

# Comparison of the Effectiveness of Mindfulness-Based Cognitive-Behavioral Therapy and Reality Therapy on Emotional Regulation and Self-Efficacy in Women Seeking Divorce

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### ABSTRACT

**Objective:** This study aimed to compare the effectiveness of mindfulness-based cognitive-behavioral therapy and reality therapy on emotional regulation and self-efficacy among couples seeking divorce.

**Methods and Materials:** The present research was a quasi-experimental study with a pre-test, post-test, and follow-up design, including a control group. The population consisted of all couples seeking divorce referred by the judiciary to the psychodynamic center of Jolfa city from spring to winter 2021. The sample comprised 60 individuals chosen through purposive sampling and randomly assigned to three groups of 20. Following sampling, two experimental groups received either group mindfulness-based cognitive-behavioral therapy in eight 90-minute sessions (weekly) or group reality therapy in eight 90-minute sessions (weekly), while the control group received no intervention. Data were collected using the Garnefski and Kraaij Cognitive Emotion Regulation Questionnaire (CERQ-P-short) and the Sherer Self-Efficacy Questionnaire (DCI-SF). Data analysis was performed using mixed repeated measures ANOVA and Bonferroni post-hoc tests with SPSS version 24.

**Findings:** The findings indicated that there was a significant difference between the overall means of emotional regulation and self-efficacy in both the mindfulness-based cognitive-behavioral therapy and reality therapy groups, with mindfulness-based cognitive-behavioral therapy having a greater impact on emotional regulation and self-efficacy ( $P < 0.05$ ).

**Conclusion:** Based on the results obtained, both mindfulness-based cognitive-behavioral therapy and reality therapy are effective in improving emotional regulation and self-efficacy among women seeking divorce. However, it can be said that mindfulness-based cognitive-behavioral therapy is preferable to reality therapy.

**Keywords:** Emotional regulation, self-efficacy, mindfulness-based cognitive-behavioral therapy, divorce, reality therapy.

## 1. Introduction

The family is considered the smallest and most vital unit of society that can positively or negatively affect its members. Previous research has shown that divorce is one of the detrimental effects on a family, potentially reducing individual and family well-being and increasing mental health risks for its members (Khalili et al., 2022). This multifaceted phenomenon can lead to the development and exacerbation of physical and psychological disorders among individuals, including neurological, cognitive, emotional, and behavioral diseases (Hald et al., 2020). Divorce/separation, as a common outcome of marital life failure, creates emotional disorders for one or both spouses. In other words, divorce is a process that starts with the emotional crisis of both spouses and ends with efforts to resolve differences by entering a new situation with new roles and lifestyles (Navabinejad et al., 2024; Parsakia & Darbani, 2022). Recently, the divorce rate worldwide has increased rapidly due to fast social, economic, and cultural developments, even in religious countries with significant social and legal barriers to divorce, such as Iran (Ammari et al., 2023; Heggeness, 2020; Icick et al., 2020). On the other hand, marital conflicts and the resulting failures in the family system are a fundamental social issue with many negative effects on individuals, families, and society. Deciding to end marital life brings many problems to the family organization, family functioning, and family member relationships, endangering family members' health and ultimately leading to family separation (Shavandi & Veshki, 2021).

In this context, divorced individuals, especially women, face high social and cultural pressure that can endanger their mental health and lead to psychological issues such as depression, anxiety, and emotional disorders (Fatollahzadeh et al., 2018). The psychological dimensions of divorce are of great importance (Gähler, 2006). One of the challenges that women face during and after the divorce process is the inability to regulate emotions. A significant difference in mental health and emotional regulation has been observed between divorced women and married women (Ghorbani Amir et al., 2019; Rathi & Pachauri, 2018). Previous research has shown that initiating divorce and divorce itself are associated with lower levels of mental health and difficulty in regulating emotions among women (Mahmoudpour et al., 2021; Yekta et al., 2022).

Gross (2007) defines emotion regulation as the process by which individuals influence their own emotions, how they experience, and express them. Proper management and

regulation of emotions are considered foundations of well-being and psychological health, employing conscious or unconscious (automatic or controlled) processes to increase, maintain, or decrease one or more components of the emotional response (Gross & Thompson, 2007). Frye and colleagues (2020) and Mahmoudpour and colleagues (2021) have investigated the impact of emotion regulation ability and its effect on marital satisfaction and quality of life, showing that difficulty in emotion regulation is negatively associated with marital satisfaction and quality of life in both women and men (Frye et al., 2020; Mahmoudpour et al., 2021). This highlights the importance of effective methods to enhance these characteristics and the need to examine these solutions.

