ORIGINAL ARTICLE Individualism-Collectivism, Social Support, Resilience and Suicidal Ideation among Women with the Experience of the Death of a Young Person

Saeed Ariapooran¹, PhD; Samaneh Heidari¹, MA; Mohammad Asgari², PhD; Hossein Ashtarian³, PhD; Mehdi Khezeli³, PhD

 ¹Department of Psychology, School of Literatures and Humanistic Sciences, Malayer University, Malayer, Hamadan, Iran;
²Department of Psychology, School of Psychology & Education, Allameh Tabataba'I University, Tehran, Iran;
³Department of Health Education, School of Health, Kermanshah University of Medical Sciences, Kermanshah, Iran
Corresponding author:

Saeed Ariapooran, PhD; Department of Psychology, School of Literatures and Humanistic Sciences, Malayer University, Malayer, Hamadan, Iran **Tel:** +98 81 32355348; **Email:** s.ariapooran@malayeru.ac.ir

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Abstract

Background: Grief involves a set of emotions, thoughts and behaviors that people experience when faced with a lack or threat of loss. This study was conducted to evaluate the suicidal ideation among women with experience of the death of a young person and assessed the predictive role of individualism-collectivism, social support, and resilience in suicidal ideation.

Methods: This cross-sectional study was conducted from March to August 2016 through recruitment of 146 breaved women from Gilan-e gharb (the west part of Iran). Data gathering instruments included Individualism-Collectivism Questionnaire, Multidimensional Scale of Perceived Social Support (MSPSS), Connor-Davidson Resilience scale (CD-RISC), and Beck Scale for Suicidal Ideation. Collected data were analyzed using SPSS-22.

Results: The findings showed that among women, 48 percent had suicidal ideation (scores above 6). The results of Pearson correlation showed that there were significant negative relationships between suicidal ideation (P<0.05) and factors such as collectivism (r=-0.286), family support (r=-0.558), support from friends (r=-0.307), support from significant others (r=-0.617), social support (r=-0.561), and resilience (r=-0.457). The results showed that individualism - collectivism, social support, and resilience correctly predicted 73.5% of women with suicidal ideation and 83.3% of women without suicidal ideation.

Conclusion: We concluded that higher collectivism, social support, and resilience in the bereaved women can lead to a reduction in suicidal ideation. Therefore, psychologists and counselors can provide the necessary background to strengthen supportive issues and the use of resilience-based interventions among bereaved women.

Keywords: Grief, Resilience, Social support, Suicidal ideation

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INTRODUCTION

Grief is a series of feelings, thoughts and behaviors that people experience in the face of loss or threat of a loss. Although grief is a natural and universal phenomenon in all human societies, the expression of grief is different for everyone, and different people accept the reality of loss and bereavement and its consequences in different ways.¹ If the grief causes complications such as severe depression, insomnia, weight loss, anorexia, and so on, and these complications continue at least for two months, it will be remembered as a mental disorder.² The Five Stages Theory of Grief suggests that grief is an original composition, comprised of five movements: Denial and Isolation, Anger, Bargaining, Depression, Acceptance.³ According to Bonanno and Kaltman (2001), most bereaved people in the first year after the grief show relative confusion in the performance.⁴ The death of a loved one can trigger life stressors including physical, emotional, cognitive, and social disturbances.⁵ One of the most important consequences of losing loved ones and subsequent bereavement is the likelihood of suicidal behaviors.⁶ The continuum of suicidal behavior includes death wish, suicidal ideation, suicidal attempt, and suicide.7 Some studies have acknowledged that suicidal ideation and the risk of attempted suicide is higher among people who experience the death of a close relative.8,9

Many variables can play a role in the formation or prevention of suicidal ideation or suicide as risk or protective factors. Among the individual and social characteristics, in this study individualism-collectivism, social support and resilience were investigated. Individualism consists of four components as follows: competition between individual, self-sufficiency, predominance of personal goals, and uniqueness. On the other hand, collectivism consists of four components: the superiority of group goals, interest in membership in the group, having common features with the group, and common concerns.¹⁰ The results of a study showed

that suicidal ideation and suicidal attempts were more common among people who had the individualistic tendencies, and attitudes toward suicide in the people with individualistic tendencies were more than those with collectivist tendencies.¹¹

