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The Effectiveness of Mindfulness-Integrated Cognitive Behavioral Therapy (MiCBT), Meta-Cognitive Therapy (MCT), Acceptance and Commitment Therapy (ACT), and Cognitive Behavioral Therapy (CBT) on Obsessive-Compulsive Disorder (OCD)

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Abstract

Background: *Due to the lack of a comparative study on the effectiveness of cognitive-behavioral approaches on Obsessive-compulsive disorder (OCD), this study aimed to compare the effectiveness of CBT, ACT, MCT, and MICBT on the symptoms of OCD patients.*
Methods: *The research design was experimental, with pre-test, post-test, follow-up, and a control group. The research population comprised patients with OCD who are referred to Shiraz (Iran). Counseling centers in the first quarter of 2017 with a definitive diagnosis of OCD. Participants were elected and had been assigned to five groups of twenty individuals by random. The subjects have been evaluated before and after the intervention by the Yale-Brown questionnaire. Data are analyzed using repeated measure analysis of Anova via SPSS 21.*
Results: *The findings showed that all four types of intervention, i.e., MiCBT, MCT, ACT, and CBT, were effective in improving short-term OCD symptoms. Also, there was no significant difference in the long-term (follow-up/one month) between the MCT and CBT approaches; while ACT and MiCBT have maintained their therapeutic effect in the follow-up.*
Conclusions: *OCD can be treated with all the mentioned therapies in short term; but, only ACT and MiCBT can be helpful in the long term.*

Keywords: Obsessive-compulsive disorder (OCD), Cognitive behavioral therapy (CBT), Acceptance and commitment therapy (ACT), Meta-cognitive therapy (MCT), Mindfulness-integrated cognitive behavioral therapy (MiCBT).
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Introduction

Anxiety has been a source of opportunity and threat to human beings during life. Anxiety could improve individual and even collective performance. Beyond the benefits, excessive anxiety could have caused certain mental illnesses and disorders.[1] Obsessive-compulsive disorder (OCD) is a chronic anxiety disorder characterized by excessive mental involvement in order and affairs, as well as perfection, to a stance that results in loss of flexibility, clarity, and efficiency. The main feature of OCD is the occurrence of obsessions and compulsions. This disorder is the most disabling human disorder.[2] Men and women are equal in the probability to be affected by this disorder, but in men, this disorder occurs at an earlier age than women, and the likelihood of suffering is higher in identical twins.[1] On average, about 2.5% of people in all societies and cultures suffer from OCD, and the rate of lifelong relapse is 1.7 to 4 percent. Between one and three percent of the population may have significant OCD at any time. Likely that people with OCD will also experience depression, fears, and many other psychiatric disorders.[2]

Obsessions include thoughts, images, and disturbing impulses that occur despite the people's desire and will annoy them. Obsessive-compulsive thoughts often have sexual, aggressive, and religious content, or appear suspiciously and deliberately about contamination. With this intent, the individual is resorting to compulsions to reduce distress or prevent the occurrence of horrific events.

There are various therapeutic approaches for coping with obsession. The CBT approach is considered a second-wave therapy. At CBT, the clients should be faced with a hierarchy of what they are obsessively inclined to; the logic is based on the principle that if a person faces stimuli without reaction, hers/his responses to those stimuli will be extinguished. CBT is a short-term cognitive and behavioral intervention that focuses on problems that are derived from our learning. That means the goal of behavioral interventions is to reduce non-adaptive behaviors and to increase adaptive behaviors by modifying the outcomes through behavioral activities that lead to new learning.[3,4] On the other hand, the cognitive approach relates problems to automatic processing and schema content. CBT is effective on OCD.[5,6] However, there is a lack of studies comparing the effectiveness of different therapeutic approaches both in the short term and in follow-up.[7-10]

