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Psychological Distress, Emotional Regulation, and Demographic Profile of Patients with Substance-Related Disorders

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Abstract

The main objective of the present research was to study psychological distress (depression, anxiety, stress) and its relationship with emotional regulation in patients with substance-related disorders. Emotional regulation and psychological distress are directly linked as psychological distress takes place when an individual has difficulties with regulating their emotions. It was a correlational study that followed a cross-sectional research design. G power analysis with a medium effect size suggested a 153-sample size. A sample of 155 men in the age range of 18 to 55*(M=30.39, SD=7.97)* was drawn from government hospitals admitted for the treatment of the substance-related disorders through purposive sampling. Demographic information sheet, Drug History Performa, Depression, Anxiety, Stress Scale-42 (DASS 42), and Emotional Regulation scale were used to collect data. Descriptive analysis, for demographic and social variables, depicted most of the participants belonged to a lower socioeconomic class. The mean duration of drug addiction was 12 years *(SD =2.45).* Most of the participants were multiple drug abusers. Peer pressure, failure in love affairs, and stress were reasons for drug addiction while reasons for relapse were peer pressure along with withdrawal symptoms and cessation of treatment. Descriptive analysis revealed that expressive-suppression emotional regulation strategies were common in study participants. Pearson product-moment correlational analysis demonstrates a significant positive relationship between psychological distress and expressive-suppression emotional regulation. In the present population, both social (peer pressure and bad company of friends) and psychological (stress, loneliness, curiosity and failure in love affair) factors are proven related to drug addiction problems. It is important to consider them for assessment as well as therapeutic intervention plans for patients with substance-related disorders.

Keywords: Emotional Regulation, Psychological Distress, Substance-related disorders

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Introduction

Substance-related disorders are categorized into eleven different groups of drugs that include, alcohol, cannabis, caffeine, hallucinogens, inhalants, sedatives, opioids, anxiolytics or hypnotics, stimulants, and tobacco. The pharmacological effects are different for all these drugs but the impact on brain centers is pleasure and euphoria in a high state. The rewarding feeling of drugs is strong enough that it usually leads the user to addictive behavior and maybe caught into substance-related disorders. Substance abuse is the repeated usage of recreational and medicinal drugs that eventually leads to addiction and interferes with one's daily functioning. Interpersonal relationships,

academic, social, and occupational life gets affected due to substance abuse. People might also develop substance-related disorders such as depression, anxiety, and psychosis (Hartney, 2020).

There is a long history of opium and cannabis use in South Asia, including Pakistan. There is an increasing burden of social factors in this region which contributes to increased drug use. Factors may include the Afghan refugee burden, Taliban /Afghan war, drug proliferation, and drug cultivation (Niaz, et al, 2005). International Narcotics Control Board, (2001) reported that Pakistan is a profoundly affected country with regional issues especially war-like conditions in Afghanistan and the aftermath of 9/11. Anti-Narcotics Force (2022) depicted that with seven million of People in Pakistan involved in drug addiction. Among them 4 million are using cannabis and about 2.7 million are using opioids. As far as their age is concerned, mostly under 30 years of age and the highest rate is in between 20 to 30 years of age. Half of the population 50 % were illiterate and fall under the category of skilled and unskilled labor and about 7.4% were students. United Nations Office on Drugs and Crime (UNODC) reported that 4.25 million people in Pakistan during the year 2013 were estimated to be drug dependent (UNODC World Drug Report 2017). Keeping in mind such alarming statistics, present study was initiated to understand the social and psychological factors that correlate with drug addiction.

It is an important milestone for the management and prevention plans to study the demographics of patients with substance-related disorders. Different theories describe its etiological factors differently. According to Psychoanalysis, if an individual, as a child experiences fixation in the oral stage of psychosexual stages of development, they will be more likely experience drug use. They further added that to avoid painful thoughts people use drug addiction as a defense mechanism. It performed two functions, gaining gratification and avoidance of pain, and hence an individual's behavior is based upon the hedonism principle (Cramer, 1998).

