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Original Article

Evaluating the Psychological Profile of Suicide Attempters in Terms of Personality, Emotion, Relationship, and Self-Compassion in Massih Daneshvari Hospital in 2018

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Abstract

Background and Objectives: *Suicidal ideations, interpersonal relationships problems, self-compassion, personality characteristics, and emotion seeking are among the factors that some of them are less investigated in suicide attempters yet. Thus, the goal of the current research was to provide the psychological profile of suicide attempters by considering the mentioned factors.*
Materials and Methods: *The study method was descriptive. The sampling method was accessible. The sample size was 69. All members of the sample group underwent the psychological interview and completed Beck Scale for Suicide Ideation, Millon Clinical Multiaxial Inventory, Sensation Seeking Scale of Zuckerman, Inventory of Interpersonal Problems, and Self-Compassion Scale.*
Results: *Depression was the most important factor for a suicide attempt. 62.7%, who had attempted once, were at a low risk of second suicide attempt. 41.5% suffered from histrionic and 30.2% suffered from debasement disorders. Thrill and adventure seeking score was the highest score on Sensation Seeking Scale. 50.9% suffered numerous interpersonal problems. The highest and lowest scores of the Self-Compassion Scale were over-identification and common humanity, respectively.*
Conclusions: *The high risk of suicide attempt in patients who had attempted more than once, is a major concern. Some abnormal personality characteristics, high thrill and adventure seeking, problems in interpersonal relationships, and self-compassion were confirmed in suicide attempters, which need early attention for improving the mental health and decreasing the further suicide attempt risk.*

Keywords
Suicide, Personality, Self-compassion, Emotion seeking, Interpersonal problems

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Introduction

A suicide attempt is a deliberative act for eliminating life, which can result in death [1]. A suicide attempt occurs 8 to 25 times more than a completed suicide [2]. The exact statistics of suicide attempts are not recorded due to the illegality of suicide attempt in many countries. About one million people die due to suicide attempts in a year, which is equivalent to 16 per 100000 persons or a death in every 40 seconds [3].

The suicide attempt rate was limited until a few years ago in Moslem countries. But now some new evidences show that the rate is increasing [4]. The highest rate of increase in mortality rate due to a suicide attempt, in recent decades in Moslem countries, has occurred in Iran [5]. It has been happened 31 times more in the last 21 years [6]. The suicide attempt rate and its mortality rate are 26.5 and 6.7 per 100000 persons, respectively, and the mean age of the suicide attempters is 25 years in Iran [4].

Educational level, familial relationships, income level, occupational status, psychiatric disorder, history of hospitalization in a psychiatric hospital, extraversion, neurotic and immature defensive mechanisms, hopelessness, loss of social support, all together predict 97.4% of suicide ideation in Iran [7]. The reasons for a suicide attempt are familial conflicts, marital problems, economic pressures, and educational failure in 32%, 26%, 12%, and 5% of cases, respectively [8]. In Iran, 61.47% of suicide attempters suffer from psychiatric disorders, out of which 58.72% have personality disorders [9].

Some studies in the rest of the world have shown that environmental stressors and psychiatric symptoms are the main causes of suicide attempts in 52.8% and 36.6% of the cases, respectively [10].

According to the reviewed literature, it seems that identification and evaluation of different psychological factors in suicide attempters would be so helpful by more precise recognition of them. One of the most important factors that plays a role in a suicide attempt is personality characteristics, which its role in vulnerability to suicide attempt has been the subject of research since the 1950_s [11]. Personality characteristics of suicide attempters may differ in people. Introversion, neurosis, incoherent familial structure and problems in regulating the emotions exist in suicide attempters who had not been visited by the psychologist and psychiatrist before the suicide attempt [12]. Narcissistic and anti-social personality traits also exist in people who tend to attempt suicide [13]. Some other personality characteristics including aggression, impulsivity, and pessimism are observable in many patients with psychiatric problems, which are also associated with suicide behavior [14]. Meanwhile, the characteristic of novelty seeking, as an emotional trait, is a powerful predictor of a suicide attempt [15]. Indeed, emotion is the common concept of the mentioned features, which plays a role in suicide attempters. A suicide attempt may be a kind of problem regarding emotion seeking. Suicide attempters usually seek emotion, and emotion seeking behavior may facilitate the suicide behavior directly or indirectly [16]. In fact, passing from suicide ideations to suicide attempt, requires being involved in aggressive and painful behaviors. Thus, there is a strong correlation between emotional confusion and suicide, but the relation depends on some other situations and circumstances [17]. Some emotions are rooted in interpersonal conflicts and may result in rejection and isolation. Experiencing isolation or rejection would be the most serious event that has been happened before a suicide attempt [18]. Interpersonal relationships are

considered as a critical factor in suicide attempters. They usually suffer interpersonal relationship problems [19]. These problems are correlated with a variety of psychiatric disorders, which may be the reason for the suicide behavior. Some specific kinds of interpersonal relationships, related to familial suicidal behavior, can interfere in making stable relationships. Thus, paying enough attention to the interpersonal problems in suicide attempters is necessary for relieving their sorrow, because they lack appropriate skills for solving problems [20].