At different stages of life, we may face situations that challenge our cognitive and psychological abilities. These abilities help individuals find the necessary strategies to cope with challenges like marital conflicts. One such ability is self-efficacy, initially developed by Bandura (1977). Self-efficacy is an individual's cognitive state regarding whether they can perform the necessary behaviors to achieve a desired outcome (Bandura, 1977, 1982). Self-efficacy can also be considered as an individual's confidence in their capability within a specific domain (Asadpour & Sadat Hosseini, 2018; Parsakia et al., 2023). Self-efficacy applied to marital relationships is a way to conceptualize an individual's confidence in their ability to perform relationship-affirming behaviors such as open communication with a spouse, providing support and care, and/or controlling emotions and anger (Mashal pour fard et al., 2016). Additionally, research by Nabavi and colleagues (2017) has shown that self-efficacy is related to marital satisfaction and mental health in couples, and a lack of mental health affects marital satisfaction (Nabavi et al., 2017).

The cognitive-behavioral therapy approach is one of the most effective methods of family therapy, and mindfulness-based techniques derived from this approach can help improve the relationships of couples seeking divorce. Mindfulness is a way of being that includes maintaining openness, patience, and acceptance while focusing attention on the present moment in a non-judgmental way (Gilmartin et al., 2017). It is noteworthy that this method pays significant attention to intrapersonal issues, interpersonal relationships, and individuals' reciprocal reactions, including solutions such as mutual empathy among spouses, expressing feelings in an environment of self and mutual acceptance, controlling stressful emotions, problem-solving,

positive outlook, and fostering a complementary relationship and autonomy (Abedi, 2017). Various research on the impact of cognitive-behavioral therapy emphasizing mindfulness on different characteristics of spouses overall indicates the effectiveness of this therapeutic method. For example, Ghasedi (2019) concluded that these interventions significantly positively affected the level of emotional regulation and marital intimacy (Ghasedi 2019). Research by Levinsoon (2014) also confirmed the effectiveness of cognitive-behavioral therapy in regulating emotions and enhancing efficacy in divorce (Levinsoon, 2014).

Another approach whose effects on marital compatibility have been studied and confirmed is reality therapy (Wubbolding et al., 2017). Developed by William Glasser, reality therapy is a type of psychotherapy that focuses on individuals' needs and choices (Stutey et al., 2020). Reality therapy is a pragmatic and effective approach in counseling supported by choice theory and provides an explanation for human behavior and motivation (Robey et al., 2011). Evidence indicates that reality therapy positively affects self-efficacy and the sense of competence. Law and Guo (2015) showed that reality therapy effectively increased individuals' sense of self-efficacy (Law & Guo, 2015). Additionally, research by Hadian (2023) has shown that group reality therapy increases self-efficacy in women (Hadian et al., 2023). While emotional regulation is a crucial skill in marital compatibility, research by Alirezaee and colleagues (2020) demonstrated that reality therapy is effective in improving emotion regulation skills in women with marital conflicts (Alirezaee et al., 2020). Given the foregoing, the present study aims to compare the effectiveness of mindfulness-based cognitive-behavioral therapy with reality therapy on emotional regulation and self-efficacy in women seeking divorce.

## 2. Methods and Materials

### 2.1. Study design and Participant

The current research was a quasi-experimental study with a pre-test, post-test, and follow-up design, including a control group. The population of this study comprised all women seeking divorce due to marital incompatibilities and disputes who had filed for divorce and registered in the "Decision System" from spring to winter 2022, referred by the judiciary to the divorce intervention center (psychodynamic clinic) in Jolfa county. For the sample selection, after obtaining the necessary permissions from the university, 60 women seeking divorce due to marital

incompatibilities and disputes who had approached the psychodynamic clinic were selected using inclusion and exclusion criteria through purposive sampling. After sample selection, the chosen individuals were randomly (through lottery) divided into three groups of 20. Following the sampling, two experimental groups received either group mindfulness-based cognitive-behavioral therapy in eight 90-minute sessions (weekly) or group reality therapy in eight 90-minute sessions (weekly), while the control group received no treatment. The inclusion criteria included being aged between 18 to 50 years, and having at least a high school diploma, whereas the exclusion criteria included being in a state of engagement or separation, manifesting symptoms of substance abuse, exhibiting symptoms of psychosis, receiving other therapeutic interventions such as pharmacotherapy or other psychological approaches concurrently, and missing more than three treatment sessions. It's worth mentioning that the evaluation was conducted by a collaborator who was not involved in the research and had no knowledge of the experimental and control groups. Ethical considerations in research, such as voluntary participation, clarification of rights and responsibilities of parties, confidentiality of obtained information during the research execution, and free withdrawal from the study, were observed.

