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ROLE OF PERSONALITY, STRESS, EMOTIONAL STABILITY AND PEER INFLUENCE IN DRUG TREATMENT PROCESS

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ABSTRACT:
INTRODUCTIONDrug addiction is a prolonged and regressive disorder which causes the behavior of taking drugs in spite of severely harmful consequences. Continuous usage of drug prompts adaptive changes in central nervous system (CNS) and leads to physical dependence, extreme desire and relapse **Objective:** To determine the effect of personality traits, stress, emotional problems and peer influence in recovery from drug addiction. **Methodology:** The targeted population in the current study compromised of drug addicts. 239 volunteer patients participated in the research from 11 different rehabilitation centers in Islamabad and Rawalpindi. The period of study was six months from January 2022 to Jun 2022. These variables are measured through statistical inventories having significant consistency. For analysis Big Five Inventory (BFI), for stress, Perceived Stress Scale and for emotional intelligence, Brief emotional intelligence Scale (BEIS) is used. The research was conducted using correlation method. **Results:** The study include both male (n=237) and female (n=2) participants. The statistical analysis on SPSS showed significant relations among variables. The correlation of scales used in this study are positively significant, personality and stress has significant value ($p<0.01$), whereas stress and emotional stability has significant value ($p<0.05$). The regression analysis showed that conscientiousness scored positively (0.041) whereas neuroticism scored negatively (-0.02) in recovery from drug. **Conclusion:** These findings further suggested that physiological constructs such as, personality traits, stress, emotional problems and peer influence are positively associated with an individual's recovery from drug addiction and can be used as indicators for early detection and prevention of drug addiction of an individual.
Key Words: personality, drug addiction, emotional intelligence, peer influence

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INTRODUCTION

Drug addiction is a prolonged and regressive disorder which causes the behavior of taking drugs in spite of severely harmful consequences. Continuous usage of drug prompts adaptive changes in central nervous system (CNS) and leads to physical dependence, extreme desire and relapse [1]. The main and foremost conditioning element in drug addiction are mental ailment and personality traits, the psychiatric disorders, depression and schizophrenia are allied with an amplified risk of misused [2].

According to the anti-Narcotics force the factors in charge of increasing rate of drug abuse in Pakistan are, drugs availability at low price, the social customs are promptly changing's and drug aid individuals a deceitful solution for it, the economic hindrance and unavailability of jobs, inattention by parents, peer influence and lack of interest in education, family system and educational institutes lacking drug education, the stress from family and society, a family member who is involved usage of drugs [3].

Personality can be classified as the set of physiological characteristics and process which are organized and relatively endured within an individual. Moreover it influences person's characteristics with physical and social environment [4]. Stress can be defined as the exterior situation and circumstances which affect the individuals. Stress has impact on health behavior, the individuals who are under stress can lead to negative habits which results in diseases and disorders. The behavior due to stress which effect health includes smoking, drug abuse, excessive drinking and poor diet [5 6]. An individual's intellectual appraisal of stress is most important factor in analyzing events comprising stress. The mutual stressful life events are associated with both symptoms of mental health and drug use in adults [7 8]. Moreover drug use is associated with academic difficulties, injuries, interpersonal violence, high risk sexual behavior, depression and mental disorders [9].

According to American psychological association, peer influence is the pressure applied by a peer group on the individual for the purpose to fit in with group norm and expectation. Peer influence may have positive value in context of socialization but it may also have negative significances for mental and physical health of an individual. May studies have been conducted in order to identify the alcohol use predictors among adolescence. The biological and psychosocial aspect in different societal spheres as family, school, peer group and community to subsidizes to the misuse of drugs [10]. One of the most important risk factors in misuse of alcohol and illegal substance is peer influence. Throughout the childhood and adolescence, relationship with peer is important in psychosocial growth. Alongside with family centered growth, friendship shows distinctive significance which provides companionship, communal and emotional support [11]. Emotional intelligence characterizes a set of hierarchically organized fundamental proficiencies to identify process and regulate emotion and feelings in self and others. The analysis on emotional intelligence provided with two primary contradictory ways to assess EI first is cognitive ability which is measured by performance type tests and second is personality trait which measured by self report inventories (Trait emotional questionnaire) [12].

The objectives of present study are,

- To determine the effect of personality traits, stress, emotional problems and peer influence in recovery from drug addiction
- To identify either stress is a substantial predictor of relapse in drug treatment process
- To determine the relationship of variables; personality traits,

emotional problems, stress and peer influence with drug treatment process and relapse

MATERIALS & METHODS

The targeted population in the current study compromised of drug addicts. 239 volunteer patients participated in the research from 11 different rehabilitation centers in Islamabad and Rawalpindi. The period of study was six months from January 2022 to Jun 2022. All the participants were informed that their data will kept confidential. The questionnaire was described in detailed and marked as answered by the participants since most of them were illiterate and could not read and understand questions.

