

The Intersection of Personality and Substance Dependence: A Five-Factor Model Exploration of Alcohol and Opioid Dependence

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ABSTRACT

Background: Substance dependence significantly impacts an individual's psychological and social functioning. Understanding personality traits associated with them can provide insights into their onset, progression, and treatment. Certain personality traits make an individual vulnerable to substance use, influence coping strategies, treatment compliance, and relapse risk. The Five-Factor Model (FFM) of personality offers a robust framework for examining these traits.

Aim: This study aimed to compare the personality traits of alcohol-dependent and opioid-dependent individuals to develop personalized and effective treatment strategies for the affected domains in substance dependence.

Methods: The study included 150 male participants, aged between 18 and 45 years, with 50 participants each in the alcohol-dependent, opioid-dependent, and control groups. Clinical group participants met the International Classification of Diseases 11th Revision (ICD-11) criteria for substance dependence, with current diagnosis confirmed by the researcher or a psychiatrist at the rehabilitation center. Participants were literate in either Hindi or English and did not have comorbid substance dependence or major psychiatric or organic conditions. Controls had age-matched males without any substance use or psychiatric illness. The NEO-PI-3, a psychometric tool, was used to understand the personality traits. One-way ANOVA statistical method was used to examine group differences, followed by Tukey's HSD (honestly significant difference) test for post hoc comparisons.

Results: Significant differences were observed in neuroticism, with the clinical groups scoring higher than the control group. Opioid-dependent individuals had higher scores on excitement-seeking and openness facets of actions and values. Both groups showed lower scores on conscientiousness, with deficits in competence, dutifulness, self-discipline, and deliberation.

Conclusion: The study emphasizes the utility of the Five-Factor Model in differentiating personality traits of alcohol and opioid dependent individuals. This could help in creating individualized treatment strategies that extend beyond symptom management. Future studies could strengthen these findings across diverse and larger samples, using longitudinal designs.

Keywords: Five-factor model, opioid dependence, alcohol dependence, personality traits