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Effectiveness of cognitive empowerment training in depression and anxiety of high school female students in Isfahan

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Abstract

This research aimed to investigate the effectiveness of cognitive empowerment training in depression and anxiety of high school female students in Isfahan city. The research design of the current study was semi-experimental with a pre-test-post-test design with a control group. The statistical population included all female students of the third grade of secondary school in Isfahan city in the academic year of 2023, which was selected by multi-stage cluster random sampling method and 40 students were randomly selected into two experimental groups (20 people) and a control group. (20 people) were appointed. The experimental group received fourteen ninety-minute sessions with a weekly frequency of one session of cognitive empowerment training. For data analysis was used in descriptive statistics section including (mean, standard deviation) and in inferential statistics, analysis of covariance test and Kolmogorov-Smironov test was used for data normalization and SPSS version 20 software. Research tools include anxiety questionnaire, Beck (1988) and Beck depression questionnaire (1961).

The findings of the research showed that there was a significant difference between students' depression and anxiety in the post-test stage ($p<0.01$). Therefore, it can be concluded that cognitive empowerment training has an effect in reducing the level of depression and anxiety of female students, and counselors, social workers, teachers and school coaches should use this approach for the social, personal and academic development of students.

Keywords: cognitive empowerment training, depression, anxiety, female high school students.

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1. Introduction

Students constitute an important and huge part of the population of any country. In our country, a significant percentage of students are studying in secondary schools (Kiani and Kakavand, 2013). On the other hand, the growth and development of any society is indebted to its educational system. An educational system can be efficient and successful when it pays attention to students' education in different periods (Gadampour, Farhadi and Naghi Beiranvand, 2016). Today, we know that mental health problems of students in childhood and adolescence are important social issues (Mesh and Wolf 2011, translated by Mozaffari Mokrabi Abadi and Forough Walid-e-Adl, 2014). Educational activities are stress-generating factors that can affect various aspects of an individual's quality of life and mental health. These activities force the individual to come into contact with other places, people, and cultures and create problems that lead to a decrease in mental health (Mahdovi Haji, 2011). Increased psychological stress leads to the severity of psychological problems such as anxiety in students (Ghanbarian and Rajabzadeh, 2016).

Anxiety is an unpleasant and vague feeling without a clear cause that is often accompanied by symptoms of the autonomic nervous system. If anxiety is severe and the person is involved in it for a long time, it is harmful to the person and will play an important role in causing numerous psychological and social harms (Amberhat, 2009). Anxiety is not dependent on time or a specific culture and its experience begins at birth and continues throughout life and is created with all new experiences of each person such as entering school, university, job or any new situation (Rafiei and Seifi, 2013). The results of some studies show that anxiety is observed in 19 to 23 percent of students (Seyed Nozada, Behdani, Jarahi and Erfanian, 2012). Although a moderate amount of anxiety is considered normal and part of life, pathological anxiety causes problems in everyday life and academic life, and its chronic and abnormal type has destructive effects on the individual's mental and physical health (Ferguson, Howard, & Lynskey, 1993).

More than 72% of people diagnosed with anxiety disorders also meet at least the criteria for another mental disorder. Of all the disorders, depressive disorder has the highest comorbidity with anxiety disorders, and in these individuals, anxiety usually precedes depression. The seemingly complex

nature of this disorder has made it difficult to conceptualize and treat. The complexities associated with this generalized anxiety disorder cause serious problems and impairments in the functioning of the lives of those affected. Depression is a common disease in the current century, accompanied by emotional inadequacy, behavioral dysfunction, and cognitive dysfunction (Jafari, Salehi, & Mohammadkhani, 2013). Depression is a common disorder in psychiatry, and reports show that about one-third of the world's population suffers from a mild episode of depression at some point in their lives (Abbet, 2005). The World Health Organization estimates that depression will be the second leading cause of disease (after cardiovascular disease) worldwide by 2020. Its lifetime prevalence is reported to be 12-25% for women and 5-12% for men. Depression has significant negative effects on individuals' emotional regulation and expression and is considered one of the most important disabilities (Fakhari, Mina Shiri, & Goradel, 2013). Depression has negative effects on both mental and physical health (Ryland & Rickwood, 2001), and is thought to increase the risk of chronic diseases, each of which contributes significantly to the onset of depression (Sherwood & Blumenthal, 2013).

Clinical and epidemiological studies have shown that women experience depression significantly more often than men (Leach and Christensen, 2008). In addition, the influence of gender roles, family, and responsibility can affect the adaptive capacity and demands associated with depression (Clark and Corey, 2009). Given that depression as a clinical disorder can have adverse individual, family, and social consequences for individuals, especially women; Such as depressed mood, loss of pleasure, severe loss of interests, weight and appetite disorders, sleep disorders, restlessness or psychomotor retardation, fatigue, decreased energy, feelings of guilt and worthlessness and inadequacy, loss of concentration and doubt and hesitation, and recurrent thoughts about death or suicide, family conflicts, and problems and job incompatibility (DSM-V, 2013), it is necessary to carry out interventions to reduce these symptoms. Among these interventions is cognitive empowerment training. Therefore, it remains to be seen how effective cognitive empowerment training is on depression and anxiety among female high school students in Isfahan?