Demographic information

A portion of survey was made up of questions which categorize the descriptive statistics of each individual's age, gender, education, monthly family income, marital status, family system, number of siblings, birth order and marital status of parents.

Big Five Inventory

To measure the personality traits, Big Five Inventory was exercised (-----). It is a devised 10 item inventory having 2 items per scale. The scale is rated on 5 point Likert scale from 1= strongly disagree to 5= strongly agree. The subscales representing the traits of personality in BFI are extraversion, agreeableness, conscientiousness, neuroticism and openness to new experiences. Extraversion assesses being "reserved" to being "outgoing/sociable." Conscientiousness taps if one has the tendency to be "lazy" or if one "does a thorough job." Agreeableness measures if one tends to "find fault with others" or if the individual is "generally trusting." Finally, Neuroticism focuses on whether an individual is usually "relaxed" and "handles stress" or if the individual "gets nervous easily" [13].

Perceived Stress Scale (PSS)

To measure the level of stress, perceived Stress Scale (PSS) is used. It is most extensively used psychological instrument to measure the stress perception. The degrees to which conditions in a person's life are considered as worrying and tense are measured through this instrument. The scale further embraces a number of direct questions concerning present stress levels. The PSS scale contain 10 item and encompasses 5 point Likert scale; 0=never, 1=almost never, 2=sometimes, 3=fairly often, 4=very often [14].

Brief Emotional Intelligence Scale (BEIS)

BEIS propose a manner though which emotional intelligence can be apprehended quickly while sustaining the suitable and satisfactory psychometric properties. The BEIS consist of 10 item with subscale measuring 5 factors; appraisal of own emotions, appraisal of other emotions, regulation of emotions and utilization of emotion on 5 point Likert scale ranging from 1=strongly disagree to 5= strongly agree [15].

Peer Influence (PI)

Peer influence is also a contributing factor in drug treatment process and it is measured by adding questions into demographic stating 'do you feel your peer have influence on you' with scoring option as 1=yes, 2=no. The data provided information about how influencing friend and associates are considered by participants.

Statistical Analysis

Data analysis was accomplished using IBM SPSS version 24. Cronbach, s, s alpha was used to measure the reliability or consistency of scales. Multiple regression and correlation analysis was used to measure the correlation among dependent and independent variables.

RESULTS

Variable	Frequency	%
Gender		
Male	237	99.2
Female	2	0.8
Marital Status		
Un-married	102	42.7
Married	123	51.5
Engaged	8	3.3
Widowed	2	0.8
Divorced	4	1.7
Family System		
Joint	68	28.5
Nuclear	167	69.9
Birthed order		
First born	50	20.9
Middle born	133	55.6
Last born	51	21.3
Only Child	5	2.1
Marital status of Parents		
Married	160	66.9
Divorced	2	0.8
Separated	1	0.4
Deceased	69	28.9

Table 1. Demographic Details of Sample (N=239)

	N	M	SD	Range		Skewness	Kurtosis	α
				Potential	Actual			
BFI	236	32.95	4.29	10-50	10-43	-.52	2.98	.52
BFI.1	238	7.02	1.41	2-10	2-10	-.68	.47	.09
BFI.2	238	6.63	1.34	2-10	2-10	-.27	1.05	-.78
BFI.3	236	6.51-	1.32	2-10	2-10	-.48	.83	-.25
BFI.4	239	6.52	1.35	2-10	2-10	-.22	.31	-.15
BFI.5	238	6.23	1.61	2-10	2-10	-.01	-.32	.31
PSS	237	20.87	5.20	0-40	4-37	.18	.24	.56
BEIS	235	36.37	4.8	10-50	17-50	-.49	1.3	.72
BEIS.1	237	6.83	1.65	2-10	2-10	-.60	-.18	.64
BEIS.2	238	7.19	1.57	2-10	2-10	-.81	.26	.65
BEIS.3	238	7.51	1.36	2-10	3-10	-.90	1.37	.18
BEIS.4	236	7.55	1.31	2-10	3-10	-.75	.34	.22
BEIS.5	238	7.27	1.32	2-10	4-10	-.40	.09	.33