### 2.2. Measures

#### 2.2.1. Cognitive Emotion Regulation

The Cognitive Emotion Regulation Questionnaire, designed by Nadia Garnefski, Vivian Kraaij, and Philip Spinhoven in 1999 and published in 2001, is a multidimensional questionnaire used to identify individuals' cognitive coping strategies following negative events or situations. This self-report instrument's short form consists of 18 items validated in Iran by Hasani (2011). The questionnaire includes dimensions of positive or adaptive and negative or maladaptive cognitive emotion regulation. The positive dimension comprises strategies like positive reappraisal/broader perspective; refocus/planning. The negative dimension includes self-blame, blaming others, rumination, catastrophizing, and acceptance. Each subscale of this questionnaire has two items, and the score for each subscale is obtained by summing the scores given to each statement. The higher the score obtained, the more the strategy is used by the individual. Garnefski and colleagues (2002) have reported satisfactory validity and reliability for this questionnaire. Research on the emotion regulation

strategies has shown that all subscales of this test have good internal consistency. Hasani (2011) in validating the short form Persian version of CERQ-P-short in the Iranian population, reported suitable psychometric properties, indicating that the 9 subscales of the Persian short form questionnaire have satisfactory reliability with Cronbach's alpha ranging from 0.68 to 0.82. Principal component analysis, explaining 75% of the variance, supported the original 9-factor model of the Cognitive Emotion Regulation Questionnaire. Also, the correlation between subscales was relatively high (Garnefski et al., 2001; Ghorbani Amir et al., 2019; Mahmoudpour et al., 2021).

### 2.2.2. *Self-Efficacy*

This questionnaire was developed by Sherer and Maddux in 1982 to measure individuals' self-efficacy beliefs and consists of 17 five-point scale questions. Sherer and Maddux (1982) believe that this scale measures three aspects of behavior, including the tendency to initiate behavior, the tendency to expand effort to complete a task, and resistance when facing obstacles. Woodruff and Cashman (1993) confirmed the "validity" and "reliability" of the General Self-Efficacy Scale. They used exploratory factor analysis to study construct validity and showed the presence of three factors in this scale. The results of Boucher and Smith's (1998) study, which was conducted using confirmatory factor analysis, indicated the existence of three correlated latent factors and one higher-level factor of general self-efficacy in this scale. The reliability of this questionnaire in the research by Sherer and colleagues reported a Cronbach's alpha of .86. Also, in the research by Najafi and Fouladchang, its reliability was reported as .80. In Iran, the validity and reliability of the questionnaire were confirmed by Barati Bakhtiari at 79% and also in the research by Malek Shahi and colleagues at 73% (Asadpour & Sadat Hosseini, 2018; Azimi, 2012).

## 2.3. *Intervention*

### 2.3.1. *Reality Therapy*

In this study, the second experimental group received 8 sessions of 90 minutes each of group reality therapy according to the group reality therapy protocol (Guderzi, 2020; Hadian et al., 2023; Koleshtajani et al., 2022; Wubbolding et al., 2017).

Session 1: Introduction to Reality Therapy

The initial session introduces the concepts and principles of reality therapy, focusing on choice theory. Participants learn about the importance of taking responsibility for their actions and the role of choice in their behaviors and emotional responses. The therapist outlines the structure of the therapy and sets the stage for participants to explore their current situations and desired outcomes.

Session 2: Identifying Wants and Needs

Participants explore their basic needs according to choice theory, including love, power, freedom, fun, and survival. The session focuses on identifying unmet needs and understanding how these needs drive behaviors and choices. Participants engage in activities to articulate their wants and needs clearly and examine how their behaviors align with these desires.

