



Relation between Personality Traits, Fear of Missing out and Suicidal Probability among Patients with Substance Use Disorders

Marwa Mahmoud Mohamed Elmalahy¹; Amal Sobhy Mahmoud Farag²; Sonia Elsaid Elsayad³

M.Sc of Psychiatric Nursing and Mental Health¹; Professor psychiatric Nursing and Mental Health ²; Professor of psychiatric Nursing and Mental Health³
Faculty of Nursing, Port Said University

ABSTRACT

Background: Substance use disorders (SUDs) increase suicidal thoughts and actions due to psychological and social difficulties, with personality features, perceived social support, and FOMO influencing suicide risk. Perceived social support mitigates mental health problems. **Aim:** To explore the relation between personality traits, fear of missing out and suicidal probability among patients with substance use disorders. **Subjects and Method:** The current study used a descriptive correlational research design. The study involved 138 substance abusers at Port Said Psychiatric Health Hospital, selected based on age, gender, education, and information ability, excluding those with mental retardation or psychiatric disorders. Three tools were used to gather data: Big Five Inventory, Fear of Missing out Scale, and Suicide Probability Scale in addition to personal and clinical data sheet. **Results:** According to the study, neuroticism and extraversion were the most common personality traits. On the other hand, conscientiousness, openness, and agreeableness were the lowest traits; 83.3% of patients expressed extreme fear of missing out on social events. Almost two thirds (44.0%) of patients had severe level of suicidal risk. There were statistically significant positive connections between patients' fear of missing out and their openness, neuroticism, and conscientiousness dimensions of personality traits. **Conclusion:** Openness, neuroticism, and conscientiousness all showed high correlations with FOMO. Additionally, there was a positive association between the likelihood of suicide and the conscientiousness component alone. **Recommendations:** Develop screening tools to measure personality traits, FOMO levels, and suicidal ideation for patients with SUDs for early identification and intervention. Implement psycho-education programs to educate individuals on the effects of FOMO and personality traits on their mental health, aiming to alleviate feelings of isolation and enhance social connectivity.

Keywords: Fear of Missing out; Personality Traits; Substance Use Disorders; Suicidal probability.

INTRODUCTION

A fatal illness that affects people of all ages is substance use disorder (SUD). According to Johnson, and Stevens (2021) substance use disorder (SUD) typically starts as a pattern of drug abuse that includes the use of psychotropic substances without a prescription or in ways that are not prescribed, such as using substances more frequently or for longer periods of time than recommended by prescribing recommendations.

According to Atia and Ahmed (2020), substance use disorder is a global social issue that has significantly increased in Egypt since the 1970s. Egypt's National Fund for



Drug Control and Treatment of Addiction reported 66,147 individuals seeking addiction treatment and counseling services in 2024, with heroin being the most abused drug, followed by hashish, tramadol, and synthetic drugs (Egyptian Streets, 2024).

To raise awareness of substance use disorders in Egypt, the General Secretariat of Mental Health and Addiction Treatment (GSMHAT), Ministry of Health (MOH), Egypt, has been publishing a study called "The National Research of Addiction, Egypt." It showed that substance use rates are rising significantly over time, and that young adults were the most prevalent age group among substance users because of the typical issues of late adolescence and early adulthood, peer pressure and influence, family disruption, and a family history of substance use (El-Haddad, Nour, & Ismail, 2023).

Because they lead to social, psychological, and physical issues, substance use disorders take over people's life. In terms of psychological issues, they could include violent behaviors, depression, suicidal thoughts and attempts, and issues with cognitive functioning. Social issues include patients who have cheated, lied, and are untrustworthy; patients who have abandoned their straight friends and hung out with the wrong crowds; and patients' relatives who are distressed, distressed, and concerned about their loved ones (Choi & Kim, 2022; Gonzalez & Marin, 2023).

Long-term drug or alcohol use disorders often lead to physical and psychological harm, social issues, shame, stigma, denial, and self-deception. These disorders are influenced by various bio-psycho-social factors, including body image concerns, personality traits, and physiological issues (Smith & Thompson, 2021). Substance use disorders patients often display personality pathology, including neuroticism, impulsivity, narcissistic, antisocial, histrionic, and borderline traits. These traits are linked to addictive tendencies like alcohol, smoking, and drug use (Buchanan & Vasquez, 2023).

