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### **Original Article**

Personality Traits, Psychological Distress, and Locus of Control among Drug Abusers and Non-Drug users

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## ABSTRACT

The problem of drug addiction is growing day by day in Pakistani youth. Previous studies on drug addictions highlighted that drug addicts have different personality traits and level of stress, anxiety and depression as compared to the non addicts. Objective: To get the deep understanding of the personality traits, psychological discomfort, and Locus of control among drug and non-drug users. Methods: For this purpose, a sample of 200 participants, drug abusers (n=100) and non-drug users(n=100) of the same age, were taken from the general population and various rehabilitation facilities in Islamabad and Rawalpindi by using three reliable scales: The TIPI Questionnaire, the DASS-21, and the Locus of Control Questionnaire were administered to the selected sample. The core findings of the study were interpreted in terms of descriptive, correlation and t-test analysis. Results: The study findings demonstrate a statistically significant difference between drug and non-drug users in extraversion, Openness to experience, agreeableness, conscientiousness, and emotional stability. Drug abusers reported significant levels of psychological discomfort and external Locus of control, in contrast to nondrug users who scored well on internal Locus of control. Conclusions: Drug users exhibits high level of psychological discomfort and negative personality trait than non-drug users. Therefore, health professionals and psychologists working in drug addiction rehabilitation centers should focused on the improvement of drug addicts' psychological health.

#### INTRODUCTION

Pakistan's population of drug users is constantly growing, which was very risky. There were 6.7 million drug users in Pakistan, 78% of whom were men and 22% of whom were women. 5.8% of Pakistan's population between the ages of 15 and 64 reported using natural and synthetic medications. In addition to the eight million heroin and three million opium addicts, there are four million cannabis users in the country. Ice usage is also quite common among privileged youth and students [1]. Recent studies suggested that drug usage can lead to a variety of adverse effects, including disturbed sleep, hallucinations, weariness, lack of interest in pleasurable activities, suicidal thoughts, elevated heart rate and blood pressure,

and loss of coordination [2]. Positive personality traits lessen psychological pain in challenging situations, which enhances psychological wellness [3]. According to studies, some personality qualities, such as a high degree of neuroticism and a low level of agreeableness, consciousness, Openness to experience, and extraversion, are positively associated with psychological distress [4–6]. Moreover, studies on drug users highlighted that young people are more reliant on drugs because they are more susceptible to media and peer pressure. They use drugs for recreational purposes and to cope with life's stresses at other times. Therefore, they exhibit more psychological distress, negative personality traits, and external Locus of

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control than non-drug users [7-9]. Empirical evidence confirmed the notion of a strong association between negative personality traits (low agreeableness, low extraversion, and high neuroticism) and increased psychological distress as well as the emergence of an external locus of control with drug addiction [10-13]. Regarding the study's variables, there is not much existing literature available on the combined study of psychological distress and personality traits of drug users in our local surroundings [14]. Only one study on the Locus of control and personality characteristics of substance abusers and non-users was undertaken in Pakistan [15]. The results of this outdated study were insufficient. Therefore, the focus of the current study was to explore the personality traits, psychological discomfort, and internal and external Locus of control among drug abusers and non-drug users.

### METHODS

In the current study, cross-sectional research used that was a questionnaire-based survey. A sample of 200 male participants sub-divided into two groups, drug users (n=100) and non-drug users (n=100) of age groups with an age range of 16 to 40 years (late adolescence and young adults) were taken from different drug rehabilitation centers and general population located in twins' cities of Pakistan. Drugs abusers' data were collected from different rehabilitation centers, and non-drug users' data from the general population. After taking permission from the authority of rehabilitation centers. Firstly, informed consent has given by the participants than a demographic sheet along with three scales, TIPI (Personality traits), DASS-21 (Depression, Anxiety, Stress), and LOC (Locus of Control), was administered. Before distributing the questionnaires, complete directions were given to the members. Individuals were informed to rate every item by their views and request them not to quit any questions. The English version of all three questionnaires was used in the current study. After the data collection phase, to fulfill the study's objectives and hypotheses, all the analyses were computed with the help of SPSS version 21.0.

## RESULTS

Table 1 shows Means, Cronbach's alpha, SD, Range, Skewness, and Kurtosis of study variables. The alpha reliability estimates of all the scales and their dimensions ranging between (0.49- 0.89) were moderately reliable. Skewness and kurtosis values of all the scales were within the acceptable range, indicating that overall data was normally distributed.

