



Prediction of Happiness Based on Anxiety, Depression, and Cognitive Flexibility with the Mediation of Spiritual Intelligence in Prisoners of Iran-Iraq War in Tehran

ARTICLE INFO

Article Type

Descriptive Study

Authors

Zoghi L.^{1*} PhD,
Farajpoor A.² MA,
Mousavi B.³ MD, MPH

How to cite this article

Zoghi L, Farajpoor A, Mousavi B. Prediction of Happiness Based on Anxiety, Depression, and Cognitive Flexibility with the Mediation of Spiritual Intelligence in Prisoners of Iran-Iraq War in Tehran. Iranian Journal of War & Public Health. 2022;14(4):465-4472.

ABSTRACT

Aims The stress caused by war is not limited to the war period, but after the war, it creates chronic and acute reactions, which are characterized by psychological and physical injuries and a decrease in happiness. This study aimed to predict happiness based on anxiety, depression, and cognitive flexibility with the mediation of spiritual intelligence in the prisoners of Iran-Iraq war in Tehran.

Instruments & Methods The current study is descriptive-correlation research (structural equations). The statistical population consisted of all the prisoners of the Iran-Iraq war in Tehran in 2021-2022, of which 178 prisoners of war entered the research through non-random and voluntary sampling. Data were collected using Oxford Happiness Questionnaire, Depression, Anxiety and Stress Scale, Cognitive Flexibility Inventory, and Spiritual Intelligence Scale.

Findings Anxiety indirectly affects happiness through the mediator variable of spiritual intelligence, with a standardized coefficient of -0.033 ($p < 0.05$). Depression indirectly affects happiness through the mediator variable of spiritual intelligence, with a standardized coefficient of -0.040 ($p < 0.01$). Cognitive flexibility indirectly affects happiness through the mediator variable of spiritual intelligence, with a standardized coefficient of 0.133 ($p < 0.05$).

Conclusion Happiness is predicted based on anxiety, depression and cognitive flexibility with the mediation of spiritual intelligence in prisoners of war.

Keywords Anxiety; Depression; Cognitive Flexibility; Spiritual Intelligence; Prisoner of War

CITATION LINKS

[1] Identification and ... [2] Comparison of psychological ... [3] Examine the ... [4] Factors affecting student's ... [5] Toward a biology ... [6] Testing for stress ... [7] A review of the ... [8] A Comparative study ... [9] External and ... [10] The effects of basic ... [11] Subjective ... [12] A Survey on the relationship ... [13] Psychopathology ... [14] The role of generalized ... [15] The effectiveness of ... [16] A short form of ... [17] The coping flexibility ... [18] Coping flexibility in ... [19] A study of the role ... [20] Cognitive flexibility ... [21] The effectiveness ... [22] Prediction of life satisfaction ... [23] The relationship of ... [24] Predicting the quality ... [25] The relationship between ... [26] Relationship between ... [27] Acceptance and commitment ... [28] The cognitive flexibility ... [29] Examining the relationship ... [30] Cognitive therapy versus ... [31] The essential handbook ... [32] The Oxford Happiness ... [33] Psychometric properties of ... [34] Manual for the Depression ... [35] Validation of Depression Anxiety ... [36] Investigating the reliability ... [37] Rethinking claims of ... [38] The spiritual intelligence ... [39] The validation of King's ... [40] Feeling of well-being ... [41] Spiritual intelligence ... [42] The friends ... [43] The future ... [44] Psychotherapy and spirituality ... [45] Investigating the relationship ... [46] The wrong ... [47] Pursuing happiness ... [48] Divine relations ... [49] Religious involvement ... [50] Quest, and fundamentalism ... [51] Job stress and spiritual ... [52] Relationship of Spiritual ... [53] Spiritual intelligence ... [54] The role of self-efficacy ... [55] The role of ego-resiliency ... [56] Feasibility and effectiveness ... [57] Spiritual orientation ... [58] What is ...

¹Department of Educational Psychology, Amin Police University, Tehran, Iran

²Tehran Branch, Islamic Azad University, Tehran, Iran

³Prevention Department, Veterans Institute of Engineering and Medical Sciences, Tehran, Iran

*Correspondence

Address: Amin Police University, Tehran, Iran.

Phone: -

Fax: -

leila.zoghi@yahoo.com

Article History

Received: July 13, 2022

Accepted: September 20, 2022

ePublished: November 1, 2022

Introduction

As a factor of extreme psychological pressure, war has wide consequences. Physical and psychological problems are some of the consequences. Meanwhile, psychological problems continue to affect people long after the war. War can lead to psychological trauma in veterans [1]. The stressful events of the war, including captivity, have an intense emotional load that can cause a person to suffer from various mental disorders, especially post-traumatic stress disorder, and it causes a decrease in happiness during the life of veterans [2].

