

Original Article: Relationship between Self-Efficacy with Suicide Thinking in Normal and Addicted Individuals



Azam Hamed¹, Hamideh Ahmadi², Rahim Garoosi³, Farzaneh Shiralinejad⁴

¹Master of student Clinical Psychology, Expert of Mental Health at Sirjan University of Medical Sciences, Sirjan, Iran

²Master of General Psychology, Azad university of Zarand, Iran

³Master student of Clinical Psychology, Sirjan University of Research Sciences, Sirjan, Iran

⁴Department of Phycology, Central Tehran Branch, Islamic Azad University, Tehran, Iran



Citation A. Hamed, H. Ahmadi, R. Garoosi, F. Shiralinejad. **Relationship between Self-Efficacy with Suicide Thinking in Normal and Addicted Individuals.** *Int. J. Adv. Stu. Hum. Soc. Sci.* 2021, 10(4):204-212.

<https://doi.org/10.22034/ijshss.2021>



Article info:

Received: 23 May 2021

Accepted: 25 June 2021

Available Online: 26 June 2021

Checked for Plagiarism: Yes

Language Editor:

Dr. Behrouz Jamalvandi

Editor who Approved Publication:

Professor Dr. Ahmad Alipour

Keywords:

Self-Efficacy, Suicide, Addiction

ABSTRACT

This study was conducted to investigate the relationship between self-efficacy and suicidal ideation in ordinary and addicted individuals. Our statistical population covered 150 people, including 75 ordinary people and 75 addicts who were selected by random sampling. The research instruments included Sherer's self-efficacy scale (GSES) and the Beck Scale for Suicide Ideation (BSSI). Pearson correlation and multivariate analysis (MANOVA) were used to analyze the data. The results showed that self-efficacy is negatively and significantly related to suicidal ideation, i.e. suicidal ideation is decreased by increasing self-efficacy. Conversely, the self-efficacy rate is higher in females than in males, and the rate of suicidal ideation in addicts is significantly higher than in normal people.

Introduction

Self-efficacy is a development and change throughout a person's life that is connected with normal social events in the form of the roles that affect the various areas of change [1]. A person thinks of how much he can control the tensions and stress in life and how much he can be effective in a specific task, and to what extent he can encounter problems [2-5]. Self-efficacy refers to a person's belief to respond to external incentives and the extent he/she tries to deal with problems in the way of a person's objectives. In other words, self-efficacy is self-confidence in a person who has the ability to self-

organize and use knowledge and skills to solve a problem or complete a successful task [6-8]. Self-efficacy starts to form in early childhood, but its growth does not stop in adolescence and continues during life as individuals gain new skills and understandings. The four sources of self-efficacy are: a) Successful experiences, the most effective way and performing a task successfully that strengthens our sense of self-efficacy; b) social learning, observation and success of others in performing a task; c) verbal conviction including convincing the person by others that he has the ability and capability to perform a task; d) physiological responses, our internal responses to

*Corresponding Author: Azam Hamed (azam.hamed123@gmail.com)

different conditions and situations play a significant role in our sense of self-efficacy.

Self-efficacy enables people to learn, to be more flexible at the time of facing problems, to be less concerned, to perform their tasks adequately, to spend more time pursuing objectives, and to have more self-regulatory strategies. Self-efficacy affects extensively motivational processes such as choice, i.e., people with high self-efficacy determine more complex objectives; effort, determination, and performance, i.e. people with high self-efficacy try and pursue more to perform things; excitement, i.e., people with high self-efficacy in the field of performing the tasks have a better mood; coping with stressful situations, i.e., people with high self-efficacy can more cope with stressful and frustrating situations [9].

Numerous studies have shown that there is a positive and significant relationship between self-efficacy and mental health and people's understanding of it [10-12] mental health and psychological well-being gender and self-esteem [13-16]; coping with stressors [17-19] the individual's fate, academic and occupational advancement [20-25] creativity, competence, learning and growth [26-30] training and professional situations [31-34], getting along with the signs and symptoms of illness, depression and anxiety observing the therapeutic principles and positive therapeutic consequences, individual feedback, perceived support, and cultural context [35-39] self-awareness and knowledge [40-43], group activity and individual performance [44-46] job satisfaction; job adaptability and customer orientation, health status, physical activities; exercise [47-49], and there is a relationship between self-efficacy and drug abuse, cigarettes, Internet and Smartphone addiction and quitting them [50].