Another concept in suicide attempters, which may play a role in modulating some personality, emotional, and interpersonal relationship features between them, is self-compassion. It is self-sympathy and replacing the extreme self-criticizing by self-kindness while the person confronts a failure or feels unworthy. Self-compassion includes three main factors: self-kindness, common humanity, and mindfulness [21]. Some researches in this regard have shown that shame and anger against self, as opposed to self-compassion, increases the suicide attempt risk [22]. Depressed patients may feel angry about themselves, which causes a feeling of guilt and a sense of being unpardonable. Self-anger is correlated with self-disgust, which the correlation is in turn correlated with suicidal ideations [23].

Although self-compassion characteristic plays a critical role in suicide attempters, there is not enough evidence about it. Thus, investigating it would be worth considering because suicide attempters may be unkind with themselves, and they would navigate their anger to themselves by a suicide attempt, which may be evolved by the environment.

Altogether, the importance and necessity of the current research is that many social, psychological, cultural, and other factors may affect suicidal behavior, in relation to each other. But the stigma accompanied by psychiatric disorders and suicide attempt impedes the high-risk persons to request for receiving appropriate help and treatment. Hence, the WHO´s goal was also to reduce the suicide attempt rate up to 10% in different countries until the year 2020 [24]. Since further suicide attempt risk is common in suicide attempters [25], it has been tried for identification of personality and some other basic factors in suicide attempting. If not so, more lives would be lost due to suicide attempts.

The goal of the current research was to provide psychological profiles of suicide attempters in terms of personality, emotion, self-compassion, interpersonal relationships, and suicidal ideations by considering the demographic information, suicidal behaviour, history of special events, and psychiatric problems.

Materials and Methods

The study design was applied once and the study method was descriptive. The statistical population of the study included all patients who had been hospitalized in Massih Daneshvari Hospital in Tehran, due to suicide attempts in 2018. The sampling method was accessible and all suicide attempters who had been hospitalized in the hospital during the time span of the research included in the study according to inclusion criteria. Ultimately, the sample group included 69 cases from the statistical population. Inclusion criteria consisted being 20-40 years old, being conscious, informed consent, and hospitalization due to suicide attempt. Exclusion criteria included refusing participation in the project, being in delirium or reduced saturation level, and dying due to a suicide attempt.

All participants gave informed consent, before participating in the project. They were also assured about the confidentiality of their personal information.

Demographic information, reason, method, and the number of suicide attempts, history of substance and

psychiatric medicines use, history of hospitalization in a psychiatric hospital, history of physical diseases, experiencing a terrific event in the past, history of a psychiatric disorder or a suicide attempt in the family, and history of imprisonment were determined by the general interview guide approach. The psychological profile was provided by using Beck Scale for Suicide Ideation, Millon Clinical Multiaxial Inventory, Sensation Seeking Scale, Inventory of Interpersonal Problems, and Self-Compassion Scale.

Beck Scale for Suicide Ideation (BSSI): The BSSI consists of 19 questions for determining the severity of programming for a suicide attempt. The total scores range from 0 to 38. The scores between 0 to 5, 6 to 19, and 20 to 38 indicate suicide ideations, readiness for suicide attempt, and intention for suicide attempt, respectively. The scale´s validity by the Cronbach Alpha method is 0.78 to 0.97 [26].

Millon Clinical Multiaxial Inventory (MCMI): The MCMI focuses on measuring personality disorders and symptoms. It consists of 175 questions with options of yes and no as answers. The MCMI-III includes 24 clinical and 4 validity scales. Usually, computerized scoring is applied due to the difficulty in manual scoring. The retest validity was 0.69 and 0.67 for personality and clinical scales, respectively [27].

Sensation Seeking Scale (SSS): The SSS consists of 40 questions with yes and no options as the responses. It was designed to assess the personality traits of thrill and high risk activities and includes 4 sub-scales: thrill and adventure seeking, disinhibition, experience seeking, and boredom susceptibility. The scoring of the SSS is based on the answer key, and the answers can be 0 and 1. The higher score of each sub-scale reflects the more strong emotionality in that sub-scale and vice versa. Execution of SSS on Iranian students showed the validity of 0.78 and sufficient stability [28].

Inventory of Interpersonal Problems (IIP-32): The IIP-32 is designed for evaluating the interpersonal problems of adults. It has 6 factors including assertiveness and sociability, openness, caring, aggression, supportiveness and involvement, and dependency. The scoring ranges from 1 to 5 (completely disagree to completely agree). The scores range from 32-64, 64-96 and upper than 96 reflect the little interpersonal problems, moderate interpersonal problems, and severe interpersonal problems, respectively. In addition, the higher scores in each factor show the higher interpersonal problems in that factor. Performing the IIP-32 on Iranian students showed the Cronbach Alpha and validity of 0.82 and 0.83 coefficients, respectively [29].

Self-Compassion Scale (SCS): The SCS contains 26 sentences that measure the compassion to self. It includes 6 sub-scales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. The scoring is from 1 to 5, including from completely disagree to completely agree. The Cronbach Alpha coefficient is 0.76 for the total scale. The validity has also been approved in Iran [30].

All statistical analysis was done through SPSS-22 by using descriptive and inferential statistical methods, including dependent t-test, Chi-square, ANOVA, and spearman. In addition, the Tukey's post hoc test was applied for determining the higher or lower means scores of demographic information in the significant correlations between sub-scales and each demographic data.