Social support, as a protective factor in suicidal behaviors, is often used in a broad meaning and refers to any process by which social relationships can promote health and wellbeing.¹² Perceived social support has a strong association with suicidal ideation.¹³ Studies have suggested that there were significant relationships between the limited social supports with an increase in suicidal behavior,¹⁴ and between the higher social supports with lower levels of suicidal ideation.^{15, 16}

Resilience to suicidality is one of the topics considered by researchers in the field of suicide in recent years, which can be considered as a psychological construct – such as a perceived capability of people to overcome hardships, a collection of positive beliefs, or a set of individual, familial, or social resources – that can buffer people from suicide in the circumstances where risk factors of suicide surround the individuals.¹⁷ Some studies show that resilience is associated with low levels of suicidal ideation.¹⁸⁻²⁰

Loss of family members and grief of a young in Iranian culture in which, usually collectivist families are common, may affect the prevalence of suicidal ideation among women. Kermanshah, as the biggest province in the west of Iran, stood at the 3rd place in the country in terms of high rates of mortality caused by suicide. Eastern regions of the province have the lowest rate of suicide predominantly in men, while western areas have the highest rate mainly in women.²¹ Gilan-e Gharb in the west of Kermanshah province is faced with numerous cases of suicide. This study was conducted to evaluate the suicidal ideation among women of Gilan-e Gharb who had had lost a young person and also to investigate the predictive role of individualism-collectivism, social support,

and resilience in suicidal ideation. Researches about suicide ideation and the predictive role of individualism-collectivism, social support, and resilience among women who had lost a young are important for psychologists and consolers. They can use psychological trainings and therapies based on resilience. They can also strengthen the support systems and collectivism among these women. Given that the subject of this research is new, its results can strengthen the attention of researchers to women who experience the death of young. The main hypothesis of this study was that "individualism-collectivism, social support, and resilience predict the suicide ideation in women who have experienced the death of a young".

MATERIALS AND METHODS

This cross-sectional study was conducted from March to August 2016 through recruitment of women from Gilan-e gharb (the west part of Iran), which had been faced with the death of a young person (husband, daughter, son, sister, or brother) in the family during the past year. According to correlation method, individualismcollectivism, social support, and resilience were considered as predictive variables and suicide ideation as criterion. This research was ethically approved by the Malayer University.

The data in Gilan-e Gharb Registry Office showed that 153 deaths were related to people aged 18 to 40 years were recorded over the past year (from March 2015 to March 2016). Accordingly, we selected one women from each family, among the sisters, mothers or daughters (N=229) of every dead young. Inclusion criteria were having at least elementary education level, and age range of 18 to 40 years. We used Cochrane Formula:

$$n = \frac{Nz^2p(p-1)}{Nd^2 + z^2p(p-1)}$$

to determine the sample size; z [1.96] is the selected critical value of desired confidence level, p [0.5] is the estimated proportion of an

attribute that is present in the population, and d [0.05] is the desired level of precision. For the 229 community, the sample size was 143.5. From each family (153 families), a woman was selected by convenience sampling method to participate in the study. If she had criteria for entering the research. Three people refused to participate in the research due to the lack of proper mental conditions. Finally, after collecting the questionnaires, 7 women were excluded from the final sample because of incomplete questionnaires, so the final sample fell to 146.

It should be noted that before distributing the questionnaires the aim of the study was explained to the participants; they were assured that their information would remain confidential. Then, they completed the consent form.

We used four questionnaires in addition to the demographic questionnaire for data collection. First, the questionnaire was the Individualism-Collectivism Questionnaire with 25 questions, and 2 sub-scales including individualism (11 questions) and collectivism (14 questions). Each item was rated on a 5-point scale from strongly disagree (1) to strongly agree (5). The scores of the individualism range from 11 to 55 and collectivism from 14 to 70. The validity of this questionnaire has been reported using the correlation coefficient between the dimensions and the total score of the questionnaire, which was equal to 0.78 (individualism) and 0.71 (collectivism). The reliability of the questionnaire was also calculated and reported using Cronbach's alpha coefficient (0.83).²² The content validity of the Individualism-Collectivism Questionnaire was measured using S-CVI by three Psychologist, and two Health Promotion specialists; the S-CVI amount was 0.82. Finally, the concurrent validity of the questionnaire was confirmed with a correlation coefficient of 0.62.22 In addition, we assessed the internal consistency of the questions using Cronbach's Alpha, which were 0.73 for individualism and 0.77 for collectivism.

