Journal of Fundamentals of Mental Health

Mashhad University of Medical Sciences

Psychiatry and Behavioral Sciences Research Center

The effectiveness of mindfulness-based cognitive therapy on depression, dysfunctional beliefs, and self-esteem in mothers of children with intellectual disabilities

Mahdi Amiri[1]; *Elham Taheri[1]; Morteza Ataee Karizmeh[2]; Hanieh Taheri[3]

[1]*Assistant professor of clinical psychology, Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.*
[2]*MSc. student in clinical psychology, Mashhad University of Medical Sciences, Mashhad, Iran.*
[3]*Ph.D. student in health psychology, Torbat-e Jam University, Torbat-e-Jam, Iran.*

Abstract

Introduction: This study examined the effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) on depression, dysfunctional beliefs, and self-esteem among mothers raising children with intellectual disabilities.

Materials and Methods: In this cross-sectional study, 24 mothers recruited through convenience sampling were randomly assigned into experimental and control groups. The experimental group received nine 2-hour sessions of MBCT. We assessed the participants using the Beck Depression Inventory-II, the Coopersmith Self-Esteem Inventory, and the Dysfunctional Attitudes Scale.

Results: The data showed that mindfulness-based cognitive therapy significantly reduced depression (P= 0.001), dysfunctional beliefs (P= 0.000), and increased self-esteem (P= 0.000) in the experimental group. The effect size for the mentioned variables was 0.429, 0.497, and 0.568, respectively. The greatest effect of the intervention was observed on improving family self-esteem (P= 0.000) and reducing perfectionistic beliefs (P= 0.002).

Conclusion: Overall the findings of the study showed that MBCT can reduce depression and increase self-esteem by enhancing acceptance, reducing rumination, and improving emotional regulation. It is suggested that this method be included in support programs for mothers of children with intellectual disabilities.

Keywords: Depression, Dysfunctional beliefs, Intellectual disabilities, Mindfulness-based cognitive therapy, Self-esteem

Please cite this paper as:
Amiri M, Taheri E, Ataee Karizmeh M, Taheri H. The effectiveness of mindfulness-based cognitive therapy on depression, dysfunctional beliefs, and self-esteem in mothers of children with intellectual disabilities. Journal of Fundamentals of Mental Health 2025 Nov-Dec; 27(6): 389-396. DOI: 10.22038/JFMH.2025.89444.3261

Introduction

This study examined the effect of mindfulness-based cognitive therapy on depression, dysfunctional beliefs, and self-esteem in mothers of children with intellectual disabilities caring for a child with intellectual disabilities, especially for mothers who are the primary caregivers, faces numerous challenges. It has been found that most of these mothers have a clinical level of anxiety, depressive symptoms, and low self-esteem due to their significant caregiving burden.

These mothers spend significantly more time on child-related care than mothers caring for neurotypical children. As a result they

***Corresponding Author:**
Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical Sciences, Mashhad, Iran.
taheriem@mums.ac.ir
Received: Jul. 10, 2025
Accepted: Sep. 30, 2025

experience the highest levels of stress and psychological distress, which can negatively affect mental health (1,2). Additionally, Dysfunctional attitudes represent a core cognitive mechanism that plays a central role in the onset and persistence of mental health challenges in mothers. These negative, deeply rooted thought patterns, often created and reinforced through a complex interplay of personal preferences and life experiences, persistently increase the tendency to interpret everyday situations in a negative and distorted way. As a result, such maladaptive cognitive styles act as a significant catalyst, exacerbating the severity of depressive and anxiety symptoms (3).