One of the psychological needs of humans is happiness, which has always occupied the human mind due to its impact on people's lives [3]. Happiness is one of the essential human needs and an important factor for family and society health [4]. The feeling of happiness creates energy, enthusiasm, and dynamism in society, protects people against problems, and guarantees their health [5]. Argyle *et al.* consider happiness as a combination of life satisfaction, the absence of negative emotion, and the presence of positive emotion [6]. Happiness is sometimes created by a person in a certain situation or after completing a certain activity [7], and it is more than excitement, being active, or having pure physical energy [8]. It is a kind of psychological experience in which people feel alive [9]. This feeling is unlike in people and is influenced by physical and psychological factors. Indeed, happiness is a reflection of a person's psychological and physical health [10]. Happiness causes a positive attitude to life, positive self-concept, emotional balance, favorable attitude and effective job performance, and life satisfaction [11].

Another effective factor for creating happiness is anxiety and depression [12]. Depression and anxiety are among the common psychiatric disorders, with a prevalence of 20% per year in the general population. Anxiety is a mental state of intense excitement whose main features are fear, doubt, and excessive worry. In some people, fear is much higher than threat or danger. So, fear or threat intensity does not have a logical proportion (e.g., phobias). People are constantly in a state of fear and worry without knowing the reason (e.g., in generalized anxiety disorder or some panic disorders). Fear and worry are chronic and constantly afflict people to the extent that they cannot lead their daily life [13]. Also, depression is one of the medical and social issues, and if it continues, destroys a person's workforce, abilities, and economic and social status [14]. Approximately 15% of the entire population experiences a period of depression. Currently, depression is the fourth cause of disease in the world. According to estimates, depression is the second most common cause of disease in the world in 2020. The complexity of individual and social life requires people compatibility facing adversity [15].

Another variable investigated in this study is cognitive flexibility. Cognitive flexibility is the ability to create or change reactions based on function. Studies have shown that increasing people's aerobic activities improves the performance of tasks that require flexibility [16]. Some researchers have defined cognitive flexibility as the level of a person's assessment of the controllability of conditions, which changes in different situations [17, 18]. Some people with flexible thinking abilities use alternative explanations [19]. Cognitive flexibility can adjust a person's thinking and behavior in response to changes in environmental conditions [20]. Some researchers found a relationship between the severity of depression and cognitive flexibility, cognitive deficits in attention, processing speed, and long-term verbal memory [21]. More cognitive flexibility has positive effects on the ability to use cognitive restructuring, which is a way to reduce emotional disturbance [17].

On the other hand, studies have shown that spiritual intelligence is related to happiness [22]. Spiritual intelligence is an aspect of intelligence that helps a person's physical and mental health and stability, reduces anxiety, and establishes deeper communication [23]. Whereas spirituality is seeking holy elements, finding meaning, high consciousness, and excellence [22]. Spiritual intelligence includes the ability to use these subjects, which can predict the function and adaptation of the individual and lead to valuable products and results [24]. Spiritual intelligence can be seen as the ability to deal with problems; this intelligence is the background of all beliefs and norms, ideas, and values ideas [25], the intelligence through which we ask questions related to the basic and important issues of our lives and using which we make changes in our lives [26].

As a result, spiritual intelligence can be considered a mediating role between the relationships of the above variables. Meanwhile, one of the basic concepts in behavioral approaches is taking into account psychological flexibility. Many types of research have confirmed the role of cognitive flexibility in various types of psychological problems [27]. Cognitive flexibility is the ability to change the cognitive attitude to adapt to the changing stimuli of the environment [28], and it can adapt a person's thinking and behavior in response to changes in environmental conditions. In other words, cognitive flexibility refers to the ability to select a practical response among the available and suitable options [29].

There are disappointing treatment results due to the lack of a specific model for this disorder that can take into account the uncontrollability of anxiety and worry [30]. The persistence of generalized anxiety disorder will decrease happiness and disrupt various aspects of a person's performance [31].

Few studies have been done on captivity, especially on Iran-Iraq war prisoners and their happiness.

Therefore, the results of this research determined to what extent happiness will be effective in the mental health of imprisonments and to what extent knowledge in the field of happiness can be effective in the lives of prisoners, and determined its relationship with each of the research variables, including anxiety and depression, cognitive flexibility, and spiritual intelligence.

The results of this research will apply to policy-making by the officials of the Foundation of Martyrs and Veterans Affairs in decision-making and designing executive programs. Therefore, this study aimed to predict happiness based on anxiety, depression, and cognitive flexibility with the mediation of spiritual intelligence in the prisoners of Iran-Iraq war in Tehran.