As mentioned, self-efficacy is regarded as a sense of self-esteem, self-worth, a sense of self-sufficiency, and efficiency in dealing with life. Individuals who have not realized this feeling in any way experience many problems such as emptiness, self-worthlessness, etc., and sometimes decreasing self-efficacy results in an inclination to end a person's life and commit suicide. Suicide means ending a person's life by his/himself, and its symptoms in a person who intends to suicide, include feelings of loss and failure, loss of self-confidence, feelings of humiliation, insomnia,

feelings of emptiness and being useless anything, and no desire to live, not paying attention to oneself like neglecting appearance and nutrition, suddenly writing a testament or insuring him/herself, talking about suicide, making obvious behavioral changes such as unexpected calm, being quiet, isolating and spending and forgiveness [51-54].

According to John Summers and Rita Summers, the factors associated with suicide include:

- a. Depression; priority of depression is universal;
- b. Gender: The rate of suicide in females is three times higher than males, but the rate of successful suicides or ones that lead to death among males is four times higher than females;
- c. Race and ethnicity: Successful rates of suicide are higher among whites compared to Africans and Hispanics;
- d. Sexual orientation: Adolescents with sexual identity issues are more possible suicide than usual adolescents
- e. History of psychological damage and victimization: Physical abuse or sexual abuse, it is 2 to 4 times more likely for women who have been sexually abused in childhood to commit suicide and it is 4 to 11 times more likely to commit suicide for men who have been sexually abused in the childhood. People who are being physically abused also commit suicide more likely;
- f. Combining risk factors, i.e., factors that increase the likelihood of committing suicide in people and are: Depression, alcohol abuse, social isolation, old age, white, being a man, having physical problems, and access to firearms [55].

Also, the three cognitive symptoms of uselessness, the sense of sin, and hopelessness are the most common cognitive symptoms of people who try suicide. Girls make unsuccessful suicide attempts and use methods such as an overdose of sleeping pills that they have more potential to survive. In contrast, boys choose methods such as firearms or hanging that result in immediate death because men can tolerate helplessness and unsuccessful efforts than women. Various studies have indicated that suicidal ideation is related to environmental stressors [52] depressive symptoms and childhood abuse, obsessive rumination, irrational beliefs, disclosure of suicidal ideation and self-harm social support; Interpersonal and family problems the collectivism and mood of individuals, social isolation; Autism and the degree of unity and association with others, depression and lack of

pleasure, spiritual intelligence and religious beliefs, the rate of childhood attachment or having bad-behavior parents, Alcohol addiction, mental illness, illness, disturbing others and disappointment and the spirit of individuals and self-control and self-efficacy.

Hence, according to the importance of self-efficacy and its influence on important aspects of human life such as failure and success, despair, and disappointment that are among the factors associated with suicidal ideation, and since there is a research gap in this field, this study aims to examine the relationship between self-efficacy and a suicidal tendency among the most defenseless generation, particularly adolescents.

Research Methodology

This study is a descriptive study and the method used in the study is correlational. The research population includes all normal and addicted people in Sirjan. The research sample covers 150 people (75 addicts and 75 normal people) who were selected by random sampling method.

Research Instruments

1. The Sherer's self-efficacy scale (GSES): This scale was developed by Scherer et al. (1982) in order to realize the following objectives: To provide a tool to conduct future research and to provide a tool to determine the different levels of individuals' general self-efficacy. The original version of the test included 36 questions, their producers based on the analysis, kept questions that had a load of 40.0 in each social and public factor [56-58].