Table 1: Descriptive Analysis for the Main variables on Total Sample(N=200)

Variables No. of		Mean ± SD		R	ange	01	Monto de	
variables	items	Mean I SD	α	Actual	Potential	Skewness	Kurtosis	
TIPI(T)	10	43.17 ± 9.96	.71	44.00	21.00 - 65.00	.10	82	
TIPI(EX)	2	8.22 ± 3.63	.90	12.00	2.00-14.00	.015	1.41	
TIPI (OP)	2	8.81 ± 3.38	.73	12.00	2.00-14.00	25	1.02	
TIPI (AGG)	2	9.09 ± 3.18	.78	11.00	3.00-14.00	16	1.22	
TIPI (CON)	2	8.68 ± 3.38	.71	12.00	2.00-14.00	08	1.16	
TIPI(ES)	2	8.36 ± 3.54	.78	12.00	2.00-14.00	.03	1.32	
DASS(T)	21	24.52 ± 12.31	.89	50.00	1.00-51.00	07	93	
DASS (DEP)	7	7.70 ± 4.98	.80	19.00	0-19.00	.19	-1.01	
DASS(AX)	7	8.11 ± 4.58	.74	20.00	0-20.00	.10	78	
DASS(ST)	7	8.70 ± 4.30	.72	16.00	0-16.00	24	92	
LOCN	20	54.00 ± 13.18	.49	70.00	0-100.0	.25	07	

Note: TIPI= Personality Traits Total, TIPI(EX)= Extraversion, TIPI (OP) = Openness to experience, TIPI (AGG) = Agreeableness, TIPI (CON)= Consciousness, TIPI (ES)= Emotional Stability, DASS (T)= Psychological Distress, DASS (DEP)= Depression, DASS (AX)= Anxiety, DASS (ST)= Stress, LOCN=Locus of Control

In table 2 there was a significant negative relationship between personality traits and psychological distress. There is a significant positive relationship between personality traits and the internal Locus of control (p < .01). There is a significant negative relationship between personality traits and the external Locus of control.

Table 2: Correlation of Personality traits, psychological distress, and its dimensions, and Locus of control of Main study = 200

Variables	DASS (T)	DASS (DEP)	DASS (AX)	DASS (STR)	LOC (INT)	LOC (EX)
TIPI(T)	46**	44**	37**	39**	.40**	23*
TIPI(EX)	28**	28**	23**	24**	.29**	10
TIPI (OP)	25**	28**	20**	18	.26**	19*
TIPI (AGG)	20**	13	20**	20**	.13	07
TIPI(CON)	30**	33**	26**	21**	.28**	14*
TIPI(ES)	27**	25**	18*	29**	.18*	18**

TIPI (T)= Personality Traits, TIPI (EX)= Extraversion, TIPI (OP)= Openness of experience, TIPI (AGG)= Agreeableness, TIPI (CON)= Conscientiousness, TIPI (ES)= Emotional Stability, DASS (T)= Psychological Distress, DASS (DEP)= Depression, DASS (AX)= Anxiety, DASS (STR)= Stress, LOC (INT)= Internal Locus of Control, LOC (EX)= External Locus

Table 3 shows a significant negative relationship between psychological distress and internal Locus of control. There is a significant positive relationship between psychological distress and external Locus of control (p < .01).

Table 3: Correlation of dimensions of psychological distress and Locus of control(N=200)

Scale	LOC (INT)	LOC(EX)
DASS (Total)	44**	.24**
DASS (depression)	43**	.26**
DASS (anxiety)	38**	.17*
DASS (stress)	35**	.20**

DASS(T)= Psychological Distress, LOC(INT)= Internal Locus of Control, LOC(EX)= External Locus of Control

Table 4,5 and 6 shows the differences between drug abusers and non-abusers on personality traits (extraversion, Openness to experience, agreeableness, consciousness, & emotional stability), psychological distress (depression, anxiety, stress), and internal Locus of control, external Locus of control. There was a significant difference between drug abusers and non-abusers in personality traits, psychological distress (depression, anxiety, stress), and internal Locus of control, external Locus of control. Drug abusers were low on personality traits (Extraversion, openness to experience, agreeableness, consciousness, emotional stability) compared to non-abusers. Drug abusers were higher in psychological distress (depression, anxiety, stress) than non-abusers. Drug abusers were low on internal Locus of control as compared to non-abusers. Drug abusers are high on external Locus of control as compared to non-abusers.

**Table 4:** Drugs Abusers and Non-Abusers differences of Personality Traits (N=200)

Variables	Drugs Abusers n=100	Non-Abusers n=100	t	p-value	95%CI		Cohen's d
	Mean ± SD	Mean ± SD			LL	UL	
TIPI(T)	37.88 ± 8.40	48.47 ± 8.49	8.86	.00	-12.94	-8.23	1.25
TIPI (EX)	6.96 ± 3.26	9.49 ± 3.56	5.23	.00	-3.48	-1.57	.74
TIPI (OP)	7.66 ± 3.07	9.96 ± 3.29	5.10	.00	-3.18	-1.41	.72
TIPI (AGG)	7.93 ± 3.00	10.26 ± 2.94	5.54	.00	-3.15	-1.50	.78
TIPI (CON)	8.29 ± 3.27	9.07 ± 3.46	1.63	.10	-1.72	.16	.23
TIPI(ES)	7.04 ± 3.10	9.69 ± 3.47	5.68	.00	-3.56	-1.73	.80