Results:

Table 1. Demographic information

Variable		Frequency (percent)
Gender	Women	34 (49.3)
	Men	35 (50.7)
Education	Up to high school diploma	32 (49.2)
	High school diploma to bachelor	32 (49.2)
	Upper than bachelor	4 (6)
Job	Housewife	8 (12.1)
	Student or soldier	6 (9)
	Labor or simple worker	9 (13.6)
	Jobless	4 (6.1)
	Self-employed	11 (16.7)
	Employee	3 (4.6)
	Housewife or jobless with a history of working	27 (40.9)
Marital status	Single	27 (40.3)
	Married	22 (32.8)
	Divorced (history of divorce up to 3 times)	9 (13.4)
	Married (history of divorce or dead of the past spouse)	9 (13.4)
Number of children	Without child	37 (56.1)
	1-2 children	22 (33.3)
	3-4 children	7 (10.6)

Table 2. Suicide behavior characteristics

Suicidal behavior		Frequency (percent)
Number of suicide attempts	One time	42 (62.7)
	2-5 times	21 (31.3)
	More than 5 times	4 (6)
Suicide attempt methods	Consuming drugs, substance, or aluminum phosphide	39 (59.1)
	Self-mutilation	6 (9.1)
	Swallowing acid, detergents, or poison	6 (9.1)
	Combination of eatable methods	4 (6.1)
	Hanging	3 (4.5)
	Combination of eatable and non-eatable methods	7 (10.6)
	Combination of non-eatable methods like self-mutilation and air ampule	1 (1.5)
Reason for the suicide attempt	Depression due to substance use	9 (13.6)
	Depression due to familial problems	22 (33.3)
	Compulsive marriage	3 (4.5)
	Depression due to serious problems with the spouse	10 (15.2)
	Depression due to occupational or educational failure	3 (4.5)
	Emotional problems or divorce	8 (12.2)
	Unknown reason	5 (7.6)
	Depression due to physical diseases and familial problems	2 (3)
	Depression due to occupational failure and familial problems	2 (3)
	Depression due to substance use, occupational and familial problems	2 (3)

Regarding the drug consumption, it was shown that 5 persons (7.9%) had used bodybuilding and strong analgesic drugs, 48 (76.4%) had consumed multiple psychiatric drugs, and 48 (75%) had consumed multiple substances. Fourteen persons (21.6%) had the history of hospitalization in a psychiatric hospital.

The psychiatric diagnosis that the patients received during the hospital stay due to suicide attempt included mood disorder for 29 (46.1%), substance-induced mood disorder with antisocial or borderline personality traits for 22 (35%), psychotic disorder for 2 (3.2%), adjustment disorder for 2 (3.2%), and PTSD for 4 persons (6.4%).

Four persons (6.2%) had cancer, 14 (21.6%) had tuberculosis and HIV, 11 (16.9%) had heart and pulmonary diseases, 6 (9.2%) had epilepsy, 25 (38.5%) had pulmonary disease due to a suicide attempt, and 2 (3.1%) had diabetes.

Regarding experiencing terrific events, 7 persons (10.7%) had the experience of parental divorce or being abused by a stepmother/father, 2 (3%) had been cardboard sleeper, 11 (16.8%) had experienced the loss of an immediate family member due to a suicide attempt or execution, 4 (6.1%) had the history of severe addiction or disease in an immediate family member, and 2 (3%) had the history of being injured by the earthquake or terrible car crash.

One person (1.6%) had an immediate family member with a psychotic disorder, 3 persons (4.8%) had an immediate family member with depression, 6 (9.6%) had an immediate family member with a mood disorder, attempted suicide, and being hospitalized in a psychiatric hospital, and 2 (3.2%) had an immediate family member with anxious and irritability features.

In regard to the history of imprisonment, the results showed that 7 persons (11%) had been arrested, and 15 (23.5%) had been imprisoned several times. Among them, the reasons for arresting or imprisoning were substance use and carrying for 7 persons (11%), robbery or participating in homicide for 3 (4.8%), financial and legal problems for 2 (3.2%), physical and severe fighting for 13 (20.4%), and illegal driving for 2 (3.2%).

The mean scores of SCS dimensions included 14.88, 17.5, 12.49, 14.19, 13.09, and 15.32 for self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification, respectively. The highest score was in the over-identification dimension.

Table 3. The correlation between marital status with SCS dimensions

Marital status / **Dimensions**		**Single**	**Married (first marriage)**	**Single (history of unsuccessful marriage)**	**Married (history of unsuccessful marriage)**	**P.V**
Self-kindness	Mean	14.95	14.85	13	16.44	0.392
	SD	4.38	3.06	3.33	5.52	
Self-judgment	Mean	16.78	18.1	17.25	18.11	0.640
	SD	4.32	2.95	2.25	2.61	
Common humanity	Mean	11.33	13.75	11.12	14	0.020
	SD	2.95	2.78	3.18	3.74	
Isolation	Mean	14.12	14.15	15.62	13.22	0.415
	SD	3.83	2.08	1.76	2.48	
Mindfulness	Mean	12.12	14.45	13.12	12.66	0.045
	SD	2.15	1.98	3.6	4.06	
Over-identification	Mean	15.29	15.3	15.75	15.11	0.982
	SD	4.2	2.38	2.37	3.17	

According to the above table, there was a significant relationship between marital status and common humanity and mindfulness ($p<0.05$). The Tukey's post hoc test showed that the mean score of common humanity and mindfulness were significantly higher in married patients than single ones ($p<0.05$).