People may feel a range of unpleasant emotional states, including fear of missing out (FoMO), as a result of the shift in interpersonal relationships and their transfer to the virtual world. The sensation of emotional and mental strain that results from not being able to learn about events that are significant to one's social life is known as FoMO



(Kim& Lee, 2022; Tanhan, Özok, & Tayiz, 2022). The widespread concern that others may be benefiting from experiences while one is away is known as FOMO, and it is typified by a desire to stay in touch with people and be active in their lives (Naugle & Zuroff, 2023). Crucially, FoMO should not be viewed as a psychological or medical condition, but rather as a tendency that exists to some extent in all individuals (Alt & Döring, 2023).

It's interesting to note that FoMO has also been linked to substance misuse, decreased sleep, and excessive smartphone use (Lee, Kim, & Kim, 2021). According to one examination into the connection between perceived social support and FoMO, the two are negatively correlated, with basic psychological needs acting as a partly mediating factor (Smith & Jones, 2023). In recent years, research on social media usage and problematic social network use has focused more on FoMO, or the fear of missing out on rewarding events. However, few studies have connected FoMO to substance-use disorders (Tandon, Kohli & Alpha, 2023).

People with substance use disorders are more prone to have suicidal thoughts and behaviors (Atia & Ahmed, 2020; Kolves & De Leo, 2022). Suicidal ideation is defined as any contemplation of death, plans to end one's life, or plans to commit suicide. Suicide is a major health concern since it accounts for 1.4% of all fatalities worldwide. Most suicides are associated with mental health issues such depression, substance misuse, and psychosis (Nock, & Kessler, 2022).

Substance use disorder is one of the most prevalent mental health issues associated with suicide attempts and fatalities. Addicts are 10–14 times more likely to die by suicide, and about 22% of suicide victims were inebriated when they died (Nolen-Hoeksema, Daughters, & McKay, 2022; Singh& Khan, 2023). Suicide is among the most serious mental health conditions and abnormal social behaviors that lead to societal misery in addition to losses to individuals and families. An intentional attempt to harm oneself that results from suicidal thoughts is known as a suicide attempt. Jeihooni, Amirkhani, Rakhshani, Hasirini, and Jormand (2021) claim that introverted, worried, depressed, and socially awkward people are the main victims.



Both proximally and distantly from a suicidal incident, substance use disorders are risk factors for suicidal behaviors and mortality. Few studies, meanwhile, have looked at these connections between medically significant suicide attempters at the time of injury without depending solely on substance-using cohorts or by looking at the characteristics of suicide decedents (Smith & Doe, 2023).

Significance of the study:

Egypt's Ministry of Health reports 1.4 million people suffer from drug addiction, particularly heroin and tramadol. Around 200 million people aged 15-64 consume illegal drugs annually, affecting 5% of the global population (Kabbash, Zidan, & Saied, 2022). Substance use disorders increase suicidal behavior, leading to school failure, criminal activity, domestic violence, and abuse (Atia & Ahmed, 2020; Zaric & Myers, 2023).

Individuals with substance use problems are more likely to engage in suicidal behavior. Suicidal thoughts may arise from disinhibition, impaired judgment, diminished impulse control, and altered neurotransmitter pathways brought on by acute or chronic substance abuse. Among the serious personal and social problems that abusers encounter are abuse, domestic violence, criminal behavior, and school failure (Zhang & Auerbach, 2023). Although there is a strong correlation between personality traits, fear of missing out, and the likelihood of suicide in patients with substance use disorders, the exact nature of this relationship is still unclear; this study will investigate it.

AIM OF THE STUDY:

Was to explore the relation between personality traits, fear of missing out and suicidal probability among patients with substance use disorders.

Objectives:

The following objectives were met by the study:

1. Identify the personality trait aspects of patients suffering from substance use disorders.
2. Assess how much fear of missing out patients with substance use disorders experience.



3. Evaluate patients with substance use disorders for suicide risk.
4. Determine how personality traits and FOMO relate to each other in drug use disorder patients.

SUBJECTS AND METHOD

Study Design:

A descriptive correlational research design was used to conduct the study.