Session 3: Evaluating Behaviors

This session involves a critical examination of participants' behaviors and the effectiveness of these behaviors in meeting their needs. The therapist guides participants through the process of self-evaluation, encouraging them to assess whether their actions are helping or hindering their progress towards their goals. The session emphasizes personal responsibility and the power of choice in changing behaviors.

Session 4: The WDEP System

Participants are introduced to the WDEP system—Wants, Doing, Evaluation, and Planning. The session focuses on developing plans that are realistic and attainable, aligned with participants' needs and goals. Participants learn how to create detailed action plans using the WDEP framework, incorporating strategies for change.

Session 5: Commitment to Change

Building on the previous session, participants make a commitment to their action plans. The session emphasizes the importance of commitment in the change process and explores potential obstacles to implementing the plans. Participants discuss strategies for overcoming these obstacles and maintaining motivation.

Session 6: Enhancing Relationships through Reality Therapy

This session focuses on applying reality therapy principles to improve interpersonal relationships. Participants learn about the importance of fulfilling relationships in meeting basic needs and explore ways to enhance connections with others. The therapist introduces techniques for effective communication and problem-solving within relationships.

Session 7: Dealing with Setbacks



Participants discuss challenges and setbacks they may face in implementing their action plans. The session provides strategies for dealing with disappointments and obstacles without reverting to ineffective behaviors. Participants learn how to adjust their plans as needed and continue moving forward.

#### Session 8: Review and Moving Forward

The final session reviews the key concepts and progress made throughout the therapy. Participants share their experiences and insights gained from applying reality therapy principles. The therapist encourages ongoing self-evaluation and adaptation of plans as participants move forward. The session concludes with a discussion on how to continue using reality therapy concepts in daily life to maintain changes and achieve personal goals.

### 2.3.2. Mindfulness-Based Cognitive-Behavioral Therapy

In the current study, the first experimental group received mindfulness-based cognitive-behavioral therapy according to the group therapy protocol by Segal and colleagues (2002) for 8 sessions of 90 minutes each (Jodaki et al., 2022; Segal et al., 2018).

#### Session 1: Introduction to Mindfulness

The first session introduces the concept of mindfulness and its significance in managing emotions and behaviors. Participants learn about the history and principles of mindfulness-based cognitive-behavioral therapy. The therapist explains how mindfulness practices can help individuals become more aware of their thoughts, emotions, and body sensations in the present moment without judgment. The session includes a basic mindfulness meditation practice focusing on breath awareness.

#### Session 2: Identifying Automatic Thoughts

This session focuses on identifying automatic thoughts, particularly those that contribute to distressing emotions and maladaptive behaviors. Participants learn the connection between thoughts, emotions, and behaviors and how mindfulness can help observe these thoughts without attachment. The session includes exercises to practice noticing automatic thoughts and separating themselves from these thoughts.

#### Session 3: Dealing with Emotions Mindfully

Participants explore their emotional responses and learn to approach their feelings with curiosity and acceptance rather than avoidance or suppression. The session teaches techniques for recognizing and naming emotions as they arise and using mindfulness practices to stay present with

difficult emotions. Participants engage in mindfulness exercises designed to enhance emotional regulation.

#### Session 4: Mindfulness in Daily Life

This session aims to integrate mindfulness practices into daily activities to promote continuous awareness and presence. Participants learn how to apply mindfulness during routine tasks and activities, transforming mundane moments into opportunities for practice. The therapist introduces specific strategies for maintaining mindfulness throughout the day.

#### Session 5: Developing Self-Compassion

Participants learn about the importance of self-compassion in the healing process. The session covers the three key components of self-compassion: self-kindness, common humanity, and mindfulness. Participants engage in exercises to cultivate a compassionate and non-judgmental attitude towards themselves, especially when facing difficulties.

#### Session 6: Cognitive Restructuring through Mindfulness

This session introduces cognitive restructuring techniques within a mindfulness framework. Participants learn to challenge and reframe negative or irrational thoughts by viewing them through a lens of mindfulness and compassion. The session includes guided practices for identifying distortions in thinking and applying more realistic and balanced perspectives.

#### Session 7: Mindfulness in Relationships

The focus of this session is on applying mindfulness to improve interpersonal relationships. Participants explore how mindfulness can enhance communication, empathy, and understanding in interactions with others. The session includes practices for mindful listening and speaking, as well as techniques for managing conflicts mindfully.

