

Psychological Needs and Addiction's Severity on Death Anxiety Among Clients With Substance Use Disorders

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Abstract

Background: The severity of addiction can also contribute to a heightened sense of loss of control, deteriorating health, and increased awareness of the risks associated with death, potentially leading to elevated levels of death anxiety.

Aim: This study aimed to explore the relationship between psychological needs, addiction severity, and death anxiety among individuals with substance use disorders. **Methods:** A correlational design was used, and the sample consisted of 110 male participants selected using convenience sampling from the Drug and Psychotropic Substance Addiction Rehabilitation Center in Najaf Governorate. Data were collected using a structured questionnaire that included measures of psychological needs, addiction severity, and death anxiety. The data were analyzed using SPSS version 23, employing descriptive statistics, correlation coefficients, and one-way ANOVA.

Result: The results showed that most dimensions of psychological needs were not significantly associated with death anxiety, with the exception of self-actualization, which showed a statistically significant moderate correlation. Addiction severity also showed a weak correlation with death anxiety; however, one-way ANOVA revealed a significant effect of addiction severity on death anxiety with a moderate effect size. Furthermore, the results indicated that the majority of participants experienced moderate levels of both addiction severity and death anxiety.

Conclusion: Addiction severity is a more significant factor in explaining death anxiety than psychological needs, underscoring the importance of focusing on reducing addiction severity within treatment programs to alleviate death-related anxiety and improve mental health in this population.

Key words; addiction, psychological needs, death anxiety, substance, disorders.

1. Introduction

Substance use disorders are complex health and psychological problems that profoundly affect various aspects of an individual's life, including psychological, social, and existential dimensions (1). Addiction's impact extends beyond physical and behavioral symptoms to include disturbances in psychological balance and a sense of meaning and purpose in life, potentially leading to existential anxieties, most notably death anxiety(2). Death anxiety is defined as an emotional state characterized by fear or tension related to the idea of death or the afterlife, and it may be more pronounced in individuals experiencing chronic stress or mental health disorders, such as substance use disorders (3). sleep disorders are linked to increased anxiety and poor mental health (4), which may contribute to exacerbating psychological problems in addicts and increasing the severity of addiction.

In this context, the importance of psychological needs emerges as a fundamental factor influencing an individual's mental health. Psychological theories, such as self-determination theory, indicate that fulfilling basic psychological needs such as the need for autonomy, competence, and belonging is essential for achieving psychological balance and well-being (5). When these needs are not met, individuals may resort to maladaptive behaviors, such as substance abuse, as a way to cope with stress or compensate for psychological deficiencies, further complicating their mental state (6).

On the other hand, the severity of addiction is a significant indicator of the impact of substance use disorder on an individual's life, The more severe the addiction, the more pronounced the accompanying psychological problems, including anxiety, depression, and thought disorders (1). The severity of addiction can also contribute to a heightened sense of loss of control, deteriorating health, and increased awareness of the risks associated with death, potentially leading to elevated levels of death anxiety in these individuals (7). The results of study indicate a correlation between psychosomatic indicators and aggressive behavior, reflecting the impact of psychological disorders on increasing maladaptive behaviors, which may apply to addicts in terms of exacerbating accompanying psychological disorders (8).

Therefore, studying the relationship between psychological needs, addiction severity, and death anxiety is of particular importance, as it contributes to a deeper understanding of the psychological factors associated with substance use disorders (9). The findings of this study can also help in developing more effective therapeutic and psychological interventions aimed at improving the fulfillment of psychological needs and reducing addiction severity, which may positively impact the reduction of death anxiety levels and improve the quality of life for this group (10). This research aims to explore the impact of psychological needs and addiction severity on death anxiety in individuals with substance use disorders, by analyzing the relationships between these variables and determining the extent to which each contributes to explaining death anxiety.

2. Methodology

2.1. Study Design and Setting

The study design is a correlational design used to achieve the aimed of study was conducted in Drug and Psychotropic Substance Addiction Rehabilitation Center in Najaf Governorate during 13th November 2025 to 3rd February 2026. This center is a specific zed center for the rehabilitation of addiction individuals and who trade these drugs as a crime. Therefore, the center introduced services of treatment, rehabilitation and arrested them in a suitable environment.

