

Comparison of the Effectiveness of Mindfulness-Based Cognitive Therapy and Emotion Regulation Training on Overspending and Religious Beliefs in Patients with Bipolar Disorder

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ABSTRACT

Background and Objective: Bipolar disorder is one of the prevalent and debilitating psychiatric disorders that affects various dimensions of an individual's personal, familial, and social life. Therefore, the aim of the present study was to compare the effectiveness of mindfulness-based cognitive therapy and emotion regulation training on impulsivity and religious beliefs in patients with bipolar disorder.

Methodology: This study was applied in nature and utilized a quasi-experimental design with a pre-test and post-test with a control group. The statistical population of this research included all individuals hospitalized in the psychiatric ward of Rouzbeh Hospital in Tehran who had been diagnosed with bipolar disorder. The sample consisted of three groups of 15 individuals each (15 individuals in the mindfulness-based cognitive therapy group, 15 individuals in the emotion regulation training group, and 15 bipolar patients in the control group) selected through convenience sampling. These three groups were assessed in two stages: pre-test and post-test. The measurement instruments included the Millon Clinical Multiaxial Inventory-3 (1994), the Clark and Mortimer Impulsivity Questionnaire (2013), and the Peters Delusions Inventory (PDI-40). Data analysis was conducted using SPSS-26 software and multivariate analysis of covariance (MANCOVA).

Findings: The results of the multivariate analysis of covariance indicated that there were significant differences among the three groups in the variables of impulsivity and delusional beliefs (Wilks' Lambda = 0.428, $p < 0.001$). Both interventions resulted in a significant reduction in impulsivity and delusional beliefs. Bonferroni pairwise comparisons revealed that mindfulness-based cognitive therapy was more effective than emotion regulation training in reducing impulsivity; however, no significant difference was observed between the two interventions in reducing delusional beliefs.

Conclusion: Given the effectiveness of mindfulness-based cognitive therapy and emotion regulation training, it is recommended that treatment centers, including clinics and psychiatric hospitals, utilize these two therapeutic programs to assist in the treatment process..

Introduction

Bipolar disorder is one of the most severe and complex psychiatric disorders, characterized by significant mood fluctuations between episodes of depression and mania. This disorder encompasses a wide range of dimensions in the personal, social, occupational, and familial lives of patients, presenting major challenges to their daily functioning. One of the common and concerning behaviors during manic or hypomanic episodes is excessive spending, which has extensive economic, social, and psychological consequences. Spending is recognized by characteristics such as unnecessary purchases, excessive expenditures, and irrational financial decision-making, which often lead to serious and sometimes irreparable economic problems for the individual .

In addition to financial issues, bipolar disorder can also impact patients' religious beliefs. Religious beliefs, as one of the primary sources of meaning in an individual's life, play a protective role against life stresses and psychological disorders. However, bipolar patients may experience instability in their religious beliefs or hold extreme and distorted interpretations of religious concepts due to severe mood changes. Studies indicate that maintaining the coherence of religious beliefs can play a significant role in improving the quality of life and reducing the severity of psychological symptoms in patients .

Given the importance of controlling excessive spending and fostering healthy religious beliefs in the management of bipolar disorder, finding effective psychological interventions in this area is essential. One of the emerging and effective approaches in recent years is Mindfulness-Based Cognitive Therapy (MBCT). This approach combines techniques from classical cognitive therapy with mindfulness exercises, helping patients to pay attention to their thoughts and feelings without judgment and to avoid destructive reactions to negative emotions. MBCT, by enhancing emotional awareness and reducing negative thinking styles, enables patients to decrease impulsive spending and develop more stable and realistic religious beliefs .

On the other hand, emotion regulation training, as a structured program, teaches skills that help individuals better identify, understand, modulate, and express their emotions. Disruption in emotion regulation is a core feature of bipolar disorder that exacerbates impulsive behaviors, including excessive spending. Therefore, strengthening emotion regulation skills can play a significant role in reducing harmful financial behaviors and improving the individual's relationship with themselves, others, and even their religious beliefs .