#### Session 8: Consolidation and Future Planning

The final session reviews the key concepts and practices covered throughout the program. Participants reflect on their progress and discuss challenges and successes. The therapist provides guidance on maintaining a mindfulness practice moving forward, including developing a personal mindfulness routine. Participants leave with a plan for integrating mindfulness into their lives to continue their journey towards well-being.

### 2.4. Data Analysis

Data were analyzed using mixed repeated measures ANOVA and Bonferroni post-hoc tests with SPSS version 24 software.

### 3. Findings and Results

Regarding educational levels, in the current study, within the mindfulness-based therapy group, there were 2 participants with less than a high school diploma, 4 with a high school diploma, 6 with a bachelor's degree, and 3 with a master's degree. In the reality therapy group, there were 2 participants with less than a high school diploma, 5 with a high school diploma, 5 with a bachelor's degree, and 3 with a master's degree. In the control group, there were 2 participants with less than a high school diploma, 3 with a

high school diploma, 6 with a bachelor's degree, and 4 with a master's degree. Regarding age, in the mindfulness-based therapy group, 6 participants were aged 25 to 35, 6 were 36 to 45, and 3 were 46 to 55. In the reality therapy group, 7 participants were aged 25 to 35, 6 were 36 to 45, and 2 were 46 to 55. In the control group, 6 participants were aged 25 to 35, 5 were 36 to 45, and 4 were 46 to 55. The Chi-square analysis comparing the three groups in terms of education and age was not statistically significant ( $p > 0.05$ ), indicating that the three groups were comparable in terms of education and age.

**Table 1**

*Means and Standard Deviations of Positive and Negative Emotion Regulation and Self-Efficacy by Measurement Stage in Groups*

| Dependent Variable          | Group                     | Pretest Mean | Posttest Mean | Follow-up Mean | Pretest SD | Posttest SD | Follow-up SD |
|-----------------------------|---------------------------|--------------|---------------|----------------|------------|-------------|--------------|
| Positive Emotion Regulation | Control Group             | 37.73        | 38.09         | 37.80          | 7.11       | 6.81        | 6.57         |
|                             | Reality Therapy           | 41.27        | 51.53         | 51.07          | 7.70       | 6.94        | 7.98         |
|                             | Mindfulness-Based Therapy | 42.40        | 64.87         | 64.02          | 7.31       | 5.51        | 7.54         |
| Negative Emotion Regulation | Control Group             | 91.32        | 90.85         | 91.14          | 7.03       | 7.36        | 8.23         |
|                             | Reality Therapy           | 88.77        | 67.50         | 68.32          | 5.18       | 4.93        | 5.61         |
|                             | Mindfulness-Based Therapy | 87.65        | 47.46         | 48.76          | 6.56       | 5.38        | 6.30         |
| Self-Efficacy               | Control Group             | 41.53        | 42.13         | 42.03          | 4.12       | 3.13        | 3.14         |
|                             | Reality Therapy           | 42.51        | 50.41         | 49.25          | 2.75       | 3.37        | 4.07         |
|                             | Mindfulness-Based Therapy | 42.20        | 58.40         | 57.15          | 3.55       | 4.03        | 4.23         |

It is observed that the means in both experimental groups in the post-test stage, compared to the pre-test, show a change for both positive and negative emotion regulation. Furthermore, Table 1 illustrates that the most significant change in means occurred in the mindfulness-based therapy

group. Similarly, the means in both experimental groups in the post-test stage, compared to the pre-test, show a change in the self-efficacy scale. Table 1 also indicates that the most significant change in means occurred in the mindfulness-based therapy group.

**Table 2**

*Mixed ANOVA Results for Positive and Negative Emotion Regulation and Self-Efficacy with Greenhouse-Geisser Correction*