2. Review of Literature

There is no single definition of empowerment in the literature, and it literally means giving power to individuals, and its definition depends on the situation and individuals (Wright et al., 2006). Psychological empowerment is a kind of psychological state and active work orientation in people who have the ability to shape activities and influence their work fields. In this regard, education plays a fundamental role in reducing stress. Researchers believe that any education leads to learning; but the level of depth and sustainability in different learning methods is different. A large part of recent studies have examined the effectiveness of different educational programs in creating sustainable learning (Holdworth and Cartwright, 2003). In general, cognitive empowerment programs are the same as life skills training programs, with the difference that specific educational programs are developed according to different groups and diverse needs, and then specialized training is carried out (Mohammadkhani, 2010). In the empowerment method, the materials and content of education do not depend on personal views. In fact, in the main approaches of treatment, emotional content does not have a place and is somewhat emotionally neutral. Cognitive empowerment therapy is a special and unique treatment from the perspective that it focuses solely and mainly on cognitive abilities (Weeks and Gigg, 2001; quoted in Qamari Givi et al., 2013). When managers can cultivate dimensions of cognitive empowerment in others, they have successfully empowered them. Empowered people can not only perform their tasks, but also think about themselves differently (Watton David et al., 2002).

A society that thinks about its own health and that of its future generations must take further steps towards achieving its ideals by examining and eliminating the factors that cause and create mental health problems or maintaining the health of its future-builders. An individual's understanding of their individual self plays a major role in the manifestation of their behavior and gaining experiences. The closer a person's ideal self is to their real self, the more satisfied and contented they will be, and a large gap between the ideal self and the real self leads to dissatisfaction and unhappiness, which causes long-term mental problems for the individual. Various studies have shown that high levels of depression and anxiety can have negative effects on health,

quality of life, educational progress, and the level of readiness of individuals to accept their professional roles, so paying attention to it and its consequences, as well as adopting appropriate solutions to get rid of it, is of particular importance.

Anxiety disorders are associated with a group of negative consequences such as the risk of suicide and are less likely to improve if they coexist with depression (Haj Rasouli, 2011). Considering that students constitute a large segment of the country's population (Seyed Navazi, Behdani, Jarahi, & Erfanian, 2012), and acknowledging that numerous studies indicate an increase in anxiety (Mesbah & Abedian, 2014) and depression (Qadei & Ghorban Shiroudi, 2016) in this group, Pouraboli, Esfandiari, Ramezani, Miri, Jahani, & Sohrabi (2016) in a study they conducted to determine the effect of psychological empowerment on reducing occupational stress in intensive care unit nurses, concluded that empowerment based on psychological intervention reduced occupational stress in nurses and also reported that these interventions were effective in improving the quality of nurses' work.

Rahmati, Mohammadkhani, and Mohsen Pour (2015) examined the effectiveness of psychosocial empowerment training on the cognitive and emotional attitudes of adolescents in their study and reported that psychosocial empowerment training is effective in increasing the negative attitudes of adolescents. Ming Tu (2016) showed in his research that psychological empowerment of women leads to improving their quality of life and reduces psychological distress in the family, and finally, women's active participation in the workplace leads to increasing their personal, interpersonal, and political authority. Therefore, this study aimed to investigate the effectiveness of cognitive empowerment training in reducing depression and anxiety in high school girls.

3. Methodology

The present study was applied in terms of purpose and was a quasi-experimental study with a pre-test-post-test design and a control group. The statistical population included all third-grade female students of high school in Isfahan in the academic year 2022-2023, of which 40 students were selected

using a multi-stage cluster random sampling method and randomly assigned to two experimental groups (20 people) and a control group (20 people). In this way, one district was selected from among the five education districts, and from among the girls' high schools, Imam Sadeq (AS) High School, and from among the third-grade students, 40 students were selected in accordance with the inclusion criteria for the study. The experimental group received fourteen ninety-minute sessions with a weekly frequency of one session of cognitive empowerment training, but the control group did not receive any intervention.

Inclusion criteria included informed consent to participate in the study, willingness to cooperate, high scores on the anxiety and depression scale, and absence of specific physical and psychological illnesses. Exclusion criteria included unwillingness to participate in the study, absence of more than two training sessions, and presence of specific physical or mental illnesses.

Beck Anxiety Inventory: Beck Anxiety Inventory is a self-report questionnaire developed by Beck (1988) to measure the severity of anxiety in adolescents and adults. Beck Anxiety Inventory is one of the common questionnaires used to measure this disorder. This questionnaire has high reliability and validity. Its internal consistency coefficient (alpha coefficient) is 0.92%, its one-week test-retest reliability is 0.75%, and its item correlation ranges from 0.30 to 0.76%. Five types of content validity, concurrent, construct, diagnostic, and factor validity have been measured for this scale, all of which indicate the high efficiency of this tool in measuring anxiety severity. This questionnaire is a 21-item scale in which the subject selects one of four options in each item that indicate the severity of anxiety. The four options in each question are scored on a four-part scale from 0 to 3. Each question on the scale describes one of the common symptoms of anxiety (mental, physical, and panic symptoms). Therefore, the total score of this questionnaire is in the ER range of 0 to 63 (Fathi Ashtiani, 2010).

