



Research Paper

ASSESSMENT AND MANAGEMENT OF PERSONALITY TRAITS FOR ADDICTION

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ABSTRACT

An addictive personality refers to a set of personality traits that predispose an individual to addiction (Lang, 1983). Although no single psychological characteristic or specific factor fully explains all forms of addiction, personality traits are considered important contributors to addictive behaviours. The present study investigated the effectiveness of Cognitive Behavioural Therapy (CBT) in enhancing positive personality traits, reducing negative personality traits, and identifying personality trait predictors of depression among individuals with addiction. The study employed a pretest–post-test experimental design and included 200 individuals with addiction who were selected through purposive random sampling. Data were collected using the Personality Trait Questionnaire developed by Selvam and the Hamilton Depression Rating Scale (HDRS; Hamilton, 1960). The findings revealed significant demographic differences in personality traits. Participants aged 20–35 years scored higher on family relationships and assertiveness. Female participants reported higher levels of neuroticism, impulsivity, fantasy, pessimism, and depression. Skilled workers exhibited greater impulsivity and pessimism, whereas uneducated participants showed higher levels of neuroticism, family relationship concerns, and impulsivity. Unmarried participants scored higher on interpersonal relationships, assertiveness, novelty seeking, and boredom. Urban participants reported greater introversion, problem-solving skills, and pessimism. First-born participants scored higher on problem-solving skills, impulsivity, novelty seeking, and boredom. Participants without a history of hospitalization for addiction demonstrated higher emotional maturity, stronger family relationships, greater impulsivity, extravagance, and depression. Overall, the results indicated that CBT effectively promoted positive personality traits and reduced negative personality traits among individuals with addiction. However, no significant changes were observed in introversion, extraversion, or problem-solving skills. Furthermore, problem-solving skills emerged as a significant predictor of depression among individuals with addiction.

Keywords: : *addiction, addictive personality, cognitive behavioural therapy, personality traits, depression, problem-solving skills*

1. INTRODUCTION

Addictive Personality Disorder (APD) has been described as a condition in which an individual exhibits a heightened susceptibility to addictive behaviours (Lang, 1983; Kagan, 1987; Kozlov & Rokhina, 2000; Franques et al., 2000). However, Lang (1983) argued that there is no single, unique personality type that can fully explain the development of addiction. Rather, individuals may be at greater risk of developing addictive behaviours when they exhibit characteristics such as aggression, anxiety, depression, poor self-control, and difficulties in regulating emotions (Peele, 1985).

Curtiss (2012) defined addictive behaviour as the excessive and repetitive engagement in pleasurable activities as a means of coping with internal conflict, psychological pressure, and stress. Individuals with addictive tendencies may substitute one addiction for another or maintain multiple addictions simultaneously. When access to a preferred addictive activity is restricted, they may seek alternative sources of gratification and pleasure (Stannard, 2011).

According to Bryce (2012), understanding personality traits is important for the long-term treatment and management of addiction, as well as for developing effective intervention strategies aimed at breaking patterns of addictive behaviour. Similarly, Schreiber (2013) highlighted those various perspectives on addiction, including phenomenological, biopsychosocial, genetic, exposure, and adaptation theories, differ in their explanations but share common underlying mechanisms associated with addictive behaviour. These perspectives suggest that personality traits play a significant role in the development and maintenance of addiction. Consequently, the assessment of personality characteristics may be valuable for the screening, prevention, treatment, and management of different forms of addiction.

LITERATURE REVIEW

Addictive Personality Disorder (APD) has been described as a condition in which an individual demonstrates an increased susceptibility to addictive behaviours (Lang, 1983; Kagan, 1987; Kozlov & Rokhina, 2000; Franques et al., 2000). However, Lang (1983) emphasized that no single or unique personality type can fully account for the development of addiction. Instead, individuals may be at a greater risk of developing addictive behaviours when they exhibit traits such as aggression, anxiety, depression, poor self-control, and difficulties in emotional regulation (Peele, 1985).

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Bryce (2012) suggested that understanding personality traits is essential for the long-term treatment and management of addiction, as well as for the development of effective intervention strategies aimed at disrupting addictive patterns. Similarly, Schreiber (2013) noted that various theoretical perspectives on addiction, including phenomenological, biopsychosocial, genetic, exposure, and adaptation theories, differ in their explanations but share common underlying mechanisms that contribute to addictive behaviours. Collectively, these perspectives indicate that personality traits play a significant role in the development and maintenance of addiction. Therefore, the assessment of personality characteristics may be valuable for the identification, prevention, treatment, and management of various forms of addiction.