| Variable                    | Source                   | SS       | df   | MS       | F      | Sig.   | Eta Squared |
|-----------------------------|--------------------------|----------|------|----------|--------|--------|-------------|
| Positive Emotion Regulation | Within-Subjects          | 5151.03  | 1.67 | 3084.37  | 434.57 | < .001 | .94         |
|                             | Interaction (Test*Group) | 721.74   | 1.67 | 432.17   | 60.89  | < .001 | .69         |
|                             | Between-Groups           | 1879.64  | 1    | 1879.64  | 13.03  | < .001 | .32         |
| Negative Emotion Regulation | Within-Subjects          | 18256.40 | 1.27 | 14415.16 | 898.96 | < .001 | .97         |
|                             | Interaction (Test*Group) | 1746.01  | 1.27 | 1378.64  | 85.98  | < .001 | .75         |
|                             | Between-Groups           | 4145.84  | 1    | 4145.84  | 53.81  | < .001 | .66         |
| Self-Efficacy               | Within-Subjects          | 2641.48  | 1.79 | 1475.19  | 398.28 | < .001 | .93         |
|                             | Interaction (Test*Group) | 341.44   | 1.79 | 190.69   | 51.48  | < .001 | .65         |
|                             | Between-Groups           | 607.36   | 1    | 607.36   | 17.60  | < .001 | .39         |

Considering the violation of the sphericity assumption, as seen in Table 2, the within-group effect, the time factor ( $F=36.389$ ,  $df=1.045$ ,  $p<0.01$ ), and the interaction of time and group ( $F=32.332$ ,  $df=3.134$ ,  $p<0.01$ ) indicate that there

are significant differences over time and in the interaction of time with the group ( $p<0.01$ ). The partial eta squared for the time factor is 0.694, and for the interaction of time with the group, it is 0.618, with the test power for both factors being

1. These findings suggest that 69.4% and 61.8% of the differences in the desire for infidelity are related to the

application of the independent variable (treatment method), confirmed with 100% test power.

**Table 3**

*Pairwise Comparisons of Mean Differences Between Mindfulness-Based Cognitive-Behavioral Therapy and Reality Therapy Groups Across Three Research Stages for Emotion Regulation and Self-Efficacy*

| Variable                    | Stage     | Mean Difference | Standard Error | Significance Level |
|-----------------------------|-----------|-----------------|----------------|--------------------|
| Positive Emotion Regulation | Pretest   | -1.13           | 2.70           | .99                |
|                             | Posttest  | -13.33          | 2.36           | < .001             |
|                             | Follow-up | -12.95          | 2.70           | < .001             |
| Negative Emotion Regulation | Pretest   | 1.12            | 2.31           | .99                |
|                             | Posttest  | 20.04           | 2.19           | < .001             |
|                             | Follow-up | 19.56           | 2.49           | < .001             |
| Self-Efficacy               | Pretest   | 0.31            | 1.29           | .99                |
|                             | Posttest  | -7.99           | 1.29           | < .001             |
|                             | Follow-up | -7.91           | 1.40           | < .001             |

The results of [Table 3](#) show that the difference between the post-test and follow-up stages in both the mindfulness-based cognitive-behavioral therapy and reality therapy groups is statistically significant ( $p < 0.01$ ) but not significant in the pre-test stage between the mindfulness-based cognitive-behavioral therapy and reality therapy groups ( $p < 0.01$ ). According to the results of [Table 4](#), regarding the interaction of stages and group factors, the calculated F-value for the effect of stages (pre-test, post-test, and follow-up) between the two therapy groups is statistically significant ( $p < 0.01$ ) for both emotion regulation and self-efficacy.

#### 4. Discussion and Conclusion

The present research aimed to compare the effectiveness of mindfulness-based cognitive-behavioral therapy on emotion regulation and self-efficacy among women seeking divorce. Based on the findings, it can be stated that the mindfulness-based cognitive-behavioral therapy approach has impacted the scores of emotion regulation and self-efficacy such that the experimental group (mindfulness-based cognitive-behavioral therapy) showed improvement in scores of emotion regulation and self-efficacy compared to the control group. These results are consistent with the findings of researchers ([Chan et al., 2021](#); [Ghasedi 2019](#); [Nikoo Gofar et al., 2019](#)). To explain the effectiveness of mindfulness-based cognitive-behavioral therapy in improving emotion regulation among women seeking divorce, it can be said that cognitive-behavioral therapy, due to its emphasis on cognitive processes and changing individuals' thoughts and attitudes, can regulate the emotions of these couples. It can also be argued that mindfulness-

