Investigating the Correlation Among Personality Traits, Familial Functioning, and Suicidal Thoughts Among University Students: A Descriptive Correlational Study

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Abstract
Objectives: Suicide is a serious public health problem, especially among students as active members of the community. The present study aimed to determine the correlation among personality characteristics, family functioning, and suicidal ideation in students of Shahid Beheshti University of Medical Sciences in Tehran, Iran in 2018.
Materials and Methods: The population of this descriptive correlational study included all 675 students of Shahid Beheshti University of Medical Sciences, from whom 244 students were selected using stratified random sampling. The required data was collected using four questionnaires, including demographic characteristics, personality traits, family functioning, and Beck Scale for Suicidal Ideation (BSSI). To analyze data, we used multiple linear regression and the Statistical Package for the Social Sciences (SPSS, version 22).
Results: Examination of personality traits suggested that the correlation between psychosis and suicidal thoughts was positive and significant ($P<0.05$). The correlation coefficients between the components of extraversion-introversion, agreeability, and responsibility and suicidal ideation were negative and significant ($P<0.05$). There was also a positive and significant relationship between all components of family functioning and suicidal ideation ($P<0.05$).
Conclusions: Effective steps can be taken to prevent suicide among students through providing optimal psychological healthcare and periodic screening of students in terms of suicidal thoughts and mental disorders.
Keywords: Suicidal ideation, Students, Family, Personality

Introduction

Suicide is one of the major etiologic causes of mortality globally that accounts for about one million deaths annually (1). Suicide is the second principal cause of mortality among individuals aged 15-29 years old worldwide (2,3). It is a major and common health problem, which is the result some devastating mental disorders (4). Suicide might happen due to biological, psychological, social, and cultural reasons, leading to numerous economic and humanistic consequences (5).

The first stage in the formation of suicidal behavior is the emergence of suicidal thoughts in the individual (6). Suicidal thought is defined as self-reported thoughts regarding suicide, ranging from a vague desire to die to a complete suicidal ideation (7). Some studies have demonstrated that suicidal ideation is accompanied by suicide planning and suicide attempts, and that suicide planning triggers suicide commitment (8). These thoughts are clinically important because they can predict suicidal thought.

In addition to the existence of suicidal thought in the individual, another important factor related to suicide is the presence of traces of pathological personality in individuals (9). Personality traits are an organized set of relatively constant and stable characteristics that can entail the uniqueness of human beings (10). Evidence showed that personality traits affect the way people deal with problems; for example, while some people are overwhelmed by problems, others express their feelings and emotions, or ask others for help. Depending on the type of personality traits, each person reacts to mental stress. Some personality traits increase the ability of internal resistance to stress in individuals and prevent its consequences and disease (11). The effect of personality traits on behavior and cognition is sometimes direct and immediate, and sometimes it causes behavioral and cognitive consequences by influencing mediating factors (12).

The family is a fundamental unit of community and an important place for physical and mental development (13). It should be always noted that the occurrence of problems in adolescence and youth is related to the type of behavior of parents, their upbringing, type of care, security, etc. (14). The literature shows that family functioning has

Key Messages

► Considering the presence of suicidal thoughts and investigation of the related factors among students, there was a positive significant correlation between familial functioning and suicidal thoughts.

► There was a correlation between personality traits (except for desire for new experiences) and suicidal ideation.

important effects on the health of family members, and it can strengthen the mental health cycle in the family (15). Conflict with parents is directly related to suicide among adolescents and youth. Besides, unresolved family conflict and problems are one of the most commonly reported stressful events that occur in adolescents and young adults before attempted and/or successful suicide (14).

Students are a young and active part of any society with a special place in development programs. Hence, to provide preventive and curative services in this regard, it is essential to increase the knowledge among psychologists and psychiatrists and identify the risk factors and underlying suicidal behaviors. Accordingly, this study aimed to investigate the correlation among personality traits, family functioning, and suicidal ideation in university students in Tehran, Iran.