2.2. Sample of the study

The convenience sample included (110) participants who addicted and arrested according to Iraq illegal substance used law and residence at the rehabilitation center. The sample included only males and this center is not arrested women because the Iraqi law prevented the women arrested in these centers or orisons only in restricted circumstances, issues, and Al-Najaf governorate is less Iraqi governorates in cases of female used illegal drugs according to the official statistics of Ministry of Interior about addiction records. Official approval was obtained from the center's administration before data collection began. After that, the researchers were explained the objectives and importance of study for from all drug offenders who willing to participate in the study and obtained the written acceptance from them. the study is reduced the bias by deepened on the criteria of non-probability sample approaches and gave the equal chance to all drug offenders who participated in the study. The sample size was calculated by table of sample size were published in study of (11). The size of target population was (154) male drugs offenders and the sample size was equal range (108-113) and excluded the participants who shared in pilot study.

2.3. Data Collection Instrument

The data for this study were collected using a structured questionnaire consisting of three main sections: 1. Socio-demographic information: This section collected baseline data on the participants, including age, gender, education level, marital status, and economic status. These variables were used to characterize the sample and explore potential correlations with the study results. 2. Addiction severity: The second section used an addiction severity questionnaire, a widely validated instrument designed to assess addiction severity. Each item was scored on a four-point Likert scale, with higher scores indicating greater addiction severity. 3. Death anxiety: The third section aimed to assess the level of death anxiety using a 15-item scale specifically designed to measure different aspects of death anxiety. Each item was scored on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). 4. Psychological Needs: Section 4 aims to assess the level of psychological needs using a scale consisting of 6 main sections and 36 items specifically designed to measure different aspects of psychological needs. Each item is assessed on a five-point scale ranging from 1 (not at all applicable) to 5 (fully applicable). The data for the current study were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23

2.4. Validity and Reliability

The study instrument consisted of three main parts, in addition to a very important section related to the questionnaire respondent, as this instrument was used for self-reporting by the addict. The first part relates to demographic characteristics. The second part concerns the severity of addiction to measure the level of addiction among participants. The third part relates to the Death Anxiety Scale and includes four axes with 15 items: Axis 1: Existential Anxiety (focuses on the fear of self-annihilation and the failure to achieve self-actualization). Axis 2: Physical and Pain Anxiety (focuses on the fear of pain and a painful death). Axis 3: Religious and Metaphysical Anxiety (focuses on the fear of life after death and suffering). Axis 4: Social and Avoidant Anxiety (focuses on avoiding situations related to death). The fourth part concerns the psychological needs scale, which includes six main axes comprised of 36 items. These main axes are: 1. The need for psychological security; 2. The need for belonging and social support; 3. The need for esteem and self-respect; 4. The need for self-actualization; 5. The need for meaning

and spirituality; and 6. The need for self-regulation and control over behavior. The scales were obtained in translation from previously published research, and some items were modified to suit the sample. The researcher then sent a copy of the scales to 12 experts specializing in mental health and psychological well-being to obtain their feedback. The content validity index was examined, and the results showed that the addiction severity scale was 0.74, compared to 0.78 in the study by (12); the death anxiety scale was 0.83, compared to (13), which ranged between 0.87 and 0.92; and the psychological needs scale was 0.86, compared to 0.90 in the study.

2.5. Ethical Considerations

This study received approval from the Ethics Committee of the College of Medicine, University of Kufa, Iraq (code: MEC-266). Following receipt of the program proposal, the study was conducted in accordance with the Declaration of Helsinki. Participation was entirely voluntary, and written informed consent was obtained from all participants after a clear explanation of the study's objectives. The confidentiality of all collected data was maintained. Furthermore, participants were informed of their right to withdraw from the study at any stage without obligation.

3. Result

Table (1): Distribution of the addiction clients According to History and their Socio-Demographic traits.

Variables		F	%
Age	18 yrs or less	2	1.8
	19-25 yrs	51	46.4
	26-50 yrs	56	50.9
	More than 50 yrs	1	0.9
Education Level	Illiterate	35	31.8
	Primary School Graduate	49	44.5
	High school	22	20.0
	Diploma	1	0.9
	Bachelor's	3	2.7
Marital Status	Single	69	62.7
	Married	38	34.5
	Divorced	3	2.7
Name of Substance used	Crystal	71	64.5
	Captagon	12	10.9
	Prescription	18	16.4
	Other	9	8.2
Time used of drugs (Average used per week)	Once a week	33	30.0
	2-3 times a week	27	24.5
	4-5 times a week	11	10.0
	More than 6 times a week	39	35.5

Table (1) shows the distribution of the sample of addicts according to demographic characteristics and patterns of substance use. The highest percentage was concentrated in the 26–50 age group, followed by the 19–25 age group, indicating that addiction is more common among adults. The results also showed that most individuals had a low level of education (illiterate or primary), which may reflect a correlation between low educational attainment and increased susceptibility to substance use. Regarding marital status, the majority were unmarried, which may indicate the influence of social factors and a lack of family stability. As for the type of substance used, crystal meth was the most prevalent, by a significant margin compared to other substances, reflecting the seriousness of the drug use patterns within the sample. Furthermore, data on frequency of use showed that a large percentage of individuals use drugs more than six times a week, an indicator of the severity of addiction among the studied sample.