Mothers of children with intellectual disabilities face significant psychological distress due to caregiving pressures, including feelings of personal inadequacy and low self-esteem. This often leads to clinical depression and anxiety disorders, which reduce quality of life and exacerbate feelings of helplessness. Without intervention, these symptoms tend to persist and become chronic. However, studies indicate that emotion regulation training can effectively mitigate these issues and enhance psychological well-being in these mothers (4). Therefore, it is necessary to implement psychological interventions aimed at improving the conditions of these mothers, and since Mindfulness-Based Cognitive Therapy (MBCT) focuses on developing a nonjudgmental awareness of cognitive and emotional processes, this therapeutic intervention has shown promise in improving self-esteem and reducing depressive symptoms (5). Therefore, it is necessary to implement psychological interventions aimed at improving the conditions. Various psychotherapy approaches have been used to address the well-documented psychological consequences among mothers of children with intellectual disabilities, specifically depression, anxiety disorders, and lower self-worth. With numerous research proving their clinical efficacy in reducing psychological distress in this susceptible group, mindfulness-based therapies have stood out among the rest.

Several studies have demonstrated that mindfulness training decreases depression in adults (6). Mindfulness-based stress-reduction programs can help patients in managing mental conditions such as anxiety and depression (7). Additionally, clinical investigations demonstrated that both compassion-focused therapy and mindfulness-based cognitive therapy produced noteworthy therapeutic outcomes, such as a decrease in psychological symptoms, a decrease in negative automatic thoughts, and a decrease in the intensity of pain, while also improving quality of life indicators in patients with fibromyalgia syndrome (8). Current research indicates that mindfulness interventions effectively decrease symptoms of depression and anxiety while simultaneously enhancing self-esteem and altering dysfunctional cognitive patterns (9,10). The stressful situations, besides increasing anxiety, depression, and reducing self-esteem, can also negatively impact the social relationships of mothers (11). The prevalence of intellectual disability is a significant concern, affecting an estimated 10 to 15 per 1000 children in developing countries and 1% to 3% of the general population in western societies. Given the high demands and chronic stress associated with caring for a child with intellectual disabilities, mothers of these children are at a substantially increased risk for psychological distress. Studies indicate that without effective intervention, a majority of these mothers experience clinically significant levels of anxiety and depression. This highlights the critical and urgent need for accessible, evidence-based psychological support for this vulnerable population (4). A lower quality of life, social disengagement, marital discord, and long-lasting medical and psychological effects might occur from ignoring these issues. According to the Global Burden of Disease Study 2019, the number of disability-adjusted life years (DALYs) due to mental disorders worldwide increased from 80.8 million in 1990 to 125.3 million in 2019. Moreover, the global percentage of DALYs attributable to these disorders rose from 3.1% in 1990 to 4.9% in 2019 (12,13). These results highlight the urgent need for deeper studies and focused therapies. Thereby, there is an urgent need for extended research on evidence-based therapy, such as mindfulness-based therapies. The main objectives of this study are to determine the extent to which mothers of children with intellectual disabilities benefit from MBCT in the regard of reducing depressive symptoms, changing dysfunctional beliefs, and promoting self-esteem. Therefore, this research effort aims to investigate MBCT as a treatment for psychopathologies in these caregivers.

Materials and Methods

In this cross-sectional study, all mothers of children with intellectual disabilities who visited Mashhad rehabilitation facilities (Mehravaran Rehabilitation Center) were included in the statistical population. A total of 24 mothers who were chosen via convenience sampling. This sample size was defined as appropriate for achieving a statistical power of 0.80 and a significance level of 0.05 in intervention studies, according to scientific recommendations (14). The inclusion criteria were: having a child with intellectual disability who has been definitively diagnosed by rehabilitation centers or their specialist physician, have at least a basic literacy level to understand the concepts of the session, do not report any severe psychiatric disorder based on self-report or treatment history, and do not receive psychological interventions or specific drug treatment for depression in mothers at the same time. Exclusion criteria included absence from more than two therapy sessions, unwillingness to cooperate in completing the questionnaires or withdrawal from participation at any stage, developing a new medical or psychological condition (according to medical records) that interferes with the intervention process, and diagnosis of severe psychiatric disorders during the study based on clinical reports and medical history. The experimental group received MBCT over the course of nine two-hour sessions. No psychological intervention or therapy of any kind was given to the control group. Both groups completed a post-test when the intervention was finished.