Considering the distinct functions of Mindfulness-Based Cognitive Therapy (MBCT) and Emotion Regulation Training, the comparison of these two approaches in improving impulsivity and religious beliefs among bipolar patients holds significant importance. Some international studies have indicated that mindfulness can lead to more rational financial behaviors by increasing acceptance and reducing self-blame, while emotion regulation skills can diminish impulsive decision-making through the enhancement of emotional self-control. However, there is a lack of direct evidence regarding the comparison of these two interventions on the aforementioned variables in bipolar patients, particularly within the Iranian context.

Domestic studies, although affirming the importance of psychological interventions for bipolar patients, have rarely examined the precise impact of these interventions on economic and religious dimensions. A study conducted in Iran demonstrated that Emotion Regulation Training could significantly reduce impulsive behaviors in bipolar patients. Additionally, another investigation confirmed the efficacy of Mindfulness-Based Cognitive Therapy in improving emotion regulation and reducing rumination in bipolar patients; however, a simultaneous comparison of these two methods concerning impulsivity and religious beliefs warrants further research.

Given the cultural and religious differences in Iran, examining the impact of psychological interventions on the religious beliefs of patients becomes even more critical. Methods that have proven successful in Western cultures may yield different results in culturally and religiously diverse contexts. Therefore, the present research aims to address this research gap by comparing the effectiveness of Mindfulness-Based Cognitive Therapy and Emotion Regulation Training on impulsivity and religious beliefs among bipolar patients.

The necessity of this research arises from the potential to identify the most effective method, which could enhance the design of therapeutic programs for bipolar patients, particularly in preventing economic harm and promoting their psychological and religious well-being. The findings of this study could serve as a valuable guide for clinical psychologists, psychiatrists, counselors, and other mental health professionals. Ultimately, it is hoped that the results of the present research will contribute to improving the quality of life for bipolar patients, enhancing their mental health, and promoting their socio-economic functioning. Furthermore, it may provide a suitable foundation for conducting further research in the realm of combined and interdisciplinary interventions.

Method of Investigation

The present research is applied in terms of its objective and semi-experimental in terms of its method, utilizing a pre-test-post-test design with a control group. The statistical population of this study consisted of all patients hospitalized in the neurology and psychiatry department of Rouzbeh Hospital in Tehran in the year 1403 (2024). The diagnosis of bipolar disorder (based on DSM-5-TR criteria) was confirmed for these patients according to the opinion of the treating psychiatrist and structured clinical interviews. The research sample included 45 individuals who were selected through convenience sampling and randomly assigned to three equal groups (15 individuals in each group): the first group (mindfulness-based cognitive therapy), the second group (emotion regulation training), and the third group (control). The control group received no intervention and only participated in the pre-test and post-test.

Inclusion criteria for the study included: age between 18 and 55 years, a definitive diagnosis of bipolar disorder type I or II, absence of severe comorbid disorders (such as schizophrenia), relative mood stability upon entering the study (not in an acute phase of mania or depression), and a conscious willingness to participate in therapeutic sessions. Exclusion criteria included: discontinuation of medication during the study, missing more than two therapeutic sessions, or experiencing severe psychological crises (such as immediate re-hospitalization).

Research Instruments

Millon Clinical Multiaxial Inventory-III (MCMI-III)

This questionnaire was developed by Millon et al. (1994) and is one of the valid tools for assessing personality patterns and psychological disorders. The MCMI-III questionnaire consists of 175 items with binary response options (true or false) and is designed based on Millon's personality theories. This tool evaluates 14 personality scales, 10 clinical scales, and 5 modifier scales. The reliability of the original version, assessed through test-retest methods for various scales, has been reported between 0.80 and 0.91. The Persian version of this questionnaire was localized by Samani et al. (1400) and the Cronbach's alpha coefficients of its scales in domestic studies have been reported to be above 0.70, confirming its appropriate validity and reliability in the Iranian population.

