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Research paper

Comparing the Effectiveness of Cognitive-Behavioral Therapy and Metacognitive Therapy on Aggression and Emotional Expression of Patients with Obsessive-Compulsive Disorder

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Introduction

Obsessive-compulsive disorder (OCD) is a psychiatric disorder that in Iran, the prevalence of OCD symptoms was reported to be 43% in 2015 (Khosravi and Nasser, 2020), which is very high compared to the global prevalence. Research evidence suggests that beliefs based on violence and aggression are common in people with OCD disorder (Fernandez et al., 2023); Aggressive beliefs are among the beliefs related to OCD patients and have a significant relationship with anxiety in these patients (Chawla et al., 2022). Also, patients with OCD perform poorly in emotional recognition, including disgust and empathy (Bora, 2022). In addition, it has been shown that people with OCD have low emotion regulation (Si et al., 2023). Research evidence has shown that obsessive-compulsive patients have difficulty in metacognition, therefore, metacognitive therapy can have an effect on outcomes related to OCD; metacognitive therapy can improve regulation. Yajani (Nooripour et al., 2023) and emotional distress (Fisher et al., 2019). In addition, this treatment has been effective in reducing aggression and anger (Kara et al., 2023). In previous studies in patients with OCD, emotional expressiveness and aggression have not been the target of treatment research, so this study can contribute to the research literature in this field. Therefore, the aim of this study was to compare the effectiveness of cognitive behavioral therapy and metacognitive therapy on reducing aggression and emotional expressiveness in patients with OCD.

Method

The research sample was 57 patients with obsessive-compulsive disorder. Of these, 4 had primary education and were excluded from the final sample. Among the other 53, 5 people withdrew from participating in the treatment sessions for personal reasons. The remaining 48 people were randomly assigned to three groups: cognitive behavioral therapy, metacognitive therapy, and the control group. The inclusion criteria for the study were: age (20 to 40 years), education (diploma or higher), high score on the aggression and negative emotion expression scale, satisfaction with

participating in the study. The exclusion criteria were also: taking psychiatric medications, participating in other therapy sessions at the same time as conducting the study, and not participating in consecutive therapy sessions. The tools used were: a) Aggression Questionnaire: This aggression questionnaire (Bass and Perry, 1992) consists of 29 items, and b) Emotional Expressiveness Questionnaire (King and Emmons, 1990) which has 16 items. The work process was as follows: This study was approved by the Ethics Committee of the Islamic Azad University, Boroujerd Branch with the code IR.IAU.B.REC.1402.027. First, three groups completed the research instrument in the pre-test stage, then two experimental groups underwent ten sessions of therapeutic intervention by a trained psychologist, and the control group did not receive any intervention. After that, a post-test was administered to both the experimental and control groups. Finally, the research data were analyzed using repeated measures analysis of variance. In addition, one person in the metacognitive therapy group was excluded from the final assessment during the sessions due to not participating in consecutive sessions. Therefore, one person in the cognitive-behavioral therapy group and the control group were also randomly excluded (15 people in each group).

Results

The mean (standard deviation) age of the CBT, MCT, and control groups was 34.01 (9.24), 33.74 (9.99), and 35.73 (9.07), respectively. Table: Summary of the results of repeated measures analysis of variance with within-group and between-group factors on the aggression and emotional expression variables. According to Table 1, there is a difference between the experimental and control groups in aggression, positive emotion expression, intimacy expression, and negative emotion expression ($P < 0.05$). Also, the results of the Bonferroni post hoc test show that CBT and MCT had a significant effect on reducing aggression in the post-test and follow-up; but there is no difference between the two treatments in these variables. Also, in the experimental groups, there is a significant difference between the scores of positive emotion expression and intimacy expression in the pre-test, post-test, and follow-up stages, and the difference between the post-test and follow-up scores is also significant ($P < 0.01$). This means that CBT and MCT had a significant effect on increasing the expression of positive emotion and intimacy expression in the post-test and follow-up, and the effect is stable over time. In addition, the results show that the effectiveness of CBT was greater than MCT in increasing the scores of intimacy expression. CBT and MCT also had a significant effect on reducing negative emotion expression scores at post-test and follow-up, and the effect was stable over time; however, there was no difference between the two treatments in reducing negative emotion expression scores.

Discussion

The results showed that CBT and MCT had a significant effect on reducing aggression (physical and verbal aggression) in patients with OCD; however, there was no significant difference between the effectiveness of the two treatments in reducing aggression in these patients. CBT identifies unconstructive cognitive distortions, i.e. incorrect thoughts, beliefs, and attitudes, and allows individuals to recognize these faulty thoughts and replace them with constructive thoughts. The results showed that CBT and MCT were effective in improving the expression of positive emotion and the expression of intimacy in patients with OCD, and the effectiveness of CBT in improving the expression of intimacy was greater than MCT. In explaining this finding, it can be stated that CBT, by identifying negative thoughts, beliefs, and attitudes, allows individuals to replace these negative thoughts and beliefs with positive beliefs (Beck, 2020). Regarding the effectiveness of MCT on improving emotional expression, it can be said that this result is consistent with previous findings that showed that MCT was effective in improving emotional regulation (Nooripour et al.,

2023) and emotional distress (Fisher et al., 2019). In MCT, metacognitive beliefs and processes related to cognitive symptoms are identified and modified, and while the patient is made aware of the negative effects of worry and rumination and the ineffectiveness of current coping strategies, the individual's metacognitive beliefs are challenged in the form of Socratic dialogues (Wills et al., 2023). Regarding the greater effectiveness of CBT in improving the expression of intimacy compared to MCT, it can be stated that CBT challenges unconstructive cognitive distortions in thoughts, beliefs, and attitudes, and the defective behaviors that follow these distortions, and causes them to be replaced with positive thoughts, attitudes, and behaviors (Beck, 2020). Therefore, it is likely that this change in beliefs and attitudes will cause obsessive individuals to reconsider their expression of intimacy and consider their lack of expression of intimacy as a problem, and after CBT, they will try to express their intimacy to others in a positive way.

Ethical considerations

This article is derived from a doctoral dissertation in general psychology and has been approved by the Ethics Committee of the Islamic Azad University, Boroujerd Branch with the code IR.IAU.B.REC.1402.027.

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Author contributions

Reza Sadeghzadeh (first author): data collection, training, statistical analysis, and preparation of the original draft of the article; Mohsen Arzani (second author): research process management, editing, and revision of the article; Omid Shokri (third author): editing and reviewing article revisions; editing and reviewing article revisions; Hassan Piriaei (fourth author): editing and reviewing article revisions.

Conflict of interest

The authors declare that there are no conflicts of interest in conducting this research.

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