



# Comparing the Effectiveness of Compassion Focused Therapy and Mindfulness-Based Cognitive Therapy on the Anxiety of Infertile Women

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## Abstract

**Aim:** Infertile women face a lot of anxiety in life, and it seems that treatments derived from the third wave of psychotherapy can be effective in reducing their anxiety. As a result, the aim of this study was comparing the effectiveness of compassion focused therapy and mindfulness-based cognitive therapy on the anxiety of infertile women. **Methods:** The present research in terms of purpose was applied and in terms of implementation method was semi-experimental with a pretest, posttest and two month follow-up plan with the control group. The research population consisted of infertile women who referred to clinics with a fertility specialist of Tehran city in 2022 year. The research sample was 45 people who were selected by purposive sampling method after checking the inclusion criteria and randomly divided into three equal groups including two experimental groups and one control group. Each of the experimental groups underwent eight sessions of 90-minute the therapies of compassion focused and mindfulness-based cognitive, separately and the control group during this time did not receive therapy. The data were collected with Beck et al's anxiety inventory (1988) and analyzed with mixed variance analysis and Bonferroni post hoc test in SPSS software. **Results:** The analyzes showed that both compassion focused therapy and mindfulness-based cognitive therapy in compared to the control group reduced the anxiety of infertile women, and the effectiveness of compassion focused therapy in compared to mindfulness-based cognitive therapy was more effective in reducing their anxiety ( $P < 0.001$ ). **Conclusion:** According to the results of the present study and considering the greater effectiveness of compassion focused therapy in compared to mindfulness-based cognitive therapy in reducing the anxiety of infertile women, it is suggested that therapists in their interventions used from compassion focused therapy.

**Keywords:** *Compassion Focused Therapy, Mindfulness-Based Cognitive Therapy, Anxiety, Infertile Women.*

## Introduction

Fertility ability has a high value, and if the attempt to conceive fails, it is called infertility, which is a very bitter and destructive experience (Neho & Kim, 2022). Infertility as a type of crisis in life is an unwanted and unplanned stressor that causes couples to face many problems (Wolodarski et al., 2020). Medically, infertility means the inability to conceive after one year of regular intercourse without the use of contraceptive methods (Magzob et al., 2022).

Anxiety is an unpleasant, ambiguous state associated with the excitation of the autonomic nervous system, which causes increased restlessness, headaches, sweating, palpitations, chest muscle cramps, and digestive upsets (Greenberg et al., 2021). A moderate level of anxiety is necessary for life and can help a person adapt. On the other hand, if the level of anxiety exceeds the average level and lasts for a long time, it is harmful to the person and causes psychosomatic diseases in him (Felez-Noberga et al., 2022).

To reduce anxiety, many treatment methods were used, among the treatment methods derived from the third wave of psychotherapy in this field, we can mention compassion-based therapy (Gourdin et al., 2019) and cognitive therapy based on mindfulness (Mathor et al., 2021).

The construct of compassion has three components: self-kindness versus self-judgment, human commonality versus isolation, and vigilance versus extreme identification (Taylor & Hodgson, 2020). Compassion-based therapy aims to reduce pain, suffering, anxiety, and depression and focuses on the four areas of past and historical experiences, basic fears, strategies for feeling safe, and unforeseen consequences and outcomes (Ao et al., 2017). In compassion-based therapy, painful and uncomfortable feelings and emotions are not avoided, but the person approaches them with kindness and understanding. Accordingly, negative feelings and emotions are transformed into more positive feelings and emotions, and a person is given the opportunity to accurately understand the situation and choose effective actions to change himself or the situation (Craig et al., 2020).

Mindfulness-based cognitive therapy is based on the principles of mindfulness-based stress reduction therapy, cognitive therapy, mindfulness meditation, cognitive-behavioral therapy, information processing theory, and group therapy. Its main purpose is to make a person aware of the consequences of the reactivation of the mentality and to observe his thoughts and feelings through the use and creation of the state of presence of mind through repeated exercises on the intentional direction of attention to a neutral object (Kalman et al., 2023). Mindfulness means conscious and non-judgmental attention to internal and external phenomena (Shulman et al., 2018).

The aforementioned treatment method has three parts: regulation of attention, development of metacognitive awareness and decentralization, and its development towards mental states and contents (Felder et al., 2017). This therapy is a client-centered systematic therapeutic and educational perspective that is used to teach relaxation, mindfulness, and the ability to respond skillfully to experiences that can lead to emotional distress or maladaptive behavior (Kelder-Mikos et al., 2023).

According to the mentioned materials, the aim of this study was to compare the effectiveness of compassion-based therapy and mindfulness-based cognitive therapy on the anxiety of infertile women.

## Method

The present research in terms of purpose was applied and in terms of implementation method was semi-experimental with a pretest, posttest and two month follow-up plan with the control group. The research population consisted of infertile women who referred to clinics with a fertility specialist of Tehran city in 2022 year. The research sample was 45 people who were selected by purposive sampling method after checking the inclusion criteria and randomly divided into three equal groups including two experimental groups and one control group. Each of the experimental groups underwent eight sessions of 90-minute the therapies of compassion focused and mindfulness-based cognitive, separately and the control group during this time did not receive therapy. The data were collected with Beck et al's anxiety inventory (1988) and analyzed with mixed variance analysis and Bonferroni post hoc test in SPSS software.

## Results

The presuppositions of mixed variance analysis showed that the assumption of normality of anxiety of the groups based on the Shapiro-Wilk test, the assumption of homogeneity of variances based on Levine's test, and the assumption of homogeneity of regression slopes were established ( $P>0.05$ ). As a result, using the mentioned analysis method is allowed.

The results indicated the effectiveness of the group, time and the interaction of time and group, based on which it can be said that there was a significant difference between the groups, their evaluation stages and the effect of the groups according to the time levels ( $P<0.001$ ).

The results indicated the effectiveness of both compassion-based therapy and mindfulness-based cognitive therapy compared to the witness group in reducing the anxiety of infertile women, and the greater effectiveness of compassion-based therapy compared to mindfulness-based cognitive therapy in reducing their anxiety. ( $P>0.001$ )

## Conclusion

This research was conducted on infertile women who received virtual and online training due to the spread of Covid-19, so caution should be exercised in generalizing the results. Other limitations of this study include using the purposeful sampling method due to more sampling error compared to random sampling methods, using self-reporting tools due to more error in data collection, especially when people do not have enough self-reflection and the small sample size in the groups. Therefore, it seems necessary to conduct more research on infertile women who are selected by random sampling methods, are trained face-to-face, and are evaluated with the help of interviews instead of questionnaires.

According to the results of the present study and considering the greater effectiveness of compassion-based therapy compared to mindfulness-based cognitive therapy in reducing the anxiety of infertile women, it is suggested that therapists use compassion-based therapy in their interventions. Another practical suggestion is that the officials of the infertility centers and clinics or the infertility association, require their psychologists and counselors to take a course of cognitive therapy based on mindfulness so that they can use the solutions and strategies of the mentioned method in their counseling sessions and even their treatment.

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