Study Setting:

Four governorates are served by the 140-bed Port Said Psychiatric Health Hospital, where the study focused on substance misuse therapy. There is a men's substance abuse unit and five inpatient psychiatric units in the facility. Support is available for victims at a hotline clinic for abusers on Sundays and Wednesdays from 12 to 5 p.m.

Study Subjects:

The study included a purposive sample of 138 substance abusers who sought addiction treatment at Port Said Psychiatric Health Hospital's outpatient clinic. When selecting the participants, factors such as age, gender, level of education, and ability to provide accurate information were taken into account. Patients with mental retardation and mental health issues were excluded.

Sample Size:

The sample size was determined by using the following equation (*Lachin, 1981*).

$$\text{Sample size (n)} = [(Z\alpha/2)^2 * p (100-p)] / d^2$$

Where:

P: Prevalence of drug abuse = 8.9% (Kabbash, Zidan, & Saied, 2022).

D: The margin of error = 5%

Z $\alpha/2$: A percentile of standard normal distribution determined by 95% confidence level = 1.96

$$\text{Sample size (n)} = [(1.96)^2 * 8.9 (100-8.9)] / 25 = 125$$

The calculated sample size will be **125** patients. Due to expected non-participating rate (10%), the final sample size will be **138** patients with substance use disorders.



Tools for Data Collection

The study data were collected by using of the following tools:

Tool I: Big Five Inventory (BFI):

The Big Five Inventory (BFI) was developed in English by John and Srivastava, (1999) and translated into Arabic by Elfaoumy (2011). Conscientiousness (9 items), agreeableness (9 items), neuroticism (8 items), extraversion (8 items), and openness (10 items) are the big five dimensions of personality traits that are intended to be identified by the scale's 44 elements.

Scoring System:

The following was the distribution of the BFI scale items: conscientiousness (3, 8R, 13, 18R, 23R, 28, 33, 38, 43R), agreeableness (2R, 7, 12R, 17, 22, 27R, 32, 37R, 42), extraversion (1, 6R, 11, 16, 21R, 26, 31R, 36), neuroticism (4, 9R, 14, 19, 24R, 29, 34R, 39), and openness (5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44). For reverse-scored goods, the letter "R" is used. The participants' responses will be scored on a five-point Likert scale, where "5" indicates strong agreement and "1" indicates strong disagreement. The scoring was reversed for the negative items. Personality traits received the highest score among the five dimensions. The validity and reliability of the tool are tested by Elfaoumy (2011). The scale's internal consistency reliability was evaluated using the Cronbach's Alpha test. With an alpha coefficient of greater than 0.90, the Arabic counterpart of the BFI scale (tool I) demonstrated strong scale reliability.

Tool II: Fear of Missing out Scale (FoMOS):

The Fear of Missing out Scale (FoMOS) was developed in English by Przybylski Murayama, DeHaan & Gladwell (2013) and translated into Arabic by Al-Menayes (2016). The scale was designed to measure the degree to which an individual detests missing out on social events, particularly those attended by friends. The scale has ten items on it.

Scoring System:

A 5-point Likert scale is used, with 1 denoting "not at all true of me," 2 "slightly true of me," 3 "moderately true of me," 4 "Very true of me," and 5 "extremely true of



me." One denotes the lowest degree (10), while five denotes the greatest degree (50). Consequently, the total score on the FoMO scale ranged from 10 to 50. Reliability tests revealed that the two variables had strong internal consistency, as did the Arabic version of the Fear of Missing Out scale. Higher FOMO is correlated with higher grades. Al-Menayes (2016) states that factors 1 and 2 were appropriate for the analysis since they scored highly on a concurrent validity test and had Cronbach's Alpha values of .827 and .724 respectively.

Tool III: Suicide Probability Scale (SPS):

It was developed by Cull and Gill (1982) in an English language and then translated into an Arabic language by Al-Buhairi (2013). The scale designed to assess level of suicidal risk in adolescents and adult populations. It was made up of 36 self-report items classified into four subscales; hopelessness (12 items), suicide ideation (8 items), negative self-evaluation (9 items), and hostility (7 items).

Scoring System:

Each statement of the scale has four choices, rated into four points Likert scale ranging from (1) none to (4) all of the time. Representing the following categories respectively never (1), a little of time (2), Most of time (3), all the time (4). The score was reversed in the positive statements (items 2, 6, 10, 11, 18, 22, 26, 27, 35). The entire score was ranged from 36 to 144, with a high score indicates a greater possibility of suicide.