2. Accordingly, 13 questions that did not have this feature were removed, and the test was reduced to 23 questions. 17 questions measure general self-efficacy with a mean of 99.57 and a standard deviation of 08.12. The reliability coefficient was achieved through Cronbach's alpha method for general self-efficacy subscale and social self-efficacy subscale 86.0 and 71.0 for each, respectively. A moderate negative correlation was also observed between the self-efficacy scale scores and the Rotter's internal-external control scale. A positive correlation also was found between the Marlowe–Crowne social scale and the self-efficacy scale, and there was also a correlation between the scores of the alienation scales and the individual

competency scale with the self-efficacy scores [52-54] used the split-half method to evaluate the reliability of the self-efficacy scale [59-61].

3. The reliability coefficient was achieved 76.0 through Spearman-Brown with length and unequal length at 76.0 and achieved 75.0 by the split-half method. Cronbach's alpha or overall homology of the questions was 79.0, which was acceptable in this study [62-65].

The Beck Scale for Suicide Ideation (BSSI): BSSI is a 19-question self-assessment tool. The scale has been developed to clarify and measure the attitudes, behaviors and plan to commit suicide during the last week. The scale has been adjusted based on three-point degrees from 0 to 2. A person's total score is calculated based on the sum of scores from 0 to 38. There are 5 screening questions in the BSSI. If the answers indicate an active or passive suicidal tendency, the subject will answer the next 14 questions [66-68].

It should be said that this scale has had a high correlation with standardized clinical tests of depression and suicidal tendencies to determine the validity and reliability of this test, its correlation coefficients were 90% for hospitalized patients and 94% for clinical patients. Also, this scale was related to Beck Scale for Depression Suicide from 58% to 69%, in addition, it was correlated with Beck Depression Inventory and Beck Depression Questionnaire from 64% to 75%. This scale has high reliability, and the coefficients were achieved 87% to 97% using Cronbach's alpha, and its reliability was 54% using the test-retest method. [69-71].

Data Analysis

In this study, the Pearson correlation method was used in order to analyze the data and investigate the relationship between identity crisis and the dimensions of maladaptive schemas, and multivariate analysis of variance (MANOVA) was used to detect the differences between these variables in girls and boys.

Research Results

Table 1 shows the mean, standard deviation of age, self-efficacy, and suicidal tendencies of addicted males and females [72].

Table 1. Mean, the standard deviation of self-efficacy and suicidal ideation of addicted females and males

Group	Variable	Self-Efficacy	Suicidal Tendencies
Females	Addicts	Mean	47/07
		standard deviation	6/41
	Normal	Mean	50/17
		standard deviation	10/72
Males	Addicts	Mean	47/23
		standard deviation	11/93
	Normal	Mean	47/06
		standard deviation	11/68

International Journal of Advanced Studies in Humanities and Social Science

Table 2 shows the correlation between suicidal ideation/tendency and self-efficacy in the sample.

According to the table's contents, there is a relationship between suicidal ideation and self-efficacy ($r = -0.95$, $p = 0.001$). It means the tendency to commit suicide is decreased by

increasing self-efficacy, and the tendency to commit suicide is increased by decreasing self-efficacy, and vice versa. Two one-way analysis of variance was performed in the Manova text to realize if there is a significant difference between men and women in suicidal ideation and self-efficacy. The results are reported in tables 4 and 3.

Table 2. Pearson correlation between suicidal ideation and self-efficacy. (Significance level = 0.05)

Correlation	Self-Efficacy
Suicidal Ideation/Tendency	*95/0-
Significant Level	001/0

International Journal of Advanced Studies in Humanities and Social Science

Table 3. Results of multivariate analysis of variance about the mean scores of the two groups in research variables

Test Name	Value	Df Hypothesis	Df Error	F	Significant level
Pillai's Trace	0/21	6	122	2/46	0/02
Wilks Lambda	0/78	6	120	2/54	0/02
Hotelling's Trace	0/26	6	118	2/62	0/02
Roy's Largest Root	0/25	3	61	5/12	0/003

International Journal of Advanced Studies in Humanities and Social Science

As the test results explain, there is a significant difference between the two groups in terms of research variables ($p < 0.05$). Two one-way analysis

of variance was performed in the Manova test to detect the direction of the changes.