The correlation coefficient between the number of children and SCS dimensions including self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification were 0.048 ($p>0.05$), 0.123 ($p>0.05$), 0.034 ($p>0.05$), 0.016 ($p>0.05$), 0.304 ($p\leq0.01$), 0.042 ($p>0.05$), respectively. There was a positive and significant correlation between mindfulness and the number of children ($p\leq 0.01$).

Table 4. The correlation between occupational status and SCS dimensions

Occupational status / **Dimensions**		**Housewife or jobless**	**Employee**	**Worker**	**Self-employed**	**Housewife or jobless (having job in the past)**	**Student or soldier**	**P.V**
Self-kindness	Mean	15	23	13.77	15.8	14.39	15.83	0.336
	SD	4.47	1.6	4.94	3.91	3.31	4.79	
Self-judgment	Mean	18	20	18.44	17.1	17.91	13.5	0.068
	SD	3.4	2.8	3.12	3.34	2.99	4.23	
Common humanity	Mean	12	17	12.33	14	12.13	12.16	0.470
	SD	3.6	1.5	3.53	1.76	3.37	3.65	
Isolation	Mean	14	14	14.88	13.3	15.13	11.5	0.114
	SD	2.79	3.7	2.61	3.71	2.28	3.72	
Mindfulness	Mean	13.45	17	12.11	13.5	13.34	11.66	0.406
	SD	3.23	1.3	2.2	2.27	3.11	2.06	
Over-identification	Mean	15.09	11	18.11	14.5	15.56	13	0.027
	SD	2.66	2.71	1.9	3.86	2.78	4.24	

According to the above table, there was a significant correlation between over-identification and occupational status ($p<0.05$). The Tukey's post hoc test results showed that the mean score of over-identification was significantly higher in workers than employees ($p<0.05$).

The correlation coefficient between the number of suicide attempts and SCS dimensions including self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification were -0.394 ($p<0.01$), 0.354 ($p<0.01$), -0.266 ($p<0.05$), 0.371 ($p<0.01$), -0.142 ($p>0.05$), and 0.313 ($p\leq0.01$), respectively. There was a significant and reversed correlation between self-kindness ($p<0.01$) and common humanity ($p<0.05$) and the number of suicide attempts. In addition, there was a significant correlation between self-judgment, isolation, over-identification, and the number of suicide attempts ($p\leq0.01$).

The mean scores of SSS sub-scales included 3.65, 6.11, 4.3, and 3.9 for experience seeking, thrill and adventure seeking, boredom susceptibility and

disinhibition, respectively. Thrill and adventure seeking had the highest score.

Table 5. The difference between men and women in SSS sub-scales

Sub-scales	Gender	Mean ± SD	P.V
Experience seeking	Women	4.03 ± 1.44	0.041
	Men	3.28 ± 1.54	
Thrill and adventure seeking	Women	6.12 ±1.85	0.944
	Men	6.09 ±1.73	
Boredom susceptibility	Women	4.16 ± 1.48	0.422
	Men	4.45 ±1.33	
Disinhibition	Women	3.58 ± 1.5	0.079
	Men	4.22 ± 1.33	

According to the above table, there was a significant difference between men and women in experience seeking ($p<0.05$).

The correlation coefficients between the number of children and SSS sub-scales including experience seeking, thrill and adventure seeking, boredom susceptibility, and disinhibition were 0.092 ($p>0.05$), -0.088 ($p>0.05$), -0.248 ($p\leq0.05$), and -0.078 ($p>0.05$), respectively. There was a reverse and significant correlation between boredom susceptibility and the number of children ($p\leq0.05$).

The mean scores of IIP-32 sub-scales included 19.09, 11.38, 18.26, 12.7, 18.33, and 16.73 for assertiveness and sociability, openness, caring, aggression, supportiveness and involvement, and dependency, respectively. The most and the least interpersonal problems were in assertiveness and sociability and openness sub-scales, respectively.

In addition, 3 persons (5.7%) had mild, 23 (43.4%) had moderate and 27 (50.9%) had severe interpersonal problems.

Table 6. The correlation between marital status and IIP-32 sub-scales

Marital status / Sub-scales		Single	Married	Single (history of unsuccessful marriage)	Married (history of unsuccessful marriage)	P.V
Assertiveness and sociability	Mean	19.92	19.31	21.44	13.88	0.036
	SD	6.96	4.06	7.09	4.67	
Openness	Mean	11.72	11.18	12.11	10.22	0.482
	SD	2.03	2.61	2.36	5.21	
Caring	Mean	17.04	19.13	19.22	18.62	0.150
	SD	2.89	3.54	3.99	3.73	
Aggression	Mean	12.92	12.27	15.66	9.87	0.036
	SD	4.73	3.56	2.69	4.08	
Supportiveness and involvement	Mean	19.96	16.81	21	14.88	0.047
	SD	6.44	4.95	6.98	4.7	

Dependency	Mean	16.2	17.45	18.55	14.37	0.133
	SD	4.52	3.96	3.67	2.06	

According to the table above, there was a significant correlation between marital status and assertiveness and sociability, aggression and supportiveness, and involvement ($p<0.05$). The Tukey's post hoc test results showed that assertiveness and sociability were significantly higher in single patients with and without a history of unsuccessful marriage than married patients with a history of unsuccessful marriage in the past ($p<0.05$). The mean score of aggression and supportiveness and involvement were significantly higher in single patients with a history of unsuccessful marriage than married patients with a history of unsuccessful marriage in the past ($p<0.05$).