Beck Depression Inventory: Beck Depression Inventory was first developed by Beck et al. (1961). This questionnaire, which consists of 21 questions, was designed to measure the feedback and symptoms of depressed patients, and the value of zero to three for each sentence indicates the severity of the degree. These items and their weights were selected logically (Azkhosh,

2006). Beck et al. (1988) reported the internal consistency of this tool as 73.0 to 92.0 with an average of 86.0 and the alpha coefficient for the patient group as 86.0 and the non-patient group as 81.0. Also, the correlation of Beck Depression Inventory with Hamilton Psychiatric Rating Scale, Zung Self-Esteem Scale, Depression Scale, Multiple Affective Trait Scale of Depression, and Psychological Symptoms Checklist among psychiatric patients is 0.73, 0.76, 0.74, and 0.60, respectively. In Iran, research has also reported its validity as 0.90 (Abolghasemi, 2004).

Table 1. Cognitive empowerment training package on depression and anxiety

Sessions	Content Sessions	Time
First	Welcome, explanations about the purpose of the educational sessions and the confidentiality of educational and therapeutic materials, as well as initial introduction to clients and gaining trust in the research.	90
Second	Definition, symptomatology, and etiology of depression	90
Third	Definition, symptomatology, and etiology of depression	90
Fourth	A summary of the previous session will be presented and a continuation of the interpretation of the material on anxiety and depression will be discussed, describing the characteristics of depressed and anxious people.	90
Fifth	Depression and Anxiety Treatments	90
Sixth	Cognitive-Behavioral Approach and Explanation of the Process of Formation of Depression and Anxiety from This Perspective of Theories and Individuals as Well as Strengthening Self-Esteem	90
Seventh	Why is self-knowledge important and self-confidence (traits of positive thinking people) Traits of positive people (the art of conversation) Successful negotiation, good relationships	90
Eighth	Coping skills for depression, anxiety, intrusive thoughts, irrational beliefs, changing cognitions and negative perspectives	90
Ninth	Identifying negative automatic thoughts about oneself and associated unpleasant emotions, identifying irrational beliefs, and discussing the consequences of irrational beliefs about oneself and worries.	90
Tenth	Introduction to the method of logical analysis as the most powerful method of challenging beliefs.	90
Eleventh	Identifying and confronting dysfunctional assumptions	90
Twelfth	Changing cognitions and negative views about self, environment, and future.	90
Thirteenth	Pessimistic explanatory style and how to change attributions of events and consequences Use of flashbacks	90
Fourteenth	Adopting preventive strategies for symptoms	90

4. Findings

Descriptive statistics including frequency distribution table, mean, and standard deviation were used for data analysis. Covariance analysis and Kolmogorov-Smirnov test were used for data normalization in the inferential statistics section. SPSS version 20 software was used for data analysis.

The mean age of the experimental group was 14.43 years with a standard deviation of 2.45 years, while the mean age of the control group was 15.10 years with a standard deviation of 1.55 years. The following are the descriptive results of the research variables in the experimental and control groups.

Table 2. Mean and standard deviation of depression and anxiety in the experimental and control groups in the pre-test and post-test stages

Variable	Pre-test	Pre-test	Post-test	Post-test
	Experimental group	Control group	Experimental group	Control group
	M (S. D)	M (S. D)	M (S. D)	M (S. D)
Anxiety	26.41 (4..87)	28.58 (5.93)	14.58 (4.77)	27.50 (2.13)
Depression	20.83 (3.79)	21.53 (2.43)	9.08 (2.13)	19. 16 (3.13)

As can be seen in Table (2), the average scores of the experimental group decreased from pre-test to post-test in the depression and anxiety component. This trend was not observed in the control group. For a better description, a graph of the anxiety and depression variables in the two stages of the test is presented.

One of the assumptions of the covariance test is the homogeneity of variances of the variables in the experimental and control groups. To evaluate this assumption, Levine's test was used, the results of which are given in Table 2.

Table 3. Results of Levine's test for equality of variances of the scores of research variables of the two research groups

Variable	F	df1	df2	Sig
Anxiety	0.627	1	38	0.437
Depression	0.768	1	38	0.385

As can be seen in Table (3), all values of the Luben test are non-significant. In other words, the assumption of zero variances of the two groups is confirmed and it can be said that in all tests, the variances of the two groups of research variables are equal.

Another assumption of the covariance test is the normal distribution of the variables in the population. To evaluate this assumption, the Kolmogorov-Smirnov test was used, the results of which are given in Table 4.

Table 4. Results of the Kolmogorov-Smirnov test on the normality of the distribution of scores of research variables

variable	Sig
Post-test depression	0.300
anxiety	0.714

As can be seen in Table (4), all values of the Kolmogorov-Smirnov test statistics are insignificant, which means that the distribution of scores of these variables in the population is normal.

Another assumption is the homogeneity of the regression slope between the auxiliary variables (pre-tests) and dependent variables (post-tests) at the factor levels (experimental and control groups).

Table 5. Results of the test to check the assumption of homogeneity of regression slopes of research variables

Variable	Source of changes	F	Sig
Anxiety	Group * Pre-test	0.930	0.346
Depression	Group * Pre-test	0.040	0.844

As can be seen in Table (5), the F value of the interaction is not significant for all research variables. Therefore, the assumption of regression homogeneity is confirmed. The analysis of covariance test is presented below.