Instruments and Methods

This applied study is a descriptive-correlation type (structural equation modeling analysis), which was carried out on the prisoners of the Iran-Iraq war in Tehran in 2021-2022 ($n=6000$). Due to the lack of direct contact with the subjects, the information of the prisoners, who entered the study voluntarily, was collected by the call in the Foundation of Martyrs and Veterans Affairs using non-probability sampling.

According to Hayes *et al.* [27], who believed that the number of samples should be at least 15 times the number of variables observed in the research to make the model compatible with the model of structural equations, in this research, four observed predictor variables were identified, which 20 times this amount is equal to 80 people, and through overestimation and prediction, the number of participants increased to 200 people, and finally, the data of 178 prisoners were analyzed. The inclusion criteria were having at least 6th-grade literacy and not suffering from a specific chronic physical and mental illness that requires medication and hospitalization, according to the participants' reports. The exit criterion was unwillingness to continue participating in the research.

Data were collected using Oxford Happiness Questionnaire, Depression, Anxiety and Stress Scale, Cognitive Flexibility Inventory, and Spiritual Intelligence Scale.

Oxford Happiness Questionnaire-Short Form: Oxford Happiness Questionnaire was designed and developed by Hills and Argyle in 2002 to measure happiness. This questionnaire has eight items (e.g., I don't feel satisfied with who I am) and is scored on a 6-point Likert scale. Happiness is the score given by the respondents to the 8-item questions of the happiness questionnaire. The components of the questionnaire are single factors [32]. Najafi *et al.* confirmed the content and face validity of the questionnaire, and Cronbach's alpha coefficient calculated for this questionnaire was estimated to be above 0.7 [33].

Depression, Anxiety and Stress Scale (DASS-21):

This questionnaire was designed by Lovibond and Lovibond in 1995. The function of DASS is to assess the severity of the underlying symptoms of depression, anxiety, and stress. This test is suitable for screening and differentiating between teenagers and adults and distinguishing the three states of depression, anxiety, and stress. The first version of the questionnaire had 42 items, whereas, in this research, the 21-item version was used. DASS has three subscales of anxiety, depression, and stress, each of which contains 7 items. The depression subscale measures boredom, disappointment, devaluing life, self-devaluation, lack of interest/participation, listlessness, and stillness. The anxiety subscale measures self-reported musculoskeletal effects, situational anxiety, and the subjective experience of feeling anxious. The stress subscale is sensitive to chronic arousal levels and measures nervousness, difficulty relaxing, irritability/restlessness, increased excitability/reactivity, and intolerance. Answers are scored on a 4-point Likert scale. Scores range from 0 (never) to 3 (very much). Also, the test does not have reverse grades. The scores of depression, anxiety, and stress are obtained from the sum of the scores. Lovibond and Lovibond showed the reliability of DASS using Cronbach's alpha for all three subscales of depression, anxiety, and stress, 0.91, 0.84, and 0.90, respectively [34].

In Iran, Sahebi *et al.* prepared and validated the Persian version of DASS. The internal reliability of DASS scales was calculated using Cronbach's alpha, and the results were 0.77 for the depression scale, 0.79 for the anxiety scale, and 0.78 for the stress scale. The simultaneous implementation of Beck depression, Zung anxiety, and perceived tension questionnaires was used to check the validity of the DASS. The correlation of the DASS depression subscale with Beck's Depression Inventory was 0.70, the DASS anxiety subscale correlation with the Zung anxiety scale was 0.67, and the DASS stress scale correlation with the perceived tension test was 0.49. The three-factor structure of this questionnaire was confirmed by factor analysis [35].

Cognitive Flexibility Inventory (CFI): This questionnaire was designed by Dennis and Vanderwal in 2010. It is a short self-report instrument with 20 items to measure a kind of cognitive flexibility that is necessary for a person's situation to challenge and replace ineffective thoughts with more effective ones. Items 3, 5, 6, 12, 13, 14, 16, 18, 19, and 20 are related to the perception factor of different options, items 1, 2, 4, 7, 9, 11, 15, and 17 are related to the perception factor of controllability, and items 8 and 10 are related to the perception factor of behavior justification. It is scored by a 7-point Likert scale from 1 to 7 to measure three aspects of cognitive flexibility, including a) tension to perceive the difficult situation as controllable

situations, b) ability to understand multiple alternative explanations for life events and human behavior, c) ability to create multiple alternative solutions to difficult situations. Items 2, 4, 7, 9, 11, and 17 are reverse scored. This questionnaire is used in clinical and non-clinical cases to evaluate a person's progress in developing flexible thinking for the cognitive-behavioral treatment of mental illnesses. The concurrent validity of this questionnaire with the Beck Depression Inventory was -0.39, and its convergent validity with Martin and Robin's cognitive flexibility scale was 0.75. Cronbach's alpha coefficient was reported to be 0.90 for the scale and 0.87, 0.89, and 0.55 for the subscales, respectively [28]. In Iran, Shareh *et al.* reported the revalidation coefficient and Cronbach's alpha coefficient of the whole scale by 0.71 and 0.90, respectively [36].