Taking a behavioral perspective to understand the involvement of different factors in substance-related disorders, social learning theory states that family dynamics including parental practices of discipline, family constellation, parental use of drugs, and peer pressure including friends' use of drugs or pro-sensation-seeking attitudes could lead a person towards drug addiction. Peer use of drugs enhances the individuals' attitude and cognitive frame of mind and makes it a normative behavior. As far as operant conditioning is concerned, the social circle of the person acts like a reward system that reinforces the habit of drug-taking. The pleasure and relaxation properties of drugs give them rewards that ultimately strengthen an individual's habit of drug use (Edwards, 2016).

There is a debate that whether an individual involves in drugs first or uses drugs due to psychological problems like mood disorders. Whatever the reason might be, drug addiction and depression are usually associated with each other. Depression is an overwhelming state of sadness, lack of pleasure, lack of motivation, sleep and appetite-related problems, hopelessness, and even suicidal thoughts and ideations in some cases. It leads to self-medication which sometimes further directs a person to addiction to these medications which could make the depression worse.

Psychological factors including stress, anxiety, depression, and low self-esteem emerged as contributing factors for reasons of drug addiction and a significant reason for relapse. Emotional stress in increased intensity is usually associated with a lack of control over impulses and an individual decreased capacity to refrain from inappropriate behaviors or delay gratification (Sinha, 2008). Emotional regulation has been researched and very commonly linked to addiction in research

over the years. People emotionally regulate themselves differently in various situations. They regulate in two different ways, expressive suppression, and cognitive reappraisal. Expressive suppression is when people hide their emotions in stressful situations, which in turn increases their stress levels (Butler et al., 2003). Cognitive Reappraisal is the way how people choose to view a situation. They try to overcome stressful situations by diverting their attention or changing their perspective of the situation (Ochsner & Gross, 2005). Low emotional regulation has been seen to increase a person's vulnerability to depression, personality and substance-related, somatoform, and eating disorders (Berking & Wupperman, 2012).

Numerous research was conducted to show the relationship between psychological factors and drug addiction, for example, Kokkevi et al. (2006) researched to explore psychosocial correlates of drug addiction in adolescents in six countries in Europe. The sample size was 16,445 in their teens. The authors administered a questionnaire to assess psychological correlates like depression, self-esteem, anomie, and anti-social personality characteristics. For the assessment of social correlates, they used an anonymous self-administered questionnaire for drugs and socialization agents like family and peers. With the help of logistic regression, they concluded that neither depression nor self-esteem, but anomie and anti-social behavior were more related to drug addiction.

In upper socioeconomic strata, Niaz et al. (2005) studied young adults between 16 to 21 years of age to see the prevalence and psychosocial correlates of substance use. They approached a sample of 300 students with a self-developed questionnaire in different educational institutions in posh areas of Karachi city of Pakistan. With the help of both descriptive and inferential statistics, they concluded that more males (192) compared to females (108) involved in substance use. The social factors associated were friends who are taking different substances, parents with alcohol consumption habits, and with the marital status of separated or divorced. The psychological factors associated were poor coping skills, lack of control over peer pressure, and lack of adequate parental relationship with children.

There is a need for population-based research to determine the risk factors of drug addiction among the general population of Pakistan. Why they are vulnerable to be indulged in this habit owing to their emotional stability. Public health agencies and the public at large should be aware and alert to this rising epidemic of drug addiction in society and could plan for its management. Keeping in mind the need for research in middle and lower socio-economic strata as well present research was planned to conduct in a government hospital. The basic rationale of the present study was to identify the gateway drugs, deviant behavior, and psychological and environmental risk factors. Pakistani legislative, teachers, parents, and society at large should be vigilant enough and could establish some corrective measures to reduce and prevent this addiction which is leading our youth into darkness. For that, an elaborate correctional program could be established to treat psychological as well as social problems to reduce the habit of drugs.

Objectives

- To determine the demographic profile of individuals with substance-related disorders.
- To determine the level of psychological distress and emotional regulation in individuals with substance-related disorders.
- To determine the relationship between psychological distress and emotional regulation in individuals with substance-related disorders.
- **Hypotheses**
- There will likely be a positive relationship between psychological distress and expression suppression

in individuals with substance-related disorders.
- There will likely be an inverse relationship between psychological distress and cognitive reappraisal in individuals with substance-related disorders.