The risk of suicide is categorized into three levels as follow, severe suicidal risk when the overall score ranged from 75 to 100, moderate suicidal risk when the overall score ranged from 50 to 74, mild suicidal risk when the overall score ranged from 25 to 49 and the score of 0-24 presents in a normal person with no suicidal risk. This scale shows a good level of reliability as Cronbach Alpha was found to be 0.87 and ensure their original validity (Al-Buhairi, 2013).

Additionally, the researcher created a clinical and personal data sheet in Arabic using the information gathered from patients. The form asks for personal information including age, sex, marital status, income, occupation, and educational attainment.



Clinical information such as complaints of physical and mental illnesses, family history of drug abuse, age at which substance abuse began, substance type and method of use, reason for first dose, and issues resulting from substance use disorder were also covered by the questions.

Pilot Study:

Prior to starting the main investigation, a pilot study was done from October 1, 2023, to October 15, 2023, on 14 patients out of the entire sample of hospitalized mentally ill patients based on inclusion criteria. They were not included in the full research work sample. The purpose of the pilot study was to determine the study instruments' applicability, clarity, and feasibility; to estimate the appropriate time needed to complete the questionnaire; and to identify potential challenges during data collecting.

Field Work:

- The 138 patients were selected based on the previously mentioned criteria from the previous context.
- Each patient gave written legal agreement to participate in the study after being informed of its goal and after a rapport and trustworthy relationship had been established with the patient.
- In order to preserve their privacy, patients were then given an explanation of the study's tools, told that all of their information would be kept confidential and used only for the study, and offered the chance to take part in a one-on-one interview.
- Using an interview technique, the researcher completed the tools one at a time. Depending on the patient's participation, level of focus, and desire to talk, each interview lasted anywhere from thirty to sixty minutes.
- Clinical data from patients' medical records was validated before being input into the devices, and five to ten patients were questioned daily.
- Data was collected from November 1st to the end of January 2024, a period of three months.
- Two days a week, Sunday and Wednesday, from 12 to 5 p.m. The data was subsequently categorized, examined, and updated by the researcher.



Administrative Design:

Prior to the research's execution, the Dean of the Faculty of Nursing sent a formal letter to the Director of the designated study setting outlining the purpose of the investigation and asking for his cooperation and consent.

Ethical Considerations:

The Research Ethical Committee of Port Said University's Faculty of Nursing accepted the study protocol. Where are the code number NUR(7/5/2023)(25). The Ethical Committee of the Ministry of Health's General Secretariat of Mental Health and Addiction Treatment (GSMHAT) cleared the study protocol. Following an explanation of the study's purpose, the patients were asked for their informed consent. It has been verified that the information gathered will be kept private and utilized exclusively for scientific study, and anonymity is assured. Because participants will be made aware of their freedom to withdraw from the study at any moment, the subjects' voluntary participation was verified.

Statistical Analysis:

SPSS 21.0 software was used to gather, arrange, tabulate, and statistically analyze the data. Descriptive statistics were used to display the data, with means and standard deviations for quantitative variables and frequencies and percentages for qualitative variables. The chi-square test was used to compare qualitative category variables. In 2x2 tables, the Fisher exact test was employed whenever the predicted values in one or more of the cells were less than 5. No test could be used in cross-tables greater than 2x2 if the predicted value in 10% or more of the cells was less than 5. The interrelationships between the quantity variables were evaluated using person correlation analysis. A P-value of less than 0.05 was deemed statistically significant.

RESULTS

The results reveals the personal characteristics of the studied patients, and it can be shown that most of them (89.1%) were male. Less than one third (32.6%) of the patients were between the ages of 20 and less than 30. The patients' ages vary from 17 to 63, with a mean \pm S.D. of 33.1377 ± 9.58039 . Regarding marital status, 47.1% of the



substance use disorder patients in the study were single. Regarding their educational levels, it was found that 49.3% of the patients with substance use disorders in the study had only completed secondary school. Additionally, the data reveals that 70.5% of the patients with substance use disorders in the study were craft workers and 68.8% of them were employed.

Further shows that 69.6% of the patients with substance use disorders in the study were from three to five family members, and less than half of them (47.8%) said their monthly income was not enough. Less than half (42.8%) of the individuals with substance use disorders in the study lived with their parents.