Acceptance and commitment therapy (ACT) is one of the clinical behavioral analysis approaches that use a combination of mindfulness and acceptance-based strategies in the treatment of disorders. The goal of this approach is to promote psychological flexibility.[9,10] Also, this approach considers emotions and pays attention to high-valued behaviors that are in line with the individual goals. Therapists do not seek to educate their clients to prevent responses against unpleasant

feelings or to stop reacting against life-threatening incidents. This kind of therapy is aimed at helping clients to know more about their values. This approach summarizes all the problems of an individual in four cases; blending with thoughts; assessing, and judging experiences, avoiding our own experiences, and finding excuses to justify behavior. Also, there are three items as a healthy mental path for clients; acceptance of our reactions and living in the present time, choosing a worthwhile route, and action based on the purpose. It should be noted that this therapeutic approach is mindful-based. It seeks to facilitate the acceptance of problems that a person encounters during her/his life and this approach wants to see one's feelings and thoughts but does not do anything about them.[11] This therapeutic approach has been instrumental in the therapy of OCD.[12] OCD was treated so far using ACT.[13-15] Other studies have also reported the effectiveness of ACT on anxiety disorders and obsessions.[8,16]

The MCT approach was built by Adrian Wells and is based on the Wells and Matthews information processing model.[17] The purpose of this therapy is, firstly, to understand the clients' thoughts and functions - the so-called metacognitive beliefs - and then to help clients to understand how these beliefs worsen or to prolong the problem. In this approach, the disease and disorder are shaped by a psychological set called a cognitive attentional syndrome, which causes three major reasons to prolong the process of the metacognitive beliefs; worry/rumination, extreme focus on self, and attention bias.[18] All of these are controlled by the metacognitive thoughts of the patient. This approach is limited to short-term therapies. Metacognition means thinking about thinking that it is a new step to help people in need. Metacognition-based therapy was created to fill existing and potential gaps in past approaches.[19] In this approach, the therapist seeks to separate the client from his disorder by changing the three main so-called components of the cognitive-attentional syndrome. MCT claims that it can treat OCD.[17,20,21] Metacognitive therapy has been effective in reducing obsessive-compulsive symptoms in patients with a significant variation in the Yale-Brown scale.[18] Metacognitive therapy is effective on anxiety disorders in children.[22] Also, rapid metacognitive therapy can have positive effects on negative recurrent thoughts and primary generalized anxiety thoughts.[23]

The MiCBT approach is an integration of mindfulness and CBT aimed at changing the type of person's response to life experiences to have a better relaxing life. This approach was developed by Bruno Cayoun, with only 8 to 10 sessions categorized as short-term therapies. During these sessions, clients are focused on their body and breathing through mindfulness training, focusing on thoughts that call for reactive behaviors, and emotions. As a result, better management of internal conflicts can be observed. This can be a message of inner calm, confidence, and communication. MiCBT has proposed an integrative approach for cognitive and behavioral modification using a combination of the traditional explanation of the mind-consciousness and based on the principles of cognitive and neural networks in information processing. Mindfulness requires a deliberate and sustained focus on sensory processes along with an unconditional acceptance of sensory experience. So clients can adjust their feelings and attention and generalizing these skills to those situations where pathology is being set up or maintained.[24] MiCBT could be successful in the therapy of patients with predominant OCD.[25] In another study aimed at examining the effect of MiCBT and rational emotional behavioral therapy (REBT) on delaying perfectionism and worry, it was shown that students in the MiCBT group had a greater decline in negative perfectionism, postponement of decisions, and behaviors and worries. But both were equally effective in positive perfectionism.[26] Moreover, MiCBT can decrease the level of anxiety and depression in pregnant women.[27]

In summary, there is evidence for the effectiveness of CBT, MCT, ACT, and MiCBT on OCD, but none of the earlier studies have paid attention to following up on the effectiveness of these interventions. Also, fewer studies have compared the effectiveness of these interventions simultaneously.

Materials and Methods

This study was experimental with a pre-test, post-test, and follow-up on four exposure groups of CBT, MCT, ACT, MiCBT, and a control group. This study was approved by the ethics committee of the psychology department of the Shahid Bahonar university of Kerman.

The research population was consisting of people with OCD who had been referred to Shiraz city counseling centers in the first quarter of 2017. Those patients have received a definitive diagnosis of OCD from a psychiatrist. The data have collected my data from 10 distinct, different, and separated centers from peoples with OCD in Shiraz city by random. The initial sample size was 114. Due to the reasons like not being residents in Shiraz and transportation problems, the lack of satisfaction with the process of the sessions, 14 participants have left the study. The remaining 100 patients were assigned to one of the five groups of CBT, ACT, MCT, MiCBT, and control in a completely randomized way. Descriptive findings and demographic information of the studied samples are presented in tables 2 and 3. Repeated measure analysis of ANOVA analysis was used to analyze the data; it is worth mentioning that proper to use this method, the assumptions of using repeated measure analysis of ANOVA like Kolmogorov-Smirnov test for normal distribution and, M-box test for equality of covariance matrices and Leven's test for variance homogeneity and Mauchly's Sphericity test conditions were investigated. The methods of this study can be seen in table 1 and figure 1.