Table (2): correlation of psychological needs and Addiction's Severity of addiction clients with death anxiety

Variables			F	%	r	Sig.	Interpretation
Psychological needs	Safety	High need	49	44.5	0.15	0.12	weak correlation
		Moderate need	41	37.3			
		Low need	15	13.6			
		Saturated need	5	4.5			
	Belongingness	High need	60	54.5	0.10	0.31	weak correlation
		Moderate need	39	35.5			
		Low need	8	7.3			
		No need	3	2.7			
	Self-esteem	High need	24	21.8	0.190*	0.05	weak correlation
		Moderate need	76	69.1			
		Low need	10	9.1			
	Actualization	High need	66	60.0	.217*	0.02	moderate correlation
		Moderate need	41	37.3			
		Low need	3	2.7			
	Spirituality	High need	74	67.3	0.12	0.21	weak correlation
		Moderate need	35	31.8			
		Low need	1	0.9			
	Control on behaviors	High need	26	23.6	-0.07	0.44	no correlation
		Moderate need	71	64.5			
		Low need	13	11.8			
	Overall of Psychological needs	High need	42	38.2	0.02	0.82	no correlation
		Moderate need	63	57.3			
		Low need	5	4.5			
Addiction's Severity		Severe addict	25	22.7	0.16	0.09	weak correlation
		Moderate addict	45	40.9			
		Low addict	29	26.4			
		No addict	11	10.0			

Table (2) illustrated the relationship between psychological needs, addiction severity, and death anxiety among addicts. The results show that most dimensions of psychological needs, such as safety, belonging, self-esteem, and spirituality, were weakly correlated with death anxiety, indicating the limited influence of these factors individually. In contrast, the self-actualization dimension showed a statistically significant correlation with a moderate level of association, suggesting that low self-actualization may be linked to increased death anxiety in individuals. Controlling behavior showed little to no relationship with death anxiety, and the same was true for the total sum of psychological needs, which also showed no significant correlation. Regarding addiction severity, a weak relationship was found with death anxiety, with the largest proportion concentrated in the moderate addiction category. This suggests that addiction severity may contribute only to a limited extent in explaining death anxiety compared to some other psychological dimensions.

Table (3): Distributions of addiction client according to their psychological needs

Variables			F	%	Mean	SD	t*	P-value	Sig.
Psychological needs	Safety	High need	49	44.5	2.2182	0.8501	27.3680	0.000	HS
		Moderate need	41	37.3					
		Low need	15	13.6					
		Saturated need	5	4.5					
	Belongingness	High need	60	54.5	2.4182	0.7466	33.9690	0.001	Hs
		Moderate need	39	35.5					
		Low need	8	7.3					
		No need	3	2.7					
	Self-esteem	High need	24	21.8	2.1273	0.5437	41.0380	0.002	HS
		Moderate need	76	69.1					
		Low need	10	9.1					
	Actualization	High need	66	60.0	2.5727	0.5495	49.1000	0.001	HS
		Moderate need	41	37.3					
		Low need	3	2.7					
	Spirituality	High need	74	67.3	2.6636	0.4936	56.6000	0.000	HS
		Moderate need	35	31.8					
		Low need	1	0.9					
	Control on behaviors	High need	26	23.6	2.1182	0.5863	37.8940	0.001	HS
		Moderate need	71	64.5					
		Low need	13	11.8					
	Overall of Psychological needs	High need	42	38.2	2.3364	0.5630	43.5210	0.000	HS
		Moderate need	63	57.3					
		Low need	5	4.5					
	Death of anxiety	High anxiety	26	23.6	1.89	0.76	26.15	0.003	HS
		Moderate anxiety	46	41.8					
		Low anxiety	38	34.5					
	Addiction's Severity	Severe addict	25	22.7	1.7636	0.9180	20.1500	0.001	HS
		Moderate addict	45	40.9					
		Low addict	29	26.4					