Spiritual Intelligence Scale: In general, this scale has 24 items. The score of this scale fluctuates between 0 and 96 (0=no idea, 1=not true, 2=somewhat true, 3=very true, 4=completely true), where a high score indicates a high level of spiritual intelligence in people [37]. King investigated the reliability of this scale on 619 students in 2007 based on the alpha coefficient of 0.95. The alpha of its subscales, including critical existential thinking, creating personal meaning, transcendental consciousness, and expansion of transcendental consciousness was reported by 0.88, 0.87, 0.89, and 0.94, respectively. To check the validity, this scale was compared with several valid questionnaires, including the transpersonal self-interpretation scale, mysticism scale, and internal and external religiosity scale, and their correlation coefficient was reported as 0.67, 0.63, and 0.78, respectively [38]. Also, Raghieb *et al.* reported the reliability of this questionnaire using Cronbach's alpha coefficient of 0.88 [39].

After obtaining the ethical code, data were collected using distributing the questionnaires among the subjects. Due to the Corona epidemic, the questionnaires were provided to the participants by online mode through Porsline and SMS.

Data were analyzed using descriptive and inferential statistical methods, including Pearson's correlation coefficient and path analysis method through AMOS 22 software.

Findings

The mean scores of anxiety, depression, cognitive flexibility, spiritual intelligence, and happiness were shown in Table 1. Also, considering that the values of skewness and kurtosis of the data were between +2 and -2, the data had a normal distribution (Table 1). There was an inverse correlation between anxiety and depression with happiness, and there was a direct correlation between cognitive flexibility and spiritual intelligence with happiness ($p < 0.01$; Table 2).

Anxiety had an indirect effect on the happiness of Tehran prisoners through the mediation of spiritual intelligence (Figure 1).

Table 1) Statistical description of variables

Variable	Skewness	Kurtosis	Mean±SD
Anxiety	0.678	-0.340	7.29±5.45
Depression	0.649	-0.462	6.88±5.59
Cognitive flexibility	-1.135	1.598	48.78±5.24
Spiritual Intelligence	0.112	0.514	50.81±14.22
Happiness	-0.520	0.405	33.13±6.77

Table 2) Matrix of correlation coefficients between research variables

Variable	1	2	3	4
1- Anxiety	1			
2- Depression	0.737*	1		
3- Cognitive flexibility	-0.379*	-0.310*	1	
4- Spiritual Intelligence	-0.489*	-0.457*	0.681*	1
5- Happiness	-0.667*	-0.709*	0.455*	0.571*

* $p < 0.01$

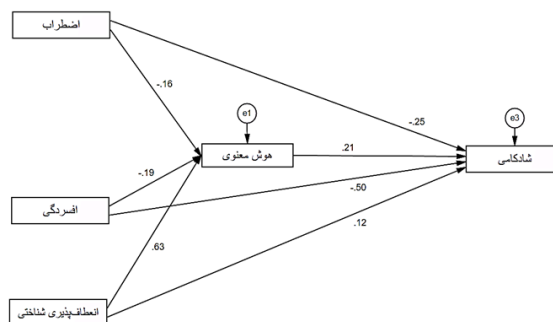


Figure 1) Standard coefficients of the mediating role model of spiritual intelligence in the relationship between anxiety, depression and cognitive flexibility with happiness

The coefficients of the indirect effect of anxiety, depression, and cognitive flexibility on happiness through spiritual intelligence are shown in Table 3.

Table 3) Path coefficients of the indirect effect of anxiety, depression, and cognitive flexibility on happiness through spiritual intelligence

Indirect path	Non-standard coefficient	Standard coefficient	P-value
Anxiety → Spiritual intelligence → Happiness	-0.035	-0.033	0.05
Depression → Spiritual intelligence → Happiness	-0.042	-0.040	0.01
Cognitive flexibility → Spiritual intelligence → Happiness	0.147	0.133	0.05

Discussion

The scientific study of happiness, also called subjective well-being or life satisfaction, is relatively new, beginning in the mid-1970s and growing rapidly. Some researchers have tried to provide methods to increase the happiness level in people [4].