Note: TIPI=Personality Traits Total, TIPI(EX)=Extraversion, TIPI (OP)= Openness to experience, TIPI (AGG)=Agreeableness, TIPI (CON)= Consciousness, TIPI (ES)=Emotional Stability

**Table 5:** Drugs Abusers and Non-Abusers differences of Personality Traits, Psychological Distress, and Locus of Control (N=200)

Variables	Drugs Abusers n=100	Non-Abusers n=100	t	p-value	95%CI		Cohen's d
	Mean ± SD	Mean ± SD			LL	UL	
DASS(T)	28.05 ± 11.12	20.99 ± 12.48	4.22	.00	3.76	10.35	.59
DASS(DEP)	8.94 ± 4.81	6.47 ± 4.86	3.61	.00	1.12	3.81	.51
DASS(AX)	9.06 ± 4.29	7.17 ± 4.69	2.97	.00	.63	3.14	.42
DASS(ST)	10.05 ± 3.75	7.35 ± 4.41	4.66	.00	1.55	3.84	.65
LOC(INT)	70.33 ± 6.39	71.9 ± 7.21	22.12	.00	-39.79	-30.15	.23
LOCN(EX)	37.00 ± 4.21	35.5 ± 3.92	14.69	.00	-37.97	-31.62	.36

Note: DASS (T)= Psychological Distress, DASS (DEP)= Depression, DASS(AX)= Anxiety, DASS(ST)= Stress LOC (INT)= Internal Locus of Control, LOCN (EX)= External Locus of Control

### DISCUSSION

The current study set out to compare drug abusers and non-drug users in terms of personality traits, including extraversion, agreeableness, consciousness, Openness to experience, and emotional stability, as well as

psychological distress, including depression, anxiety, and stress, as well as internal and external loci of control. This chapter will offer recommendations and consequences based on the investigation's findings. Momentary Pearson product to assess the study's hypothesis, the variables were subjected to correlation and t-test analysis. Results in table 1 show the descriptive Analysis of the study's main variables. Which confirmed that all scales had considerable reliability values and data were normally distributed. Tables 2 and 3 highlighted the correlation among the main variables of the study. Results demonstrate a significant negative connection between positive personality qualities (extraversion, Openness to experience, conscientiousness, agreeableness, and emotional stability) and psychological discomfort (Depression, Anxiety, and Stress). Previous study by Tsai et al., support the idea that there is a negative correlation between positive personality characteristics and psychological suffering (Depression, Anxiety, Stress) [4]. Moreover, the findings support the hypothesis and demonstrate a strong positive correlation between personality traits and the internal Locus of control. In contrast, there is a negative correlation between personality characteristics and the external Locus of control. Previous studies confirmed the notion in a desirable direction [7]. In addition, results demonstrate the association between psychological distress and external and internal Locus of control, i.e., positive and negative association, respectively. The study results are consistent with the past investigations [16, 17]. The central hypothesis states that drug abusers will exhibit more negative personality traits (extraversion, Openness to experience, emotional stability, conscientiousness, and agreeableness) and high external locus control than nondrug users (table 4). Previous research by Wani and Singh findings were consistent with the idea. According to earlier research, drug abusers have personalities with poor impulse control, problems forming relationships with others, and emotional anguish [13]. Individuals with an external locus of control are easily swayed by others' perceptions and blame their failings on the external situation. They are more inclined to experiment with drugs [15]. According to the eighth hypothesis, drug abusers were expected to have a poorer internal locus of control than non-users. The results are consistent with the idea that drug users have a poorer internal locus of control than non-users. The idea that drug users have a poorer internal locus of control than non-drug users is supported by previous research findings [8]. Table 4-6 also highlighted that drug abusers would experience more tremendous psychological suffering than non-drug users. Results support the underlying theory. According to previous

Gyawali et al., and Martinez et al., studies, drug abusers have higher levels of psychological distress (Depression, Anxiety, and Stress) than non-users. Drug addiction also contributes to mental health issues, including despair and anxiety[18-20].

## CONCLUSIONS

There was a negative significant relationship between personality traits (extraversion, Openness to experience, emotional stability, agreeableness, conscientiousness) and psychological pain. The findings indicated a positive correlation between personality traits and internal Locus of control. Personality traits and external Locus of control have a markedly inverse connection. Positively significant results were found in the link between psychological distress and external Locus of control. There was a significant inverse relationship between psychological discomfort and internal Locus of control. Drug addicts exhibit less favorable personality traits than non-users. Psychological anguish was more prevalent among drug users than among non-users. Drug users have a lower internal locus of control and a more vital external locus of control than non-users.

## Authors Contribution

Conceptualization: R Methodology: SU

Formal analysis: SU, AUK

Writing-review and editing: SU, AUK, JK, SA

All authors have read and agreed to the published version of the manuscript.

#### Conflicts of Interest

The authors declare no conflict of interest.

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