Research instruments

A) Demographic Questionnaire: It contains personal data, including age and educational level.

B) Cooper-Smith Self-Esteem Inventory (CSEI): This inventory has 58 items and four subscales: academic (school), family (parents), social (peers), and general (self-esteem). Iranian studies have validated the validity and reliability (15).

C) Beck Depression Inventory-II (BDI-II): This tool measures physical, behavioral, and cognitive symptoms of depression. Every item has a score between 0 and 3. The internal consistency in clinical and non-clinical populations was 0.68 and 0.18, respectively. Furthermore, Dobson and Mohammadkhani's research validated the its validity and factor structure, showing a Cronbach's alpha of 0.92 for outpatients, 0.93 for students, and 0.93 for test-retest reliability over a one-week period (16).

D) Dysfunctional Attitude Scale (DAS): Weissman and Beck (1978) created this measure using Beck's cognitive theory of depression as a basis. Its 26 items are broken down into four subscales: vulnerability–performance evaluation, need for approval, need to please others, and achievement-perfectionism. The DAS has demonstrated good validity and reliability in a selection of studies. Ebrahimi and Mousavi (2012) noticed that the Cronbach's alpha for the internal consistency of the 26-item DAS is 0.92. Also, the validity was confirmed by its significant correlations with other measures, such as the BDI-II, at a confidence level of 0.99 (17).

The researcher first went to the Mehravaran Rehabilitation Center in Mashhad after receiving an introduction letter from the university. Participants were given an explanation of the goals and how to fill out the surveys. In the second phase, a clinical psychologist was present and provided instruction while each participant filled out the questionnaires on their own. The experimental group learned and practiced mindfulness-based skills (18) (Table 1).

Table 1. Structure of mindfulness-based cognitive therapy

Session	Content
1st	Overview and familiarization with the study, as well as instructions on how to fill out the surveys
2st	Training in focusing attention and performing daily activities with full awareness
3st	Recognizing the "wandering mind" and learning how to control that
4st	Using body scanning and other ways to practice controlling the wandering mind
5st	Deep relaxation techniques, such as meditation and mindful breathing techniques, are introduced in session 5
6st	Maintaining mindfulness and strengthening acquired abilities
7st	Learning to accept and fully recognize one's ideas and feelings
8st	Covered identifying symptoms of depression and rumination as well as techniques for enhancing mood and cognitive processes
9st	Developing and putting into practice useful coping mechanisms to deal with day-to-day obstacles

Results

The study sample consisted of a total of 24 mothers of children with intellectual disabilities. The 12 of them were randomly assigned to the experimental group and then 12 to the control group.

An analysis of the age distribution revealed that around one-third (29.2 %) of participants were over 35, while about one-fifth (20.8%) of the participants were younger than 25. Half of the sample was in the 25-35 age range, and the two study groups had comparable percentages. According to the participants' educational backgrounds, the sample's highest level of education was a high school diploma (33.3%), while the lowest was a bachelor's degree (16.7%).

Overall, the demographic information on age and education distribution was approximately balanced, then, allowing for a meaningful comparison of results.

The Kolmogorov-Smirnov test was implemented to determine whether the data distribution was normal. As shown by the analyses, all research variables had significance levels above 0.05. The use of parametric tests like analysis of covariance (ANCOVA) was thus made possible by the confirmation of the normal distribution assumption. We looked at the presumptions required for statistical analysis. The significance level for all research variables was higher than 0.05, showing homogeneity of variances between the experimental and control groups, according to the results of Levene's test, which was used to evaluate the equality of variances. Additionally, the homogeneity of variance-covariance matrices was tested, and a significance level above 0.05 confirmed that the assumption of homogeneity was met, validating the use of multivariate analyses. Both tests verified that parametric analysis assumptions had been satisfied, allowing parametric statistical techniques such as ANCOVA to be applied. Also, the assumption of equal regression slopes was confirmed by the test for homogeneity of regression slopes, which showed there was no significant interaction between the independent variable and the covariate ($P > 0.05$). A substantial linear association between pre-test and post-test scores ($P < 0.05$) was detected when the linearity assumption in regression was verified, supporting the use of ANCOVA. Multivariate tests such as Pillai's trace, Wilks' lambda, Hotelling's trace, and Roy's biggest root were applied to examine how mindfulness-based cognitive therapy affected the dependent variables of the study (depression, dysfunctional beliefs, and self-esteem). These tests indicate a difference at a significant level ($P < 0.05$) between the experimental and control groups. On top of that, the therapeutic intervention had a significant impact on the research variables, as evidenced by the effect size (eta squared, η^2) of 0.642. A summary of the multivariate test results is presented in Table 2.