Table 7. The correlation between education and IIP-32 sub-scales

Educational status / **Sub-scales**		**Up to high school**	**High school and diploma**	**Academic education**	**P.V**
Assertiveness and sociability	Mean	17.52	20.52	14.5	0.048
	SD	5.57	6.44	3.53	
Openness	Mean	11.4	11.38	11.5	0.999
	SD	2.85	2.94	4.94	
Caring	Mean	18.45	17.83	20.5	0.500
	SD	2.66	3.93	2.12	
Aggression	Mean	12.75	13.05	9	0.427
	SD	4.47	4.17	0.6	
Supportiveness and involvement	Mean	17.08	19.27	16	0.332
	SD	6.11	6.07	2.82	
Dependency	Mean	15.79	17.3	15.5	0.354
	SD	4.04	4.2	2.12	

According to the table above, there was a significant correlation between education and assertiveness and sociability sub-scale ($p<0.05$). The Tukey's post hoc test results showed that patients with educational levels up to high school had significantly higher scores than patients with academic education in assertiveness and sociability ($p<0.05$).

Table 8. The correlation between occupational status and IIP-32 sub-scales

Occupational status / **Sub-scales**		**Housewife or jobless**	**Employee**	**Worker**	**Self-employed**	**Housewife or jobless (having job in the past)**	**Student or soldier**	**P.V**
Assertiveness and sociability	Mean	18.5	12	21.33	18	19.15	19.66	0.717
	SD	6.69	3.9	7.41	6.53	5.54	6.31	
Openness	Mean	10.91	8	12.88	10.8	11.46	11.16	0.479
	SD	3.08	1.5	4.07	2.14	2.64	2.56	
Caring	Mean	17.83	22	20.25	18.1	18.3	15.66	0.198
	SD	3.27	2.7	2.76	2.68	4	2.25	
Aggression	Mean	13.08	9	14.75	9.3	13.5	12.83	0.053
	SD	5.24	1.4	4.06	3.74	3.55	3.54	
Supportiveness and involvement	Mean	16.83	14	18.77	17.6	18.84	19.16	0.895
	SD	7.34	3.66	6.74	6.78	5.73	3.18	
Dependency	Mean	17.5	14	18.37	15.4	17.23	13.5	0.201

SD	4.62	2.21	3.85	4.24	3.82	3.5

According to the table above, there was a significant correlation between aggression and job status ($p \leq 0.05$). The post hoc Tukey's test results showed that aggression was significantly higher in workers than employees ($p \leq 0.05$).

According to the BSSI, 36 persons (57.1%) had a low risk, 19 (30.2%) had a high risk and 8 (12.7%) had a very high risk for a suicide attempt. There was a significant correlation between the number of suicide attempts and BSSI results ($r=0.382$, $p<0.01$).

Table 9. The frequency distribution of the MCMI

Scales	0-59 scores Frequency (percent)	60-74 scores Frequency (percent)	75-84 scores Frequency (percent)	85-115 scores Frequency (percent)
Disclosure	2 (3.8)	19 (35.8)	28 (52.8)	4 (7.5)
Desirability	34 (64.2)	16 (30.2)	0	3 (5.7)
Debasement	11 (20.8)	18 (34)	8 (15.1)	16 (30.2)
Schizoid	31 (58.5)	16 (30.2)	4 (7.5)	2 (3.8)
Avoidant	45 (84.9)	7 (13.2)	1 (1.9)	0
Depressive	23 (43.4)	13 (24.5)	5 (9.4)	12 (22.6)
Dependent	30 (56.6)	14 (26.4)	2 (3.8)	7 (13.2)
Histrionic	18 (34)	4 (7.5)	9 (17)	22 (41.5)
Narcissistic	25 (47.2)	25 (47.2)	2 (3.8)	1 (1.9)
Anti-social	35 (66)	13 (24.5)	2 (3.8)	3 (5.7)
Aggressive	32 (60.4)	17 (32.1)	2 (3.8)	2 (3.8)
Compulsive	34 (64.2)	14 (26.4)	2 (3.8)	3 (5.7)
Passive-aggressive	14 (26.4)	27 (50.9)	6 (11.3)	6 (11.3)
Self-defeating	47 (88.7)	6 (11.3)	0	0
Schizotypal	48 (90.6)	3 (5.7)	1 (1.9)	1 (1.9)
Borderline	44 (83)	6 (11.3)	1 (1.9)	2 (3.8)
Paranoid	23 (43.4)	26 (49.1)	2 (3.8)	2 (3.8)
Anxiety	15 (28.3)	23 (43.4)	5 (9.4)	10 (18.9)
Somatoform	26 (49.1)	21 (39.6)	5 (9.4)	1 (1.9)
Manic	27 (50.9)	17 (32.1)	6 (11.3)	3 (5.7)
Dysthymia	20 (37.7)	22 (41.5)	5 (9.4)	6 (11.3)
Alcohol dependence	47 (88.7)	4 (7.5)	2 (3.8)	0
Drug dependence	38 (71.7)	6 (11.3)	4 (7.5)	5 (9.4)
Post-traumatic stress	21 (39.6)	19 (35.8)	8 (15.1)	5 (9.4)
Thought disorder	12 (22.6)	10 (18.9)	19 (35.8)	12 (22.6)
Major depression	10 (18.9)	18 (34)	18 (34)	7 (13.2)
Delusional disorder	27 (50.9)	21 (39.6)	2 (3.8)	3 (5.7)

According to the table above, debasement (30.2%) and histrionic (41.5%) scales had the most frequencies in the highest scores.