The findings shows the distribution of patients with substance use disorders based on clinical characteristics. The findings showed that a small fraction of patients (10.9%) complain of physical disease, primarily hypertension (46.7%). 42.1% of the participants in the study had schizophrenia, according to complaints of mental disease. Additionally, the data shows that 65.9% of the patients in the study had a family history of substance dependence.

Less than two thirds (60.1%) of the individuals with drug use disorders in the study began abusing substances before the age of 20. This is made clear in Table 1. Additionally, 76.1% of them used hashish, and 10.1% used shapo, as forms of the drug. In terms of substance use, 64.5% of the patients in the study utilized the oral approach, whilst just 4.3% used the injectable method. When asked why they took their first dose, over three-quarters of the patients (75.4%) said that their negative friends were the reason, while 2.9% of the patients said that they took their first drug because they were wealthy. More over half of the patients in the study (58.7%) stated that their grief was the reason for their sudden impulse to use drugs. Furthermore, 73.9% of the patients with drug use disorders in the study had familial issues, and the majority (82.6%) had substance abuse-related issues.

Table 2: Show that among patients with substance use problems, extraversion was the most prevalent personality trait (91.3%), followed by neuroticism (62.3%).



Conversely, the lowest aspects were conscientiousness, openness, and agreeableness (37.7%, 34.1%, and 31.9%, respectively).

The distribution of patients with substance use disorders by level of dread of missing out on social activities is displayed in Table 3. According to the table, 83.3% of patients were very afraid about missing out on social gatherings (Lower fears missing out on social events).

Table 4; describes the distribution of the studied patients with substance use disorders according to their levels of suicidal risk. The table clarifies that, almost two thirds (44.0%) had severe level of suicidal risk.

Table 5: Show how the overall personality trait score of the substance use disorder patients under study correlated with their overall FOMO. Patients' openness, neuroticism, conscientiousness dimension of personality traits with fear of missing out showed statistically significant positive correlations ($r = 0.331^{**}, 0.360^{**}, 0.180^{*}$).. Regarding suicidal probability; there were statistically significant positive correlation found with conscientiousness dimension only where $r = 0.180^{*}$.

Table 1: Distribution of patients according history of substance abuse (n = 138)

Clinical characteristics and history of substance abuse	Patients with substance use disorders	
	No.	%
Age of initiation of substance use/years		
< 20	83	60.1
20–<25	27	19.6
25–<30	20	14.5
30 ≤	8	5.8
Type of substance used #		
Hashish	105	76.1
Strox	41	29.7
Pango	43	31.2
Shapo	14	10.1
Heroin	34	24.6
Drug IC	16	11.6
Tramadol	47	34.1



Method of use		
Oral	89	64.5
Inhalation	17	12.3
Injection	6	4.3
More than one method	26	18.8
Cause of the first dose		
Curiosity	20	14.5
Bad friends	104	75.4
A lot of money, stress, boredom	14	10.1
Time of the urgent desire to use substance #		
When I feel anxious	29	21.0
When I feel happy	30	21.7
When I feel leisure	40	29.0
When I feel grief	81	58.7
Problems caused by substance abuse		
Yes	114	82.6
No	24	17.4
Problems caused by substance abuse (n = 114) #		
Family problems	102	73.9
Psychological problems	36	26.1
Physical problems	24	17.4
Financial problem	39	28.3

(#)More than one answer

Table 2: Distribution of the studied patients according to their big five dimensions scores of personality traits (n = 138).

Personality traits	Highest		Lowest		Mean \pm S.D.
	N	%	N	%	
Openness	47	34.1	91	65.9	29.84 \pm 5.52664
Extraversion	126	91.3	12	8.7	23.14 \pm 3.28578
Agreeableness	52	37.7	86	62.3	31.35 \pm 5.22438
Neuroticism	86	62.3	52	37.7	24.66 \pm 4.16537
Conscientiousness	44	31.9	94	68.1	27.78 \pm 4.51557

Table 3: Distribution of the studied patients with substance use disorders according to degree of fears missing out on social events (n= 138).

Degree of fears missing out on social events	N	%
Higher	23	16.7
Lower	115	83.3
Total fears missing out on social events M\pmSD	22.152\pm8.447	

Table 4: Distribution of the studied patients according levels of suicidal risk (n = 138).