The results showed the significant indirect effect of anxiety on happiness through the mediating variable of spiritual intelligence at the alpha level of 0.05. In other words, spiritual intelligence plays an intermediary role between anxiety and happiness. This finding follows the findings of Diener *et al.* in explaining the higher level of happiness in spiritual people [40].

Spiritual intelligence is an experienced ability that allows people to gain more knowledge and understanding and provides the basis for achieving perfection and progress in life [41]. The findings of Myers [42] and Peterson [43] indicate the effective role of happiness in improving and increasing physical and mental health, which causes a sense of security and satisfaction in life and a higher participation spirit, and people with spiritual life are undoubtedly psychologically healthy people [44]. So it can be said that people with high spiritual intelligence will benefit from a higher level of happiness.

Due to the close relationship between happiness and spiritual intelligence with mental health, this explanation is consistent with Yaghoubi *et al.*'s findings [45], observing a significant relationship between spiritual intelligence and mental health in students. On the other hand, Dekman [46] points to the positive effect of spiritual intelligence on mental health. According to Peterson [43], happy people tend to see themselves and others positively and interpret events positively. Also, studies have shown higher personal, family, academic and social efficiency in happy people [47].

In explaining these findings, it can be said that the higher the spiritual intelligence of people, they not lose their control using spiritual possessions in the face of anxiety caused by the corona epidemic and reduce this anxiety in adaptive ways. Spiritual beliefs allow people to adapt to adversities and psychological pressures.

According to some researchers, religious people have religious schemes that can help them in cognitive processing. Religious psychology can be effective in the quality of facing stressful events and help people to face these events. Spirituality, as an innate human need, can be effective in reducing anxiety and helping a person's mental health. In people with higher spiritual intelligence, religion creates a coherent belief system that leads to finding meaning in people's lives. This meaning allows people to interpret life's adversities and difficulties positively and accept the mentioned adversities as a part of worldly life, so happiness will be increased.

Also, the results showed the significant indirect effect of depression on happiness through the mediating variable of spiritual intelligence at the alpha level of 0.01.

Pollner [48] found a relationship between consistent social support, the feeling of being close to God, and having a friendly perception of God with happiness. Ellison [49] showed that after the continuation of

social support, steadfast faith leads to happiness. Genia [50] found a relationship between spiritual healths with internal orientation to religion and explained that serious commitment to religion can be considered the ultimate objective, and having a purpose in life is positively correlated with happiness. Therefore, it can be concluded that spiritual intelligence, as the foundation of one's beliefs, plays an essential role in various fields, especially the promotion and provision of mental health, of which happiness is considered one of its signs. Happiness is an internal matter, and the interpretation of events creates a sense of happiness. Therefore, to be happy, cognitive and motivational processes should be activated. Looking at the teaching content of the Fordyce technique, we find that Fordyce teaches principles that are somehow effective in these processes. Fordyce believes that there is another special feature which can cause happiness apart from various factors such as genetics, personality, income, social and economic class, level of education, etc. The basis of Fordyce's happiness is that people can be happy if they want to be. This program is a combination of cognitive and behavioral theories [13].

Argyle *et al.* believed that happiness consists of three components, including feeling happy, life satisfaction, and having no negative feelings [6]. This educational method has been effective in reducing negative emotions by increasing activity, emotional expression, optimism, social relations, and stopping worrying. In addition, techniques such as reducing expectations and prioritizing happiness are effective in life satisfaction. Lazantak believes that depression is the result of the interaction between three components, including nervous activity, the voluntary activity of the body, and mental or inner experience. Indeed, thought, feeling, and behavior work interactively, and the change of each affects other dimensions as well [13]. The components of the happiness education program have been able to reduce people's depression by influencing the three components. Lazantak showed the significant indirect effect of cognitive flexibility on happiness through the mediating variable of spiritual intelligence at the alpha level of 0.05. This finding is consistent with previous studies [51-53]. King describes that people with high spiritual intelligence perceive life as meaningful and purposeful, and since interpret events in the light of the overall meaning of life, they are less disappointed, cope with hard times, and have more tolerance against life's pressures, so their adaptability increases [54]. In other words, people with spiritual intelligence have more self-awareness and a deeper understanding of their strengths and weaknesses; this ability plays a significant role in creating insight into oneself and the surrounding environment and increases the power of compromise. This finding is consistent with the findings of Jun and Lee [55] and Taghizadeh and

Farmani ^[19]. Jun and Lee described that people with cognitive flexibility can successfully deal with stressful events and do not show specific emotional behavioral disorders through proper self-control. These people show good flexibility in different conditions, life adversities, and problems and find more tolerance ^[55]. Burton *et al.* ^[56] describe that people with flexible thinking abilities use alternative justifications, positively reframe their thinking, accept challenging situations or stressful events more easily, and are happier than people without cognitive flexibility.