Materials and Methods

Setting
The population of this descriptive correlational research included 675 students in different levels of various academic majors at Shahid Beheshti University of Medical Sciences in Tehran, Iran during 2018-2019. Finally, 244 students were selected by stratified random sampling. Exclusion criteria were incomplete and distorted questionnaires and any psychiatric problems among students diagnosed by a psychiatrist.

Data collection started in September 2018 and ended in July 2019. Each of the 11 schools (School of Nursing and Midwifery, School of Pharmacy, School of Dentistry, School of Health and Safety, School of Modern Medical Technologies, School of Nutritional Sciences and Food Industries, School of Medicine, School of Medical Science Education, School of Paramedicine, School of Traditional Medicine, and School of Rehabilitation Sciences) was considered as a separate class. Regarding the total number of students studying in each school, the required sample size from each school was randomly selected using the random numbers table. It should also be noted that the School of Dentistry refused to cooperate. Accordingly, 44 individuals from the School of Nursing and Midwifery, 24 individuals from the School of Pharmacy, 30 individuals from the School of Health and Safety, 16 individuals from the School of Modern Medical Technologies, 18 individuals from the School of Nutrition and Food Industry, 37 individuals from the School of Medicine, 15 individuals from the School of Medical Education

Sciences, 24 individuals from the School of Paramedicine, 15 individuals from the School of Traditional Medicine, and 21 individuals from the School of Rehabilitation Science were selected.

All participants signed an informed written consent and they volunteered to take part in the study. After allocating sufficient time for completing the questionnaires, the relevant questionnaires were given to them. Based on the exclusion criteria, 20 subjects were excluded from the study.

Sample Size
Based on research aims, the sample size was estimated as 212 students using the following formula:
Type I error probability: $\alpha=0.05$
Test power: $1-\beta=0.9$

$$n = \frac{\left(Z_{\frac{\alpha}{2}} + Z_{\beta}\right)^2}{d^2} + 3$$
$$d = \frac{1}{2}ln\frac{1+r}{1-r}$$
$$r = -0.07$$

where r is the Pearson's correlation coefficient. Considering a 15% attrition rate, the sample size was considered to be 244.

Data Collection Tools
Demographic Information Questionnaire
This questionnaire entails demographic variables, including age (>20, 20-30, 30-40, 40-50, & <50), gender (male or female), level of education (associate degree, bachelor's degree, MA/MSc, Ph.D.), monthly family income (sufficient or insufficient), and history of psychiatric illness (yes or no).

NEO-Five Factor Inventory–Revised (NEO-FFI-R)
The NEO-Personality Inventory–Revised (NEO-PI-R) replaces the NEO test, developed by McCrae and Costa in 1985. It measures five main personality factors and six characteristics in each factor. This questionnaire also has a short form called NEO-FFI that is a 60-item checklist and is used to evaluate five main personality factors, including psychosis, extraversion-introversion, desire for new experiences, agreeability, and responsibility. The answer sheet for this questionnaire is based on the five-point Likert scale (strongly disagree, disagree, indifferent, agree, and strongly agree). In scoring the short form of the questionnaire, 5 points is devoted to: "strongly agree", 4 points to: "disagree", 3 points to: "indifferent", 2 points to: "agree", and 1 point to: "completely agree". The validity coefficients of the NEO-FFI obtained by McCrae and Costa ranged from 0.83 to 0.75 (16). The NEO 5-factor test is currently used worldwide and has been translated into Czech, Slovak, Japanese, Dutch, Arabic, French, German, Norwegian, Polish, and Swedish for research purposes.

Validation of this questionnaire was performed in Iran using Cronbach's alpha method and the findings showed that the questionnaire is a suitable tool for determining personality traits (17).

