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The relationship between emotional intelligence, distress disclosure, and psychological distress among Egyptian illicit substance users

***Corresponding Author(s): Amira Mohammed Ali,**

Department of Psychiatric Nursing and Mental Health, Faculty of Nursing, The University of Alexandria, Edmon Fremon Street, Smouha, Alexandria 36741, Egypt

Tel: +2-03-4291-578

Email: mercy.ofheaven2000@gmail.com

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Abstract

Objective: This study aimed to examine the role of emotional intelligence **(EI)** and distress disclosure in psychological distress among Egyptian illicit substance users.

Methods: A total number of 65 participants (59 males, Mean age = 32.6 years, SD = 7.4) completed the Distress Disclosure Index **(DDI)**, the Schutte Self Report Emotional Intelligence Test **(SSEIT)**, and the Depression Anxiety Stress Scale-21 (DASS-21). Linear regression was used to test the study hypotheses.

Results: Distress disclosure was associated with emotional intelligence, explaining 9.4% of the variance. Neither distress disclosure nor emotional intelligence could predict psychological distress (β=0.396 and -0.170 respectively, $p<0.05$).

Conclusion: Although distress disclosure tendency was associated with emotional intelligence, no associations were found between distress disclosure and emotional intelligence with psychological distress. Further replications of the study in larger samples are needed.

Introduction

Abuse of alcohol and other drugs **(AOD)** is prevalent worldwide [1]. It considerably contributes to the global burden of disease and global mortality [2-4]. Further, abusers of illicit drugs bear an increasing burden because of their high risk of contacting serious infections such as HIV and hepatitis B and C [5]. Meanwhile, treatment failure and relapse frequently occur; sufferers are distressed all over the chronic course of the disease out of its adverse physical, psychological, and social outcomes [6]. Emotions influence all cognitive processes: thinking and decision-making are of special interest among substance users. Further, emotions can motivate individuals towards certain behaviors based on their nature and intensity [7] i.e. a person may use a substance to culminate a negative emotion. According to Salovey and Mayers (1990) theory of emotional intelligence, emotional intelligence represents the ability to 1) perceive, appraise, and express emotions; 2) regulate emotions; and 3) use emotions in problem solving [8,9]. Emotion regulation is an essential aspect of emotional intelligence; it denotes the ability to understand, control, or change one's emotional response tendencies. Emotional dysregulation, particularly problematic use and processing of emotional information, is evident in nearly all mental disorders [10,11]. In addition, the literature indicates strong associations of lower levels of emotional intelligence with various types of addictions such as strong associations of lower levels of emotional intelligence with intensive drinking and alcohol-use-related problems, smoking, illicit sub-

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stance abuse, gambling, and internet addiction. Remarkably, recognition and regulation of emotions are two aspects of emotional intelligence that are highly impaired in illicit substances abusers [3,12,13]. Emotional dysregulation increases substance craving and other relapse-related markers [12].

Poor emotional functioning is related to impaired ability to control the access and elimination of negative content to and from the working memory, which gives rise to rumination, worry, and negative mood [10,14]. Although people who use illicit substances encounter enormous problems, they tend not to disclose their distress. They restrain their negative emotions. Emotional inhibition induces rumination, which in turn heightens the risk of depression and anxiety [15-17]. Research denotes high co-morbidity of negative mood with illicit substances use [6,18,19]. According to the self medication theory, people who abuse illicit substances have low tolerance to emotional distress, and they use illicit substances to control their depression and anxiety symptoms [20,21]. There is evidence that emotional intelligence is negatively correlated with anxiety and depression among illicit substance users [22,23].

Emotional intelligence and distress disclosure tendency mirror analogous dimensions of emotional functioning that can notably influence psychological well-being. This study examined the relationship between both dimensions as well as their association with psychological distress. Accordingly, the present study hypothesized that low distress disclosure is associated with low emotional intelligence. Meanwhile, it was also hypothesized that both low distress disclosure and low emotional intelligence are associated with psychological distress.