The second questionnaire used in this study was the Multidimensional Scale of Perceived Social Support (MSPSS); Zimet et al. MSPSS consists of 12 items and measures three dimensions of social support including family, friends and significant others. For each dimension, 4 questions are designed and respondents answer each item with a 7-point Likert scale ranging from one (strongly disagree) to seven (strongly agree). According to Zimet et al. (1990), the overall scores of this scale range from 12 to 84 and for each of the subscales from 4 to 28. Zimet et al. have pointed to appropriate internal consistency which was assessed by Cronbach's Alpha to be 0.91, 0.87, and 0.85 for support from significant others, family, and friends, respectively23. The content validity of Persian version of the MSPSS has been assessed and approved in some Iranian studies.^{24, 25} Internal consistency assessed by Cronbach's Alpha was 0.92 for total MSPSS in the healthy group. Test-retest reliability as assessed by Pearson's correlation in the healthy group was 0.74, 0.78, and .84 for family, friends and significant others, respectively.23 Another study reported that Cronbach's alpha coefficient and the Intra-class Correlation Coefficient (ICC) for the entire scale were 0.89 and 0.92, respectively.²⁴ In the present study, we assessed the internal consistency of the questions using Cronbach's Alpha, which were 0.79, 0.73 and 0.71 for family, friends and significant other support.

The Connor-Davidson Resilience scale (CD-RISC), as the third questionnaire, was comprised of 25 items, each rated on a 5-point scale from not true at all (0) to true nearly all time (4), in which higher scores reflect the higher resilience. The overall scores of this scale range from 0 to 100. Cronbach's alpha for the full scale was calculated 0.89 and convergent and divergent validity were satisfactory compared with several other measuring tools. The CD-RISC has sound psychometric properties and can distinguish between those who have high or low levels of resilience.²⁵ Mohammadi et al. in Iran has

localized this questionnaire. The validity of the scale was calculated from 0.41 to 0.64 (except for item 3), using the correlation coefficient of each item with total score of correlation coefficients.²⁵ In addition, the reliability of the scale using the Cronbach's alpha coefficient was satisfactory, which ranged from 0.89, to 0.91 in several studies.^{25, 26}

Finally, we used the Beck Scale for Suicidal Ideation (Beck & Steer, 1991) which measures the intensity of suicidal ideation using 19 items; each item was rated from 0 to 2. The total scores on the Beck scale can, thus, range from 0 to 38 points; the higher scores indicate greater levels of suicidality.²⁷ Anisi et al. performed semantic, technical, and criterion equivalence by translating and back translating the instrument into Persian.²⁸ The concurrent validity of the scale with the General Health Questionnaire has been reported 0.76 and reliability using Cronbach's alpha was calculated 0.95. Cronbach's alpha coefficient for the screening part and the whole scale was 0.829 and 0.837, respectively.²⁷ Considering the fact that in previous researches the cut-off point in the Beck suicidal ideation scale was considered 6 score,²⁹ in the present study also we considered this score as a cutoff point.

Researchers received the address and phone number of the home of the dead people after referring to the Registry Office of Gilan-e-Gharb and determined the research sample. Then, they returned to the designated homes, and after obtaining informed consent, the participants received the research questionnaire. The questionnaires were completed as self-administrated and for approximately 30 to 45 minutes. Finally, the data were analyzed through SPSS-22 using Correlation Coefficient test, Discriminant function analysis and Canonical Correlation Coefficient.

RESULTS

The mean ages of the participants and their lost young were 31.2±7.57 and 27.8±4.11, respectively. Descriptive results showed

that 36.3% of women were single and 63.7% married. 20.5% did not have a diploma, 32.9% had diploma, 17.8% were in apprenticeship period, 25.3% were undergraduate, and 3.5% had Master's degree and higher.