METHODOLOGY

METHOD

RESEARCH DESIGN

The study employed a single-group pretest–post-test experimental design to examine the effectiveness of Cognitive Behavioural Therapy (CBT) on personality traits and depression among individuals with addiction.

Participants

The sample consisted of 200 individuals with addiction who were selected from both inpatient and outpatient services of the Department of Psychiatry at a well-known hospital in Karaikal, Puducherry, India. Participants exhibited addictive behaviours related to alcohol use, smoking, drug use, caffeine consumption, mobile phone use, compulsive buying, compulsive eating, excessive exercise, sexual behaviour, gambling, workaholism, co-dependency, internet use, video gaming, television viewing, and tanning. All participants met the diagnostic criteria for addiction based on the International Classification of Diseases, Tenth Revision (ICD-10).

The inclusion criteria were: (a) a diagnosis of addiction according to ICD-10 criteria, (b) age between 20 and 50 years, and (c) a duration of addictive symptoms exceeding six months. Participants were excluded if they had any co-occurring psychiatric or physical illness or were unwilling to participate in the study. Written informed consent was obtained from all participants before data collection.

MEASURES

A demographic information schedule was used to collect data on age, gender, education, occupation, marital status, geographical location, birth order, duration of addiction, past history of addiction, family type, family history of addiction, and previous hospitalization for addiction treatment.

Personality traits were assessed using the Personality Trait Questionnaire developed by Selvam.

The instrument measures 16 personality dimensions: Extraversion, Introversion, Neuroticism, Pessimism, Extravagant Trait, Problem-Solving Skills, Emotional Maturity, Fantasy, Self-Confidence, Impulsivity, Assertiveness, Boredom, Hostility, Novelty Seeking, Family Relationship, and Interpersonal Relationship. Each dimension consists of 10 items, resulting in a total of 160 clinician-rated, closed-ended items. The instrument demonstrated satisfactory internal consistency, with a Cronbach's alpha coefficient of .81.

Depression was assessed using the Hamilton Depression Rating Scale (HDRS; Hamilton, 1960), a widely used clinician-rated measure of depressive symptom severity.

PROCEDURE

The study was conducted in three phases.

Phase I: Pretest Assessment. Demographic information was collected, and participants completed the Personality Trait Questionnaire and the Hamilton Depression Rating Scale. Assessments were conducted across two sessions.

Phase II: Intervention. Participants received Cognitive Behavioral Therapy (CBT) consisting of 24 sessions administered over a period of six months.

Phase III: Posttest Assessment. One month after the completion of the CBT intervention, participants were reassessed using the Personality Trait Questionnaire and the Hamilton Depression Rating Scale to evaluate changes in personality traits and depressive symptoms.

RESULTS AND DISCUSSION

The findings revealed significant demographic variations in personality traits among individuals with addiction. Participants aged 20–35 years scored significantly higher on family relationships and assertiveness, whereas those aged 36–50 years exhibited higher levels of impulsivity and hostility. These findings are consistent with previous studies that reported age-related differences in social relationships and behavioural

regulation among individuals with addictive behaviours (Wu et al., 2013; Xiuquin et al., 2010).

Gender differences were also observed. Male participants scored significantly higher on interpersonal relationships, whereas female participants reported higher levels of neuroticism, impulsivity, fantasy, and pessimism. These findings support earlier research suggesting greater emotional vulnerability and impulsive tendencies among women with addictive behaviours (Martin, 1997; Stephenson & Lefever, 2004; Weafer & de Wit, 2014).

Educational status significantly influenced personality traits. Uneducated participants demonstrated higher levels of neuroticism, family relationship concerns, and impulsivity, while educated participants scored higher on novelty seeking. These findings are consistent with previous research indicating associations between educational attainment and personality characteristics related to addiction (Agha et al., 2008; Rezvanfard et al., 2008).

Occupational differences revealed that semi-skilled participants scored significantly higher on impulsivity and pessimism, whereas skilled workers demonstrated better problem-solving skills. Similar findings have been reported in studies examining coping skills and behavioural regulation among individuals with addiction (Charfi et al., 2018; Coskunpinar et al., 2013).

Marital status was also associated with personality traits. Unmarried participants scored higher on interpersonal relationships, assertiveness, novelty seeking, and boredom, whereas married participants demonstrated greater self-confidence, hostility, and pessimism. These findings are partially consistent with earlier studies linking marital status with social functioning and personality characteristics (Ferrell & Galassi, 1981; Miller & Eisler, 1977).