Methods

Sample

This cross-sectional study recruited inpatient illicit substance users who were included in an expressive writing trial in Alexandria, Egypt [24]. The original sample comprised 165 multiple substance users; however, only 65 participants completed all the questionnaires — response rate of 39%. Eligible participants were detoxified inpatients, 18 years or older, able to read and write, free from psychotic disorders, not suicidal, and willing to participate. The main study was approved by the ethical board of Alexandria University.

Outcome measures

Depression Anxiety Stress Scale-21 (DASS-21), developed by Lovibond and Lovibond (1995), consists of 21 items that are rated on a 4-point scale (0 = did not apply to me at all and 3 = applied to me most of the time). It assesses depressive symptoms (e.g., life was meaningless), anxiety symptoms (e.g., feeling close to panic), and general stress symptoms (e.g., having a tendency to over-react to situations). Scale scores range between 0 and 63. Higher scores reflect higher levels of psychological distress [25].

The Schutte Self Report Emotional Intelligence Test (SSEIT), developed by Schutte et al. [26], is a 33-item self-report measure of emotional intelligence [26]. Responses are on a 5-point Likert scale (1= strongly disagree and 5= strongly agree), and items 5, 28, and 33 have reversed scores. Items of the test were intended to reflect aspects of emotional intelligence denoted by the Salovey and Mayer (1990) model of emotional intelligence such as appraisal and expression of emotions, regulation of emotions, and utilisation of emotions. Scale scores range between 33 and 165; high scores reflect high levels of emotional intelligence [27].

The Distress Disclosure Index **(DDI)**, developed by Kahn & Hessling [28], consists of 12 items that assess the tendency to disclose versus conceal personally distressing information across time and situations. Items are rated on a 5 point Likert scale that range from strongly disagree to strongly agree; half the items have reverse scores. Scale scores range between 12 and 60. Lower scores indicate greater concealment of distress [28].

Analysis

Descriptive statistics of the study variables were computed as frequencies and percentages for categorical variable and means and standard deviations for continuous variables. Simple linear regression analysis was conducted to test the direct relation between the study outcomes. First, the association between distress disclosure and emotional intelligence was examined. In another analysis, the separate associations between distress disclosure and emotional intelligence with psychological distress were tested. The assumptions of multiple linear regression were tested; however, no direct linear correlation was found between the DASS-21 scores with the DDI or with the SSEIT, which is a major assumption violation (see supplementary material).The analysis was performed in SPSS version 22, and p was set to .05 two-tailed.

Results

Table 1 presents the sociodemographic and clinical characteristics of the study sample. A total number of 65 participants (59 males and 6 females) completed all the outcome measures. Their age ranged from 19 to 60 years (Mean = 32.6 years, SD = 7.4). Less than half the participants (44.6%) were single. The education of the majority of the participants (73.8%) was high school or below, and 64.6% were employed. The average number of abused substances was 3.3 (SD = 1.6) whereas the average life long duration of substance abuse was 14.4 years (SD = 7.5). Refer to **Table 2** for the means and standard deviations of the study variables.

A set of simple linear regression was used to test the study hypotheses. As shown in **Table 3**, there was a statistically significant positive correlation between distress disclosure tendency and emotional intelligence ($r = .307$, $p < 0.05$). Distress disclosure tendency had a significant contribution to the variance in emotional intelligence ($\beta = 0.848$, $p < 0.05$). Neither emotional intelligence nor distress disclosure tendency predicted psychological distress ($\beta = -0.170$ and 0.396, p values > 0.05).

Discussion

The current study was an initial attempt to investigate the relationship between emotional intelligence and distress disclosure tendency with psychological distress among Egyptian substance users. The addressed hypotheses were partially supported by the findings of the current study. Whereas distress disclosure tendency significantly predicted emotional intelligence, neither emotional intelligence nor distress disclosure tendency had a contribution to psychological distress.

The depicted relation between distress disclosure tendency and emotional intelligence seems intuitive. Distress disclosure represents efforts to regulate negative emotions through verbal expression [29] whereas emotional intelligence as measured by the SSEIT should reflect participants' abilities to express and

manage negative emotions [27].