based cognitive-behavioral therapy prevents catastrophizing and reduces pointless and illogical thoughts. This therapy, by increasing acceptance of problems, positive attention and evaluation, and refocusing on issues, tries to improve the emotions of the couples. Cognitive-behavioral therapy, by changing attitudes towards aggression and irritability, makes individuals more rational and refrains from impulsive responses to events, thereby improving their emotion regulation. Another explanation could be that since the cognitive-behavioral approach based on mindfulness is grounded in learning foundations and cognitive processes resulting from experience and the role of cognitive processes in behavior, according to clinical experiences, individuals' behavior in a group resembles their usual life behavior. Individuals enter the group with the same behavioral schemas that have caused problems in their lives, and it doesn't take long for these behaviors to be displayed within the group. Through awareness of behavior, hypotheses, motives, fantasies, thoughts, and perceptions of the client, the possibility of replacing their inefficient beliefs with more tangible and realistic beliefs arises ([Chan et al., 2021](#)). Managing and observing inefficient beliefs as influential factors in emotions can effectively improve emotion regulation.

One of the significant sources of poor emotion regulation in individuals is the lack of precise understanding of situations and belief in the lack of control over them. Since one of the topics discussed in the classes of mindfulness-based cognitive therapy, besides correcting cognitive methods, is introducing stressful situations and identifying stress factors in terms of duration, intensity, predictability, degree of lack of control, and sudden onset, getting ready for

such situations, adapting and logically confronting any problem or potential shortcomings, and also having the readiness and appropriate response, has led to the improvement of emotion regulation in couples seeking divorce. Mindfulness-based cognitive therapy emphasizes the present moment, which is the only truth. Being in the present moment and enjoying it is the most crucial technique used in this method. Mindfulness training teaches patience (patience means having the inclination that things reveal themselves in their own time and the desire to stay with whatever happens at the moment. Patience is the ability to endure problems or a state of calmness and self-control, but it expands the view that the person endures the perceived failures of the current situation, which helps to deal more effectively with the emotions arising from marital life conflicts and positively regulate emotions during this period).

Additionally, the results of the present research showed that mindfulness-based cognitive-behavioral therapy is effective in enhancing the self-efficacy of women seeking divorce. Individuals with low self-efficacy usually evaluate their capabilities negatively in various situations and believe in their incapacity to perform a skill satisfactorily. Explaining the findings, it can be said that the use of mindfulness techniques helps clients to accept their distorted thinking patterns and dysfunctional behaviors and to observe them without judgmental bias, allowing thoughts and feelings to pass without reactive responses. This distancing or disengagement from thoughts and behaviors enables the individual to become familiar with their automatic reactions from a distance, providing an opportunity to see them better. Knowing that believing in the inadequacy to perform an action is merely a mental trait that requires examination of its correspondence with the realities of one's competence. Here, the real experience, without stopping the initial evaluations, aids the person to direct a realistic attention to subsequent feelings and thoughts derived from these viewpoints. To achieve this goal, structured discussions and organized tasks are utilized, and the premise of this therapy is to assist the client in making desirable changes in their life; therefore, the focus in therapy is on providing opportunities for new adaptive learnings and creating changes outside the clinical setting. Problem-solving is an integral part of the treatment. All therapeutic aspects are explained to the client. The therapist and the client try to establish mutual communication and develop strategies to deal with precisely defined issues, which has been effective in enhancing self-efficacy among participants.

Another explanation is that this type of therapy, emphasizing flexibility, clarifying values, and performing various exercises, can be effective in increasing self-efficacy and responsibility acceptance by the client. From the cognitive-behavioral therapy perspective based on mindfulness, unpleasant thoughts are not eliminated; they are simply taken less seriously. Acceptance, to always be a beneficial process, must inherently include the willingness to experience any degree of distress (Ghasedi 2019). Hence, the effectiveness of mindfulness-based cognitive-behavioral therapy in increasing self-efficacy is justifiable.