Table 6. Results of analysis of covariance of depression and anxiety variables

	Resources	Sum of squares	df	Mean squares	F	Sig	Eta squared
Pretest	Anxiety	109.950	1	109.950	13.543	0.001	0.404
Group	Anxiety	23.352	1	23.352	5.186	0.037	0.245
Error	Anxiety	162. 481	36				
Pretest	Depression	530.596	1	530.596	111.274	0.000	0.756
Group	Depression	30.949	1	30.949	6.941	0.019	0.245
Error	Depression	4.768	36	95.367			

As can be seen in Table (6), the difference between the two groups in the level of depression and anxiety in the post-test phase is significant; therefore, it can be concluded that cognitive empowerment training is effective in reducing the level of depression and anxiety in female students.

5. Conclusion

The present study was conducted to investigate the effectiveness of cognitive empowerment training on depression and anxiety in female high school students in Isfahan. The results of the analysis of covariance showed that the experimental group had a significant decrease in depression scores in the post-test phase, which indicates confirmation of the research hypothesis that cognitive empowerment training is effective on depression in female students. This finding is consistent with the studies of Mahdianfar, Kimiaie, and Ghanbari Hashemabadi (2015), Golchin (2017), Akbari, Ebrahimi

Moghadam (2017), Rahimian-Boger (2011), League and Clark (2016), and Clark et al. (2016).

Cognitive therapy helps to process information appropriately and initiate positive change across all systems through the cognitive system. In a combined process, the therapist and the patient challenge the patient's beliefs about themselves, others, and the world, challenging the patient's dysfunctional conclusions as hypotheses to be tested. Behavioral experiments and verbal processes are used to test alternative interpretations, thereby helping the patient and their dysfunctional beliefs begin to change (Kudall et al., 2018). A depressed person has a negative bias, which includes a negative view of themselves, the external world, and the future. In anxiety, there is a systematic bias or cognitive shift in selecting interpretations that are threatening. The techniques used in cognitive therapy primarily focus on correcting errors and biases in information processing and modifying core beliefs that promote false conclusions. Purely cognitive techniques focus on identifying and testing the patient's beliefs; Discovering errors and biases, correcting them if they are correctable, and solving the problem. For example: some beliefs are specific to a particular culture, gender role, religion, social and economic status.

Treatment may focus on problem solving by understanding how these beliefs affect the patient. Core beliefs are explored and tested in a similar way, their validity and efficacy being tested. These can directly reduce symptoms of depression (Ogreen, 2011). Cognitive therapy aims to correct faulty cognitive processing and help the patient modify the assumptions that perpetuate maladaptive behaviors. Cognitive methods are used to challenge dysfunctional beliefs and develop genuinely functional thoughts. The short-term goal of cognitive therapy is to relieve symptoms, but its ultimate goal is to eliminate cognitive biases and modify core beliefs that predispose the person to future stress (Hudson et al., 2015). Cognitive therapy seeks to promote change in patients' dysfunctional beliefs by considering testable hypotheses to test the beliefs that have been jointly agreed upon with the patient through cognitive experiments. The therapist's cognition never tells the patient that his or her beliefs are irrational and distressing and that the therapist's beliefs should be accepted. Instead, the therapist asks questions to elicit the meaning, function,

utility, and consequences of the patient's beliefs. Finally, the patient decides whether to reject, modify, or maintain all of the personal beliefs that he or she is aware of and their behavioral and emotional consequences. This can lead to a style of thinking and emotion regulation that is effective in reducing depression (Clark et al., 2003).

The results of the analysis of covariance also showed that the experimental group had a significant decrease in anxiety scores in the post-test phase, which indicates confirmation of the research hypothesis that cognitive empowerment training is effective on anxiety in female students. This finding is consistent with the studies of Golchin (2017), League and Clark (2016), and Clark et al. (2016). In explaining the results of this study, it can be stated that cognitive empowerment has become a perspective that increases awareness and skillful responses to psychological processes involved in emotional and behavioral tensions, and as a result, cognitively empowered individuals are more capable of recognizing, managing, and solving everyday problems (League and Clark, 2016). The general strategies of cognitive therapy primarily include collaborative experientialism between the patient and the therapist to examine the patient's dysfunctional interpretations and try to change them. Participatory empiricism sees the patient as an empirical scientist who makes sense of stimuli, but is temporarily neutralized by the information gathered and the integrative system. The second approach is “guided exploration,” which aims to uncover the issues and beliefs that the patient is currently interpreting as dysfunctional; and to relate them to recent past experiences. Thus, the therapist and patient collaboratively explore the reasons for the patient’s disorder. Both approaches utilize Socratic dialogue (a style of questioning that helps to uncover and test the consistent and inconsistent features of the patient’s views). Psychotherapy attempts to improve reality testing by continuing to draw effective personal conclusions. The immediate goal is to return the information-processing system to a neutral state, so that events can be evaluated in a more balanced way. There are three main perspectives for treating dysfunctional mindsets: 1- deactivating them 2- balancing them and 3- strengthening compatible and effective mindsets to counteract the dysfunctional mindsets. In therapy, the first and third perspectives

simultaneously identify a maladaptive belief and replace it with a new, highly compatible and correct belief. Deactivating a dysfunctional mindset may occur through distraction and reassurance, but lasting change is unlikely unless the core context of a person's beliefs is modified (Beck, 2017).