In the explanation of these findings, it can be said that according to Nasel's opinion, spiritual intelligence goes beyond the physical and cognitive relationships of a person with her/his surrounding environment and enters the intuitive realm of a person's view of her/his life ^[57]. This view includes all the events and experiences of a person that are influenced by a general view, and a person can use this intelligence to reinterpret her/his experiences. Also, this process can phenomenologically give more meaning and value to the events and experiences of a person ^[57]. Spiritual intelligence is dependent on the inner life of the mind and soul and its connection with the world and includes the capacity to deeply perceive existential questions and insight into multiple levels of consciousness; in other words, it causes psychological flexibility ^[58].

Resilient people do not avoid stress in their lives, instead, they consider stressful situations as opportunities for growth and development. The more flexible a person is, she/he can consider difficult times as controllable situations and make several alternatives to facing life events and people's behavior. Such a person can think of alternative solutions in difficult situations, so one's capacity to cope, adapt, and recover from stress and difficulties in life is higher ^[19]. People with higher psychological flexibility have a greater ability to tolerate their pain and show faster recovery facing stressful events ^[20]. High psychological flexibility in people, who experienced being a prisoner, can act as a support factor against tensions and other difficulties resulting from memories of captivity.

Edwards believes that high spiritual intelligence is different from having information about spiritual intelligence. This distinction shows the distance between practical and theoretical knowledge. Therefore, having extensive knowledge about spiritual issues and related exercises should not be considered the same as achieving spiritual intelligence through worship and meditation to solve moral issues. Whereas, having both theoretical and practical knowledge is necessary to effectively benefit from spirituality.

Conclusion

Happiness is predicted based on anxiety, depression, and cognitive flexibility with the mediation of spiritual intelligence in the prisoners.

Acknowledgments: The authors tend to appreciate the Veterans Engineering and Medical Sciences Research Institute (Martyrs Foundation and Veteran Affairs), which contributed to this research.

Ethical Permission: The consent of all people to participate in the research was obtained.

Conflict of interest: None were reported by the authors.

Authors' contribution: Zoghi L (First Author), Statistical Analyst (30%); Farajpoor A (Second Author), Introduction Writer/Main Researcher/Methodologist (50%); Mousavi B (Third Author), Discussion Writer (20%)

Funding: Financial resources were provided by the first author.

References

- 1- Jilanchi M, Borjali M, Vatankhah, H, Mashayekh M, Zali A. Identification and validation of effective indicators in the model of mental health related to Iranian culture for the wives of war veterans. *EbneSina*. 2021;23(1):15-24. [Persian]
- 2- Sadeghi A, Jadidi M, Shamsaei MM. Comparison of psychological profile, life satisfaction and coping strategies in spouses of martyrs, war veterans with posttraumatic stress disorder and prisoners of war. *J Thought Behav Clin Psychol*. 2014;9(31):57-66. [Persian]
- 3- Salehi Omran E, Abedini Boltrak M. Examine the relationship between happiness and academic success of students Educational spaces Mazandaran province with emphasis on the role of educational planning. *J Educational Plann Stud*. 2018;7(13):121-45. [Persian]
- 4- Araghian Mojarad F, Heidari Gorji MA, Yaghoobi, T. Factors affecting student's spiritual vitality: A narrative review study. *Nurs Dev Health J*. 2021;12(1):12-21. [Persian]
- 5- Davidson RJ. Toward a biology of personality and emotion. *Anna N Y Acad Sci*. 2011;935:191-207.
- 6- Argyle M, Martin M, Lu L. Testing for stress and happiness: the roll of social and cognitive factor. In Spielberg CD, Sarason IG, editors. *Stress and emotion*. Washington DC: Taylor & Francis. 1995. Pp.173-87.
- 7- Etemadi AR, Madandoost S, Farrokh Payam, L. A review of the effectiveness of life skills training on the happiness and quality of life of married women. The 5th National Conference on Law, Social and Human Sciences, Psychology and Counseling. Tehran, 2021. [Persian]
- 8- Jireay R, Salehzadeh M. A Comparative study of the self-esteem of people with physical-mobility disabilities either with or without university education. *Q J Soc Work Res*. 2019;4(14):105-36. [Persian]
- 9- Denny KG, Steiner H. External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry Hum Dev*. 2009;40(1):55-72.
- 10- Vaezi AA, Fallah Tafti B, Moshtagh Eshgh Z. The effects of basic conditioning factors on self-care behaviors of patients with type 2 diabetes referred to Yazd Research Center, 2014. *J Shahid Sadoughi Univ Med Sci*. 2018;25(10):770-9. [Persian]
- 11- Diener E. Subjective well-being. *Psychol Bull*. 1984;95(3):542-75.
- 12- Fallahzadeh H, Farhmand Z, Mohammadi F, Momayezi M. A Survery on the relationship between fruit and vegetable consumption and depression, anxiety and stress in students of Shahid Sadoughi University of Medical Sciences, Yazd. *Toloo-e-Behdasht*. 2015;13(5):141-52. [Persian]