Method

Research Design

The present research was a correlational study with a cross-sectional research design.

Participants

Through the non-probability purposive sampling technique, 155 male patients who were admitted for their treatment in a public hospital were taken from December 2019 to February 2020 with ages ranging from 18-55years (*M*=30.39, *SD*=7.97). Sample size (*N*=153) was calculated through G power analysis where the significance level was 0.05 with a medium effect size of 0.3 and *r* was .20. Two participants were added to avoid chances of dropout.

Inclusion Criteria

- Only those participants were included who were admitted to addiction Centre.
- Patients were contacted in their rehabilitation phase of treatment.

Exclusion Criteria

- Screening was carried out with the help of DSM-5 diagnostic criteria for exclusion
- Patients suffering from drug-induced psychosis were excluded.
- Patients with any comorbid diagnosis of psychological disorder were also not included in the present sample.

Table 1

Demographic Information of the Participants (N=155)

Variables	Frequency	Percentage
Education		
Illiterate	24	16.0
Primary-Middle	53	34.7
Matriculation	34	22.0
Intermediate	13	14.7
Graduation	15	9.3
Higher Education	6	3.3
Marital Status		
Unmarried	80	52.7
Married	64	41.3
Divorced	11	6.0
Profession		
Unemployed	42	27.3
Government Employee	11	6.0
Private Employee	71	46.7
Business	26	17.3
Self Employed	5	2.7
Monthly Family Income.	**Mean**	**SD**
	25000.54	2000.13

Measures

Following measures for data collection were used for the present research.

Demographic Information Sheet

It was devised by the researchers keeping in mind the present research objectives. The questionnaire includes information regarding participants' age, marital status, education, and profession.

Drug History Proforma

The proforma was developed to obtain information including duration and reason of drug intake as well as preferred drug.

Depression, Anxiety, and Stress Scale-42 (DASS-42).

This scale was developed by Lovibond and Lovibond (1995) and consists of 42 items and was rated on a 4-point Likert scale ranging from 0 (Did not apply to me at all – NEVER) to 3 (Applied to me very much, most of the time – ALMOST ALWAYS). The scale measures the negative emotional states of depression, anxiety, and stress. An Urdu translated version of this scale (Farooqi & Habib, 2010) was used with internal reliability of .87.

Emotional Regulation Scale

This scale was constructed by Gross and John (2003) and consists of 10 items that are rated upon a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The items measure the participant's tendency to regulate their emotions in two different ways, cognitive reappraisal, and expressive suppression. An Urdu translated version by Majeed and Bano (2021) was used in this research. The reported Cronbach alpha was .94 for the Urdu version.

Procedure

Data collection was started after taking approval from Institutional Review Board (IRB). Patients who were admitted to the addiction center of a public hospital were informed about the research objectives and procedures. Patients were contacted during the rehabilitation phase of their treatment. Then after signing the informed consent of participation, they were asked to fill out the questionnaires. Special arrangements were made for those patients who cannot read or write statements of the questionnaires were read aloud, forms filled by the researcher, and research information was briefed in a comprehensible language. A total of four scales including a demographic questionnaire, drug history form, DASS-42, and emotional regulation scale were administered. All the measures were administered individually, and it took approximately thirty minutes to complete data collection with one participant. In case of any discomfort or fatigue expressed by the participant, the data collection procedure was halted and resumed later as per the comfort time of the participant.

Ethical issues were considered during the research study and data collection was initiated after the approval of the IRB. Permission for data collection was taken from the Institutional heads and permission from scales' authors was also sought before data collection. Written informed consent was signed by the participants and they were allowed to quit for data collection at any time during the research without any penalty or prejudice. They were also informed that their decision to decline to participate in research will not affect their treatment. No monetary benefits were involved in participation in the research. No identification information was expressed, and the anonymity of the participants was also safely guarded. Data would remain confidential and was only used for research purposes.