According to the participants, of the dead people 44.5% were women and 55.5% male; 63.3% were single and 37% were married; also, 11.6% were mother, 12.3% father, 33.6% brother, 21.9% sister, 12.3% spouse and 8.3% daughter or son of the persons who participated in the research. The cause of death was mentioned as follows: 39.7% (N=58) diseases, 36.4% (N=56) road accidents, 14.4% (N=21) suicide, 3.4% (N=5) Carbon Monoxide Poisoning, 2.1% (N=3) electric shock, and 2.1% (N=3) armed conflict.

Results showed that among women, 46.6% (68 women) had suicidal ideation (scores above 6) and 53.4% (78 women) [scores 6 and below 6] did not. In Table 1, the mean and standard deviations of variables with correlation coefficients of predictor variables and criterion variable (suicidal ideation) are presented. The means \pm SD of individualism, collectivism, family support, support from friends, support from significant others, social support (total), resilience and suicidal ideation were 26.89 \pm 8.76, 38.23 \pm 9.41, 16.65 \pm 4.39, 14.44 \pm 4.61, 15.93 \pm 5.51, 47.03 \pm 5.94, 57.87 \pm 6.94 and 8.89 \pm 4.05, respectively.

Normal distribution of data and equality of variances are the important assumptions of Pierson correlation and Linear Discriminant Analysis (LDA). Before performing the tests, we used Shapiro-Wilk (S-W) for testing the normality of distribution of the independent variables. According to S-W test, the distributions of individualism (S-W test=0.02; P<0.65), collectivism (S-W test=0.10; P<0.22), social support (S-W test=0.09; P<0.53), and resilience (S-W test=0.06; P<0.61) were normal.

As shown in Table 1, there was a significant negative relationship between suicidal ideation and collectivism (r=-0.19; P=0.05), family support (r=-0.47; P<0.01), support from friends (r=-0.26; P<0.01), support from the important person in life (r=-0.44; P<0.01), social support (r=-0.45; P<0.01), and resilience (r=-0.31; P<0.01) in the subjects. This means that by increasing the amount of collectivism, resilience, and social support and its dimensions, the rate of female suicidal ideation has diminished, and vice versa. Also, there was no significant relationship between individualism and suicidal ideation.

Before the LDA, we used Box's Test of equality of covariance matrices; the results of this test indicated that covariance matrices were equal (F Box=0.48; P<0.12). Group membership prediction through LDA by inter-method specifies that does this mean that individualism, collectivism, social support and resilience can show the membership of individuals (women faced with young person's grief) in two groups, with or without suicidal ideation? The results of Wilks-Lambda were significant for collectivism (f=6.53, P<0.01), social support (f=36.49, P<0.01), and resilience (f=10.57, P<0.01). This means that the statistical difference between the mean of variables (collectivism, social support, and resilience) was significant in the group with suicidal ideation and one another, but for individualism (f=0.029, P<0.87), this

Variables/Social ideation	r	P value*
Individualism	-0.08	0.33
Collectivism	-0.19	0.02
Family support	-0.47	0.01
Support from friends	-0.26	0.01
Support from significant others	-0.44	0.01
Social support (total)	-0.44	0.01
Resilience	-0.31	0.01

Table 1: Variables, and the results of correlation between predictor variables and the suicidal ideation

*Correlation Coefficient

Groups	Group membership		Canonical correlation
	With suicidal ideation	Without suicidal	coefficient
		ideation	
With suicidal ideation	73.5%	26.5%	0.58
Without suicidal ideation	16.7%	83.3%	

Table 2: Discriminant function in predicting group membership (with and without suicidal ideation)

difference was not significant. Based on the structural matrices, the role of significant variables in the discriminant function was determined in which the social support (0.69), resilience (0.38), and collectivism (0.29) were the most important contributors in this function, respectively.

As shown in Table 2, according to Canonical Correlation Coefficient, the discriminant function has been predicted successfully in 58% of cases of women with and without suicidal ideation. Therefore, the discriminant function had a relatively high correlation with predictor variables. Also, the results of this table indicate that discriminant analysis has been accurately predicted in 73.5% of women with suicidal ideation and 83.3% of women without suicidal ideation.