Table 4. Results of one-way analysis of variance in Manova text on suicidal ideation and self-efficacy scores between men and women

Variable	Sum of squares	Freedom degree	Mean of squares	F	Significant level
suicidal ideation	56/61	2	28/3	0/54	0/58
Self-efficacy	1194/3	2	597/1	6/71	0/002

International Journal of Advanced Studies in Humanities and Social Science

According to the table's contents, there is a significant difference between the two groups (women and men) in the self-efficacy variable ($p = 0.002$). According to Table 1, the rate of self-

efficacy is higher in women than men. But there is no difference in the variable of suicidal ideation ($p > 0.05$) in the two groups (women and boys) [73].

Two one-way analysis of variance was performed in the Manova text to realize if there is a significant difference between normal people and

addicts in suicidal ideation and self-efficacy. The results are reported in Tables 5 and 6 [74].

Table 5. Results of multivariate analysis of variance about the mean scores of the two groups in research variables

Test Name	Value	Df Hypothesis	Df Error	F	Significant level
Pillai's Trace	0/08	2	137	6	0/003
Wilks Lambda	0/91	2	137	6	0/003
Hotelling's Trace	0/08	2	137	6	0/003
Roy's Largest Root	0/08	2	137	6	0/003

International Journal of
Advanced Studies in
Humanities and Social Science

As the test results show, there is a significant difference between the two groups in terms of research variables ($p < 0.05$). Two one-way analysis

of variance was performed in the Manova text to find the direction of the changes [75].

Table 6. Results of one-way analysis of variance test in Manova text on suicide tendency and self-efficacy scores of addicts and non-addicts/normal people

Variable	Sum of Squares	Freedom Degree	Mean of Squares	F	Significant Level
Suicide Tendency	377/36	1	377/36	11/62	0/001
Self-Efficacy	143/19	1	143/19	1/1	0/29

International Journal of
Advanced Studies in
Humanities and Social Science

According to the contents of the table, no significant difference between the two groups (addicts and non-addicts) is observed in the self-efficacy variable ($p > 0.05$). But there is a significant difference between the two groups in terms of suicidal ideation ($f = 11.62$, $p = 0.001$). According to Table 1, it is more possible that addicts commit suicide compared to non-addicts.

Discussion and Conclusion

This study was conducted to investigate the relationship between self-efficacy and suicide among normal and addicted people. The results revealed a positive and significant relationship between self-efficacy and suicide. Self-efficacy is the most fundamental element in motivating, determining the objective, success, and finally, life expectancy. Self-efficacy relates to a sense of competence, adequacy, and ability to get along with life (Bandura, 1995). The degree of self-efficacy related to each person is influenced by expectations, insinuations, successes, and advances. It also depends on the conditions and the person's degree of control over events and situations. Suicide is a death committed by a person him/herself to get rid of pain, suffering, problems, and sometimes to hit

and take revenge on others. Suicide is directly related to unrealized needs, feelings of desperation and weakness, dual conflicts in life, and unbearable stress. Suicide is a significant health problem, and its rate is increasing in developing countries. We can mention the study conducted by Iver Smith (2017) consistent with these results, in which suicide attempt is more prevalent in people with characteristics such as obstruction, sabotage, procrastinator, stubbornness, and inefficiency.

Another finding of this study was that suicidal ideation is higher among addicts compared with normal people. Drug addiction is one of the health and social problems of the current century and one of the most important intellectual concerns, and one of the worst social injuries. People who use drugs have improper social behaviors, their personal relationships are decreased, and their efficiency is weakened. Drug addiction denies a person of his or her ability to make the right decisions and also destroys the person's functioning in the family, work, and social life.

The study also specified that women have more self-efficacy compared to men. The results of this study are the same as the results of the research conducted by Hekmatinejad (2001) and winneread

(1996), Azadi Sonji (2019), Shakeri (2019), based on the higher level of self-efficacy and its components in women than men. A sense of self-efficacy is a high-level cognitive process that influences the way a person copes with and solves life problems. Individuals with low self-efficacy avoid obstacles instead of coping with them, giving up the effort, showing little resilience and flexibility, and not dealing realistically with problems. Low self-efficacy also causes mental states such as fatigue, anger, and suffering, and leads to a deterioration in the quality of life. One of the reasons for this hypothesis may be that women normally set more attainable objectives for themselves compared to men, and achieving that causes them to feel high self-esteem and self-efficacy. Other causes include the different roles of men and women in Iran. In our society, men are regularly responsible for meeting the economic needs of the family, and this, in turn, causes a person to waste time and effort to provide this and forget or delay their purposes and of course blame themselves and overlook some of their achievements and feel lower self-efficacy.