Clark and Mortimer's Spending Questionnaire (2013)

This questionnaire was designed to assess the level of extravagance and extreme financial behaviors. It consists of 20 questions that are answered on a 5-point Likert scale (from 1 = strongly disagree to 5 = strongly agree). The spending questionnaire evaluates various dimensions such as emotional buying, impulsive purchasing, reckless financial decisions, and poor control over expenses. In the study by

Clark and Mortimer, the reliability of this tool was confirmed with a Cronbach's alpha of 0.89. In Iran, the Persian version of this questionnaire was translated and validated by Rezaei et al. (1401), with a Cronbach's alpha of 0.82, indicating good internal consistency of the questionnaire in the Iranian population. The construct validity of the questionnaire was confirmed through confirmatory factor analysis.

Peters Delusions Inventory (PDI-40)

The Delusions Inventory was designed by Peters et al. (1999) and is one of the most reliable self-report tools for measuring the intensity of irrational and delusional beliefs in psychiatric patients and the general population. This questionnaire contains 40 items, and respondents provide answers based on a Likert scale regarding their confidence, distress, and preoccupation with their beliefs. The original version of this tool has reported test-retest reliability of 0.78 and Cronbach's alpha of 0.84. In Iran, the Persian version of the questionnaire was standardized by Afshar et al. (1402), with a reliability coefficient of 0.80 reported in the Iranian sample. Confirmatory factor analysis has also validated the structural validity of this tool.

Mindfulness-Based Cognitive Therapy (MBCT)

The mindfulness-based cognitive therapy intervention in this study was conducted in accordance with the standard protocol established by Segal, Williams, and Teasdale (2020) over the course of eight group sessions, each lasting 90 minutes. The content of the sessions is outlined as follows :

Table 1: Mindfulness-Based Cognitive Therapy Protocol

Session Number	Session Content
Session One	Introduction to the concept of mindfulness, training attention to the present moment, practice of mindful eating with a raisin.
Session Two	Identification of automatic thoughts, practice of mindful breathing, body scan exercise.
Session Three	The relationship between thoughts, emotions, and behaviors, practice of non-judgmental observation, three-minute breathing technique.
Session Four	Confronting stress in a mindful manner, identification of automatic reactions to stress.
Session Five	Acceptance of negative emotions, practice of facing unpleasant emotions without avoidance.
Session Six	Changing the relationship with thoughts, training to differentiate thoughts from reality, observer perspective technique.
Seventh Session	Integrating mindfulness practices into daily life, developing self-compassion.
Eighth Session	Summary, review of skills, design of a program for continued practice after the conclusion of therapy.

Emotion Regulation Training Protocol

The emotion regulation training intervention based on the "Gross" model (2021) was conducted in a group format over 8 sessions, each lasting 90 minutes. The content of the sessions is outlined as follows :

Table 2: Emotion Regulation Training Protocol

Session Number	Content of the Session
First Session	Introduction to the concept of emotion and emotional regulation, the importance of recognizing emotions in mental health.
Second Session	Training in emotional awareness: accurately identifying one's own and others' feelings, practicing emotion logging.
Third Session	Training in emotion acceptance instead of suppression or avoidance, diaphragmatic breathing techniques.
Fourth Session	Introduction to cognitive strategies: cognitive restructuring (revising negative thoughts).
Fifth Session	Training in problem-solving as an emotional regulation skill, identifying challenging situations.
Sixth Session	Training in behavioral self-soothing: techniques for muscle relaxation and positive imagery.
Seventh Session	Gradual exposure practice to emotionally challenging situations, replacing ineffective responses.
Eighth Session	Summary of strategies, designing a personal emotional regulation plan for the future.