Table 2. Multivariate test results

Test	Value	F	P	Effect size (Eta²)
Pillai's Trace	0.942	91.784	0.000	0.642
Wilks' Lambda	0.058	91.784	0.000	0.642
Hoteling's Trace	16.197	91.784	0.000	0.642
Roy's Largest Root	16.197	91.784	0.000	0.642

With a substantial effect size, the multivariate tests indicate that MBCT significantly reduced depression symptoms and dysfunctional beliefs while raising self-esteem. Table 3 presents the mean scores of depression, dysfunctional beliefs, and self-esteem for the groups in the pre-test and post-test phases. The experimental group exhibited a notable decrease in depression and dysfunctional beliefs, alongside a significant increase in self-esteem, while the control group showed minimal changes.

Table 3. Summary of the descriptive statistics

Variable	Group	Pre-test (Mean)	Post-test (Mean)
Depression	Control	45.16	44.83
	Experimental	46.25	42.25
Dysfunctional beliefs	Control	118.08	118.08
	Experimental	117.16	112.66
Self-esteem	Control	26.08	26.58
	Experimental	25.58	33.83

Analysis of covariance (ANCOVA) was used to examine the effect of mindfulness-based cognitive therapy on the research variables (depression, dysfunctional beliefs, and self-esteem). All dependent variables showed significant differences between the experimental and control groups ($P< 0.05$) and the effect size (eta squared) showed that the variables were significantly affected by the impact of intervention. Significant improvements in self-esteem and a decrease in depression and dysfunctional beliefs can be shown by mindfulness-based cognitive therapy effects. The intervention had the most impact on self-esteem, followed by dysfunctional beliefs, according to the eta squared values. The ANCOVA evidenced significant differences between the groups ($P< 0.05$) (Table 4).

Table 4. ANCOVA results for depression, dysfunctional beliefs, and self-esteem

Dependent Variable	SS	df	F	P	Eta²
Depression	79.914	1	14.270	0.001	0.429
Dysfunctional Beliefs	118.041	1	74.452	0.000	0.497
Self-Esteem	333.108	1	124.536	0.000	0.568

The adjusted means and 95% confidence intervals (CIs) were computed in order to accurately analyze the impact of mindfulness-based cognitive therapy on depression, dysfunctional beliefs, and self-esteem. The outcomes showed that while self-esteem rose in the experimental group, depression and dysfunctional beliefs declined. The 95% CIs and adjusted averages for the research variables are shown in Table 5.

Table 5. Adjusted means and 95% confidence intervals for research variables

Variable	Group	Adjusted Mean	Std. Error	95% CI (Lower)	95% CI (Upper)
Depression	Control	45.350	0.674	43.949	46.752
	Experimental	41.733	0.674	40.331	43.134
Dysfunctional beliefs	Control	117.700	0.352	116.967	118.433
	Experimental	113.050	0.352	112.317	113.783
Self-esteem	Control	26.412	0.453	25.469	27.355
	Experimental	34.005	0.453	33.062	34.948

According to the findings, the mean score for depression and dysfunctional beliefs in the experimental group significantly decreased. Furthermore, the mean score of self-esteem significantly increased when compared to the control group. Lastly, the 95% confidence interval attests to the statistical significance of the mean difference at an appropriate level. An analysis of covariance (ANCOVA) was applied for each dependent variable to investigate the treatment effect. The findings showed that the experimental and control groups differed significantly ($P< 0.05$) on all subscales of depression, dysfunctional beliefs, and self-esteem) (Table 6). All subscales of depression, dysfunctional beliefs, and self-esteem showed significant differences between the two groups. Social self-esteem and familial self-esteem showed the strongest treatment effect. The cognitive dimension showed the largest change, suggesting that MBCT was highly effective in promoting cognitive changes.