Tbale 1. The method of the study

Cognitive-Behavioral Therapy [CBT]: This treatment protocol is based on Whittal and McLean[3]. The structure of the sessions was as follows:
First session: Understanding the Cognitive-behavioral Therapy Model and the Logic of Therapy and measuring the patient's perception of self-contingent thoughts compared to assessments.
Second session: Introducing cognitive errors and their relationship with evaluations, identifying fundamental fears using some assessment techniques.
Third, fourth, and fifth sessions: Introducing and discussing the notions of a person and potential coping strategies, setting alternative assessments that are less threatening. Challenging obsessive assumptions and beliefs, behavioral measures for collecting evidence to confirm or reject assumptions or alternative beliefs.
Sixth, seventh, and eighth sessions: Self-treatment of what to do when it comes to experiencing self-contingent thoughts. Prevention of relapse and return of the disorder.
Acceptance and commitment therapy [ACT]: The structure of the presentation was as follows[8].
First and second sessions: Being familiar with the ACT therapy model: a two-mountain metaphor, teaching about OCD and obsessive-compulsive thought, examining thoughts and distress, how to face obsession in daily life and turning it into an issue in life, discussing adaptive anxiety response and impaired responses, discussing this issue that anxiety is not problematic itself but our stance towards that is problematic. Discussing strategies for controlling and avoiding anxiety.
Third Session: surveying the specific control strategies that an individual has used. Surveying the costs and damages these strategies have in an individual's life. Surveying the advantages of these control strategies, introducing control strategies as a problem, obsessive-compulsive dietary metaphor, person's metaphor in the well, teaching how to use mindfulness exercises to observe instead of reacting to anxiety.
Fourth and fifth sessions: acceptance and Live following Values that can be a substitute for managing obsession, focusing on control as an unhelpful strategy in facing with the anxiety of obsessions, Metamorphosis of tugging of war with a monster, acceptance of obsession with mindfulness, the metaphor of a polygraph.
Sixth Session: Moving forward to a Valuable Life with an acceptable and Observer, Types of Self, Self as the Content, the metaphor of the Chessboard. Creating flexible patterns of behaviors: How do the meta-traits of Traffickers prevent traffic from existing traffic?
Seventh and eighth sessions: The patient had been helped to develop his/her behavioral storage in response to obsessive thoughts and anxiety, and to be able to create more flexible patterns of responsiveness to obsession. Through mindfulness, values, and commitment (participation in value-based activities), the patient learned how to accept and describe his thoughts and emotions by keeping him/ herself in present moments. The patient had practiced ACT techniques through selected activities and had reviewed how to deal with barriers in a valuable life.
Metacognitive therapy (MCT): The structure of the presentation was as follows[18,19].
First session: Patient familiarity with meta-cognitive modeling and teaching methods of mindfulness and detachment.
Second session: Focusing and working on obsessive-compulsive thoughts and beliefs
Third Session: Teaching the technique of facing with thoughts
Fourth and Fifth Session: Learning fusion beliefs and challenging these beliefs and conducting behavioral experiments
Sixth Session: Starting to search for changing and stopping symptoms
Seventh session: The remaining cures and changes in stopping the symptoms and criteria have been surveyed.
Eighth session: consolidating new programs to work with their future obsessions
Mindfulness-integrated Cognitive Behavioral Therapy [MiCBT]: This therapy protocol is according to[32,35].
First Session: Being familiar with (MiCBT), Speaking, and Provision of Mindfulness on Emotions and Thoughts and mindfulness of breath
Second Session: Non-judgmental awareness and attention to the immediate experience of thoughts and feelings and emotions and body scanning with audio in 3 first days and without audio in 4 remained days
The third and fourth sessions: Working on the receptive attitude and easy-going and non-prejudiced thinking about thoughts, emotions, and feelings and bilateral body scanning
Fifth Session: Encouraging and helping the patient in the prevention of neutralization or hiding coercion in their obsessions and doing partial sweeping
Sixth session: Training techniques at a meeting to think that what patients are thinking about or doing at the time of facing their discomfort or their obsession, and sweeping in mass with free flow
Seventh session: Focusing on transversal scanning
Eighth Session: Facing mindfully when confronting with automatic thoughts, and sweeping in-depth: loving-kindness.
It is worth mentioning that the participants have been trained the mindfulness confrontation and reappraisal of their cognitive status, interpersonal mindfulness, and also prevention of relapse based on empathy. The total emphasis was on body scanning to regulate emotions.