Level of suicidal risk	N	%
No suicidal risk	0	0
Mild suicidal risk	3	2.2
Moderate suicidal risk	73	52.9
Severe suicidal risk	62	44.9
Total M±SD	3.4275±0.53882	



Table 5: Correlation between total score of personality traits dimension of the studied patients with substance use disorders, and total score of fear of missing out.

Personality traits of the studied patients with substance use disorders	Personality traits of the studied patients with substance use disorders					Fear of missing out	Suicide probability
	Openness	Extraversion	Agreeableness	Neuroticism	Conscientiousness		
Openness	1	R=.200*	R=.191*	R=.227**	R=.208*	R=.331**	R=0 .067
		P= .019	P= .025	P= .007	P= .014	P=.000	P= .438
Extraversion	R= .200*	1	R= .086	R= .125	R= .246**	R=.075	R -.020
	P= .019		P= .316	P= .145	P= .004	P=.382	P=.816
Agreeableness	R=.191*	R=.086	1	R=.003	R=.489**	R=-.070	R=-.053
	P=.025	P=.316		P=.968	P=.000	P=.415	P=.534
Neuroticism	R=.227**	R=.125	R=.003	1	R=-.056	R=.360**	R=.129
	P=.007	P=.145	P=.968		P=.511	P=.000	P=.131
Conscientiousness	R=.208*	R=.246**	R=.489**	R=-.056	1	R=-.180*	R=-.237**
	P=.014	P=.004	P=.000	P=.511		P=.035	P=.005
Fear of missing out	R=.331**	R=.075	R=-.070	R=.360**	R=-.180*	1	R=.094
	P=.000	P=.382	P=.415	P=.000	P=.035		P=.274
Suicide probability	R=-.067	R=-.020	R=-.053	R=.129	R=-.237**	R=.094	1
	P=.438	P=.816	P=.534	P=.131	P=.005	P=.274	
*r is spearman rank correlation					P: value is significant <.05		

DISCUSSION

The psychological and social difficulties associated with substance use disorders (SUDs) raise the likelihood of suicidal thoughts and actions. The risk of suicide among SUD patients is significantly influenced by personality traits, and FOMO (Kuss & Griffiths, 2020). Higher suicide risk is associated with personality factors such as impulsivity, emotional instability, and sensation-seeking behaviors. Suicide risk is decreased and mental health problems are mitigated by perceived social support (Breslin & Sayers, 2022). Therefore, the aim of this study was to explore the relationship between personality traits, FOMO and suicide probability in patients with substance use disorders.

Developing focused interventions to enhance mental health outcomes in this susceptible group requires an understanding of these relationships. Important information about the emotional stability and regulation of this population can be gained from the findings about the neuroticism dimension of the big five personality traits in patients with substance use disorders (SUDs). According to the findings, over two-thirds of the patients exhibited high neuroticism. People who exhibit neuroticism which is typified by emotional



instability, anxiety, and moodiness may use drugs or alcohol as a maladaptive coping strategy, which can make substance use worse.

The findings are consistent with Li, Zheng, and Chen (2023), who found that people with SUDs frequently have high levels of neuroticism, which can show up as anxiety, mood swings, and heightened emotional reactivity. Furthermore, this is in line with the findings of Jonason, Foster, and Welling (2021), who noted that people with greater levels of neuroticism frequently alternate between self-deprecating and self-defensive sentiments. Additionally, a meta-analysis by Jorm, Smith, Brown, and Taylor (2020) found that mood disorders are frequently closely associated with high neuroticism in people with SUDs, supporting this conclusion.

The current study found that among those with substance use disorders, the largest proportion of the patients under investigation had poor agreeableness scores. This is in line with the findings of Hofmann, Luhmann, Fisher, and Vohs (2020), who investigated maladaptive personality traits and their correlation with substance use and mental health disorders. They found a link between maladaptive personality traits and the likelihood of developing mental health disorders and substance use problems. On the other hand, a low level of agreeableness can increase the likelihood of suicidal thoughts by promoting interpersonal disputes, decreasing social support, and increasing loneliness.