Family Functioning Questionnaire

This 60-item questionnaire includes seven subscales that measure six family dimensions, as well as overall family functioning. It was designed by Epstein, Baldwin, and Bishop in 1983 based on McMaster model. There are four options for each item, (strongly agree, agree, disagree, and strongly disagree) each option receiving points from one to four, respectively. The minimum possible score is 60 and the maximum is 235 (18). The validity of Family Functioning Questionnaire (FFQ) was psychometrically measured on a sample of 503 people. The α coefficient of the sets ranged between 0.72 and 0.92 indicating its high internal consistency (19). In summary, the FFQ has acceptable reliability between different families, so that Cronbach's alpha of its various subscales ranged from 0.57 to 0.80 (18).

Beck Scale for Suicide Ideation

The Beck Scale for Suicide Ideation (BSSI) is a 19-item self-reported scale with three subscales, including tendency to die, preparing for suicide, and the tendency to commit real suicide. Each item receives points from 0 to 2 on a Likert scale, so the total score varies from 0 to 38. The purpose of this instrument is to identify and assess the severity of attitudes, behaviors, and planning for suicide. This questionnaire entails five screening items. If the respondent answers yes to item 5 in particular, it is necessary to answer the remaining 14 items of the scale; otherwise, there is no need to answer the remaining items. In psychometric validation of the BSSI, Cronbach's α ranged between 0.87-0.97% in different studies. It was also reported as 0.54% by the use of the test-retest method (20).

In this research, to determine the content validity, the questionnaires were first approved by a research supervisor, then given to ten nursing experts to review them in terms of relevance, clarity, simplicity, and necessity. Besides, ten experts and ten students examined the face validity of the questionnaires in terms of appearance and fit, and several modifications and improvements were made based on their comments. In terms of content validity, no specific modifications were needed, because according to experts' opinions the scale was standard. Moreover, students and experts agreed on the appropriateness of the face validity of the questionnaires regarding the objectives of the study. In this study, the reliability of the tools was checked through internal consistency (Cronbach's α). In this way, before sampling, 20 subjects received a questionnaire, and after completion, the internal consistency was estimated. A coefficient above 0.70 was accepted. Cronbach's α coefficient for the NEO-FF-I questionnaire was 0.83

for the subgroup of psychosis, 0.75 for extroversion-introversion, 0.80 for desire for new experiences, 0.79 for agreeability, and 0.79 for responsibility. Family functioning was calculated as 0.80 and Beck's suicidal thoughts as 0.95.

Statistical Analysis

The collected data was imported into the Statistical Package for the Social Sciences (SPSS, version 22) and analyzed by descriptive and analytical tests, including frequency distribution tables, mean, SD, Pearson's correlation coefficient, and multiple linear regression model ($P = 0.05$).

Results

Demographic Characteristics

In this study, out of a total of 244 students, 168 (68.85%) were in the age range of 20-30 years and one (0.41%) subject was in the age range of over 50 years. Besides, 88 (36.07%) respondents were male and 156 (63.93%) were female. Also, 157 (64.34%) subjects were undergraduate students and one (0.41%) student was an associate degree student. Moreover, 182 (74.59%) subjects earned sufficient income and 62 (25.41%) did not earn sufficient income. According to the results, 16 (6.56%) subjects had a history of psychiatric illness. People with a history of psychiatric disorders were excluded from the final analysis. Table 1 shows the characteristics of participants in the study.

According to Table 2, the correlation coefficient between psychosis and suicidal ideation was positive and significant ($P < 0.05$). Furthermore, the correlation coefficients among the components of extraversion-introversion, agreeability and responsibility, and suicidal ideation were negative and significant ($P < 0.05$). Yet, there was no significant correlation between desire for new

Table 1. Frequency Distribution of Age, Gender, Education Level, Monthly Income, and History of Psychiatric Illness in the University Students