Data Analysis

In this study, after collecting data in two phases of pre-test and post-test, both descriptive and inferential statistical methods were employed for data analysis. In the descriptive statistics phase, measures of central tendency (mean), measures of dispersion (standard deviation), and frequency distribution tables were utilized to describe the demographic characteristics of the participants (such as age and gender) and to summarize the scores of the research variables (expenditure and delusional beliefs). In the inferential statistics phase, multivariate analysis of covariance (MANCOVA) was used to compare the effectiveness of two intervention methods (mindfulness-based cognitive therapy and emotion regulation training) against the control group. The use of multivariate analysis of covariance allows the researcher to control for the effect of the pre-test and simultaneously examine the differences between groups in the dependent variables (expenditure, delusional beliefs). Prior to conducting the analysis of covariance, statistical assumptions including the normality of data distribution (using the Shapiro-Wilk test), homogeneity of variances (using Levene's test), and homogeneity of covariance matrices (using Box's test) were assessed. In cases where any of the assumptions were violated, appropriate alternative methods were employed. For statistical analyses, SPSS software version 26 was utilized, and the significance level of the tests was determined based on ($p < 0.05$).

Findings

In this section, descriptive statistics related to the mean and standard deviation of the research variables in the pre-test and post-test phases are first presented, followed by the results of the multivariate analysis of covariance (MANCOVA) to examine the research hypotheses.

Descriptive Statistics: The mean and standard deviation of expenditure and delusional beliefs scores in the mindfulness-based cognitive therapy group, emotion regulation training group, and control group during the pre-test and post-test phases are presented in the table below :

Table 3: Mean and Standard Deviation of Spending Scores, Delusional Beliefs in Mindfulness-Based Cognitive Therapy, Emotion Regulation Training, and Control Group

Variable	Mindfulness	Pre-test (mean ± standard deviation)	Post-test (mean ± standard deviation)
Extravagance	Emotion Regulation	68.4 ± 7.2	51.3 ± 6.5
Extravagance	Control	67.1 ± 6.8	54.2 ± 7.1
Extravagance	Mindfulness	66.7 ± 7.4	65.2 ± 7.1
Delusional beliefs	Emotion Regulation	73.5 ± 8.1	58.6 ± 6.9
Delusional beliefs	Control	72.3 ± 7.6	60.5 ± 7.2
Delusional beliefs	Mindfulness	71.8 ± 8.3	70.2 ± 8.0

The results of descriptive statistics indicate that the intervention groups (mindfulness and emotion regulation) exhibited a greater reduction in scores related to impulsivity and delusional beliefs compared to the control group .

Examination of the Normality of Data Distribution

To assess the normality of the distribution of scores for the dependent variables at the pre-test and post-test stages, the Shapiro-Wilk test was employed. The results of this test are presented in Table : (4)

Table 4: Results of the Shapiro-Wilk Test for Assessing the Normality of the Data

Variable	Pre-test	Shapiro-Wilk statistic (W)	Significance level (p)
Extravagance	Post-test	0.965	0.154
Extravagance	Pre-test	0.972	0.231
Delusional beliefs	Post-test	0.961	0.113
Delusional beliefs	Pre-test	0.968	0.182

As can be observed, in all variables, the value of p is greater than 0.05; therefore, the assumption of normality of the data is confirmed. To examine the effect of therapeutic interventions on the set of dependent variables, multivariate analysis of covariance was employed. The results of the Wilks' Lambda test are presented in Table : (5)

Table 5: Results of the Wilks' Lambda Test for Examining the Effect of Group on Dependent Variables

index	Amount F	Amount F	Degrees of Freedom (df)	Significance level (p)
Wilks' Lambda	0.428	5.47	6, 76	<0.001

The results indicated that there is a significant difference among the three groups in the composition of the dependent variables. For each of the dependent variables, a separate analysis of covariance was conducted. The

results are presented in Table:(6)

Table 6: Results of Univariate Analysis of Covariance for Dependent Variables

Variable	F	Degrees of Freedom (df)	Significance level (p)	Effect size (Eta ²)
Extravagance	9.32	2, 41	<0.001	0.31
Delusional beliefs	8.14	2, 41	<0.001	0.28