There was a significant correlation between gender and antisocial personality, alcohol, and drug dependence scales ($p \leq 0.05$). The number of men in the higher scores of these scales was more than women.

There was a reverse and significant correlation between the number of children and the narcissistic scale ($r=-0.390$, $p \leq 0.05$).

There was a reverse and significant correlation between education and disclosure (r=-0.340), paranoid (r=-0.343), dysthymia (r=-0.342), drug dependence (r=-0.361) and thought disorder (r=-0.373) scales (p≤0.05). There was a significant correlation between education and desirability scale (r=0.386, p≤ 0.05). In addition, there was a reverse and significant correlation between education and debasement (r=-0.286), depressive (r=-0.278), aggressive (r=-0.288), passive-aggressive(r=-0.323), and delusional disorder (r=-0.283) scales (p≤0.05).

There was a significant correlation between occupational status and desirability scale (p≤0.05). It appeared that the frequency of worker, soldier, and student patients was more in scores between 0 and 59.

There was a significant correlation between occupational status and delusional disorder scale (p≤0.05). It seemed that the frequency of jobless or housewife patients with a history of having a job in the past was more in scores between 60 and 74.

There was a significant correlation between disclosure (r=0.308, p<0.05), debasement (r=0.376), depressive (r=0.354), anxiety (r=4.19), dysthymia (r=0.381), post-traumatic stress (r=0.478), major depression (r=0.401) and thought disorder (r=0.420, p< 0.01) and the number of suicide attempts. There was a significant and reverse correlation between desirability (r=-0.325, p≤0.01) and the number of suicide attempts.

Discussion:

Results of the current descriptive article about the relatively equal number of males and females showed that gender does not play an important role in a suicide attempt. Just four of the sample group members were educated in a higher than bachelor degree which reflects the fact that the suicide attempt risk would be higher in people with lower degrees of educations. Most of the suicide attempters were housewives or jobless with a history of having job in the past. It means that missing a job would be considered as a deficiency that may be predominant in the pathology of a suicide attempt. The largest proportion of the suicide attempters were single without a history of unsuccessful marriage in the past, and most of them did not have any children. It reflects the fact that loneliness and not having familial relationships would facilitate a suicide attempt. Most of them had attempted suicide once, but despite the multiple suicide attempts in suicide attempters in the real world, the risk of further suicide attempts would exist among them. Most of them had attempted suicide by drug, substance, or aluminum phosphate. 38.5% were involved with pulmonary disease due to suicide attempt, which required surgery and long-term treatment. Some of them even suffered deformation or disability in the lung or windpipe organs, which would result in serious and lifetime limitations. It shows excessive access to the oral methods of suicide attempt and applying them, and subsequently incidence of irreparable physical injuries, which in turn would result in impaired mental health or further suicide attempts. Therefore, the necessity of taking some actions for limiting the accessibility to life threatening eatable things for high-risk people in regard to suicide attempts should be mentioned. The largest proportion of them had attempted suicide due to mood disorders resulted from familial problems. Mood disorder was also the most allocated diagnosis to the hospitalized patients due to suicide attempts during hospitalization. These findings reflect the critical role of depression and mood disorders due to familial problems in suicide attempts in our country, which should receive immediate attention. Indeed, recognizing and paying enough attention to the familial problems of the high-risk group of suicide attempters and providing psychological services for them would partly reduce the mental problems among them. Meanwhile, some

findings including the history of consumption of several neuroleptic drugs or multiple substances and hospitalization in psychiatric hospitals reflect the existence of untreated and extended psychological problems in the history of suicide attempters which ultimately resulted in a suicide attempt.

According to the obtained results, it is perceivable that the incidence of unpleasant events, like a beloved loss, parental divorce, being abused, suicide attempt in an immediate family member, and being imprisoned occur not rarely in suicide attempters' lives. Although it is not possible to consider the events and suicide attempts as cause and effect correlation, the incidence of such events in suicide attempters' lives along with some personality traits, which are explained in the following text, are worth considering for taking in time actions to impede a suicide attempt.

