential strategies in curbing the rising tide of substance abuse in young populations. The integration of these psychological and social dimensions into national prevention programs could significantly enhance the efficacy of drug rehabilitation and prevention efforts in Pakistan.

CONCLUSION

The present study concluded that family dysfunction and low self-esteem are significantly linked to higher substance abuse among adults, underscoring the importance of emotional and familial stability in promoting healthier behavioral outcomes. By examining this relationship in the context of Okara, the research highlights the pressing need to address psychosocial factors that contribute to addiction in vulnerable populations. The findings emphasize that while negative emotional states have long been associated with substance use, it is equally vital to foster positive emotional well-being and family cohesion as protective factors. Furthermore, the observed gender difference in self-esteem points to the need for tailored interventions. These insights call for urgent attention from policymakers and mental health professionals to develop community-based strategies and public health initiatives aimed at strengthening self-worth and family support systems to curb the rising trend of substance abuse among young adults.

AUTHOR CONTRIBUTIONS

Author	Contribution
Saba Younas	Conceptualization, Methodology, Formal Analysis, Writing - Original Draft, Validation, Supervision
Ayesha Jabbar	Methodology, Investigation, Data Curation, Writing - Review & Editing
Sameen Sadaqat	Investigation, Data Curation, Formal Analysis, Software
M. Abdullah	Software, Validation, Writing - Original Draft
Tauseef Ahmad	Formal Analysis, Writing - Review & Editing
Amina Ashiq	Writing - Review & Editing, Assistance with Data Curation
Muhammad Umair Waheed	Investigation, Data Curation, Formal Analysis, Software
Sana Noor Ul Meen	Software, Validation, Writing - Original Draft
Zunaira Abdul Malik	Formal Analysis, Writing - Review & Editing
Fatima Saeed	Writing - Review & Editing, Assistance with Data Curation

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