The literature documents a negative association of both distress disclosure and emotional intelligence with symptoms of depression and anxiety in substance users [22,29]. Although the present study reported levels of distress disclosure and emotional intelligence that were around average values, neither distress disclosure nor emotional intelligence was associated with symptoms of psychological distress. Research indicates that other factors such as cultural context and levels of mindfulness moderate the relation between both distress disclosure and emotional intelligence with psychological well-being. In line, Kahn and colleagues (2017) indicated that distress disclosure was negatively associated with depression symptoms and positively associated with life satisfaction in Taiwanese students who had low levels of mindfulness whereas distress disclosure was not associated with depression symptoms in European American students, and it was associated with higher life satisfaction, regardless of one's level of mindfulness [30]. In another study mindfulness training had no effect on disclosure indicating that distress disclosure can be impulsive rather than thoughtful [31].

Further, there is evidence that patients with mental illnesses, including substance dependence, have higher levels of emotional awareness than healthy people, but their ability to successfully manage negative emotions is much lower [11]. In agreement, compared with healthy people, cocaine dependent patients are reported to have highly selective problems in reasoning aspects of emotional intelligence: emotional understanding, management, and regulation—which was associated with an increase of perceived stress and poor impulse control, which are key factors of relapse [8]. These findings indicate that certain dimensions of emotional intelligence can affect the psychological health of illicit substance users. Nonetheless, there is no agreement on identifiable subscales of the SSEIT, since its development till now [9,26,32], and accordingly the current study used the overall scale score to reflect the overall level of emotional intelligence.

Up to the researcher's knowledge, this is the first attempt to assess the relationship between emotional intelligence, distress disclosure, and psychological distress among Egyptian drug users. Nevertheless, it is necessary to admit that this study has shortcomings, and results should be interpreted with caution. First, the response rate was low, and the analyzed sample size was relatively small-which implies a risk of selection bias. Second, generalizability of findings is limited since only 6 females were included in the study while gender differences in distress disclosure, emotional intelligence, and psychological distress are documented in the literature [29,33]. More, there are reported psychometric flaws of the Arabic version of the DASS-21, which was used to measure psychological distress [34,35]. In addition, the majority of participants were multiple substance users which could not allow examination of the moderating effect of certain substances on the addressed outcome measures.

Conclusion

The study at hand revealed a positive association between distress disclosure and emotional intelligence among Egyptian substance users. However, the findings indicated no association of the former two constructs with psychological distress. There is a need to identify factors that moderate the associations between distress disclosure and emotional intelligence with psychological distress in this group. Further larger studies that involve more female participants and comparison with healthy people will certainly be beneficial.

Tables

Table 1: Participants' sociodemographicand clinical characteristics (N=64).

Variables	N (%)
Age M (SD)	32.6 (7.4)
Gender	
Males	59(90.8%)
Females	6 (9.2%)
Marital status	
Single	29(44.6%)
Married	24(36.9%)
Divorced	12(18.5%)
Education	
Elementary school	21(32.3%)
High school	27(41.5%)
Above high school	17(26.2%)
Employment	
Employed	42(64.6%)
Unemployed	23(35.4%)
Number of abused substances M (SD)	3.3 (1.6)
Lifetime history of abuse M (SD)	14.4 (7.5)

Table 2: Mean and standard deviation of the outcome measures (N=64).

Variables	M (SD)
Psychological distress	26.6(13.8)
Distress disclosure	40.3 (4.6)
Emotional intelligence	124.2(12.7)

Table 3: Simple linear regression analysis and zero order correlation between the study variables and the predictor variables (N=64).

Criterion	Predictors	r	β	t	p	R^2	SE	95% CI
Emotional intelligence	Distress disclosure	0.307*	0.848*	2.557	0.013	0.094	12.22	0.185 to 1.510
Psychological distress	Emotional intelligence	-0.156	-0.17	-1.256	0.214	0.024	13.78	-0.440 to 0.100
	Distress disclosure	0.132	0.396	1.055	0.95	0.017	13.83	-0.354 to 1.145

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