With regard to geographical location, participants from rural areas scored higher on fantasy, extraversion, and pessimism, whereas urban participants demonstrated greater introversion,

problem-solving skills, and pessimism. Previous studies have similarly reported environmental influences on coping styles, stigma, and personality-related factors associated with addiction (Nasrazadani et al., 2017; Schomerus et al., 2011).

Birth order was found to influence personality traits. First-born participants scored significantly higher on problem-solving skills, novelty seeking, and boredom, whereas later-born participants scored higher on interpersonal relationships and impulsivity. These findings suggest that family dynamics may contribute to the development of specific personality characteristics among individuals with addiction.

Participants with a duration of addiction below 20 years exhibited higher levels of introversion and fantasy, whereas those with a duration of addiction between 21 and 40 years reported greater self-confidence and assertiveness. These findings indicate that personality characteristics may vary according to the chronicity of addictive behaviours.

Participants with a positive history of addiction demonstrated significantly higher levels of novelty seeking and hostility compared with those without such a history. Similarly, individuals from nuclear families scored higher on impulsivity, whereas those from joint families demonstrated greater introversion and self-confidence. These findings highlight the potential role of family environment in shaping personality characteristics associated with addiction.

Furthermore, participants without a history of addiction reported higher levels of introversion, family relationships, and extravagant traits, whereas those with a history of addiction exhibited greater impulsivity and extravagant traits. Participants without previous hospitalization for addiction treatment scored significantly higher on emotional maturity, family relationships, impulsivity, and extravagant traits.

Correlation analyses revealed significant associations between depression and all measured personality traits, including neuroticism, intro-

version, extraversion, family relationships, interpersonal relationships, emotional maturity, assertiveness, self-confidence, problem-solving skills, impulsivity, pessimism, hostility, fantasy, boredom, novelty seeking, and extravagant traits. These findings suggest that personality character-

istics play a substantial role in the manifestation and maintenance of depressive symptoms among individuals with addiction and may therefore represent important targets for psychological intervention.

Table – 1 shows Mean, SD and t –value between Demographic Variables of Addicts in Depression

Depression	Age	N	Mean	Std. Deviation	t- value
Age	20 -35yrs	192	10.64	3.90	0.10 NS
	36 to 50yrs	8	10.50	3.50	
Gender	Men	132	10.11	3.66	2.70**
	Women	68	11.65	4.12	
Education	Uneducated	15	11.20	4.70	0.59 NS
	Educated	185	10.58	3.81	
Occupation	Semiskilled	129	10.80	3.92	0.83 NS
	Skilled	71	10.32	3.80	
Marital status	Single	188	10.55	3.89	1.10 NS
	Married	12	11.83	3.66	
Geographic location	Rural	92	10.99	3.55	1.22 NS
	Urban	108	10.32	4.13	
Birth order	First born	102	10.48	3.83	0.55 NS
	Later born	98	10.79	3.94	
Duration of addiction	1 to 20yrs	140	10.56	4.04	0.36 NS
	21 to 40yrs	60	10.78	3.48	
Presence of past history of addiction	Absence	156	10.69	4.07	0.42 NS
	Presence	44	10.41	3.12	
Types of family	Nuclear	14	12.00	3.61	1.46 NS
	Joint	186	10.53	3.89	
Family history of addiction	Absence	156	10.69	4.07	0.42 NS
	Presence	44	10.41	3.12	
Hospital Treatment	Absence	172	10.84	4.02	2.61**
	Presence	28	9.36	2.51	

**Significance at 0.01 level, * Significance at 0.05 level NS = Not Significant

The results presented in the table indicate that depression levels among individuals with addiction differed significantly based on gender and history of hospitalization for addiction treatment. Female participants reported significantly higher levels of depression than male participants. In addition, participants without a previous history of hospitalization for addiction treatment exhibited significantly different depression scores compared to those who had received prior treatment. These findings are consistent with earlier research highlighting the influence of gender and treatment-related factors on depressive symptoms among individuals with addictive behaviours (Sindermann et al., 2018).

However, no significant differences in depression were observed with respect to age group, educational status, occupation, marital status, geographical location, birth order, family type, duration of addiction, past history of addiction, or family history of addiction. These findings suggest that depression among individuals with addiction may be more strongly influenced by gender and treatment-related experiences than by other demographic characteristics examined in the present study.