Table 6. ANCOVA results for subscales of depression, dysfunctional beliefs, and self-esteem

Subscale	SS	df	F	P	Eta²
Depression- somatic	8.725	1	5.338	0.032	0.219
Depression- behavioral	12.576	1	6.804	0.017	0.264
Depression- cognitive	5.136	1	7.774	0.012	0.290
Dysfunctional beliefs- perfectionism	13.859	1	13.304	0.002	0.425
Dysfunctional beliefs- approval seeking	11.093	1	12.106	0.003	0.402
Dysfunctional beliefs- Pleasing others	3.157	1	7.152	0.015	0.284
Dysfunctional beliefs- Vulnerability	3.825	1	6.605	0.019	0.268
Self-esteem- general	20.425	1	27.327	0.000	0.603
Self-esteem- social	17.531	1	44.640	0.000	0.713
Self-esteem- family	20.022	1	59.595	0.000	0.768
Self-esteem- academic	20.083	1	39.234	0.000	0.686

Discussion

The findings of this study showed that this intervention significantly improved the self-esteem of these mothers and also reduced their levels of depression and dysfunctional beliefs. These results are in accordance with earlier studies that observed the beneficial effects of mindfulness on increasing mental health, decreasing rumination, and improving cognitive regulation. For instance, the results of a related study on people suffering from depression and intellectual disability carried out in Nigeria are in line with the current findings of the substantial beneficial effects of MBCT in reducing depression (19). The effectiveness of the MBCT as a treatment for vulnerable populations is reinforced by the two trials' consistent demonstration that the intervention significantly reduced depression symptoms and that its benefits persisted at short-term follow-up. However, there are differences in terms of the target group and significant outcomes. The current study employed mothers of children with intellectual disabilities as caregivers and was primarily successful in lowering dysfunctional beliefs and boosting their self-esteem, rather than lowering the child's intellectual disability. In contrast, the Nigerian study concentrated on directly reducing intellectual disability in the affected individuals themselves. This distinction shows the adaptability of the MBCT approach, which may be applied to both manage symptoms in impacted individuals and enhance the mental well-being of those who care for them. The results are further in line with a meta-analysis conducted by Peng Qi et al. which found that parents of autistic children saw notable reductions in stress, anxiety, and depression. The impact of these treatments on the caregiver population is highlighted in both studies. The current study, concentrated on mothers' cognitive-emotional outcomes (dysfunctional beliefs and self-esteem) and did not examine direct effects on children, even though the previously cited meta-analysis also demonstrated improvements in children's social skills. This distinction implies that various target populations wanted different intervention mechanisms (20).

The current findings align similarly with a study by Valizadeh et al. Both studies demonstrated that this intervention enhanced mental health markers and dramatically decreased irrational/dysfunctional beliefs. This concordance supports the effectiveness of MBCT in different populations (both the elderly and mothers of children with intellectual disabilities). Valizadeh et al.'s study focused on the elderly and had a significant impact on happiness, while the present study focused on mothers and improved self-esteem. This distinction could indicate the acceptability of the MBCT intervention in targeting the specific needs of different populations (21). The findings of the present study are also consistent with those of Khalili. In both studies, the intervention significantly reduced depression and improved various psychological indicators in mothers of children with special needs. These findings support the efficacy of MBCT in the caregiver population in the meta-analysis. Despite these findings, the main differences were in the type of child disorder (i.e., autism vs. intellectual disability) and the specific outcomes measured, and both studies emphasize the importance of psychological interventions for promoting caregiver mental health (22). Beck's cognitive model states that stressful events, along with strict standards, perfectionistic inclinations, and dysfunctional beliefs, may lead to disorders such as depression (23). Bahmaei et al. confirmed the role of the mediating mechanism of self-esteem in the relationship between mindfulness and psychological well-being. Therefore, the findings can be considered complementary as an outcome of MBCT and as a mechanism of their effects on psychological well-being (24). Another study suggests that mindfulness-based interventions are even more effective in specifically reducing conditioned (approval-dependent) self-esteem, which is a maladaptive factor (25). Finally, in line with the findings of this study, another study confirmed the effectiveness of both CBT and MBCT interventions. There was no significant difference in efficacy of two approaches, indicating that while MBCT is useful, it may not be necessarily better than conventional CBT in terms of self-esteem. The study thus emphasizes how crucial it is to take into account various treatment alternatives according to each person's unique needs (26).