Variable	Values	No. (%)
Age	<20	50 (20.49)
	20-30	168 (68.85)
	30-40	20 (8.20)
	40-50	5 (2.05)
	>50	1 (0.41)
Gender	Male	88 (36.07)
	Female	156 (63.93)
Education level	Associate degree	1 (0.41)
	BA/BSc student	157 (64.34)
	MA/MSc student	16 (6.56)
	PhD student	70 (28.69)
Monthly income	Sufficient	182 (74.59)
	Insufficient	62 (25.41)
History of psychiatric disorders	Yes	16 (6.56)
	No	228 (93.44)

experiences and suicidal ideation ($P > 0.05$). Table 2 also suggests that the relationship between all components of family functioning and suicidal thought was positive and significant ($P < 0.05$).

To explore the impact of familial functioning components on suicidal ideation, we used a regression model (dependent variable: suicidal ideation vs. independent variables: family functioning components). The findings are displayed in Table 3.

Considering the level of significance (0.000, which is less than 0.05) in Table 3, the regression model was significant.

According to Table 4, the slope of the standardized regression line is equal to 0.279 for psychosis, -0.181 for extraversion-introversion, -0.192 for agreeability, and -0.290 for responsibility. Given that the significance level of these coefficients is less than 0.05, these coefficients

have a significant difference with zero. So, the hypotheses are confirmed.

As Table 4 depicts, the value of R^2 (adjusted coefficient of determination) is equal to 0.586, which indicates the personality components can account for 58.6% of the variance in the dependent variable (suicidal thought). Also, the value of Durbin-Watson statistic of the model was equal to 2.039, which indicates the lack of sequential correlations.

To investigate the impact of family functioning components on suicidal ideation, we used a regression model (dependent variable: suicidal ideation vs. independent variables: family functioning components). The findings are given in Table 5.

Based on Table 6, the slope of the standardized regression line is equal to 0.202 for problem-solving, 0.203 for relations, 0.212 for roles, 0.242 for effective responsibility, 0.179 for effective engagement, 0.179 for behavioral control, and 0.294 for overall functioning. Considering that the significance level of these coefficients is less than 0.05, these coefficients are significantly different from zero. Thus, the hypotheses are confirmed.

As Table 6 depicts, the value of R^2 is equal to 0.675, which indicates that family functioning components can account for 67.5% of the variance of the dependent variable (suicidal thought). Furthermore, the value of the Durbin-Watson model was equal to 2.302, which indicates the lack of sequential correlations.

Discussion

The present study determined the correlation among personality characteristics, family functioning, and suicidal thought in students of Shahid Beheshti University of Medical Sciences in 2018. The findings showed that the correlation between psychosis and suicidal ideation was positive and significant. The correlation coefficients between the components of extraversion-introversion, agreeability, and responsibility with suicidal ideation were negative and significant; nevertheless, no significant correlation was observed between desire for new experiences and suicidal ideation.

A previous study explored the correlation among suicidal thought, daily stress, anxiety, depression, resilience, and psychological health in students. The

Table 2. Spearman's Correlation Coefficient Between Different Personality Traits and Family Functioning Components With Suicidal Ideation in University Students

	Suicidal Ideation	
	Correlation Coefficient	P Value
Personality components		
Psychosis	0.26**	0.000
Extraversion-introversion	-0.239**	0.000
Desire for new experiences	-0.001ns	0.993
Agreeability	-0.337**	0.000
Responsibility	-0.275**	0.000
Family functioning components		
Problem solving	0.206**	0.001
Relations	0.305**	0.000
Roles	0.273**	0.000
Effective responsiveness	0.262**	0.000
Effective engagement	0.250**	0.000
Behavior control	0.295**	0.000
Total functioning	0.278**	0.000

** Significant at the 1% probability level.

Table 3. Goodness of Fit of Regression Model

Sum of Squares		Mean of Squares	F	P Value
Regression	70.868	17.717	60.847	0.000
Remainders (residues)	48.044	0.291	-	-
Total	118.912	-	-	-

Table 4. Regression Coefficients and Determining the Coefficients of Regression Model