Table 2. Descriptive statistics of main study

Note: BFI=Big Five Inventory, BFI.1=Extraversion (subscale), BFI.2=Agreeableness (subscale), BFI.3=Conscientiousness (subscale), BFI.4=Neuroticism (subscale), BFI.5=Openness to new experiences (subscale), PSS=Perceived Stress Scale, BEIS= Brief Emotional Intelligence Scale, BEIS.1=Appraisal of new emotions, BEIS.2=Appraisal other emotions, BEIS.3=Regulation of own emotions, BEIS.4=Regulations of other emotions, BEIS.5=Utilization of emotions

The results of current research contribute an additional endorsement that personality, stress, emotional stability and peer influence were associated with drug treatment process of drug addicts in rehabilitation centers. The values of result propose that the link between stressors, peer influence and drug addiction is significant. Reliability of all scale is shown. The high value of cronbach, s alpha showed acceptable reliability for the tools. Table 1 shows demographic details of participants. The ratio of male and female is 237:2 with the respective percentage as 99.2% and 0.8%. The frequency of unmarried is 102 (42.7%) and frequency of married individuals is 123 (51.5%). The

frequencies for family system are 68 (28.5%) and 167 (69.9%) respectively. The birth order of individuals was also determined as first, middle, last born and only child. The frequencies and percentages are stated as 50:20.9%, 133:55.6%, 51:21.3% and 50:20.9%. Marital status of parents were also acquired the frequencies and percentages are; married, 160:66.9%, divorced, 2:0.8%, separated, 1:0.4% and deceased, 69:28.9%

Table 2 shows the descriptive statistics of all scales and subscales used in this study. The value of skewness and kurtosis shows the distribution of the data on the positive side as well as on negative sides of the curve. The table indicated the range of stress scale from 0-40, with greater value indicating high level of stress. The average level of perceived stress among drug addict is M=32.95, SD=4.29 and emotional intelligence scale has M=36.37, SD=4.8. Table 2 also shows the reliability of study variables. The cronbach,s alpha for 10 Big Five Inventory (BFI) is 0.52 (<0.70) which specifies low internal consistency. The alpha value of extraversion is .09 (<.70) also indication low internal consistency, for agreeableness -0.78 indicating moderate but low internal consistency. Alpha value for consciousness (-0.25), for neuroticism (-0.15) indicate negative and low internal consistency. The cronbach,s alpha for Perceived stress scale (PSS) is 0.56 also indicating low internal consistency. The Brief Emotional Intelligence Scale (BEIS) has reliability of 0.72 indicating moderate internal consistency. The alpha value for appraisal of own emotions (0.64), for appraisal of other emotions (0.18), for regulation of emotions (0.22) and for utilization of emotions (0.33) representing extremely low internal consistency and reliability.

Table 3. Correlation matrix of scales and subscales of BFI, PSS and BEI

Variable	1	2	3	4	5
Scale					
BFI	-	.459**	.381		
PSS		-	.430*		
BEIS			-		
Subscale (BFI)					
Extraversion	-	.343*	.252**	.224**	0.81
Agreeableness		-	.298**	.235**	.238**
Conscientiousness			-	.234**	.084
Neuroticism				-	.196**
Openness					-
Subscale (BEIS)					
Appraisal of own emotions	-	.496**	.313**	.261**	.377
Appraisal other emotions		-	.302**	.245**	.291**
Regulations of own emotions			-	.361**	.133
Regulations of others emotions				-	.216**
Utilization of emotions					-

Note: correlation is significant at the 0.01 level (2-tailed) **, Correlation is significant at 0.05 levels (2-tailed)*, BFI= Big Five Inventory, PSS= Perceived Stress Scale, BEIS= Brief Emotional Intelligence Scale

Table 3 shows correlations among variables of the study, the big five inventory is positively correlated perceived stress scale and brief emotional intelligence scale. Likewise perceived stress scale is positively related with big five inventory and brief emotional intelligence scale and brief emotional intelligence scale is positively correlated big inventory and perceived stress scale. The table revealed that personality and stress has positive and significant correlation ($p<0.01$). On the other hand, stress and emotional stability also have positive and significant correlations ($p<0.05$). Table 3 also demonstrates the correlation matrix which shows the correlations across all the subscales for sample used in main study. Each trait personality is significantly correlated with the other. Extraversion, agreeableness, conscientiousness, neuroticism and openness to new experiences have positive and correlated significant value ($p<0.01$).As shown in table 3, each subscale of brief emotional intelligence scale is significantly and positively correlated with other subscales. However, appraisal of own emotions and utilization of emotions have positive relation but not significant. Similarly, regulation of own emotions and utilization of emotions have positive relation between them but are not significantly correlated.