Results

Table 2

Drug-related Information of the Participants (N=155)

Variables	*f*	%
Type of drug intake		
Marijuana	33	22.0
Opium	3	2.0
Meth	9	6.0
Heroine	45	30.0
Cocaine	23	15.3
Steroids/Medical drugs	3	2.0
Multiple drugs	34	22.7
Reason for starting drug		
Loneliness	4	2.7
Stress	22	14.7
Curiosity	18	12.0
Peer pressure	65	43.3
Failure in love affair/marriage	34	22.7
Medical reason	7	4.7
Reason of Relapse		
Company of Friends	70	46.6
With drawl symptoms	30	20
Stop treatment	50	33.3

According to the self-reported information, most of the participants were multiple drug abusers while heroin and marijuana appear the most used drug by them. Peer pressure could be seen as both the reason for drug use as well as the reason for relapse. The mean duration of drug addiction was 12 years with an SD of 2.45.

Table 3

Descriptive Statistics of the Emotional Regulation, Depression Anxiety, and Stress (N=155)

Variables	Mean	SD	Minimum	Maximum	*a*
Expressive - suppression	24.95	7.86	6	42	.73
Cognitive reappraisal	18.27	6.12	4	28	.72
Depression	15.65	9.56	1	63	.87
Anxiety	14.78	9.81	1	48	.84
Stress	18.88	9.73	1	65	.89

Table 3 revealed that most of the participants regulate their emotions with the expressive suppression style. Mean scores show participants scored high on the stress subscale of DASS-42 if their scores were compared to depression and anxiety.

Table 4

Correlation between Emotional Regulation and Depression, Anxiety, Stress (N=155)

Variables	*M*	*SD*	1	2	3	4	5
Cognitive Reappraisal	24.95	7.86	-				
Expressive-Suppression	18.27	6.12	-.59**	-			
Depression	15.65	9.56	.15	.01	-		
Anxiety	14.78	9.81	.17	.04	.78	-	
Stress	18.88	9.73	.08	.12	.71**	.73**	-

***p*<.01

Results in Table 4 illustrated that depression, anxiety, and stress are positively related to each other. Likewise, a significant positive relationship can be seen between cognitive reappraisal and anxiety and a negative relationship resulting between cognitive reappraisal and expressive suppression of emotional regulation skills for the present patient population.

Discussion

Addiction has been an area of interest all over the world and now it is becoming a prominent issue in Pakistan. The present research objectives were to establish a demographic profile and to examine the relationship between psychological distress and emotional regulation in individuals with drug addiction.

The first hypothesis was approved, and results indicated that there was a significant positive relationship between expressive suppression and anxiety in individuals with drug addiction. Numerous theoretical models declared that impairments in emotion processing and emotion regulation trigger the co-incidence of anxiety and depression (Hofmann et al., 2012; Kashdan & Farmer, 2014). Expressive suppression is also linked with feelings of inauthenticity, as hiding outward, emotion creates incongruence between an individual's internal emotional state and outward emotional expression (Gross & John, 2003). Likewise, expressive suppression has negative effects on self-esteem, emotional well-being, and life satisfaction (Brewer et al., 2016; Hu et al., 2014).

The second hypothesis was not approved by the present patient population as no significant inverse relationship can be seen between psychological distress and cognitive reappraisal emotional regulation. Unlike the present results, cognitive reappraisal has multiple implications. Peers of individuals who used cognitive reappraisal more commonly stated closer relationships and better fondness for them than did contemporaries of those who used cognitive reappraisal less often (Gross & John, 2003). Furthermore, even if a cognitive reappraisal is associated with communicating more positive but less negative emotions, those who reported using more frequent cognitive reappraisal advocated more frequent giving out of both positive and negative emotions (Gross & John, 2003).

Results revealed that the ages of participants, in this study, to start taking drugs have been reported to be as low as 10 years, and the mean age of 22.69 years with a standard deviation of 8.09. A survey was conducted with elite class adolescents and reported that about 90% of boys experimented with drugs as low as 10 years of age. About 30 to 35 % of girls get

positive results in dope after attending high-class school parties. The most associated factors were sensation seeking, friends' company, and participating in parties. This study supports present research that adolescents and young adults start taking drugs majorly due to peer pressure. 43.3% of the sample reported having started taking drugs due to peer pressure (Niaz et al., 2005).