Another finding of the present study was that the reality therapy approach has impacted the scores of emotion regulation and self-efficacy in such a way that the experimental group (reality therapy) compared to the control group has caused an increase in scores of emotion regulation and self-efficacy. This result is consistent with the findings of researchers (Guderzi, 2020; Hadian et al., 2023; Stutey et al., 2020; Wubbolding et al., 2017). To explain the effectiveness of reality therapy, it should be said that in choice theory, the belief is that only the individual can act for themselves, and nobody can do so without their permission. Humans can create a better situation for themselves by choosing effective and appropriate ways to achieve fun, power, freedom, love, and belonging. To explain the effectiveness of reality therapy in improving the emotion regulation of women seeking divorce, it can be said that a fundamental assumption in the reality therapy approach is that individuals, through self-evaluation, shift the focus from behavior outside their control and concentrate on controllable aspects. Through positive internal dialogue, negative and inefficient emotions are reduced, and emphasis is placed on capabilities. As a result, an individual can develop a sense of empowerment and experience happiness. Reality therapy increases emotional expression among members and enhances their awareness in articulating their issues and problems. It also helps individuals to accept responsibility for their behavior, take control of their actions, and regulate their emotions (Hadian et al., 2023; Wubbolding et al., 2017). To explain the effectiveness of reality therapy on self-efficacy in couples seeking divorce, it can be said that in the teachings of this approach, couples learned to focus on reality, accept responsibility, and recognize the correct and incorrect matters and their relation to their everyday life. In this way, by accepting responsible behavior, they could avoid irresponsible behaviors that pave the way for failure and mood fluctuations, creating psychological stress. Furthermore, the application of reality



therapy has enabled individuals, through self-evaluation, to shift focus from uncontrollable behavior and concentrate on controllable aspects. Through positive internal dialogue, it reduces negative and inefficient emotions in them and emphasizes their capabilities; as a result, individuals have been able to develop a sense of empowerment. Thus, reality therapy helps individuals realize that they can have control over their lives, free themselves from external control, and take responsibility for their actions through suitable choices, which in turn leads to empowerment, self-confidence, and an increase in the sense of self-efficacy.

The findings from this research indicate that there is a significant difference between the overall means of emotion regulation and self-efficacy in both the mindfulness-based cognitive-behavioral therapy and reality therapy groups, with mindfulness-based cognitive-behavioral therapy having a more substantial impact on emotion regulation and self-efficacy. Acceptance and Commitment Therapy (ACT) alongside mindfulness-based cognitive-behavioral therapy, as third-wave treatments sharing many similarities, focuses on accepting the problem and emphasizes the present moment, which aligns the individual with current conditions and paves the way for subsequent steps and ultimately creates psychological flexibility, the ultimate goal in this treatment. Using group reality therapy based on a set of research findings indicates that individuals undergo changes in themselves under the motivational effects of the group. To further explain the greater effectiveness of mindfulness-based cognitive-behavioral therapy, it can be said that the emphasis of this program on employing techniques for stress reduction and being aware of one's condition is about letting go of the fight and accepting the current situation without judgment, which is the primary and fundamental concept in mindfulness-based cognitive therapy. Therefore, these teachings likely impact by affecting specific beliefs about one's abilities and the level of self-efficacy, improving these individuals' emotion regulation. Indeed, the primary goal in mindfulness-based cognitive therapy is systematic training in awareness at the present moment. The main goal in mindfulness-based cognitive therapy is to increase present moment awareness. The main goal of mindfulness-based cognitive therapy is the systematic training of moment-to-moment awareness of bodily sensations, thoughts, and emotions. Through practices, individuals learn to consider their thoughts, emotions, and bodily sensations as aspects of experience that come into awareness and not to regard them as absolute realities. This type of "being" with experiences can lead to changes in how individuals react, as well as how

they cope with and confront problems that individuals face when dealing with psychological or physical issues. The exercises in mindfulness-based cognitive therapy provide a new and personal way to cope with stress for the individual; external stressors are part of our lives and cannot be changed, but how individuals respond to stress and coping methods are changeable (Guderzi, 2020). Overall, it can be said that the findings of this research showed that mindfulness-based cognitive-behavioral therapy is more effective than reality therapy in improving emotion regulation and self-efficacy in women seeking divorce. This is because it increases the individual's ability to pay attention to current moment-to-moment experiences non-judgmentally and makes them resistant against ineffective mental preoccupations with separation, divorce, and its accompanying consequences.

## 5. Limitations and Suggestions

Every research has its limitations. One of the limitations of the present study is the lack of overall control of the sample individuals between the pre-test, post-test, and follow-up, which reduces the generalizability of the test results. Another limitation of this study was the inability to control all confounding variables, issues of couples during interventions, and being limited to women seeking divorce in Jolfa city and self-report instruments, which should be considered when using and generalizing these results. Therefore, it is recommended that future research of this kind be conducted using interviews instead of questionnaires. It is suggested that future research consider a third experiment that applies a combination of cognitive-behavioral therapy and reality therapy to the research sample.

## Authors' Contributions

Authors contributed equally to this article.

## Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

## Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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The authors report no conflict of interest.

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### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

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