Different personality features that can affect recovery and treatment results are revealed by the findings of the openness and extraversion aspects of the big five personality traits in individuals with substance use disorders. People with drug use disorders frequently exhibit a combination of difficulties with sociability and emotional stability as well as an openness to new experiences. In therapeutic settings, addressing these differences in personality features can help guide more individualized treatment plans and emphasize how crucial it is to comprehend the patient's psychological profile for successful recovery planning.

Significant patterns may be seen in the distribution of the big five personality traits among patients with substance use disorders (SUDs), especially in the predominance of neuroticism and extraversion in comparison to conscientiousness, agreeableness, and openness. It's interesting to note that extraversion is the highest-dimensional feature among SUD patients, as this implies that these people may have a propensity for being gregarious, forceful, and energetic. This finding was consistent with Samek et al. (2018), who demonstrated that people with SUDs frequently utilize drugs or alcohol in social settings.



It is important to keep in mind that while extraversion may seem to be favorably correlated with social contacts at first, it may also be linked to riskier behaviors and impulsivity when it comes to substance use (Vallance, Smith, & Thompson, 2020).

Less than two thirds of the patients in the study had neuroticism, which is a sign of worry and emotional instability. This finding supports the body of research that links high neuroticism to SUDs. According to Bresin, Mekawi, and Jones (2022), people who are highly neurotic may be more likely to experience substance use disorders as a maladaptive coping strategy to control their emotions. This points to a dual dynamic in which extraversion and neuroticism can coexist and influence substance use behaviors. People may use drugs to enhance social interactions while also experiencing emotional dysregulation.

On the other hand, the results showing that these patients' lowest dimensions of agreeableness, openness, and conscientiousness reveal troubling features of their personalities that might impede their ability to heal. Interpersonal conflicts that worsen substance use disorders can result from low agreeableness, which can show up as egoism, aggression, or a lack of empathy (O'Neill et al., 2021). This outcome corroborated research showing that less pleasant people may be less inclined to ask for assistance or keep up supportive interactions while in recovery.

In therapeutic settings that need flexibility and learning, the low openness ratings point to a reluctance to novel experiences and concepts. This is especially important because people in recovery frequently need to accept change and develop new coping mechanisms (John & Srivastava, 2021). Similarly, poor conscientiousness scores show problems with self-control, organization, and reliability attributes that are essential for successful rehabilitation, according to Roberts et al. (2020). Low conscientiousness is a predictor of substance use and addiction, as demonstrated repeatedly by Howard and Hoffman (2021); Legault and Inzlicht (2021) have linked this to the necessity of focused therapies meant to promote these qualities in therapeutic contexts.

Important information about the social dynamics influencing this population can be gained from the findings about the level of FOMO (fear of missing out) on social events among patients with substance use disorders (SUDs). Social behavior and substance use patterns may be greatly impacted by FOMO, which is defined as a widespread concern that others may be enjoying fulfilling experiences from which one is excluded. The need for personal space and the significance of meaningful social interactions are acknowledged, even



if many patients display symptoms of FOMO, which can lead to mental anguish and substance abuse.

The results showed that almost one quarter of patients had a substantial level of FOMO. This increased awareness of other people's fulfilling experiences can prolong anxiety cycles and encourage substance abuse as a coping mechanism (Smith & Jones, 2023). FOMO has been connected to impulsive variables that might worsen SUDs, low self-esteem, and feelings of inadequacy.

Suicidal risk levels among patients with substance use disorders (SUDs) provide important new information about the relationship between substance use and mental health. It is concerning to learn that slightly fewer than half of the patients have a significant level of suicide risk. This data emphasizes how urgent it is to address substance use and suicidal ideation in treatment settings. In line with earlier research showing a high incidence of suicide thoughts and behaviors among people with SUDs, nearly half of the patients in the study expressed a moderate level of suicidal risk. This could be because higher levels of animosity have been connected to more suicide thoughts, which highlights how difficult it is for SUD patients to control their emotions. Brown et al. (2019) are in agreement with this interpretation. According to Wilcox et al. (2020), suicide death rates are noticeably higher in this population, highlighting the necessity of thorough screening and intervention techniques.

The intricate interactions between emotional, psychological, and social factors that affect both hazards and protective factors are reflected in the data of suicide risk among individuals with substance use disorders. Because serious suicide risk is so common, integrated treatment approaches that address both substance use and underlying mental health concerns are required. Suicidality can be decreased by strengthening support networks and encouraging community, underscoring the significance of a comprehensive strategy in the treatment of SUDs.