Table (3) showed the analysis of differences in psychological needs, death anxiety, and addiction severity among the sample of addicts. The results showed that most of the psychological dimensions (safety, belonging, self-esteem, self-

actualization, spirituality, behavior control, and the total sum of psychological needs) were highly statistically significant (HS) with p-values less than (0.05), indicating that there are clear significant differences between the levels of these needs within the sample. The highest percentages were often concentrated within high or moderate levels of need, particularly in the dimensions of belonging, self-actualization, and spirituality. Regarding death anxiety, the results showed that most individuals experienced a moderate level of anxiety, with statistically significant differences indicating varying levels. As for addiction severity, the largest percentage fell within the moderate addiction category, again with statistically significant differences, reflecting a clear variation in addiction severity among individuals. Overall, the results indicate that psychological needs, death anxiety, and addiction severity all show significant differences within the sample, reinforcing the importance of these variables in explaining addictive behavior.

Table (4): correlation of intensity addiction among clients with Psychological needs

Variables		N	Death of anxiety					η2*/R Squared	Adjusted R Squared
			Mean	Sd	F-Calculated	P-value	Sig.		
Psychological needs	High need	42	42.631	2.177	0.335	0.716		0.006	0.012
	Low need	5							
	Moderate need	63							
Addiction's Severity	Low addict	29	43.916	1.373	4.372	0.006		0.11	0.065
	Moderate addict	45							
	No addict	11							
	Severe addict	25							
*η2= Eta square is tested the size effect between variables and it value equal the value of R squared when used univariate ANOVA test									

Table (4) showed the results of the one-way analysis of variance (ANOVA) examining differences in death anxiety based on the variables of psychological needs and addiction severity within the study sample. The results showed no statistically significant differences in death anxiety according to the levels of psychological needs (high, medium, low), with an F-value of (0.335) and a significance level of ($p = 0.716$). This indicates that psychological needs are not a significant factor influencing death anxiety within this sample, a finding supported by the very small effect size ($\eta^2 = 0.006$), reflecting a very weak effect. Conversely, the results revealed statistically significant differences in death anxiety based on addiction severity, with an F-value of 4.372 and a significance level of 0.006. This indicates that addiction severity significantly influences levels of death anxiety. Furthermore, the effect size ($\eta^2 = 0.11$) suggests a moderate effect, reinforcing the importance of this variable in explaining the variance in death anxiety. Therefore, it can be concluded that addiction severity is a crucial variable in determining the level of death anxiety, while psychological needs showed little to no effect in this context.

4. Discussion

The results indicated that addiction is more concentrated among the age group (26–50 years), which is consistent with what previous studies have indicated that adulthood is associated with increased psychological and social pressures, which increases the likelihood of resorting to drug use as a coping mechanism. Also, the low educational level of the majority of the sample reflects a weak health and cognitive awareness related to the risks of addiction, which supports what the literature has concluded, that education represents an important protective factor against addictive behaviors. Likewise, the high percentage of unmarried individuals reflects a lack of social support and family stability, which is an important factor in explaining involvement in substance abuse, as in the study by(14), which

confirmed the role of social factors in the emergence of addiction. In addition, the high prevalence of crystal meth use and the frequency of use reflect the severity of the disorder in the sample.

Regarding most dimensions of psychological needs were not significantly associated with death anxiety, with the exception of self-actualization, which demonstrated a statistically significant relationship. This can be explained in light of Abraham Maslow's theory of human needs, where self-actualization represents the apex of the psychological hierarchy, and any disruption to it can lead to a profound sense of existential emptiness and death-related anxiety. This finding aligns with the existentialist argument presented by (15), who indicated that a loss of meaning in life is linked to increased death anxiety. Conversely, the weak correlation of the other psychological dimensions suggests that these needs may not directly influence this type of anxiety, but rather operate through more complex psychological pathways.

Regarding psychological needs, death anxiety, and addiction severity. This reflects a clear variation among the sample members, which aligns with the (16), which confirms that substance use disorders are characterized by varying degrees of severity and psychological impact. Furthermore, the concentration of death anxiety at the moderate level indicates that individuals are aware of the risks associated with addiction without reaching very high levels of anxiety. This is consistent with the findings of Abdel-Khalek Ahmed's study, which demonstrated that death anxiety often manifests at moderate levels in clinical samples.