Cognitive therapy does not seek to replace negative beliefs with positive ones. Rather, cognitive therapy is based on reality, not on positive delusions and empty thoughts. Similarly, cognitive therapy does not believe that people's problems are imaginary. Patients may have serious social, economic, or health problems such as functional impairments. In addition to real problems, they also have biases about themselves, their situations, and their resources that limit their range of responses and prevent them from generating solutions (Rahimian, 2011). Changing cognitions by allowing the patient to take risks and try new behaviors can lead to behavioral change. In turn, the experience of using new behaviors can validate the new perspective. By expanding the perspective, emotions can be modified to include alternative interpretations. In new learning, when emotions are invoked, they also lead to cognitive change. Therefore, cognitive, behavioral, and emotional channels interact in therapeutic change, but cognitive therapy emphasizes the primacy of cognition in the development and sustainability of therapeutic change. In anxiety symptoms, cognitive empowerment can be effective in reducing anxiety by reducing negative biases, modifying dangerous beliefs about the environment and the future, and improving the individual's coping through modifying fundamental beliefs (Mutabi, 2017).

Cognitive change occurs at several levels: thoughts that are under control, persistent or automatic thoughts, basic assumptions, and core beliefs. According to the cognitive model, cognitions are arranged in an orderly hierarchy, with each level differing in accessibility and stability from the next. At the most accessible and least stable cognitions are conscious and voluntary thoughts. At the next level are automatic thoughts, which enter the mind automatically when called upon by circumstances. They are thoughts that mediate between an event or stimulus and the person's behavioral and emotional responses. An example of an automatic thought is "Everyone will know I'm nervous," which occurs when a person with social anxiety is invited

to a party. Automatic thoughts are associated with emotion, and when experienced, they seem very salient and consistent with the individual's logic. They are valid to the patient without being challenged. Automatic thoughts, although less accessible and stable than voluntary thoughts, can be learned by the patient to identify and review them. Cognitive distortions are evident in automatic thoughts. Automatic thoughts stem from fundamental assumptions. For example, the belief: “I am responsible for other people’s happiness” causes a number of automatic thoughts in people who hold these assumptions. Assumptions shape perceptions for cognitions, determine goals, and give meaning to interpretations and events. They may be quite stable and outside the patient’s awareness (Leahy, 2015).

Among the limitations of the present study, it can be noted that this study was conducted only on female students in the third grade of high school, and the results of this study cannot be generalized to boys, and information and data were collected through self-reporting by the subjects and through a questionnaire, which is always influenced by numerous influential factors such as the tendency of respondents to provide pro-social answers. Therefore, it is suggested that in future studies, researchers implement and examine cognitive empowerment on boys and girls simultaneously. Future studies should also examine the effectiveness of cognitive empowerment on other emotional, cognitive, affective, and social problems of female students. In addition, this cognitive empowerment approach and its related techniques should be provided to counselors, social workers, teachers, and educational approach and techniques officials so that by using it, they can create a favorable social, personality, and academic development environment for students.

References

Abbasi, A. (2010). *Investigating the relationship between cognitive styles and coping styles with psychological stress and academic achievement of students at the University of Tabriz.* Master's thesis, Faculty of Psychology and Educational Sciences, Teacher Training University.

Abbasi, Fa. (2010). The effect of coping styles training on stress reduction. *Quarterly Journal of Cognitive Sciences*, 4(4).

Abet, K.L. (2005). *The effect of a group exercise intervention in the adjunctive treatment of depression.* University of Pittsburgh,7-10. [PhD thesis]

Abramson, L. Y., Seligman, M.E.P., & Teasdale. J.D. (2003). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.

American Psychiatric Association. (2001). *Classification of Mental Disorders According to DSM-IV* (Translated by Pour Afkari), Tehran: Azad Publications.

Bakhshaish, A; and Dehghan Zardini, R. (2013). The Effectiveness of Problem Solving Skills Training on Reducing Students' Behavioral Problems. *Journal of Behavioral Sciences*, (4), 353-347.

Bech, A. T. (2000). *The Hopelessness Scale*. Consulting; Psychologists Press.

Beck, A. T., Steer, R., & Garbin, M. G. (1988). Psychometric property of the Beck depression inventory, Twenty-five Years evaluation. *Clinical psychology Review*, 8, 77 -100

Blackburn, I.M., & Smyth. P. (2000). A test of cognitive vulnerability in individuals prone to depression. *British Journal of Clinical Psychology*, 24, 61-62.

Blankstein, K.R., Flett, G.L., & Watson, M.S. (1992). Coping and academic problem – solving ability in test anxiety. *Journal of Clinical Psychology*, 48(1), 37 – 45.

Borkovec, T.D. (1995a). *Cognitive behavioral treatment of generalized anxiety disorder: Applied relaxation, self – control desensitization ،and cognitive therapy, with special reference to the integration of clinical experience and basic research in their application*. Paper Presented at World Congress of Cognitive – Behavioral Therapists. Copenhagen, Denmark, 1995.

Brown, R.F., Bylund, C.L., Kline, N., De La Cruz, A., Solan, .J, Kelvin, J., & et al. (2009). *Identifying and responding to depression in adult cancer patients: evaluating the efficacy of a pilot communication skills training program for oncology nurses.* Cancer Nursing, 32(3), E1-7.

Carr, S.J., Teasdale, J. D., & Broadbent, D. (2004). Effects of induced elated and depressed mood on self – focused attention. *British Journal of Clinical Psychology*, 3,. 273- 275.

Cassidy, T., & Long, C. (1996). Problem – solving style ،style. stress and psychological illness: Devolopment of a multifactorial measure. *British Journal of Clinical Psychology*, 35, 265-277.