Table - 2 show Multivariate Regression Analysis for the prediction of Personality Traits of Addicts and Depression

Independent variables	Unstandardized Coefficients	Standardized Coefficients	t-value
	B	Beta	
Neuroticism	.745	.059	.82 NS
Extraversion	.677	.086	.70 NS
Introversion	.391	.048	.39 NS
Emotional maturity	.249	.025	.29 NS
Family relationship	1.142	.101	1.31 NS
Problem solving skills	2.125	.211	2.71**
Self – confidence	.527	.055	.76 NS
Interpersonal relationship	1.254	.133	1.77 NS
Assertiveness	.331	.038	.53 NS
Impulsivity	1.260	.051	.68 NS
Hostility	.108	.009	1.30 NS
Novelty Seeking	1.154	.141	1.01 NS
Fantasy	.053	.007	.08 NS
Boredom	.886	.108	1.41 NS
Extravagant trait	1.263	.135	1.83 NS
Pessimism	1.413	.104	1.44 NS

**Significant at 0.01 level, NS = Not Significant

Table 2 presents the results of the multivariate regression analysis conducted to examine the extent to which personality traits predict depression among individuals with addiction. In this analysis, the dimensions of personality traits were entered as predictor variables, while depression served as the criterion variable.

The findings revealed that among the personality trait dimensions, problem-solving skills emerged as a significant predictor of depression ($\beta = 2.125$, $p < .05$). The significant beta coefficient indicates that problem-solving skills contributed uniquely to the prediction of depression among individuals with addiction. Therefore, the hypothesis that personality traits significantly predict depression was supported.

These findings suggest that problem-solving abilities play an important role in the psychological well-being of individuals with addiction. Effective problem-solving skills may help individuals achieve personal goals, manage stressful situations, reduce depressive symptoms, cope with anxiety, and address interpersonal difficulties more constructively. Conversely, deficits in problem-solving abilities may increase vulnerability to emotional distress and depression.

The present findings are consistent with the work of Sinha et al. (2009), who reported that negative affective states are strongly associated with substance use and relapse. Their study demonstrated that negative emotions can trigger conditioned cravings, increase substance-seeking behaviour, and elevate the risk of relapse. Therefore, strengthening problem-solving skills through psychological interventions such as Cognitive Behavioral Therapy (CBT) may contribute to reducing depression and improving treatment outcomes among individuals with addiction.

Table – 3 Mean, SD and t-value of Cognitive Behaviour Therapy between Pre and Post Assessment of Personality Traits in Addicts

Personality trait	Test	N	Mean	Std.Deviation	t-value
Neuroticism	Pre-test	200	1.90	.30	38.20**
	Post-test	200	1.02	.12	
Extraversion	Pre-test	200	1.35	.47	1.41
	NS				
Introversion	Post-test	200	1.36	.48	
	Pre-test	200	1.35	.47	1.41
NS					
	Post-test	200	1.36	.48	
Emotional maturity	Pre-test	200	1.18	.38	26.95**
	Post-test	200	1.96	.18	
Family relationship	Pre-test	200	1.14	.34	32.32**
	Post-test	200	1.98	.15	
Problem solving skills	Pre-test	200	1.18	.38	25.81**
	Post-test	200	1.95	.21	
Self –confidence	Pre-test	200	1.20	.40	24.77**
	Post-test	200	1.97	.17	
Interpersonal relationship	Pre-test	200	1.22	.41	23.19**
	Post-test	200	1.94	.22	
Assertiveness	Pre-test	200	1.26	.44	18.63**
	Post-test	200	1.92	.28	

Impulsivity	Pre-test	200	1.98	.15	80.21**
	Post-test	200	1.00	.07	
Hostility	Pre-test	200	1.87	.33	30.12**
	Post-test	200	1.04	.19	
Novelty seeking	Pre-test	200	1.34	.47	9.46**
	Post-test	200	1.02	.12	
Fantasy	Pre-test	200	1.56	.49	15.28**
	Post-test	200	1.92	.12	
Boredom	Pre-test	200	1.67	.47	18.80**
	Post-test	200	1.03	.17	
Extravagant trait	Pre-test	200	1.78	.41	25.45**
	Post-test	200	1.02	.12	
Pessimism	Pre-test	200	1.91	.28	36.49**

**Significant at 0.01 level NS = Not Significant

Table 3 presents the mean scores, standard deviations, and t-values for the pretest and posttest assessments of personality traits and depression among individuals with addiction. The findings indicate that Cognitive Behavioral Therapy (CBT) produced significant improvements in several positive personality traits, including emotional maturity, problem-solving skills, self-confidence, assertiveness, family relationships, and interpersonal relationships (Scherbaum & Specka, 2008).

Furthermore, CBT significantly reduced several negative personality traits, including neuroticism, novelty seeking, hostility, fantasy, boredom, extravagant traits, pessimism, and impulsivity. These findings suggest that CBT was effective in promoting adaptive personality characteristics while reducing maladaptive traits associated with addictive behaviours. However, no significant changes were observed in the dimensions of introversion and extraversion following the intervention.