Table 4. Regression co-efficient of conscientiousness & neuroticism (personality traits), stress emotional stability and peer influence on drug treatment process

Variables	B	SE	t	p
Conscientiousness				
Constant	9.35	1.52	6.11	0.00
BFI.3	0.04	0.11	0.34	0.73
PSS	-0.62	0.04	-1.53	0.12
BEIS	0.01	0.03	0.27	0.78
PI	-0.18	0.38	-0.49	0.62
Neuroticism				
Constant	9.69	1.58	6.13	0.00
BFI.4	-0.02	0.13	-0.21	0.83
PSS	-0.04	0.04	0.46	0.64
BEIS	0.01	0.03	0.46	0.64
PI	-0.18	0.38	-0.48	0.62

Note: BFI.4 = neuroticism (subscale), PI= Peer Influence, PSS= Perceived Stress Scale BEIS= Brief Emotional Intelligence Scale

Table 4 shows the influence of conscientiousness, neuroticism (personality trait), stress, emotional stability and peer influence on drug treatment among drug addicts. The R^2 value of .02 discovered that the predictors described 2% variance in outcome variables. The results exposed that conscientiousness (personality trait) (B=0.03) and emotional intelligence scale (B=0.01) has positive significant effect on drug treatment process whereas perceived stress (B=0.62) and peer influence (B=-0.18) has negative significant effect on drug treatment process. According to data neuroticism (B=-.02), perceived stress (B=-0.04) and peer influence (B=-0.18) has negative significant effect whereas emotional intelligence (B=0.01) has positive significant effect on drug treatment process.

DISCUSSION

As the research was conducted on the role of personality, stress, emotional stability and peer influence in drug treatment process. Different scales were administered to gather data from drug addicts currently present in rehabilitation centers for detoxification process. Most of the drug addicts were male and lived in joint family system. When the collected data was analyzed, it was comprehended that a considerable number of

the drug addicts had greater scores on stress. Correspondingly, it was assumed that peer influence will also be a positively correlated factor and it will be contributing factor in drug addiction. However the data obtained showed that 52.7% patients denied that they have peer influence. The brief emotional intelligence scale was used to assess the emotional stability of patients, married person, having percentage 51.5, scored on low emotional stability. The reliability of only Brief Emotional Intelligence Scale (BEIS) was obtained satisfactory. The reliabilities of Big Five Inventory (BFI) and Perceived Stress Scale were discreetly low. The reason of this low reliability values was due to not clear understanding of item asked. All the items of scales were in English language to which everyone is not familiar as it is not the national language of our country. Each item was briefed to participant and they responded accordingly. As participants were not able to read the statement themselves they misinterpreted what was asked from them and this is represented by low consistency of the scales.

The relation of stress and treatment process was predicted significantly correlated and the results showed the similar significance. Previous studies also states the same results. Stress is a significant factor which increases alcohol and relapse threat [16]. Prior researchers have concluded personality, stresses have impact on drug taking and drug treatment process, and however, the factor of emotional stability was not much explored. Also the relationships of all these variables were not studied together. Many patients who have been into the drug treatment process and fully recovered from drugs relapsed back to their past drug routine of drug abuse. The relapse can have numerous reasons but most important are personality traits, stress and peer influence [17]. In another study on personality and addiction highlighted high level of Neuroticism and low level of Conscientiousness as underlying "addictive" personality [18]. Using Eysenck personality model, Neuroticism and Psychoticism were found to be significant personality construct in determining the success of recovery treatment among addicts [19]. This also signifies our results, where each trait of personality (Extraversion, agreeableness, conscientiousness and neuroticism) is significantly correlated with other.

CONCLUSIN

In the end this research denoted and revealed the significance of learning how personality, stress, emotional stability and peer influence are connected with drug treatment process. These factors were altogether simultaneously related with drug treatment process among drug addicts. This is one of the few researches to associate personality, emotional intelligence and stress with relapse and detoxification process.

LIMITATION

Some limitations are presented in this research. The scales which are used in the study were not translated into national language of Pakistan i.e. Urdu so the participants were unable to read questionnaire by themselves. The volunteers were briefed and each question was inquired from them in Urdu. However reliability of the scales shows the participants were unable to comprehend the items and therefore resulted in low reliability. The translated version of scales used can produce better results. Due to privacy policy of rehabilitation centers we were bound to collect data from 11 treatment centers. The increased number of data from different locations will aid in more precise and accurate outcomes.

ETHICS APPROVAL: The ERC gave ethical review approval

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin

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CONFLICT OF INTEREST: No competing interest declared.

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