Results

Table 2 shows the descriptive statistics of the groups in the Yale-Brown obsessive-compulsive questionnaire.

The entry requirements in this study included having a diploma degree (12 years obligatory education) and age of 20 to 40 years, not receiving any kind of therapies psychologically nor medicine, and filling out the form of consent of participating in the study. The final participants were those who received a diagnosis of OCD from psychiatric and gained a score higher than 16 according to the questionnaire.

It should be noted that the validity of each treatment was ensured; the training of each treatment was obtained by participating in authorized and standard workshops, and several references were browsed in this regard to adhere to each treatment protocol.

Before the beginning of the interventions, all participants were informed of the research goal and have signed the informed consent form. They also had the right to withdraw from the study anytime during the study. The therapy program took place in eight sessions of 75 to 90 minutes, but the members of the control group (waitlist) did not receive any intervention at the time of the current study, but in terms of ethical standards, they were offered the ACT method of psychotherapy after the completion of the study. Participants were followed up one month later with a post-test. To determine the accuracy of the diagnosis and also to determine the extent of the changes in quantitative terms and using the Yale-Brown obsessive-compulsive scale (Y-BOCS). Y-BOCS is one of the measures of OCD, which evaluate obsession types or compulsions, but not their severity. This scale has ten items, the first five of which focus on OCD, and the next five items focus on compulsions. The highest score on this scale is 40, and each item gets between 0 and 4 points. The cut-off scores are 16 or higher.[28] The reliability of the ratings is 0.98-0.72.[29] In another study, the correlation coefficient was reported from 0.80 to 0.99. The internal consistency, as of the Cronbach's alpha coefficient was 0.69 to 0.91.[30] In the studies on the Iranian population, the convergence validity of this questionnaire with the Madzeli obsessive-compulsive questionnaire was 0.78.[28] Also, Cronbach's alpha coefficient

for the questionnaire was 0.91 for the obsessive-compulsive questionnaire, 0.98 for the obsessive part, and .89 for the compulsive disorder.[28]

One-way analysis of covariance has been used to analyze the data using SPSS 21 version. The Kolmogorov-Smirnov test did not indicate any breakthrough in the distribution of the pre-test, post-test, and follow-up in each of the groups. Also, the homogeneity of the slope of regressions is presented in table 4.

Results did not show a significant difference in the obsession score at the pre-tests. To test the research hypotheses, the mean of groups in the pre-test, post-test, and follow-up was compared using repeated measure analysis of ANOVA.

According to table 4, the results demonstrate that all therapy groups showed significant differences in the mean scores of obsessive-compulsive disorder from the pre-test to the post-test. Aa table 4 shows, the comparison of post-test and follow-up stages, are also significant in all therapy groups, Pvalue<0.01. Tukey's test results showed a significant difference between the means. Results showed that the difference between CBT and ACT in pre-test and post-test is (M=-3.42, SE=2.57, Pvalue=0.003).