Costello, T. and Costello, J. (1994). *Abnormal Psychology* (translated by Pour Afkari). Tehran: Azadeh Publications.

Cassidy, T., & Lynn, R. (1989). A multifactorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psycholog,* 62, 301-312.

Clarke, D.M., & Currie, K.C. (2009). *Depression, anxiety and their relationship with chronic diseases: A review of epidemiology, risk and treatment evidence*. Med J Aust, 190 (7 Supp):S54-S60. OpenUR.

Dubow, E.F., Tisak, J., Causey, D., Hryshko, A., & Reid, G. (2005). A two – year longitudinal study of stressful Life events, social support and social problem- solving Contributions to children'x behavioral and academic adjustment, *Child Development*, 62.583-599.

Elliott, T.R., Sherwin, E., Harkins, S.W., & Marmarosh, C. (2000). *Journal of Counseling psychology*, 42(1), 105-115.

Emberhart, N.K. (2009). Interpersonal predictor of stress generation and depressed mood. *Pers SocPsychol Bull*, 35(5), 544-556.

Esmaeili, M. (2002). Studying the effect of life skills lessons in interaction with parenting styles on the self-esteem of students in Ardabil province, *Payam Menghar Quarterly*, Year 3, Issue 6, Varay Danesh Publications.

Fakhari, A; Minashir, A; and Alizadeh Goradal, J. (2013). Comparison of Theory of Mind and Emotion Regulation Deficits in Depressed and Normal Individuals. *Journal of Babol University of Medical Sciences*, 1(16), 92-98.

Fergusson, D.M., Horwood, L.J., Lynskey, M.T. (1993). Early dentine leads levels and subsequent cognitive and behavioral development. *Child Psychology Psychiatry Journal*, 34(2), 215-27.

Ghaedi, Moyed Taher; Gh, Shiroudi, S. (2016). The effectiveness of group hope therapy on depression, loneliness and self-efficacy of female students. *Journal of Child Mental Health*, 3(2), 65-75.

Ghadampour, A. (2016). Determining the relationship between academic burnout and academic enthusiasm and performance in students of Lorestan University of Medical Sciences. *Research in Medical Sciences*, 8(2), 60-78.

Ghamari Givi, H; N, Maghsoud; and Dehghani, Fe. (2014). Investigating the effectiveness of cognitive rehabilitation in restoring executive functions of obsessive-compulsive patients. *Journal of Clinical Psychology Studies*, 16(4), 101-128.

Ghanbarian, M; Rajabzadeh, Z. (2016). The relationship between happiness and life expectancy in students of Behbahan Faculty of Medical Sciences. Journal of Principles of Mental Health, *Special Issue of the Third International Conference on Educational Sciences*, pp. 6-553.

Haj Rasoul, F. (2011). A study of problem-solving styles in depressed and normal individuals. *Quarterly Journal of Psychological Sciences*, 6(1), 24-42.

Harris, A. E., Curtin, L. (2008). *Parental Perceptions, Early Maladaptive Schemas, and Depressive Symptoms in Young Adult. Cognitive Therapy and Research*, 26(3), 405-416.

Heppner, P.P., & Petersen, C .H. (2000). The development and implications of a personal problem-solving Inventory. *Journal of Counseling Psychology*, 29.66-75.

Heppner, P.P., Baumgardner, A.,& Jackson, J. (1985). The relationship between problem –

solving self-appraisal. depression, and attributional style**.** *Are they related cognitive Therapy and ressarch*, 105-113.

Hoffman, U., & Levy. (1988). Social support and self – esteem**.** *Journal of youth and adolescence*, 17(218).

Holdsworth, L, & Cartwrightm S. (2003). Empowerment, stress and satisfaction: an exploratory study of a call centre. *Leadership and Organization Development Journal*, 24(3), 131-40.

Ingram, E.I. (1990). Self- focused attention in clinical disorders: Review and a conceptual model**.** *Psychological bulletin*, 107,156-175.

Jafari, D; Salehi, M; and Mohammadkhani, P. (2013). Comparing the effectiveness of mindfulness-based cognitive therapy with behavioral activation group therapy on depression and quality of life of depressed individuals. *Thought and Behavior*, Volume 8, Issue 29.

Jin Huang, MSN R., Jiang, D., Wang, X., Liu, Y., & Fennie, K. (2002). Changing knowledge, behavior, and practice related to universal precautions among hospital nurses in China. *The Journal of Continuing Education in Nursing*, 33(5), 217.

Kant, G. L., D'zurilla, T.J., & Maydeu – Olivares, A. (1997). Social problem – solving as a mediator of stress- related depression and anxiety in middle- aged and elderly community residents. *Cognitive Therapy and Research*, 21(1), 73-96.

Kaplan, H.I., & Sadock B. J. (1988). *Synopsis of Psychiatry*. New York: Williams & Wilkins.

Kadivar, P. (2001). Attributional Styles and Their Importance in Mental Health. *Scientific and Research Quarterly, Faculty of Psychology and Educational Sciences, University of Tehran*. No. 2.

Karimi, Yousef. (1991). *Social Psychology*. Tehran: Payam Noor Publications.

Klineke, Chris. (1993). *Life Skills* (translated by Shahram Mohammadkhani). Tehran: Espand Honar Publications.