Regarding the obtained findings, a study on suicidal individuals revealed that most of them were male, 26 to 35 years old, married, and educated up to diploma. Those who had suicide ideation mostly had a job, and those who had attempted suicide or had been died due to a suicide attempt were mostly housewives. This finding is somewhat similar to the current article. 6.9% of those who had suicide ideation, 24.1% who had attempted suicide, and 18.2% of those who had died due to a suicide attempt had attempted suicide in the past. There was a history of suicide attempt or completed suicide in family members of those who suffered from depression. Adjustment disorder with depression was the most common disorder which was diagnosed among them. But the mood disorder was the most diagnosed disorder in the sample group of the current article. Consuming pesticides was the most common method of suicide attempt in suicide attempters, and hanging was the most common method of suicide attempt in those who had died due to a suicide attempt. But in the current article, the most applicable method of suicide attempt was consuming drugs, substance, and aluminum phosphide. These findings reflect the necessitation of precise considering and providing treatment for suicide attempters and long-term follow-up for them [31]. Another study has shown that suicide attempters may have lesser educational success, tobacco consumption, and other psychiatric disorders [32], which is partly in accordance with the results of the current article. Some researches on the notes of suicide attempters have shown that most of them belonged to 21 to 30 years old men. Meanwhile, the gender ratio was equal in the current study. Financial and emotional problems were the most reasons for suicide attempt. But depression due to familial problems was the most reason for a suicide attempt in the current research. Hopelessness and depression were the diagnosis dedicated to 52.5% of suicide attempters in some other studies [33], which is in accordance with the results of the current research.

Most of the sample group members had a low risk for suicide attempt in the current research, according to the BSSI. Based on the significant correlation between the number of suicide attempts and BSSI, people with several suicide attempts are at higher suicide attempt risk. In this regard, some researches have indicated that most of those with suicidal ideations do not attempt suicide. People with suicidal ideations have higher degrees of depression and PTSD compared to people without suicidal ideations. Anxiety disorders, PTSD, substance use disorders and a history of being sexually abused in suicide attempters are more than those with just suicidal ideations [34]. A research on those hospitalized in a psychiatric hospital due to suicide attempt revealed that stressful events did not affect their suicidal thoughts, but unpleasant familial problems especially increased the suicide attempt risk [35]. This finding is in accordance with our findings. In addition,

the ability to attempt suicide is more in suicide attempters compared to those who have just suicidal ideations. Some factors like decreased fear of pain, injury, and death would increase the ability of a suicide attempt and facilitate the progression of suicidal ideations to a suicide attempt [36].

The most frequent disorders including the histrionic and debasement ones in the current article depict the tendency to fake bad about the psychological status and also attract attention by a suicide attempt. The significantly higher scores of men in anti-social and alcohol and substance dependency disorders than women would be a venturesome factor in male suicide attempters. The reverse and significant correlation between the number of children and the narcissistic scale would show the prohibitive role of having a child against egocentric personality features and also the reduced excessive concentration on self in suicide attempters. The significant correlation between educational level and desirability indicates that the higher the educational level of suicide attempters, the more they intend to leave a positive social impact. Furthermore, the higher educational level would be a potential obstacle against self-disclosure, paranoia, depression, substance use, pretending the worse situation about self, obsessional thoughts, pessimistic point of view, and disturbing others. The more the features of self-disclosure, self-debasement, depression, anxiety, dysthymia, PTSD, major depression, and thought disorder existed in suicide attempters, the more they had attempted suicide. This finding shows that as much as the pathological mentioned features increase, the number of incomplete or even histrionic suicide attempts also increase. On the other hand, the more people try to be more popular, the lower they attempt multiple suicides. Indeed the sociability criteria would play a protective role against suicide attempt in suicide attempters. In this regard, some researches have shown that personality characteristics of tolerance, stability, self-consent, and stable self-esteem are the protective factors against a suicide attempt. At the same time, the characteristics of hopelessness, neurosis and extroversion play the most critical role in suicide ideation and attempt and also in those who had died due to suicide attempt [11]. Some personality disorders, aggressive, histrionic, avoidant, dependent and impulsive behaviors are risk factors for completed suicide attempt [37]. This finding is congruent with the results of the current research about the higher frequency of histrionic personality disorder in suicide attempters. But some other researches have shown that borderline personality disorder is associated with a suicide attempt, more than any other psychiatric disorder [38].

The higher score of adventure seeking indicates that incomplete suicide attempt would be a kind of adventure seeking. The significantly higher score of women in experience seeking than men reflects the more tendency of women for experiencing new events and situations. The significant increase in boredom susceptibility by the decrease in the number of children reflects that having children plays a role in the improvement of mood status. In this regard, some researches have shown that emotional irregularities predict suicidal thoughts [39]. Emotional problems are correlated with more risk of a suicide attempt. This correlation is stronger in multiple suicide attempters and those with poor educational function [40]. The suicide attempt statistics are high in borderline personality disorders who suffer from emotional irregularities [41]. Furthermore, the degree of impulsivity of a suicide attempt is conversely correlated with the degree of lethality of a suicide attempt. People, who don't know how to manage their emotions, may attempt suicide as a means of appeasing the disgusting

emotions. But they are less likely to use severe fatal methods [42]. It is observable that some other studies, in line with the present study, have come to this conclusion that emotional problems exist in suicide attempters.