DISCUSSION

The aim of the current study was to examine the prevalence of suicidal ideation and the role of individualism-collectivism, social support, and resilience in predicting the suicidal ideation among women experiencing the death of a young person. Accordingly, the results showed that 46.6% of the bereaved women had some degree of suicidal ideation. This result is consistent with the findings of other studies which showed that the loss of first-degree family members increased the risk of suicide and suicidal ideation.^{9, 10}

In explaining this finding, it can be said that the death of close relatives leads to psychological problems and mental engagement of a person with a lot of negative thoughts because with the loss of a person the individual may lose his or her social and financial support. Therefore, the loss of the economic, social and emotional support of the lost person may cause negative thoughts, including suicidal ideation in their close relatives.

The results showed that there was a significant negative relationship between collectivism and suicidal ideation in women with a history of young person's death, but there was not a significant relationship between suicidal ideation and individualism. This conclusion is consistent with another study which showed that both suicidal ideation and suicide attempts were more common among a group that had individualistic tendencies rather than collectivism.¹² People who are collectivized usually have features such as the superiority of group goals (such as renunciation of personal interests for the benefit of the group), interest in membership in the group (such as a sense of belonging and having relationships with members of the group), having common features with the group (for example, contribution to success, failures and responsibilities, especially when the group is threatened), and common concern (such as the desire to maintain good interpersonal relationships in the group).¹¹ These factors show that a bereaved person is less likely to be alone, and his/her intrinsic tendencies toward group life make it possible to establish emotional relationships with the members of the group. Also, this makes them spend most of their time with a group of friends which can reduce suicidal tendencies and suicidal ideation. In other words, it can be said that collectivists may feel the loss of the lost person less because their emotional relationships with group members are likely to play a role in this regard; also, talking with others can help them to accept the death of the missing person.

In the present study, it was shown that individualism was not significantly related to suicidal ideation. This result is inconsistent with the findings of Eskin which showed that individuals with individualistic tendencies had more suicidal ideation and desires.¹² However, this result is exclusively related to the present study and the generalization of this result should be cautious.

The results of Pearson correlation coefficient showed that there were negative significant relationships between family support, support of friends, support from important people in life and social support with suicidal ideation of women. Also, social support (total) played a role in predicting the membership of women in the group with or without suicidal ideation. This result is consistent with the previous findings, which showed that there was a positive relationship between low social support,^{16, 17} as well as the lack of social support³⁰ with suicidal ideation. A study showed that positive social support, especially tangible support, and negative social exchanges, predicted the suicidal behavior.³¹ It is also consistent with Iranian studies which showed that social support had a negative relationship with suicidal ideation and played a major role in predicting suicidal ideation.32,33

Social support provides opportunities for individuals to discuss about stressful events and reduce the annoyance of these events, and possibly enable the individuals to reach meaning and identify their positive aspects.³⁴ Therefore, if bereaved people have social support from family, friends and significant others, then they will have less negative thoughts, such as suicidal ideation. It seems that social support can be a source of encouragement for those who are bereaved, and it can reduce the destructive effects of post-death stress as well as suicidal ideation.

The results of Pearson correlation coefficient showed that there was a significant negative relationship between resilience with suicidal ideation of women. This finding is consistent with those of other studies which have pointed to the negative relationship between psychological self-esteem and suicidal ideation.^{35, 36} In explaining this finding, it can be said that resilience is a protective process through which probability of negative outcomes decreases;³⁷ therefore, women who have this feature positively change their attitude toward the loss of a young in their family and through this, they prevent the creation of negative feelings such as suicidal ideation. Also, given that it has been shown that resilience is related to mental health,²⁶ therefore, having this positive feature can moderate the variables related to mental health, including suicidal ideation in bereaved women.

One of the limitations of this study was the fact that the research was conducted on women who had lost a young person in the family, which makes it impossible to generalize the results to the bereaved men. Other limitations were the use of self-report questionnaires, especially for suicidal ideation and the lack of women's comparison groups without the experience of a young person's death. Therefore, it is suggested that a sample of men and a group for comparison (persons without experience of the death of young) should be considered in future studies; diagnostic interviews for the prevalence of suicidal ideation should be used to reduce the bias in filling out the questionnaires. Considering the high rate of suicidal ideation in women who were bereaved in this study, and the relationship between collectivism, social support and resilience with it, we suggest that the women who have lost a young person should be provided with effective social support and participation in community-based activities; also, they should use the interventions based on resilience to reduce suicidal ideation in them.