- 13- Ganji M. Psychopathology based on DSM5. Tehran: Savalan Publishing; 2015. [Persian]
- 14- Mohammadpanah Ardakan A, Shams Esfandabad S. The role of generalized anxiety factors, cognitive bias and resilience in predicting the level of depression. *Toloo-e-Behdasht*. 2020;19(3):32-42. [Persian]
- 15- Ebrahimi M, Nazeri Kh, Javidan Sh. The effectiveness of anger management training in reducing anxiety and increasing happiness in clients covered by Shabestar welfare organization. In: 7th International Knowledge and Technology Conference. Tehran; 2020. [Persian]
- 16- Purdon SE, Waldie B. A short form of the Wisconsin card sorting test. *J Psychiatry Neurosci*. 2001;26(3):253-6.
- 17- Gan Y, Zhang Y, Wang X, Wang S, Shen X. The coping flexibility of neurasthenia and depressive patients. *Pers Indiv Diff*. 2006;40(5):859-71.
- 18- Zong J-G, Cao X-Y, Cao Y, Shi Y-F, Wang Y-N, Yan C, et al. Coping flexibility in college students with depressive symptoms. *Health Qual Life Outcomes*. 2010;8:1-6.
- 19- Taghizadeh M, Farmani A. A study of the role of cognitive flexibility in predicting hopelessness and resilience among university students. *J Cogn Psychol*. 2014;1(2):67-75. [Persian]
- 20- Dickstein DP, Nelson E, McClure EB, Grimley ME, Knopf L, Brotman MA, et al. Cognitive flexibility in phenotypes of pediatric bipolar disorder. *J Am Acad Child Adolesc Psychiatry*. 2007;46(3):341-55.
- 21- Fazeli M, Ehteshamzadeh P, Hashemi Sheikh Bahani SE. The effectiveness of cognitive behavior therapy on cognitive flexibility of depressed people. *J Thought Behav Clin Psychol*. 2015;9(34):27-36. [Persian]
- 22- Karimi Kh. Prediction of life satisfaction based on spiritual intelligence and resilience in secondary school female students. *Scientific Research Congress of Jurisprudence, Law, Psychology, Educational and Behavioral Sciences*. Tehran; 2021. [Persian]
- 23- Golmakani N, Rezaei F, Mazlom SR. The relationship of spiritual intelligence and religious activities with happiness of midwives working in hospitals and health centers. *J Midwifery Reproduc Health*. 2018;6(2):1264-72. [Persian]
- 24- Hosseini S, Qasimzadeh S, Niknam M. Predicting the quality of life of female teachers based on variables of emotional intelligence and spiritual intelligence. *J Career Organ Consul*. 2012;3(9):42-60. [Persian]
- 25- Alizadeh Mohammadi M, Oweisi Fardooie M. The relationship between psychological well-being variables and communication patterns with each other and variables that moderate spiritual intelligence and moral intelligence. 9th National Conference on Sustainable Development in Educational Sciences and Psychology, Social and Cultural Studies. Tehran; 2020. [Persian]
- 26- Khodabakhshi Koolae A, Heidari S, Khoshkonesh A, Heidari M. Relationship between spiritual intelligence and resilience to stress in preference of delivery method in pregnant women. *Iran J Obstet Gynecol Infertil*. 2013;16(58):8-15. [Persian]
- 27- Hayes SC, Pistorello J, Levin ME. Acceptance and commitment therapy as a unified model of behavior change. *Counsel Psychol*. 2012;40(7):976-1002.
- 28- Dennis JP, Vanderwal JS. The cognitive flexibility inventory: instrument development and estimates of reliability and validity. *Cogn Ther Res*. 2010;34(3):241-53.
- 29- Emad-al Eslami V, Ahmadi Raghavadi A, Rahimi A. Examining the relationship between marital burnout, cognitive flexibility and stress tolerance of senior students in Khorasan. The 7th International Conference on Knowledge and Technology of Educational Sciences, Social Studies and Psychology of Iran Tehran; 2021. [Persian]
- 30- Arntz A. Cognitive therapy versus applied relaxation as treatment of generalized anxiety disorder. *Behav Res Ther*. 2013;41(6):633-46.
- 31- Crozier WR, Alden LE, editors. The essential handbook of social anxiety for clinicians. UK: Wiley, 2005.
- 32- Hills P, Argyle M. The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *J Pers Indiv Diff*. 2002;33(7):1073-82.
- 33- Najafi M, Dehshiri Gh, dabiri S, Sheykhi M, Jafari N. Psychometric properties of Farsi version of the oxford happiness questionnaire among college students. *Q Educ Measur*. 2013;3(10):55-74. [Persian]
- 34- Lovibond SH, Lovibond PF. Manual for the Depression Anxiety Stress Scales. 2nd Edition. Sydney: Psychology Foundation of Australia; 1996.
- 35- Sahebi A, Asghari MJ, Salari R. Validation of Depression Anxiety and Stress Scale (DASS-21) for an Iranian population. *J Develop Psychol*. 2005;1(4):36-45. [Persian]
- 36- Shareh H, Farmani A, Soltani E. Investigating the reliability and validity of the Cognitive Flexibility Inventory (CFI-I) among Iranian university students. *Pract Clin Psychol*. 2014;2(1):43-50.
- 37- King DB. Rethinking claims of spiritual intelligence: A definition, model, and measure [Dissertation]. Peterborough, Ontario, Canada: Trent University; 2008.
- 38- King DB. The spiritual intelligence project. Canada: Trent University; 2007.
- 39- Raghbi M, Siadat A, Hakimnia B, Ahmedi J. The validation of King's Spiritual Intelligence Scale (SISRI-24) among students at University of Isfahan. *J Psychol Achiev*. 2010;17(1):141-64. [Persian]
- 40- Hadianfard, H. Feeling of well-being and religious activities in a group of Muslims. *J Thought Behav*. 2005;11(2):224-32. [Persian]
- 41- Jain M, Purohit P. Spiritual intelligence: A contemporary concern with regard to living status of the senior citizens. *J Ind Acad Appl Psychol*. 2006;32(3):227-33.
- 42- Myers DG. The friends, funds, and faith of happy people. *Am Psychol*. 2000;55(1):56- 67.
- 43- Peterson C. The future of optimism. *Am Psychol*. 2000;55(1):44-55.
- 44- West V. Psychotherapy and spirituality: crossing the line between therapy and religion. Shahidi S, Shirafkan S, translators. 1st Edition. Tehran: Roshd Publications; 2004. [Persian]
- 45- Yaghoubi A. Investigating the relationship between spiritual intelligence and the level of happiness of students of Boali Hamadan University. *J Res Educ Sci*. 2010;4(9):85-95. [Persian]
- 46- Dekman A. The wrong way home. Boston: Beacon Pr; 1994.
- 47- Lyubomirsky S, Sheldon KM, Schkade D. Pursuing happiness: The architecture of sustainable change. *Rev General Psychol*. 2005;9(2):111-31.
- 48- Pollner M. Divine relations, social relations, and well-being. *J Health Soc Behav*. 1989;30(1):92-104.
- 49- Ellison CG. Religious involvement and subjective wellbeing. *J Health Soc Behav*. 1991;32(1):80-99.
- 50- Genia V. I, E. Quest, and fundamentalism as predictors of psychological and spiritual well-being. *J Sci Relig*. 1996;35(1):56-64.
- 51- Ahmadian E, Hakimzadeh A, Kordestani S. Job stress and spiritual intelligence: A case study. *World Appl Sci J*. 2013;22(11):1667-76.