The high predominance of suicidal ideation among addicts in this study highlights the necessity to identify and treat at-risk addicts and also increase public awareness of the effects and reasons for suicide. There are three types of programs to prevent the incident and spread of addiction:

1- *General Programs*: These programs discuss risk and protective factors for all children and adolescents in a specific school or community environment.

2- *Selective programs*: This type of program considers groups of children and adolescents who have factors or conditions that increase the possibility of drug abuse.

3- *Case programs*: These programs have been designed for adolescents who have begun to use drugs, and these programs should be implemented correctly in school and the community. We should note the important role of the family in preventing this terrible event. Also, the family and the community (especially teachers) can increase self-esteem, challenge, optimism, self-belief, and resilience in students and children and accordingly, strengthen their sense of self-efficacy and make them believe in themselves and their abilities, so that these people can solve problems and events efficiently and be able to realize their desired future

and prevent possible adverse consequences instead of immediately missing their self-confidence and focusing on personal failures and negative outcomes and avoiding them, when faced with problems, challenging issues, consequences, and failures by persevering, influencing, confronting and inspiring them, which in turn leads to hope for life and the future and consequently, reduces the amount of suicidal ideation.

References

- [1] C.A. Adam, T.H. Emily, S.B. Michael, E.K. Darla, *Drug and Alcohol Dependence*, **2019**, *198*, 63-69. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)].
- [2] Y. Akie, T. Asko, P.M. Olli, M. KyokoImai, S. Hiroshi, K. Rihei, S. Hannu, *Teaching and Teacher Education*, **2019**, *81*, 13-24. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [3] K.C. Alice, J.B. Lauren, M.B. Janet, *Journal of Fluency Disorders*, **2019**, *60*, 11-25. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [4] S.B.B. Amy, M.R. Kathryn, A.I. Mark, *Drug and Alcohol Dependence*, **2011**, *119*, 106-112. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [5] J.M. Andrew, E.M. Lars, K. Roger, M. Marianne, P. Brad, P. Joel, *Learning and Individual Differences*, **2019**, *73*, 59-66. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [6] C.K. Anne, A.A. Brooke, J.H. Alexander, S.M.C. Michael, *Psychiatry Research*, **2019**, *273*, 514-522. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [7] M. Arguedas, T. Daradumis, F. Xhafa, *Educational Technology & Society*, **2016**, *19*(2), 87-103. [[pdf download](#)], [[Google Scholar](#)], [[Publisher](#)]
- [8] P. Arnstein, M. Caudill, C.L. Mandle, A. Norris, R. Beasley, *Pain*, **1999**, *80*(3), 483-491. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [9] A. Bandura, *Curr. Dir. Psychol. Sci*, **2000**, *9*(3), 75-78. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [10] A.T. Beck, G. Brown, R.A. Steer, *Journal of Consulting and Clinical Psychology*, **1989**, *57*, 309-310. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [11] A.T. Beck, G.K. Brown, R.A. Steer, *Behavior Research and therapy*, **1997**, *35*(11), 1039-