CONCLUSION

We concluded that higher collectivism, social support, and resilience in the mournful women could lead to a reduction in suicidal ideation. Therefore, we suggest that collectivism, social support, and resilience should be among the protective factors that can be used in educational and supportive interventions to prevent the emergence of suicidal ideation in the bereaved women. Since we did not find a connection between individualism and suicidal thoughts, we suggest that future studies should examine this relationship.

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REFERENCES

- 1 Morris SE. Overcoming Grief: A Self-Help Guide Using Cognitive Behavioral Techniques. 1st ed. London: Constable and Robinson; 2008.
- 2 Worden JW. Grief Counseling and Grief Therapy: A Handbook for the Mental Health Practitioner. 5th ed. New York: Springer Publishing Company; 2018.
- Hango CR. The five stages of grief: composition for brass ensemble [thesis]. Massachusetts: Worcester Polytechnic Institute; 2015.
- 4 Neimeyer RA, Burke LA, Mackay MM, van Dyke Stringer JG. Grief Therapy and the Reconstruction of Meaning: From Principles to Practice. Journal of Contemporary Psychotherapy. 2010;40:73-83.
- 5 Ono W. Relationships among actions, antecedents, and outcomes of grief care for bereaved caregivers: surveying visiting nurses throughout Japan. Jpn J Nurs Sci. 2013;10:212-22.
- 6 Franklin JC, Ribeiro JD, Fox KR, et al. Risk Factors for Suicidal Thoughts and Behaviors: A Meta-Analysis of 50 Years of Research. Psychological Bulletin. 2017;143:187-232.

- 7 Thompson AH, Dewa CS, Phare S. The suicidal process: age of onset and severity of suicidal behaviour. Soc Psychiatry Psychiatr Epidemiol. 2012;47:1263-9.
- 8 Dell'osso L, Carmassi C, Rucci P, et al. Complicated grief and suicidality: the impact of sub-threshold mood symptoms. CNS Spectr. 2011;16:1-6.
- 9 Rostila M, Saarela J, Kawachi I. Mortality From myocardial infarction after the death of a sibling: a nationwide follow-up study from Sweden. J Am Heart Assoc. 2013;2:e000046.
- 10 Chen FF, jing Y, Lee JM. "I" value competence but "we" value social competence: The moderating role of voters' individualistic and collectivistic orientation in political elections. Journal of Experimental Social Psychology. 2012;48:1350-55.
- 11 Eskin M. The effects of individualisticcollectivistic value orientations on nonfatal suicidal behavior and attitudes in Turkish adolescents and young adults. Scandinavian Journal of Psychology. 2013;54:493-501.
- 12 Grav S, Hellzèn O, Romild U, Stordal E. Association between social support and depression in the general population: the HUNT study, a cross-sectional survey. J Clin Nurs. 2012;21:111-20.
- 13 Kleiman EM, Liu RT. Social support as a protective factor in suicide: findings from two nationally representative samples. J Affect Disord. 2013;150:540-5.
- 14 Fassberg MM, van Orden KA, Duberstein P, et al. A systematic review of social factors and suicidal behavior in older adulthood. Int J Environ Res Public Health. 2012;9:722–45.
- 15 Vanderwerker LC, Chen JH, Charpentier P, et al. Differences in risk factors for suicidality between African American and White patients vulnerable to suicide. Suicide and Life Threatening Behavior. 2007;37:1-9.
- 16 Rowe JL, Conwell Y, Schulberg HC, Bruce ML. Social support and suicidal

ideation in older adults using home healthcare services. Am J Geriatr Psychiatry. 2006;14:758-66.