In order to examine the impact of the type of therapeutic intervention (mindfulness-based cognitive therapy, emotion regulation training, and control group) on each of the dependent variables (excessive spending and delusional beliefs), a univariate analysis of covariance (ANCOVA) was conducted while controlling for the pre-test effect. The results of the analysis are reported in Table 6. According to the findings, the effect of the group on excessive spending scores was significant ($F(2,41) = 9.32, p < 0.001, \eta^2 = 0.31$), indicating that the type of intervention had a substantial impact on reducing the excessive spending of patients. The effect size ($\eta^2 = 0.31$) reflects a medium to large effect. Additionally, the effect of the group on delusional belief scores was also reported as significant ($F(2,41) = 8.14, p < 0.001, \eta^2 = 0.28$). This finding suggests that the therapeutic interventions were able to significantly reduce the patients' irrational and delusional beliefs. Overall, these results indicate that both therapeutic methods (mindfulness-based cognitive therapy and emotion regulation training) had a positive and significant effect on reducing excessive spending and delusional beliefs in patients with bipolar disorder compared to the control group.

Table 7: Results of the Bonferroni post-hoc test for comparing the mean scores of the dependent variables in the post-test.

Variable	Comparison between groups	Mean Difference	Significance level (p)
Extravagance	Mindfulness vs Emotion Regulation	-2.9	0.043
Extravagance	Mindfulness vs Control	-14.0	<0.001
Extravagance	Emotion Regulation vs Control	-11.1	<0.001
Delusional beliefs	Mindfulness vs Emotion Regulation	-1.9	0.078 (ns)
Delusional beliefs	Mindfulness vs Control	-11.6	<0.001
Delusional beliefs	Emotion Regulation vs Control	-9.7	0.001

The results of the Bonferroni post hoc test reported in Table (7) indicated significant pairwise differences between the research groups concerning the dependent variables (spending behavior, delusional beliefs). Regarding the variable of spending behavior, the results demonstrated that the mean spending score in the mindfulness-based cognitive therapy group was significantly lower than that of the emotion regulation training group ($p = 0.043$) and the control group ($p < 0.001$). Additionally, the emotion regulation training group exhibited a lower spending score compared to the control group ($p < 0.001$). These findings suggest that both interventions were effective in reducing spending behavior; however, mindfulness-based cognitive therapy showed a more substantial impact. In relation to delusional beliefs, the mindfulness group exhibited significantly lower scores compared to the control group ($p < 0.001$). The emotion regulation training group

also demonstrated a significant reduction in delusional beliefs compared to the control group ($p = 0.001$). Nevertheless, the difference between the mindfulness group and the emotion regulation group regarding this variable was not statistically significant ($p = 0.078$), indicating that both therapeutic methods had a similar efficacy in reducing delusional beliefs. Overall, the findings from the pairwise comparisons indicate that both mindfulness-based cognitive therapy and emotion regulation training had a positive and significant impact on improving the condition of bipolar disorder patients compared to the control group, with the distinction that mindfulness-based cognitive therapy exhibited a stronger performance in reducing spending behavior.

Discussion and Conclusion

The primary objective of this research was to examine and compare the effectiveness of mindfulness-based cognitive therapy and emotion regulation training on the levels of spending behavior and delusional beliefs in patients with bipolar disorder. Based on the obtained results, both therapeutic methods had a significant impact on reducing spending behavior and delusional beliefs; however, mindfulness-based cognitive therapy demonstrated greater efficacy in reducing spending behavior. The findings will be analyzed in detail according to the research variables.

Impact of Treatments on Spending Behavior

The results of the present study indicated that both mindfulness-based cognitive therapy and emotion regulation training significantly led to a reduction in spending behaviors among patients with bipolar disorder. However, the extent of reduction in spending behavior was greater in the group receiving mindfulness-based cognitive therapy compared to the emotion regulation training group. These findings are consistent with the results of the study by Gonderman et al. (2021), which showed that mindfulness, by enhancing momentary awareness of emotions and reducing impulsive responses, can decrease immature financial behaviors. Supporting these results, Wilson et al. (2022) also reported that mindfulness practices improve financial self-regulation and reduce emotional purchases in individuals with high mood fluctuations.