We concluded that MBCT can reduce depression and dysfunctional beliefs while increased self-esteem in mothers of children with intellectual disabilities. However, limitations include small sample size, lack of follow-up, and reliance on self-report, which

may introduce bias. Therefore, future research could use longitudinal or mixed methods with larger and more diverse samples to other communities to assess long-term effects and generalizability. Incorporating objective measures and providing digital MBCT could further confirm and strengthen the findings and accessibility to individuals.

Conclusion

We concluded that MBCT can reduce depression and increase self-esteem by enhancing acceptance, reducing rumination, and improving emotional regulation. It is suggested that this method be included in support programs for mothers of children with intellectual disabilities.

Conflict of Interest

There were no conflicts of interest.

Funding

Mashhad University of Medical Sciences

Ethical Considerations

The general purpose of the research was stated, and the participating subjects were assured of the confidentiality of the information. The Ethics Committee of Mashhad University of Medical Sciences approved this research.

Code of Ethics

IR.MUMS.MEDICAL.REC.1404.336

Authors' Contributions

The first author supervised the research process and writing the manuscript. The second author participated in the presentation and implementation of the project. The third author participated in the coordination of the activities carried out and the creation of the article. The fourth author participated in the registration and administrative affairs of the project.

References

1. Zaferani Z. [A review of marital conflicts in mothers with intellectual disability children]. Journal of science and engineering elites 2023; 8(3): 1-9. (Persian)
2. Rahbar T, Jahanbani. [Comparison of self-esteem, mental health, and psychological well-being in mothers of children with intellectual disabilities and normal children in Rasht]. Family and health 2022; 33(12):1-14. (Persian)
3. Sockol LE, Epperson CN, Barber JP. The role of dysfunctional attitudes in perinatal depression: A systematic review and meta-analysis. J Affect Disord 2020; 276: 960-68.
4. Alidoosti F, Jangi F, Shojaeifar S. The effectiveness of emotion regulation training based on Gross model on emotion regulation, anxiety and depression in mothers of children with intellectual disability. World J Psychiatry 2020; 10(5): 71-79.
5. Kabat-Zinn J. Coming to our senses: Healing ourselves and the world through mindfulness. New York: Hyperion; 2005.
6. Rezakhani S, Vakili P. [The effectiveness of mindfulness-based stress reduction on depression and aggression in nurses of psychiatric hospital]. Iranian journal of psychiatric nursing 2021; 9(5): 122-32. (Persian)
7. Creswell JD, Lindsay EK, Villalba DK, Chin B. Mindfulness training and physical health: Mechanisms and outcomes. Psychosom Med 2019; 81(3): 224-32.
8. Nejad S, Naghmeh, Bayat MZ. [Comparison of the effectiveness of mindfulness-based cognitive therapy and compassion therapy on negative automatic thoughts, psychological symptoms, pain intensity, and quality of life]. Arak University of Medical Sciences journal 2022; 25(1): 156-73. (Persian)
9. Emam Jomehzadeh VS, Manshaei Gh. [Effectiveness of mindfulness-based therapy on the self-esteem of mothers of children with ADHD]. Mashhad University of Medical Sciences journal 2023; 65(6): 2586-96. (Persian)
10. Sadeghi A, Sajadian I, Nadi MA. [Comparison of the effectiveness of compassion-focused mindfulness and mindfulness-based cognitive therapy on dysfunctional attitudes, self-control, and mental health]. Positive psychology research journal 2020; 6(1): 31-48. (Persian)
11. Ara S, Khanbabayi M. [The effect of spiritual skills training on improving quality of life and hope in mothers of children with intellectual disabilities]. Journal of exceptional individuals psychology 2020; 10: 161-80. (Persian)
12. Global Mental Disorder Collaborators. Global, regional, and national burden of 12 mental disorders in 204 countries and territories, 1990-2019: A systematic analysis for the Global Burden of Disease Study 2019. Lancet Psychiatry 2022; 9(2): 137-50.
13. Sadock BJ, Sadock VA. Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry. 10th ed. Tehran: Arjmand; 2007.
14. Charan J, Biswas T. How to calculate sample size for different study designs in medical research? Indian J Psychol Med 2013; 35(2): 121-6.
15. Sabet M, Houman H. [Scientific evaluation of reliability, validity, and test software issue of self-esteem in 19 districts of Tehran]. MS. Dissertation. Tehran: Allameh Tabatabai University, 2007: 13-7. (Persian)