Psychological needs had no significant effect on death anxiety, while addiction severity had a statistically significant effect with a medium effect size, indicating that worsening addiction is associated with increased death anxiety. This finding can be explained by the neuropsychological model of addiction proposed by (17), who demonstrated that severe addiction leads to changes in the brain's stress and anxiety systems, increasing negative emotional responses, including death-related anxiety. Therefore, addiction severity is a crucial factor in explaining death anxiety compared to psychological needs, underscoring the importance of focusing on reducing addiction severity within treatment programs.

5. Conclusion

The results of the current study showed that addiction severity has a statistically significant effect on death anxiety, with individuals experiencing higher levels of addiction severity tending to exhibit higher levels of death-related anxiety. In contrast, psychological needs did not show a direct, statistically significant effect on death anxiety, with the exception of the self-actualization dimension, which showed a moderate correlation with this variable. These findings suggest that addiction severity is a key factor in explaining death anxiety in individuals with substance use disorders, while psychological needs may have an indirect influence through more complex psychological mechanisms.

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Authors' Contributions

All authors participated in the development and design of the study, as well as in the preparation of related materials. All authors also approved the final version of the article after critical review to ensure accurate intellectual content. Financial support and sponsorship: The study was funded by the authors.

Conflict of Interest

There are no conflicts of interest.

Reference

1. Volkow ND, Blanco C. Substance use disorders: a comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention. *World Psychiatry*. 2023;22(2):203–29.
2. Marcela S, Agamennoni O. Drug Abuse: From Biological to Psychological Dynamics. In: *Psychiatry and Neuroscience Update—Vol. V: Addiction: From Laboratory and Anthropology to Clinical Practice*. Springer; 2024. p. 141–55.
3. Shackelford T. *Encyclopedia of religious psychology and behavior*. 2024.

4. Ameer AAHA, Al-Hamoodi AAN. A comparison of psychological health and sleep patterns among nurses working in general hospitals and specialized centers. *Anaesth Pain Intensive Care*. 2025;29(6):600–6.
5. Conesa PJ, Onandia-Hinchado I, Dunabeitia JA, Moreno MÁ. Basic psychological needs in the classroom: A literature review in elementary and middle school students. *Learn Motiv*. 2022;79:101819.
6. Swerdlow BA, Pearlstein JG, Sandel DB, Mauss IB, Johnson SL. Maladaptive behavior and affect regulation: A functionalist perspective. *Emotion*. 2020;20(1):75.
7. Belfiore CI, Galofaro V, Cotroneo D, Lopis A, Tringali I, Denaro V, et al. A multi-level analysis of biological, social, and psychological determinants of substance use disorder and co-occurring mental health outcomes. *Psychoactives*. 2024;3(2):194–214.
8. Fadhel ZA, Al-Hamoodi AAN. The Relationship Between Psychophysical Indicators and Hostile Behavior Among School-aged Children. *Iran Rehabil J*. 2025;23(1):65–76.
9. Katar KS. Psychological Predictors of Addiction Severity in Substance Users: The Roles of Stress, Social Anxiety, and Anxiety Sensitivity. *Med Rec*. 7(3):730–7.
10. Cuijpers P, Miguel C, Harrer M, Plessen CY, Ciharova M, Papola D, et al. Psychological treatment of depression: A systematic overview of a 'Meta-Analytic Research Domain.' *J Affect Disord*. 2023;335:141–51.
11. Ahmad H, Halim H. Determining sample size for research activities: the case of organizational research. *Selangor Bus Rev*. 2017;20–34.
12. Gossop M, Darke S, Griffiths P, Hando J, Powis B, Hall W, et al. The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction*. 1995;90(5):607–14.
13. Abdel-Khalek AM. The Arabic Scale of Death Anxiety (ASDA): Its development, validation, and results in three Arab countries. *Death Stud*. 2004;28(5):435–57.
14. Paul FA, Dangroo AA, Saikia P, Ganie AUR, Zaid M, Das M, et al. Societal and individual impacts of substance abuse: A comprehensive exploration. In: *The Palgrave Handbook of Global Social Problems*. Springer; 2024. p. 1–24.
15. Chang B, Cheng J, Fang J, Dang J. The indirect effect of death anxiety on experienced meaning in life via search for meaning and prosocial behavior. *Front Psychol*. 2021;12:673460.
16. American Psychological Association APA. *Diagnostic and statistical manual of mental disorders*. 2013.
17. Heilig M, MacKillop J, Martinez D, Rehm J, Leggio L, Vanderschuren LJMJ. Addiction as a brain disease revised: why it still matters, and the need for consilience. *Neuropsychopharmacology*. 2021;46(10):1715–23.