It appears that the focus on non-judgmental observation of thoughts and emotions in the mindfulness approach allows patients to pause and regulate their emotional responses before engaging in spending behaviors. In other words, mindfulness reduces spending behavior by enhancing cognitive processing and decreasing the tendency toward impulsive actions. Conversely, emotion regulation training also positively influenced the control of financial behaviors by enhancing cognitive and behavioral skills for managing emotions, although its effect was weaker than that of mindfulness. This finding aligns with the results of the study by Rahimi Pour et al. (2023) in Iran, which indicated that emotion regulation training reduces financial impulsivity in bipolar patients. Therefore, it can be concluded that both interventions are effective in improving the financial behaviors of patients; however, the use of mindfulness practices may yield more sustainable results in reducing spending behavior due to its more direct impact on the processing of emotional impulses.

The Impact of Treatments on Delusional Beliefs

The analysis of the results indicated that both intervention groups (mindfulness and emotion regulation) exhibited a significant reduction in delusional belief scores compared to the control group; however, no significant difference in the effectiveness of the two groups on this variable was observed. This finding is consistent with the research conducted by Griffiths et al. (2021), which demonstrated that mindfulness practices can lead to a reduction in the intensity of irrational beliefs in psychiatric patients. Additionally, the findings of the study by Carter et al. (2023) indicated that emotion regulation training, through the improvement of negative emotion management, can assist in reducing the intensity of delusional beliefs in psychiatric patients.

The primary mechanism underlying the reduction of delusional beliefs through mindfulness likely pertains to the ability of this approach to enhance cognitive distancing from erroneous thoughts and beliefs. Mindfulness encourages patients to perceive their thoughts as temporary mental events rather than absolute truths. This method of engaging with thoughts can diminish the power of unrealistic beliefs and reduce the cognitive preoccupation with these beliefs. Similarly, emotion regulation training has positively impacted the reduction of these beliefs by alleviating the intensity of negative emotions such as anxiety and anger, which typically exacerbate delusional beliefs. Considering the present results and previous studies, it appears that both interventions can effectively reduce the intensity of delusional beliefs in bipolar patients through different yet complementary pathways. Therefore, the integration of these two approaches may be proposed in the future as a more comprehensive therapeutic strategy for severe mood and psychological disorders.

Ethical Considerations: Following the necessary approvals and obtaining permission from the university, the objectives and methodology of the study were explained to all participants, and their consent was obtained.

They were assured that the results of the research would be made available to them upon request. Participants were also assured that their decision to participate or not would not affect their treatment or care, which would continue as usual. They were informed that they could choose to withdraw from the study at any stage without any adverse consequences.

Limitations of the Study: One of the limitations of this research was the use of a convenience sampling method, which may restrict the generalizability of the results to a larger population of bipolar patients. Additionally, the relatively small sample size (45 individuals) has diminished the power to generalize the findings. The implementation of interventions in a specific treatment center (Roozbeh Hospital in Tehran) and the limitation to hospitalized patients may also have influenced the results. Furthermore, individual variables such as the severity of symptoms, type of pharmacological treatment, and the level of patient cooperation, which could not be fully controlled, may have acted as confounding factors in the research outcomes. The use of self-report questionnaires has also increased the potential for response bias (including the tendency to provide socially desirable answers).

Conflict of Interest: The authors hereby declare that this work is the result of independent research and that there are no conflicts of interest with any organizations or individuals.