Kiani, Q. and Kakavand, A. (1993). The Effectiveness of Emotional Intelligence Training on the Academic Achievement of First-Year High School Students in Zanjan. *Psychological Studies*, 9(2), 154-174.

Kuyken, W., Brewin, C.R. (2004). Stress and coping in depressed women. *Cognitive Therapy and Research*, 18(5), 403-412.

Leach, L.S., Christensen, H. (2008). Gender differences in depression and anxiety across the adult lifespan: the role of psychosocial mediators. *Soc Psychiatry Psychiatr Epidemiol*, 43(12), 983-998. OpenURL.

Mash, A. J. and Wolf (2014). *Child Abnormal Psychology* (translated by Mozaffar Mokri Abedi and Forough Eldin Adl). Tehran: Roshd Publications.

Mahmoud Alilou, M. (1999). Experimental study of the effect of mood on performance. *Quarterly Journal of Psychological Research*, 5 (3 and 4).

Mesbah, N; and Abedian, A. (2014). The relationship between stress level and hopelessness in students living in dormitories. *Journal of Psychology*, 3(6), 11-21.

Mehdianfar, F; Kimiai, Seyed A; and Ghanbari Hashemabadi, Bahram A. (2015). Reducing depression and aggression in women with imprisoned husbands in 2013. *Iranian Journal of Forensic Medicine*, 3(21), 167-177.

Mehryar, A H. (2001). *Depression, perceptions and cognitive therapy*. Tehran: Roshd Publications.

Meyer, T.J., Miller. M. L., Metger. R.L., & Borkovec, T.D. (1990). Development & validation of the penn state worry questionnaire. *Behavior Research and Therapy*, 28, 487 – 495.

Ming To, S. (2016). Loneliness, the search for meaning, and the psychological well-being of economically disadvantaged Chinese adolescents living in Hong Kong: Implications for life skills development programs. *Children and Youth Services Review*, 71, 52- 60.

Mobini, S. (2000). *Depression and its cognitive-behavioral therapy, theories, concepts and clinical applications*. Tabriz: Tabriz University of Medical Sciences Publications.

Mobini, S. (2000). Investigating the role of attentional focus in memory bias in depressed patients. *Quarterly Journal of First Year Psychological Research*, No. 1 and 2.

Mohammad, M., Maryam, H., & Ali, N. (2010). *The effect of psychological empowerment training on the job adjustment and vitality Apadana hospital nurses in Ahvaz.* Second Biennial Congress of Industrial and Organizational Psychology 3 and 4 March 2010, Islamic Azad University, Isfahan, 38-42.

Molina, S., & Borkoec, T. D. (1993). The penn State Worry Questionnaire: Psychometric properties & associated characteristics In. G. C. L. Davey& F. Tallis (Eds). *Worring: Perpectives on theory, assessment, and treatmet*, Sussex, England: Wilcy.In press.

Nayeri, N.D., Adibhajbagheri, M. (2006). The effect of stress relaxation and quality of life of dormitory students**.** *Feyz*,10(2), 50-7. [Persian]

Nathaniel, B. (2001). *The Psychology of Self-Esteem* (translated by Mehdi Gharacheh Daghi). Second edition, Tehran: First Publications.

Narimani, M; and Soleimani, E. (2013). The Effectiveness of Rehabilitation on Executive Functions (Working Memory and Attention) and Academic Achievement of Students with Mathematical Learning Disorder. *Journal of Learning Disabilities*, 2(3), 115-91.

Nezu, A. M. (1986). Efficacy of a social problem – solving therapy approach for unipolar depression. *Jounal of consulting and Clinical Psychology*, 54(2), 196-202.

Nezu, A.M. (1985). Differences in psychological distress between effective and ineffective problem- solvers. *Jounal of Counseling psychology,* 32(1), 135-138.

Nezu, A.M., & Perri, M.G. (2001). Social problem – solving therapy for unipolar depression: An initial dismantling investigation. *Journal of Consulting and Clinical Psychology*, 57(3), 408- 413.

Nezu, A.M., & Ronan, G.F. (1987). *Social problem – solving and dipression: rating*.

Nunnally, J. C. (1978). *Psychometric Theory*. 2 nd ed, New York: Mcgraw- Hill.

Nunnally, J.C. (1967). *Psychometric Theory*. MewYork: McGraw- Hill.

Parkes, K.R. (1994). Locus of control, cognitive appraisal, and coping in stressful episodes. *Journal of Personality and Social Psychology*, 46(3), 655 -668.

Pasha Sharifi, H; and Najafi Zand, J. (2001). *Statistical Methods in Behavioral Sciences*. Tehran: Sokhan Publications.

Petersen, C., Semmel, A., Von Baeyer, C., Abramson, L.Y., Metalsky, G.I. & Seligman, M.E.P. (1982). The Attributional Sryle Questionnaire. *Cognitive Therapy and Ressarch*, 6, 287-299.

Pouraboli, B.; Esfandiari, S.; Ramezani, T.; Miri, S.; Jahani, Younes; and Sohrabi, N. (2016). The Effectiveness of Psychological Empowerment Skills Training on Occupational Stress of Intensive Care Unit Nurses. *Clinical Journal of Nursing and Midwifery*, 1(5), 23-35.