	Non-standard Coefficients		Standard Coefficients	t	P Value
	B	SD	Beta		
Width from origin	0.431	0.183	-	2.348	0.020
Psychosis	0.277	0.083	0.279	-3.195	0.002
Extraversion-introversion	-0.189	0.088	-0.181	-2.152	0.033
Agreeability	0.210	0.090	-0.192	-2.340	0.020
Responsibility	0.208	0.087	-0.290	-2.397	0.000

Durbin-Watson test: 2.039; Adjusted factor: 0.586; Determination factor: 0.596; Correlation coefficient: 0.772

Table 5. Goodness of Fit of Regression Model

	Sum of Squares	Mean of Squares	F	*P* Value
Regression	65.141	16.285	59.575	0.000
Residues	45.104	0.273	-	-
Total	110.245	-	-	-

findings demonstrated a positive relationship between anxiety, depression, mental health, and daily stress with suicidal thought (21); this was consistent with the present study in terms of a positive relation between anxiety and suicidal thought. Another study determined the correlation between personality features and symptoms of depression, pessimism, and suicidal thought in the student population based on a five-factor personality model. Moreover, there was also a negative significant correlation between extraversion and being conscientious with the symptoms of depression, pessimism, and suicidal thoughts (22); this finding was consistent with the results of the present study.

Reviewing previous studies indicated that their findings are consistent with the results of the present study; so, it can be inferred that the higher the score of psychosis, the higher the suicidal ideation. In other words, the more anxious a person is, the more suicidal thoughts s/he has. It can also be inferred from the negative and significant correlation of extroversion-introversion that the more introverted a person is, the more suicidal thoughts they have and sociable individuals have less suicidal thoughts. The negative and significant correlation coefficient of agreeability with suicidal ideation also indicates that the more selfish a person is, the more suicidal ideation s/he has and the more populous people have less suicidal ideation. Furthermore, the negative and significant correlation coefficient between responsibility and suicidal ideation also indicates that the more irresponsible a person is, the more suicidal thoughts s/he has, and the responsible people possess less suicidal ideation.

The results of the present study concerning the correlation between family functioning and suicidal thought indicated that the correlation between all components of familial functioning and suicidal thought is negative and significant. In this way, the lower the family functioning in all dimensions, the more suicidal thoughts the person has. A previous research demonstrated a significant positive relationship between perception of general family functioning and frustration/pessimism, perception of overall family functioning, and suicidal ideation and between frustration and suicidal thought of students (23). Other studies (23-26) reported similar findings, so that any reduction in family functioning for each of the components (problem solving, relationships, roles, effective responsiveness, effective engagement, behavioral control, and general functioning) increased suicidal ideation in the individual.

Practical Implications
The findings of this study can be a useful source of data for healthcare officials, professionals, counselors, and mental health professionals. Administrators can help reduce suicidal ideation in students by making effective policies and creating programs to promote mental health and improve the functioning of students' families. It is also recommended for counselors and mental health specialists to evaluate the possibility of suicidal thoughts in students by knowing their personality traits and examining the functioning of their families, and to monitor and treat them in terms of the occurrence of suicidal behavior.

Limitations
This study had two main limitations. First, completing three questionnaires was tedious for the participants; hence, we tried to give them sufficient time to respond. Second, the mental state of the subjects could not be controlled while answering the questionnaires.