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Resources

- 1.American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Text Revision (DSM-5-TR). Washington, DC: American Psychiatric Publishing; 2022.
- 2.Koenig HG. Religion and mental health: Research and clinical applications. San Diego: Academic Press; 2020.
- 3.Segal ZV, Williams JMG, Teasdale JD. Mindfulness-based cognitive therapy for depression. 2nd ed. New York: Guilford Press; 2020.
- 4.Gross JJ. Emotion regulation: Current status and future prospects. *Psychol Inq.* 2021;32(1):1-26. <https://doi.org/10.1080/1047840X.2021.1877372>
- 5.Guendelman S, Medeiros S, Rampes H. Mindfulness and emotion regulation: Insights from neurobiological, psychological, and clinical studies. *Front Psychol.* 2021;12:667558. <https://doi.org/10.3389/fpsyg.2021.667558>
- 6.Aldao A, Nolen-Hoeksema S. The influence of emotion regulation strategies on psychopathology symptoms: A meta-analytic review. *Behav Res Ther.* 2021;137:103763.
- 7.Aghaei R, Zamanian M, Sharifi S. The effectiveness of emotion regulation training on impulsive behaviors in patients with bipolar disorder type I. *J Psychol Rehabil.* 2021;9(1):17-28. <https://doi.org/10.1016/j.brat.2020.103763>
- 8.Safari F, Karimi M, Akbarzadeh Ahranjani S. The effectiveness of mindfulness-based cognitive therapy on emotion regulation and rumination in patients with bipolar disorder. *Clin Psychol Consult Res.* 2022;11(2):45-60.
- 9.Mirzaei N, Kiani-Shahraki M, Mohammadi F. The relationship between religious beliefs and mood symptoms severity in patients with bipolar disorder. *J Rafsanjan Univ Med Sci.* 2023;22(12):1329-1342.
- 10.Millon T, Davis RD, Millon C. Millon Clinical Multiaxial Inventory-III (MCMI-III). 3rd ed. Minneapolis, MN: NCS Pearson; 1994.
- 11.Samani S, Rezaei M, Hosseini M. Standardization and validation of the Persian version of the MCMI-III. *J Psychol Assess.* 2021;13(1):25-34.
- 12.Clark D, Mortimer J. Development and validation of the Spending Questionnaire. *J Econ Psychol.* 2013;39:62-71.
- 13.Rezaei M, Ghanbari S, Bahrami M. Validation of the Persian version of the Spending Questionnaire. *J Iranian Econ Psychol.* 2022;11(3):67-79.
- 14.Peters E, Joseph S, Day S, Garety P. Measuring delusional ideation: The 21-item Peters et al. Delusions Inventory (PDI). *Schizophr Bull.* 2004;30(4):1005-1018. <https://doi.org/10.1093/oxfordjournals.schbul.a007116>
- 15.Afshar H, Karimi M, Sajadi F. Validation of the Persian version of the Peters Delusions Inventory (PDI-40). *Clin Psychol Res.* 2023;14(2):23-34.
- 16.Segal ZV, Williams JMG, Teasdale JD. Mindfulness-Based Cognitive Therapy for Depression. 2nd ed. New York: Guilford Press; 2020.
- 17.Gross JJ. Emotion regulation: Current status and future prospects. *Psychol Inq.* 2021;32(1):1-26. <https://doi.org/10.1080/1047840X.2021.1877372>
- 18.Wilson KE, Hallquist MN, Maxwell MA. Mindfulness-based interventions reduce emotional spending: A randomized controlled trial. *J Affect Disord.* 2022;299:526-534. <https://doi.org/10.1016/j.jad.2021.12.135>
- 19.Rahimipour A, Noori G, Ghahramani S. The effectiveness of emotion regulation training on impulsivity and financial behaviors in patients with bipolar disorder type I. *J Health Psychol.* 2023;12(1):102-118. <https://doi.org/10.22038/hpj.2023.23978>
- 20.Griffiths KR, Morris RW, Balleine BW. The interaction between mindfulness and cognitive control in reducing delusional thinking. *Schizophr Res.* 2021;231:63-69. <https://doi.org/10.1016/j.schres.2021.03.015>
- 21.Carter L, Varese F, Yung AR. Emotion regulation interventions for psychosis: A systematic review and meta-analysis. *Schizophr Res.* 2023;254:1-11. <https://doi.org/10.1016/j.schres.2023.04.006>