16. Miri M, Vaziri A, Zadeh S, Rad M. [Effectiveness of acceptance and commitment therapy on depression and anxiety in patients with hypertension]. Qom University of Medical Sciences journal 2021; 15(1): 66-75. (Persian)
17. Ebrahimi A, Mousavi G. [Development and validation of the 26-item Dysfunctional Attitudes Scale (DAS-26): Factorial structure, reliability, and validity in psychiatric outpatients]. Ilam University of Medical Sciences journal 2013; 21(5): 20-8. (Persian)
18. Zarboock G, Lynch S, Aman A, Ringer Z. [Mindfulness for therapists: A deeper understanding of mindfulness for improving professional performance and personal well-being]. Dehghani A. (translator). Tehran: Arjmand; 2024. (Persian)
19. Zulkiflu AM, Soh KL, Mukhtar F, Soh KY, Oladele TO, Soh KG. Effectiveness of mindfulness-based cognitive therapy among depressed individuals with disabilities in Nigeria: A randomized controlled trial. Psychiatry Res 2021; 296: 113680.
20. Peng Q, Dong Y, Jin J, Ao H, Zhang C, Ma Y. The effectiveness of mindfulness-based interventions for children with autism and their parents: A systematic review and meta-analysis. Front Psychol 2025; 16: 1526001.
21. Valizadeh H, Parandyn Sh. [The effectiveness of mindfulness-based cognitive therapy on irrational beliefs and happiness in the elderly]. Journal of aging psychology 2022; 8(1): 11-24. (Persian)
22. Khalili S, Parandavar K, Khorsand Moafi N, Mohammadi S. [The effectiveness of cognitive therapy based on mindfulness on depression and psychological flexibility of mothers with autistic children]. Rooyesh-e-Ravanshenasi journal 2024; 13(3): 245-54. (Persian)
23. Beck AT. Cognitive therapy and the emotional disorders. New York: International Universities Press; 1976: 356.
24. Bahmei S, Keshavarz Kondazi E, Zarei R, Zaratkar M. [Mindfulness and psychological well-being: The mediating role of self-esteem]. Journal of educational and learning studies 2024; 15(2): 166-43. (Persian)
25. Luna S, Rodríguez-Carvajal R. The predominant effect of a mindfulness intervention on contingent over explicit self-esteem and the key role of self-compassion. [cited 2025 Aug 25]. Available from: https://doi.org/10.1080/15298868.2025.2451794
26. Yousafian P. [Comparison of the effectiveness of group-based mindfulness cognitive therapy and cognitive-behavioral therapy on self-esteem in female students]. Journal of fundamentals of mental health 2013; 15: 205-15. (Persian)