Potter, P.A., Perry, A.G., Stockert, P., Hall, A. (2013). *Fundamentals of nursing: Elsevier Health Sciences.*

Pretorius, T. B. (1993). Assessing the problem – solving appraisal of black south African students. *International Jouvnal of Psychology*, 28(6), 861-870.

Priester, M. J., & Clum, G.A. (1993). Perceived problem – solving ability as a predictor of depression, hopelessness and suicide ideation in a college population. Journal *of Counseling psychology*, 40(1), 79-85.

Rezaee, N., Behbahani, N., Yarandi, A.N., & Hosseini, F. (2006). Relationship between job stress and social support in nurses**.** *Iranian Journal of Nursing*, 49(19), 71-8. [Persian]

Roger, J; and Petermak, W. (1996). *Negative Thinking* (translated by Mehdi Gharacheh Daghi). Tehran: Mina Publications.

Rahmati, R; Mohammadkhani, Sh; and Mohsenpour, M R. (2015). The Effectiveness of Psychosocial Empowerment Training on Adolescents' Cognitive and Emotional Attitudes to Drug Use. *Quarterly Journal of Military Psychology*, 6(23), 17-26.

Rostami, M; Abolghasemi, A; and Narimani, M. (2013). The Effectiveness of Quality of Life-Based Therapy on the Psychological Well-Being of Dysfunctional Couples. *Quarterly Journal of Family Counseling and Psychotherapy*, 1(3), 105-123.

Rafiei, M; and Seifi, A. (2013). A Study of the Reliability and Validity of the Beck Anxiety Scale in Students. *Thought and Behavior*, 7(27): 46-37.

Ryff, C.D., Keyes, C. L. M., Hughes, D. L. (2003). Status inequalities, perceived discrimination, and eduaimonic well-being: Do the challenges of minority life hone purpose and growth?. *Journal of Health Social and Behavior*, 44, 275- 291.

Rylands, K., & Rickwood, D.J. (2001), Ego-integrity versus ego-despair: the effect of "accepting the past" on depression in older women. *Int Journal Aging Hum Dev*, 53(1),75-89, OpenURL Return to text.

Sarason, I. J.; and Barbara, R., Sarason. (2002). *Medical Psychology* (translated by Najarian et al.), Tehran: Roshd Publishing.

Sam Khaniani, N. (2001). *Investigating Schematic Mental Patterns of Perfectionism and Approval Seeking in Depression*. Master's Thesis in Clinical Psychology. Iran University of Medical Sciences, Tehran Institute of Psychiatry.

Seyed Nozadi, M. (2012). Comparing Anxiety Levels in Rural and Urban High School Students in Mashhad. *Journal of Principles of Mental Health*, 14(4), 301-294.

Schechtman, Z. (2010). Impact of Life Skills Training on teachers perceived environment and self-efficacy. *Journal of Educational Research*, 3, 144-154.

Seligman, M. E. P. (1975). *Helplessness: On depression, development and death*. San Franisco,CA: Freeman.

Sherwood, A., & Blumenthal, J.A. (2013). Relationship of depression to death or hospitalization in patients with heart failure. *Arch Intern Med*, 167(4), 367-373

Sheykhi, M.R., Sarichlou, M.E., Javadi, A., & Moradi, M. (2009). Effect of nurse's empowerment on coping with job stresses. *Journal of Quazvin University of Medical Sciences*, 12(4), 38-42. [Persian]

Siegel, L. J., & Griffin, N.J. (1984). *Correlates of depressive symptoms in adolescents*.

Tiu Wright, L., Harrison, T., Waite, K., Hunter, G.L. (2006). The internet, information and empowerment. *European Journal of Marketing*, 40(9/10): 972-93.

Thomson, C. and Rudolph, L. (2016). *Counseling with Children* (translated by Javad Tahorian). Tehran: Roshd Publishing.

Watten, David A. and Cameron, Kim S. (2002). *Empowerment and Delegation* (translated by Badr al-Din Orei Yazdi). Management Research and Education Institute Publications, Tehran: Second Edition.

Weiner, B. (1985). An attributional theory of achievement Motivation and Emotion. *Psychological Review*, 92, 548-573.

Weiner, B. (1986). *An- Attributional Theory of Motivation and Emotion*. New York:Springer –Verlag.

Wenzlaff, R. M., Wegner, D.M., & Ropper, D.W. (2005). Depression and mental control: The resurgence of unwanted negative thoughts. *Journal of personality and Social Psychology*, 88(6), 882-892.

Windle, M., & Windle, R.C. (1996). Coping strategies, drinking motives, and stressful life events among middle adolescents: Associations with emotional and behavioral problems and with academic functioning. *Journal of Abnormal psychology*, 105(4), 551-560.

Zanganeh, K. (2016). *Investigating and comparing the level of rational beliefs among depressed patients referred to the Isfahan Psychiatric Center with normal individuals*. Master's thesis, Allameh Tabatabaei University.

Zautra, A.J., & Wrabetz, A.B. (1991). Coping success and its relationship to psychological distress for older adults. *Journal of Personality and Social psychology*, 61(5), 801-810.

Zeidner, M., & Hammer, A. (1990). Life events and coping resources as predictors of stress symptoms in adolescents**.** *Personality and Individual Difference*, 11(7), 693-703.

Zuckermann. M., Lubin, B, & Rinck, C.M. (1983). Construction of new scales for the Multiple Affect Adjective Checklist. *Journal of Behavioral Assessment*, 58,119-129.