- 52- Mansoury M, Khorshidzade M, Asgary A. Relationship of Spiritual Intelligence Components with Students' Adjustment. *J Pendidikan Malaysia*. 2016;41(1):25-32.
- 53- Gupta G. Spiritual intelligence and emotional intelligence in relation to self-efficacy and self-regulation among college students. *Int J Soc Sci Interdiscip Res*. 2012;1(2):60-9.
- 54- Nikmanesh Z, Keykha Sh. The role of self-efficacy and spiritual intelligence in the resilience of nurses in educational and medical centers of Zahedan city. *J Res Dev Nurs Midwifery*. 2016;12(S3):71-8. [Persian]
- 55- Jun WH, Lee G. The role of ego-resiliency in the relationship between social anxiety and problem solving ability among South Korean nursing students. *Nurse Educ Today*. 2017;49:17-21.
- 56- Burton NW, Pakenham KI, Brown WJ. Feasibility and effectiveness of psychosocial resilience training: a pilot study of the READY program. *Psychol Health Med*. 2010;15(3):266-77.
- 57- Nasel DD. Spiritual orientation in relation to spiritual intelligence: A consideration of traditional christianity and new age/individualistic spirituality [Dissertation]. Adelaide: University of South Australia; 2004.
- 58- Vaughan F. What is spiritual intelligence? *J Hum Psychol*. 2003;42(2):202-10.