1046. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [12] M. Becky, H. Jon, E.D.K. Prof, P.M. Prof, R.C.C. Prof, K.T. Prof, W. Paul, D.G. Prof, *The Lancet Psychiatry*, **2019**, 6(4), 327-337. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [13] G.S. Benjamin, F. Amy, T. Olga, D.C. Stephanie, C.C. Joey, F. Maurizio, J.H. Daphne, *Journal of Affective Disorders*, **2019**, 245, 419-427. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [14] M. Beranuy, U. Oberst, X. Carbonell, A. Charrarro, *Computers in Human Behaviour*, **2009**, 25(5), 1182-1187. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [15] N.E. Betz, G. Hackett, *Journal of Career Assessment*, **2006**, 14, 3-11. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [16] N. Betz, R. Schifano, *Journal of Vocational Behavior*, **2000**, 56(1), 35-52. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [17] L. Bradvik, A. Frank, P. Hulenvik, A. Medvedeo, M. Berglund, *Suicide Life Threat. Behav.*, **2007**, 37, 475-481. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [18] S. Sangy, F. Miryousefiata, A. Bahaoddini, H. Dimiati, *Budapest International Research in Exact Sciences (BirEx) Journal*, **2020**, 2(4), 458-466. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [19] A. Carlsten, M. Wearn, *Soc Psychiatry Epidemiol*, **1999**, 34(11), 609-14. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [20] M.C. Carrie, W.B. Ann, B.D. Elizabeth, A.C. Barbara, *The Journal for Nurse Practitioners*, **2018**, 14(7), 552-558. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [21] D.P. Gillian Charlotte, W.H. Laura, B. Katherine. *Journal of Affective Disorders*, **2017**, 223, 165-174. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [22] A.T.A. Cheng, T.H.H. Chen, C.C. Chen, R. Jenkins, *British Journal of Psychiatry*, **2000**, 177, 360-365. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [23] S.K. Cheung, S.Y.K. Sun, *Social Behavior and Personality: An International Journal*, **2000**, 28(5), 413-422. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [24] B. Christoph, T.C. Brunna, S. Jennifer, *Behaviour Research and Therapy*, **2019**, 120, 103443. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [25] A.B. Dana, C.R. Audrey, W. Jordan, *Thinking Skills and Creativity*, **2019**, 33, 100580. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [26] De Man, A. F. (1999). *Journal of Genetic Psychology*, 160, 105e114. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [27] J.S. Eccles, A. Wigfield, *Motivational beliefs, values, and goals*, 2002. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [28] C. Elena, M. Mara, B. Roberto, C. Antonio, *Journal of Applied Developmental Psychology*, **2019**, 60, 127-133. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [29] D.B. Elizabeth, W. Kathleen, L. Níall, M.R. Erica, A.L. David, W. Tessa, A. Rezvan, J.N. Mark, E.B. Nancy, P. Lawrence, A.Z. Carlos, *Journal of Affective Disorders*, **2017**, 218(15), 195-200. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [30] F. Miryousefiata, S Sangy, *Journal of Medicinal and Chemical Sciences*, **2021**, 4, 60-74. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [31] M.K. Evan, T.L. Richard, H.R. John, *Science Direct Behavior Therapy*, **2014**, 45, 212-221. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [32] M.K. Evan, D.L.C. Daniel, J.M. Alexander, J.F. Peter, R.F. Kathryn, K.N. Matthew, *Journal of Affective Disorders*, **2018**, 23, 122-126. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [33] M. Evan, K. Matthew, *Current Opinion in Psychology*, **2018**, 22, 33-37. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [34] K.C. Ewa, G.H. Adam, E.Y. Carlos, J.E. F. Cynthia, A.K. Cheryl, *Journal of Clinical Child & Adolescent Psychology*, **2018**, 47, S384-S396. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [35] A. Fisher, *Journal of Child Psychology and Psychiatry and Allied Disciplines*, **1999**, 40, 315-324. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [36] E.R. Florio, M.S. Hendryx, J.E. Jensen, T. H. Rockwood, R. Raschko, D.G. Dyck, *Suicide and life-threatening Behavior*, **1997**, 27, 182-193. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [37] J.H. Francis, L.H. David, D.C. James, R.T. Samia, *Heart, Lung and Circulation*, **2018**, 27