- 17 Rossetti MC, Tosone A, Stratta P, et al. Different roles of resilience in depressive patients with history of suicide attempt and no history of suicide attempt. Rev Bras Psiquiatr. 2017;39:216-9.
- 18 Hirschtritt ME, Ordóñez AE, Rico YC, LeWinn KZ. Internal resilience, peer victimization, and suicidal ideation among adolescents. Int J Adolesc Med Health. 2015;27:415-23.
- 19 Liu DW, Fairweather-Schmidt AK, Roberts RM, et al. Does resilience predict suicidality? A lifespan analysis. Arch Suicide Res. 2014;18:453-64.
- 20 Liu DW, Fairweather-Schmidt AK, Burns R, et al. Psychological Resilience Provides No Independent Protection from Suicidal Risk. Crisis. 2016;37:130-9.
- 21 Rostami M, Jalilian A, Ghasemi S, Kamali A. Suicide Mortality Risk in Kermanshah Province, Iran: A County-level Spatial Analysis. Epidemiology, Biostatistics and Public Health. 2016;13:e11829-1-e11829-7.
- 22 Noordin F, Jusoff K. Individualismcollectivism and job satisfaction between Malaysia and Australia. International Journal of Educational Management. 2010;24:159-74.
- 23 Bagherian-Sararoudi R, Hajian A, Ehsan HB, et al. Psychometric Properties of the Persian Version of the Multidimensional Scale of Perceived Social Support in Iran. Int J Prev Med. 2013;4:1277–81.
- 24 Mirabzadeh A, Dolatian M, Forouzan AS, et al. Path Analysis Associations between Perceived Social Support, Stressful Life Events and Other Psychosocial Risk Factors during Pregnancy and Preterm Delivery. Iran Red Crescent Med J. 2013;15:507-14.
- 25 Derakhshanrad SA, Piven E, Rassafiani M, et al. Standardization of Connor-Davidson Resilience Scale in Iranian subjects with Cerebrovascular Accident. Journal of Rehabilitation Sciences and

Research. 2014;1:73-7.

- 26 Alikhani M, Geravand S, Rashidi AR, et al. The relationship between personality traits (self-differentiation and resilience) and the individual characteristics, family functioning and economic status with mental health among women with diabetes II in Kermanshah. Advances in Environmental Biology. 2014;8:999-1006.
- 27 Esfahani M, Hashemi Y, Alavi K. Psychometric assessment of beck scale for suicidal ideation (BSSI) in general population in Tehran. Med J Islam Repub Iran. 2015;29:268.
- 28 Anisi J, Majdian M, Mirzamani SM. The factors associated with suicide ideation in Iranian soldiers. Iran J Psychiatry. 2010;5:97-101.
- 29 Sokero TP, Melartin TK, Rytsala HJ, et al. Suicidal ideation and attempts among psychiatric patients with major depressive disorder. J Clin Psychiatry. 2003;64:1094-100.
- 30 Appelqvist-Schmidlechner K, Henriksson M, Joukamaa M, et al. Psychosocial factors associated with suicidal ideation among young men exempted from compulsory military or civil service. Scand J Public Health. 2011;39:870-9.
- 31 Hirsch JK., Barton AL. Positive social support, negative social exchanges, and suicidal behavior in college students. Journal of American College Health. 2011;59:393-8.
- 32 Poursharifi H, Habibi M, Zarani F, et al. The Role of Depression, Stress, Happiness and Social Support in dentifying Suicidal Thoughts in Students. Iranian Journal of Psychiatry and Clinical Psychology. 2012;18:99-107. [In Persian]
- 33 Sohrabi M. Social Analysis of Suicidal Thoughts among Students (Case Study of Mazandaran University Students). The Hidden Injuries Of Student Life; 2015 may 25; Kurdistan. Tehran: CIVILICA; 2015. 1-15. [In Persian]
- 34 Ariapooran S, Rajabi M, Goodarzi A. Relationship between Social Support,

Time Perspective and Suicide Ideations in Patients with Multiple Sclerosis. Asian Social Science. 2016;12:192-200.

35 Pietrzak RH, Russo AR, Ling Q, Southwick SM. Suicidal ideation in treatment-seeking Veterans of Operations Enduring Freedom and Iraqi Freedom: the role of coping strategies, resilience, and social support. Journal of Psychiatric Research. 2011;45:720-6.

- 36 Cleverley K, Kidd SA. Resilience and suicidality among homeless youth. J Adolesc. 2011;34:1049-54.
- 37 Giavana J, Lafreniere, K. Exploring the Role of School Engagement in Predicting Resilience Among Bahamian Youth. J Black Psychol. 2014;40:47-68.