The current research results regarding the severe interpersonal problems in about more than half of the suicide attempters reflect the problematic relations among them. The significantly higher score of assertiveness and aggression in single suicide attempters compared to married ones with a history of unsuccessful marriage in the past shows that single suicide attempters avoid assertion in the relationships more than married ones and also use aggression in their relationships which may play a role in the defensive cycle of relations and unhealthy behavior. But married suicide attempters use more reasonable assertion in the relationships and also express less anger because of the commitment to the marriage relationship, which plays a protective role in them. The significantly higher score of openness and sociability in those with educational degrees up to high school diploma compared to those with academic educations depicts that achieving a higher educational degree would facilitate openness and familiarity with others. The significantly higher aggression in suicide attempters with laboring or simple jobs compared to employees demonstrates that aggression is more likely to happen in simple jobs that people are more dissatisfied with them. In this regard, some researches have shown that suicide ideations are significantly correlated with interpersonal problems. History of suicide attempt, loneliness, and burdensomeness together explain 65% of the suicidal thoughts in suicidal attempters [43]. Moreover, interpersonal conflicts can increase suicide ideations. This figure is at the maximum level in depressed patients and those with physical problems [44]. As it was observed, other studies' findings are not in line with the findings of the present study.

The highest and lowest score of self-compassion in over-identification and common humanity sub-scales, respectively, show that blindly imitating others is prevalent in suicide attempters, which is an unhealthy feature, and at the same time sharing the humanistic features with others can help the mental health that is low among them. It is conceivable that many suicide attempts may be an imitation of other suicide attempters. The significantly higher score of common humanity and mindfulness in married patients compared to single ones show the healthy and protective role of marriage in adaptation with common humanistic features and sharing them with others and also internal consciousness about the self. The significant increase in mindfulness along with more number of children means that awareness from self and the environment would increase by more number of children. The significantly higher score of over-identification in laborers and simple workers compared to employees means that employees were more kind with themselves and avoided blindly imitating others, which are useful characteristics. But laborers or simple workers blindly imitate others more, which is a maladaptive way and may be the result of naive nature of the simple jobs that persuade the workers to imitate others. As much as the scores of self-kindness and common humanity were higher, the number of suicide attempts was lower significantly, which shows that suicide attempters who are kind with themselves and enjoy common humanistic experiences are less occupied in multiple suicide attempts. The higher scores of isolation and over-identification accompanied by more number of suicide attempts, significantly. It means that those who do not participate in society and imitate others blindly are more disposed to multiple suicide attempts. Some researches in this regard have shown

that 24% of the suicidal ideations variance can be determined by self-compassion. Suicidal thoughts are reversely correlated with self-compassion, but they are directly correlated with self-judgment, isolation, and over-identification [45]. This finding is partly consistent with the results of the current study, about the reverse correlation between self-compassion and common humanity and the number of suicide attempts, and also a direct correlation between isolation and over-identification and the number of suicide attempts. In addition, the most pathological self-criticism including self-disgust is strongly correlated with self-harming behaviors [46].

All in all, we observed some demographic features, suicidal behaviors, and a kind of history in suicide attempters which would play as suicidal risk factors, all together. Being graduated under high school diploma, jobless, single and childless are among these factors that all of them reflect the lesser social and familial belongings. Using drugs, substance, and aluminum phosphide as the most applicable methods of a suicide attempt, and incidence of serious pulmonary problems due to suicide attempts by these methods reflects the fact of serious warnings against the accessibility of the mentioned materials especially for people with a high risk in a suicide attempt. Depression existed in the sample group, both before a suicide attempt and during hospitalization in the hospital due to a suicide attempt. By this fact, it is conceivable that untreated depression, history of consuming psychiatric drugs irregularly, high prevalence of substance use and even history of hospitalization in psychiatric hospitals are among the riskiest factors in suicide attempters. Experiencing traumatic events like the loss of a family member due to suicide attempts in many cases and imprisonment were among the other stressors in suicide attempters. All of these factors depict the vital role of unpleasant familial and personal unpleasant events in a suicide attempt. Most of the sample group members with a single suicide attempt had a low risk of suicide attempt. Meanwhile, by increasing the number of suicide attempts, there was a higher risk of repeated suicide attempts.

The highest frequency of histrionic and debasement personality features and also the highest scores of anti-social, alcohol, and drug dependency personality characteristics in men show the personality risk factors in suicide attempters. The higher scores of disclosure, debasement, major depression, anxiety disorder, dysthymia, post-traumatic stress, thought disorder, and also the lower scores of desirability, accompanied by more number of suicide attempts reflect the importance of these factors in suicide attempters. Furthermore, the highest score of adventure seeking in suicide attempters and experience seeking in women would be among the emotional factors in a suicide attempt. Too many interpersonal problems existed in more than half of the sample group. The highest and lowest score of over-identification and common humanity respectively were among the self-compassion factors among suicide attempters. Also, the accompaniment of more number of suicide attempts to higher isolation and over-identification, and lower number of suicide attempts to higher self-compassion and common humanity are among the factors that would play a role in regard to self-compassion in repeated suicide attempts.

Limitations:

One of the most important limitations of the current research was the plurality of the questionnaires with too many questions, used for obtaining data. In addition, the severe catastrophic physical situation of the sample group partly impeded them to be completely interviewed and questioned. These two factors would have affected the validity of the data, but it was tried as much as possible to overcome the limitations by

approaching the sample group at the most suitable time that they were ready to respond to the questions.

Suggestions:

It is suggested for future researchers to investigate more psychological, personality, and other deep factors in suicide attempters, not just demographic ones. Thereby, many life-threatening features in these risky people would be recognized and eventually impede the loss of people due to suicide attempts.

Conflicts of interest

The authors have declared no conflict of interest for this study.

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