- (1), 22-27. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [38] H.R.A. Otaghvar, M. Hoseini, A. Mirmalek, H. Ahmari, F. Arab, N. Amiri Mohtasham, *Iranian Journal of Surgery*, **2014**, *22*, 1-11. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [39] M. Zargar, H.R.A. Otaghvar, A. Danaei, M. Babaei, *Razi Journal of Medicinal Science*, **2017**, *24*, 88-98. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [40] P. Atef Vahid, M. Hosseini, H.R.A. Otaghvar, A. Tizmaghz, G. Shabestanipour, *J. Clin. Diagn. Res.*, **2016**, *10*, PC19-PC22. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [41] H.R.A. Otaghvar, M. Hosseini, G. Shabestanipour, A. Tizmaghz, G. Sedehi Esfahani, *Case reports in surgery*, **2014**. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [42] M. Rohani, H.R.B. Baradaran, A. Sanagoo, M. Sarani, S. Yazdani, H.R. Alizadeh, *Razi journal of medical sciences*, **2016**, *23*, 115-124. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [43] M. Hosseini, H.R.A. Otaghvar, A. Tizmaghz, G. Shabestanipour, S. Arvaneh, *Medical journal of the Islamic Republic of Iran*, **2015**, *29*, 239. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [44] M. Hosseini, A. Tizmaghz, H.R.A. Otaghvar, M. Shams, *Advances in Surgical Sciences*, **2014**, *2*, 5-8. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [45] S.A. Mirmalek, F. Tirgari, H.R. Alizadeh, *Iranian Journal of Surgery*, **2005**, *13*, 48-54. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [46] H.A. Danesh, S. Javanbakht, M. Nourallahzadeh, N.M. Bakhshani, S. Danesh, F. Nourallahzadeh, F. Rezaei, H.R.A. Otaghour, *International Journal of High Risk Behaviors and Addiction*, **2019**, *8*, e66232. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [47] A. Rouientan, H.A. Otaghvar, H. Mahmoudvand, A. Tizmaghz, *World journal of plastic surgery*, **2019**, *8*, 116. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [48] S.E. Hassanpour, M. Abbasnezhad, H.R.A. Otaghvar, A. Tizmaghz, *Plastic surgery international*, **2018**. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [49] M. Yavari, S.E. Hassanpour, H.A. Otaghvar, H.A. Abdolrazaghi, A.R. Farhoud, *Archives of Bone and Joint Surgery*, **2019**, *7*, 258. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [50] S.E. Hasanpour, E. Rouhi Rahim Begloo, H. Jafarian, M. Aliyari, A.M. Shariati Moghadam, H. Haghani, H.R.A. Otaghvar, *Journal of Client-Centered Nursing Care*, **2017**, *3*, 223-230. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [51] M. Tarahomi, H.R.A. Otaghvar, D. Shojaei, F. Goravanchi, A. Molaei, *Case reports in surgery*, **2016**. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [52] R. Seyedian, S.M. Hosseini, N. Seyyedean, S. Gharibi, N. Sepahy, S. Naserinejad, S. Ghodrati, M. BAHTOUEI, H.R.A. Otaghvar, A. Zare Mir akabadi, *Iranian Suth Medical Journal(ISMJ)*, **2013**, *16*, 215-224. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [53] M. Sarani, M. Oveisi, H. Rahimian Mashhadi, H.R.A. Otaghvar, *Weed Research*, **2016**, *56*, 50-58. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [54] G.H.R. Heydari, F. Hadavand, H. Maneshi, N. Moatamed, K. Vahdat, M. Fattah, H.R.A. Otaghvar, *Iranian South Medical Journal*, **2014**, *16*, 479-485. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [55] M. Hosseini, A. Tizmaghz, G. Shabestanipour, A. Aein, H.R.A. Otaghvar, *Annual Research & Review in Biology*, **2014**, *4*, 4381-4388. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [56] K. Ghajarzadeh, M.M. Fard, H.R.A. Otaghvar, S.H.R.Faiz, A. Dabbagh, M. Mohseni, S.S. Kashani, A.M.M. Fard, M.R. Alebouyeh, *Annals of the Romanian Society for Cell Biology*, **2021**, *25*, 2457-2465. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [57] K. Ghajarzadeh, M.M. Fard, M.R. Alebouyeh, H.R.A. Otaghvar, A. Dabbagh, M. Mohseni, S.S. Kashani, A.M.M. Fard, S.H.R. Faiz, *Annals of the Romanian Society for Cell Biology*, **2021**, *25*, 2466-2484. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [58] K. Ghajarzadeh, M.M. Fard, H.R.A. Otaghvar, S.H.R. Faiz, A. Dabbagh, M. Mohseni, S.S. Kashani, A.M.M. Fard, M.R. Alebouyeh, *Annals of the Romanian Society for Cell Biology*, **2021**, *25*, 2449-2456. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]