Conclusion
The findings of our study indicated the correlation among personality traits, family functioning, and suicidal ideation in university students. Generally speaking, it can

Table 6. Regression Coefficients and Determining the Coefficients of Regression Model

	Non-standard Coefficients		Standard coefficients	t	*P* Value
	B	SD	Beta		
Width from origin	0.451	0.178	-	2.540	0.012
Problem solving	0.185	0.081	0.202	2.294	0.023
Relations	0.204	0.085	0.203	2.404	0.017
Roles	0.222	0.087	0.212	2.561	0.011
Effective responsiveness	0.232	0.084	0.242	2.763	0.006
Effective engagement	0.211	0.088	0.179	2.403	0.017
Behavior control	0.221	0.090	0.179	2.456	0.015
Total functioning	0.331	0.087	0.294	3.816	0.000

Durbin-Watson test: 2.302; Adjusted determination factor: 0.675; Determination factor: 0.683; Correlation coefficient: 0.826

be asserted that due to the importance of suicidal thought in students and the noticeable function of personality characteristics and family functioning in creating suicidal thought, it is essential to provide educational programs to families to inform them about the role of family in pediatric suicidal ideation and help them ameliorate their performance. Moreover, it is important to provide educational programs to students to recognize their personality traits and their importance in suicidal ideation. In this regard, counselors and psychologists can help prevent suicide in this group by identify students at risk, using screening tests, and applying their expertise to counsel students at risk.

Authors' Contribution
Conceptualization: Fatemeh Aliakbari and Tayebeh Jamshidi.
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Investigation: Fatemeh Aliakbari, Tayebeh Jamshidi, Rezvaneh Manzour and Fatemeh Haj Hashemi.
Resources: Fatemeh Aliakbari and Tayebeh Jamshid.
Data curation: Fatemeh Aliakbari, Rezvaneh Manzour and Fatemeh Haj Hashemi.
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Visualization: Fatemeh Aliakbari.
Supervision: Tayebeh Jamshidi.
Project administration: Fatemeh Aliakbari.
Funding acquisition: Fatemeh Aliakbari.

Conflict of Interests
None.

Data Availability Statement
The participant-level data set for this study can be accessed from the corresponding author on logical request.

Ethical Issues
The Committee of Ethics in Human Research at the School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences approved the study protocol (code: IR.SBMU.PHARMACY.REC.1397.056).