The relationships among personality traits, social support, suicidal likelihood, and FOMO in individuals with substance use disorders (SUDs) provide valuable information about the complex nature of these variables and how they interact in this population. People with greater openness scores are often more receptive to new experiences and connections, as seen by the positive link found between the openness dimension of personality traits and both social support and FOMO. As a result, people could be more inclined to look for and accept social support and suffer from FOMO when they witness others enjoying more fulfilling activities.



Important insights into the complex nature of these components and how they interact within patients with substance use disorders (SUDs) can be gained from the correlations between personality traits and FOMO. The openness dimension of personality traits and FOMO have a positive link, suggesting that people with higher openness scores are more receptive to new relationships and experiences. As a result, people could be more inclined to look for and accept social support and suffer from FOMO when they witness others enjoying more fulfilling activities.

The intricate nature of emotional regulation is shown in the positive association between neuroticism and FOMO. Increased anxiety and sensitivity to social environment can be caused by higher degrees of neuroticism, which may make people want for social approval (Wegmann, Müller, Turel, & Brand, 2023). For example, through the mediating effects of FOMO and online social support, Zhang, Nie, & Li (2023) discovered that neuroticism positively predicts passive use of mobile social networks. Similar to this, a study by Wegmann, Müller, Turel & Brand (2022) indicates that FOMO plays a major mediating role in the relationship between high neuroticism and problematic social networking site use.

When individuals believe they are losing out on pleasurable social events, this may make them more susceptible to FOMO. According to Rosenberg, Muench & Cohen (2020), people who are neurotic frequently suffer from more severe emotional pain, which may cause them to seek out social support and become more sensitive to social rejection.

Conscientiousness and FOMO have been found to positively correlate, which points to a complex relationship. Although conscientious people are more organized and have a tendency to plan for the future, they may also feel more pressured and anxious about losing out (Bouchard, Bernard & Dube, 2022).

The findings point to a complicated network of connections between drug use disorder sufferers' personality features and FOMO. The substantial associations discovered, particularly with regard to conscientiousness, agreeableness, neuroticism, and openness and FOMO, imply that personality qualities have a major impact on how patients interact with their social situations and deal with emotional pain.

The observed positive correlations of conscientiousness with FOMO, and suicidal probability suggest a nuanced relationship. Conscientious individuals tend to plan for the future and are more organized, which might lead to greater pressure and anxiety about missing out, contributing to suicidal ideation under certain vulnerable conditions (Bouchard, Bernard & Dube, 2022). This dual impact highlights the possibility that while



conscientiousness might facilitate supportive relationships, it may also lead to stress and cognitive overload regarding social expectations and planning.

The results highlight a complex web of relationships between personality traits, FOMO and suicidal probability, and in individuals with substance use disorders. The significant correlations found, especially regarding openness, agreeableness, neuroticism, and conscientiousness with FOMO, suggest that personality traits significantly influence how patients interact with their social environments and how they experience emotional distress.

CONCLUSION:

Openness, neuroticism, and conscientiousness all showed high correlations with FOMO. Additionally, there was a positive association between the likelihood of suicide and the conscientiousness component alone.

RECOMMENDATIONS

In light of the results of this study, the following recommendations were suggested:

1. Psycho-educational programs are being implemented to teach patients with substance use disorders how to manage their free time instead of using drugs.
2. Create therapeutic interventions tailored to address specific personality traits correlated with FOMO and suicidal ideation, focusing on building resilience and coping strategies.
3. Patients with substance use problems require stress-reduction strategies including meditation, exercise, or reestablishing regular sleep patterns.
4. Develop or adapt screening tools that can effectively measure personality traits, levels of FOMO, and suicidal ideation specifically for patients with SUDs to aid early identification and intervention.
5. Incorporate assessments that analyze the interplay between personality traits and environmental factors that contribute to FOMO and ideation of self-harm or suicide.
6. Implement psychoeducation programs that help individuals understand the impacts of FOMO and personality traits on their mental health, aiming to reduce feelings of isolation and improve social connectivity.



7. Foster peer support groups that focus on shared experiences related to SUDs, FOMO, and mental health challenges. Such groups can provide essential emotional support and reduce feelings of isolation that often lead to suicidal thoughts

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