- [59] M.D. Feizollah Niazi, S. Niazi, H.R.A. Otaghvar, F. Goravanchi, *Res. Bul. Med. Sci.*, **2018**, *23*, 7. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [60] S.M. Moosavizadeh, H.R.A. Otaghvar, M. Baghae, A. Zavari, H. Mohyeddin, H. Fattahiyan, B. Farazmand, S.M.A. Moosavizadeh, *Medical journal of the Islamic Republic of Iran*, **2018**, *32*, 99. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [61] A. Tizmaghz, S. Motamed, H.A.R. Otaghvar, F. Niazi, S.M. Moosavizadeh, B. Motaghedi, *J. Clin. Diagn. Res.*, **2017**, *11*, PC05-PC07. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [62] M.R. Guity, H.R.A. Otaghvar, M. Tavakolli, A.R. Farhoud, *J Orthop Spine Trauma*, **2016**, *2*. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [63] H.R.A. Otaghvar, P. Soleymanzadeh, M. Hosseini, S. Karbalaee-Esmaeili, *Journal of Cancer Research and Therapeutics*, **2015**, *11*, 655. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [64] H.R.A. Otaghvar, M. Baniahmad, A.M. Pashazadeh, I.Nabipour, H. Javadi, L. Rezaei, M. Assadi, *Iranian Journal of Nuclear Medicine*, **2014**, *22*, 7-10. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [65] M. Hajilou, H.R.A. Otaghvar, S. Mirmalek, F. Yosefi, S. Khazrai, N. Tahery, M. Jafari, *Iranian Journal of Surgery*, **2013**, *21*, 0-0 [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [66] H.R.A. Otaghvar, S. Firoozbakht, S. Montazeri, S. Khazraie, M. Bani Ahmad, M. Hajiloo, *ISMJ*, **2011**, *14*, 134-139. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [67] H.R.A. Otaghvar, K. Afsordeh, M. Hosseini, N. Mazhari, M. Dousti, *Journal of Surgery and Trauma*, **2020**, *8*, 156-160. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [68] I.M. Zeidi, H. Morshedi, H.R.A. Otaghvar, *Journal of Preventive Medicine and Hygiene*, **2020**, *61*, E601. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [69] H.A. Danesh, *Focus on Medical Sciences Journal*, **2018**, *4* (2), 9-13. [[Crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [70] S.M. Hashemi, M.Sadeghi, A. Vahedi Tabas, S. Bouya, H.A. Danesh, A. Khazaei, A. Allahyari, *International Journal of Cancer Management*, **2017**, *10* (12) e11463. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [71] A. Sargazi, P. Kumar Nadakkavukaran Jim, H.A. Danesh, F. Sargolzaee Aval, Z. Kiani, A.H. Lashkarinia, Z. Sepehri, *Bulletin of Emergency & Trauma*, **2016**, *4* (1), 43-47. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [72] S.M. Hashemi, M. Sadeghi, A.V. Tabas, S. Bouya, H.A. Danesh, HA Khazaei, A. Allahyari, *Health Sciences*, **2016**, *5* (9S), 662-666, [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [73] H.A. Danesh, M. Saboury, A. Sabzi, M. Saboury, M. Jafary, S. Saboury, *Medical Journal of The Islamic Republic of Iran (MJIRI)*, **2015**, *29* (1), 105-109, [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [74] H.A. Danesh, M. Saboury, A. Sabzi, M. Saboury, M. Jafary, S. Saboury, *Medical journal of the Islamic Republic of Iran*, **2015**, *29*, 172- 176. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]
- [75] T.A. Izadi, A. Borjali, A. Delavar, H. Eskandari, *Danesh-e-Entezami*, 2009, *11* (344), 182-207. [[crossref](#)], [[Google Scholar](#)], [[Publisher](#)]