People are at a much higher risk of consuming drugs and getting addicted to them in lower-income families as they drop out of school early or do not prioritize their education to earn and support their families. When these children or young adults go out in the world without any awareness and education, they get more vulnerable to bad companies and influences. As supported by the sample's education, that is 50% of the sample was either illiterate or fell in the category of primary to the middle. Majorly the sample was from lower-income areas, and either was unemployed or a private employee (odd jobs). This has been supported by multiple studies that state that poverty, low education, and unemployment significantly increase the use of drugs (Niazi et al., 2009; UNDCP Global Assessment Program on Drug Abuse, 2002).

Drug history revealed that the average duration of substance involvement was 12 years and the most common drugs reported to be used are Heroin, Marijuana, and multiple other drugs like Opium, Meth, Cocaine, and Steroids/Medical drugs. Participants have reported to have not been using one but multiple drugs. Niaz et al. (2005) conducted a survey and observed that 35 % of adolescents were involved in drug use, the most common drugs in use were Hashish, Alcohol, Ecstasy, and Marijuana. The factors which increase drug use were easy availability, sensation seeking, and teen parties. The use of cocaine during the year 2000 increased in high school students. According to Anti-Narcotics Force Pakistan (2006), the most popular drug has been Heroin and young adults use drugs to overcome familial, occupational, and social stressors, peer pressure, and failure in romantic relationships.

During the year 2014, around 7.9 million adults in the United States of America have diagnosed with two disorders; one was substance-related disorder and the other was depression (Substance Abuse and Mental Health Services Administration (SAMHSA), 2014). Individuals diagnosed with a mood disorder will also indulge in drug addiction twice as compared as those without the mood disorder diagnosis. In America, one-third of the population who are diagnosed with depression also have the habit of alcohol consumption (American Addiction Center, 2019). Goeders (2004) states that people who experience some sort of stressor usually indulge more in addiction to cope with unhappy marriages, harassment, and unemployment. However, the findings of this study could be supported by the findings of Beaufort et al., (2017) who states that the scores of addicts admitted to the hospitals on DASS after detoxification were low in comparison to the scores they had at the time of admission

Limitations and Suggestions

The sample was acquired during the times of COVID-19 when admissions were very limited. The survey was administered in line with the strict hospital standard operating procedure (SOP) which included sitting at six feet distance, not being able to enter the restricted area, and always wearing a mask. This might have served as a source of low comprehension of items due to, low rapport and trust to open honestly about their thoughts, feelings, and emotions. Items in the survey had to be asked verbally by the participants because the participants were either not educated or did not want to read and answer the questions themselves. The results of the study call for deeper research into the relationship between emotional regulation. A more diverse and gender-neutral sample needs to be targeted in future research. In the present sample, research participants

were from lower economic status and uneducated. For future research, a more diverse population could be included

Implications and Future Directions

The findings of the study can be used in deriving intervention and prevention plans both at a clinical and cultural level. Demographic profiles and information about drug history give an insight into the lives of the population that might be vulnerable to addiction. The young population can be identified in schools and different education organizations and law enforcement agencies can run awareness campaigns for drug addiction. Parents and teachers can be educated to identify at-risk children and cater to their unique needs. This research will also be helpful for mental health professionals to design intervention plans in such a manner that could help patients to decrease their psychological problems and enhance their emotional regulation skills. A more diverse and gender-neutral sample needs to be targeted in future research.

Conclusion

Psychological distress, emotional regulation, and demographic variables were investigated in this research and their relationship with drug addiction was studied. Results indicated a statistically significant positive relationship between expressive suppression and anxiety for the present patient population. The demographic profile indicated that most of the participants belonged to a lower socio-economic background and were illiterate. Participants started drug-taking at a very young age, as low as ten years. Unemployment was also very high in the present sample. Polydrug abuse and duration of illness were more than ten years on average was reported.

Contribution of Authors

Saima Majeed: Conceptualization, Methodology, Formal Analysis, Writing- Reviewing & Editing

Komal Nayyar: Data Curation, Investigation, Writing- Original Draft

Altaf Qadir Khan: Conceptualization, Writing- Reviewing & Editing

Conflict of Interest

There is no conflict of interest declared by authors.

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