References
1. Kikhavani S, Chatripor F, Seidkhaninahal A. Comparison between suicidal thoughts and depression among the suicide committed and healthy individuals among ilam province people between 2011 and 2012. Journal of Ilam University of Medical Sciences. 2013;21(1):47-53.
2. Mortier P, Auerbach RP, Alonso J, et al. Suicidal thoughts and behaviors among college students and same-aged peers: results from the World Health Organization World Mental Health Surveys. Soc Psychiatry Psychiatr Epidemiol. 2018;53(3):279-288. doi:10.1007/s00127-018-1481-6
3. Mortier P, Cuijpers P, Kiekens G, et al. The prevalence of suicidal thoughts and behaviours among college students: a meta-analysis. Psychol Med. 2018;48(4):554-565. doi:10.1017/S0033291717002215
4. Kang H-J, Bae K-Y, Kim S-W, et al. Genetic predisposition toward suicidal ideation in patients with acute coronary syndrome. Oncotarget. 2017;8(55):94951.
5. Dickstein DP, Puzia ME, Cushman GK, et al. Self-injurious implicit attitudes among adolescent suicide attempters versus those engaged in nonsuicidal self-injury. J Child Psychol Psychiatry. 2015;56(10):1127-1136. doi:10.1111/jcpp.12385
6. Soofi Afshar N, Bakhtar M, Aghamohammadhasani P, Rezaeian M. Suicidal Thoughts and Planning for Suicide among the 2007-2013 Entrance Medical Students of Rafsanjan University of Medical Sciences. Health and Development Journal. 2016;5(3):257-266.
7. Fadaee Z. Path analysis of locus of control, symptoms of depression and suicidal ideation on academic achievement: The role of gender as moderator. Journal of Fundamentals of Mental Health. 2011;13(50):59-148. doi:10.22038/jfmh.2011.1015
8. Wang P-W, Yen C-F. Adolescent substance use behavior and suicidal behavior for boys and girls: a cross-sectional study by latent analysis approach. BMC Psychiatry. 2017;17(1):392. doi:10.1186/s12888-017-1546-1
9. Valikhani A, Firouzshahi A. Forecasting suicidal thoughts based on components of borderline and schizotypal personality in medical students. Thoughts and Behavior in Clinical Psychology. 2015;10(37):57-66.
10. Schultz D, Schultz S, Ellen S. Theories of personality. Trans. by Seyyed Mohammadi Y. Cengage Learnings; 2013.
11. Tavakouli Kohjehri M, Kahrazei F. Relationship of personality traits with quality of life in spouses of patients with physical disabilities. Archives of Rehabilitation. 2017;18(2):132-141.
12. Nesaian A, Gandomani R, Bagheri Z. Relationship between job stress and nurses' personality traits and spiritual experiences. Iranian Journal of Nursing Research. 2017;12(3):44-9.
13. Dai L, Wang L. Review of family functioning. Open J Soc Sci. 2015;3(12):134.
14. Aslani K, Amanollahi A, Valad Momen P, Taghipoor M. Simple and moderator relationship of hopelessness and family function with suicidal ideation among high schools student in Ahwaz city. Counseling Culture and Psycotherapy. 2014;5(20):59-79.
15. Mousvi Diva R, Moghadam N, Amani O. Evaluating family functioning and spiritual health in women with breast cancer, cancer-treated and healthy women. Iranian Journal of Psychiatric Nursing. 2017;5(5):49-56.
16. Costa PT, Mccrae RR. Normal personality assessment in clinical practice: The NEO Personality Inventory. Psychol Assess. 1992;4(1):5.
17. Anisi J. Validity and reliability of NEO Five-Factor Inventory (NEO-FFI) on university students. Int J Behav Sci. 2012;5(4):351-355.
18. Akbari A, Panaghi L, Habibi M, Sadeghi MA. Perceived family functioning and suicidal ideation among university students: hopelessness as a moderator. original research. Iranian Journal of Psychiatry and Clinical Psychology. 2017;22(4):284-291. doi:10.18869/nirp.ijpcp.22.4.284
19. Karami J, Zakiei A, Alikhani M. The relationship between mcmaster model of family functioning and personality disorders based on mcmaster model. Family Counseling and Psychotherapy. 2013;2(4):537-554.
20. Beck AT, Steer RA. Manual for the Beck Scale for Suicide Ideation. San Antonio, TX: Psychological Corporation.

1991;63

21. Pourhossein R, Farhoudi F, Amiri M, Janbzorghi M, Rezaei Bidakhvidi A, Nourollahi F. The Relationship of Suicidal Thoughts, Depression, Anxiety, Resilience, Daily Stress and Mental Health in University of Tehran Students. J Clin Psychol. 2014;4(14):21-40.

22. Bairami M, Eghbali A, Gholizadeh H. Interaction between personality factors and depression symptoms, hopelessness and suicidal ideation among students. Medical Journal of Tabriz University of Medical Sciences. 2012;34(1):28-34.

23. Ghadampour E, Shafiei M, Heidarirad H. Relationships among Cyberbullying, psychological vulnerability and suicidal thoughts in female and male students. Res Psychol Health. 2017;11(3):28-40. doi:10.29252/rph.11.3.28

24. Sun L, Zhou C, Xu L, Li S, Kong F, Chu J. Suicidal ideation, plans and attempts among medical college students in china: the effect of their parental characteristics. Psychiatry Res. 2017;247:139-143.

25. Amanee J, Purashraf Y, Aibod R. The Impact of Personality Traits on the Consumers Switching Behavior, and the Moderating Role of Service Failure. Management Studies in Development and Evolution. 2017;26(85):87-107.

26. Soltaninejad A, Ashtiani AF, Ahmadi K, Yahaghi E, Nikmorad A, Karimi R, et al. Structural equation model of borderline personality disorder, emotion-focused coping styles, impulsivity and suicide ideation in soldiers. Journal of Police Medicine. 2012;1(3):176-182.