The present findings are consistent with previous research demonstrating the effectiveness of CBT in modifying maladaptive cognitions, improving emotional regulation, and reducing problematic behavioural patterns among individuals with addiction (Barry et al., 2009; Pedrero-Pérez et al., 2011; Kim, 2013; Müller et al., 2013; Scheen, 2013; Pasche et al., 2013; Lemos et al., 2014).

In addition, the comparison of pretest and post-test depression scores revealed a significant reduction in depression following the CBT intervention. This finding indicates that CBT had a positive impact on the psychological well-being of individuals with addiction by reducing depressive symptoms and enhancing adaptive personality functioning. Therefore, the results support the effectiveness of Cognitive Behavioral Therapy in improving personality traits and decreasing depression among individuals with addiction.

Table – 4 Mean, SD and t-value between Pre and Post Assessment of Depression in Addicts

		N	Mean	Std. Deviation	't' value
Depression	Pre-test	200	10.63	3.88	22.90**
	Post-test	200	4.03	2.68	

The results presented in the above table indicate a significant difference between the pretest and posttest assessments of depression among individuals with addiction following Cognitive Behavioral Therapy (CBT). The findings demonstrate that CBT significantly reduced depression levels after the intervention, suggesting its effectiveness in improving the psychological well-being of individuals with addictive behaviours.

The observed reduction in depressive symptoms supports the effectiveness of CBT as a therapeutic approach for addressing emotional distress and maladaptive cognitive patterns associated with addiction. These findings are consistent with previous studies that have reported significant improvements in depression following CBT interventions among individuals with addictive and related psychological disorders (Brown et al., 2011; Montgomery et al., 2010; Pasche et al., 2013).

Therefore, the results support the conclusion that Cognitive Behavioral Therapy had a significant positive impact on reducing depression levels among individuals with addiction.

CONCLUSION

The present study found a significant relationship between personality traits and depression among individuals with addiction. Addicts belonging to the age group of 20–35 years, males, individuals with lower educational attainment, married participants, semiskilled workers, rural residents, first-born individuals, members of nuclear families, those without a family history of addiction, those without a previous history of addiction, and those who had not received hospital treatment for addiction demonstrated distinctive personality trait patterns.

The findings further revealed that female participants reported significantly higher levels of depression than male participants. Among the various personality dimensions examined, problem-solving skills emerged as a significant predictor of depression, indicating the importance of adaptive coping mechanisms in the psychological functioning of individuals with addiction.

The study also demonstrated the effectiveness of Cognitive Behavioural Therapy (CBT) in modifying personality traits and reducing depressive symptoms. Specifically, CBT enhanced positive personality traits, including emotional maturity, self-confidence, assertiveness, family relationships, interpersonal relationships, and problem-solving skills, while reducing negative traits such as neuroticism, impulsivity, hostility, pessimism, fantasy, boredom, novelty seeking, and extravagant tendencies. However, no significant changes were observed in the dimensions of introversion and extraversion.

Overall, the findings suggest that Cognitive Behavioural Therapy is an effective intervention for improving adaptive personality characteristics and reducing depression among individuals with addiction. The results highlight the importance of incorporating personality-focused interventions and problem-solving skill development into addiction treatment programs to enhance psychological well-being and recovery outcomes.

Delimitations of the Study

The findings of the present study should be interpreted in light of several limitations. First, although the overall sample size was adequate, some specific addiction categories consisted of relatively small numbers of participants, which may have limited the statistical power to detect group differences. Second, the sample sizes across demographic groups, particularly between male and female participants, were unequal, potentially affecting the generalizability of the findings. Third, the possibility of heterogeneous error variance across groups may have influenced the statistical analyses.

Another limitation is that the data were collected from a single hospital center in Karaikal, Puducherry, which restricts the generalizability of the findings to other clinical settings and populations. In addition, the assessment relied on relatively brief self-report and clinician-rated measures, which may not have captured the full complexity of personality traits and addictive behaviours.

Furthermore, the study focused only on selected personality traits in relation to addiction and depression. Other relevant psychological, social, environmental, and biological factors that may influence addictive behaviours were not examined. Finally, the use of a single-group pretest–posttest design without a control group limits the ability to establish causal relationships between Cognitive Behavioral Therapy (CBT) and the observed changes in personality traits and depression.

Future research should employ larger and more diverse samples, include participants from multiple treatment centres, utilize longitudinal and controlled study designs, and examine additional psychological and psychosocial variables to enhance the understanding of addiction and its treatment outcomes.

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