The difference between CBT and MiCT in pre-test and post-test is (M=-1.89, SE=1.96, Pvalue=0.001). The difference between ACT and MCT in pre-test and post-test is (M=-5.38, SE=2.24, Pvalue=0.51). The difference between ACT and MiCBT in pre-test and post-test is (M=-6.00, SE=1.28, Pvalue=0.009). The difference between MCT and MiCBT in pre-test and post-test is (M=-3.12, SE=2.08, Pvalue=0.001). The difference between CBT and control in pre-test and post-test is (M=-13.12, SE=1.16, Pvalue=0.04). The difference between ACT and control in pre-test and post-test is (M=-10.35, SE=2.67, Pvalue=0.01). The difference between MCT and control in pre-test and post-test is (M=-14.75, SE=2.11, Pvalue=0.005). The difference between MiCBT and control in pre-test and post-test is (M=- 14.84, SE=1.16, Pvalue=0.006). The difference between CBT and ACT in pre-test and follow-up is (M=-0.76, SE=2.21, Pvalue=0.94). The difference between CBT and MCT in pre-test and follow-up is (M=-0.12, SE=2.11, Pvalue=0.009). The difference between CBT and MiCBT in pre-test and follow-up is (M=1.11, SE=2.16, Pvalue=0.001). The difference between ACT and MCT in pre-test and follow-up is (M=-3.22, SE=2.24, Pvalue=0.6). The difference between ACT and MiCBT in pre-test and follow-up is (M=-3.00, SE=2.29, Pvalue=0.036). The difference between MCT and MiCBT in pre-test and follow-up is (M=-1.67, SE=2.31, Pvalue=0.024). The difference between CBT and control in pre-test and follow-up is (M=-9.57, SE=3.2, Pvalue=0.07). The difference between ACT and control in pre-test and follow-up is (M=-11.29, SE=3.12, Pvalue=0.012). The difference between MBT and control in pre-test and follow-up is (M=-10.62, SE=3.35, Pvalue=0.812). The difference between MiCBT and control in pre-test and follow-up is (M=-9.02, SE=3.67, Pvalue=0.014).

And MCT did not have a significant effect on OCD in the long term and there is no difference between these two therapies and the control group in the long term. However, there were significant differences between ACT and MICBT in the long term with a control group, Pvalue<0.05. Therefore, the best-proposed therapy for OCD in the present study is ACT and MiCBT.

Table 2. Descriptive statistics of the groups in the Yale-brown obsessive-compulsive questionnaire

Therapy group	Mean			SD			Skewness			Kurtosis		
	Pre test	Post test	Follow up	Pre test	Post test	Follow up	Pre test	Post test	Follow up	Pre test	Post test	Follow up
CBT	26.14	14.07	20.23	1.68	2.14	1.32	7.84	1.46	2.87	5.66	-1.09	-9.94
ACT	27.25	15.46	15.08	2.65	3.41	2.29	0.94	2.41	-1.92	4.78	7.65	-8.24
MCT	27.75	15.64	21.81	3.46	2.91	4.32	1.28	6.39	7.45	-2.19	7.12	6.73
MiCBT	26.23	13.20	13.24	2.84	1.99	2.12	8.62	6.93	-1.77	4.43	9.91	2.18
Control	25.36	25.92	24.17	4.62	3.08	4.02	9.48	1.19	1.05	-3.90	6.18	9.53

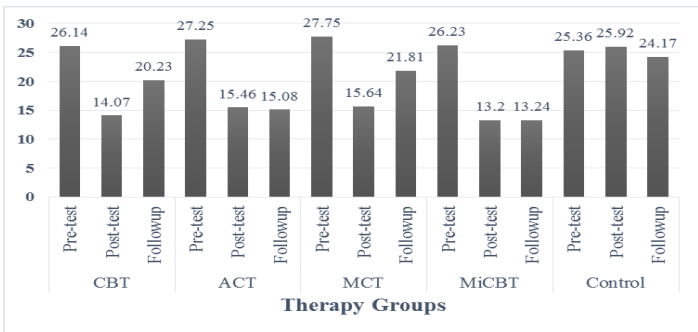

Figure 1. Shows Between-group mean differences

Table 3. Demographic characteristics of the research sample

Therapy Groups	Gender		Education			Age	
	Men	Women	Up to Diploma	Diploma to Bachelor	Master's Degree and Ph.D.	Mean	SD
CBT	8	12	4	22	4	30.1	1.2
ACT	9	11	5	9	6	29.4	2.3
MCT	9	11	5	10	5	31.3	3.0
MiCBT	8	12	6	9	5	32.2	2.6
Control	9	11	5	10	5	28.2	3.1

Table 4. Repeated measure analysis of ANOVA for pre-test, post-test, and follow-up

	Groups	SS	DF	MS	F	Pvalue	η^2_p
Pre-test and post-test	CBT	1816.92	2	908.46	26.6	0.0001	0.006
	ACT	1859.05	2	929.52	27.40	0.001	0.005
	MCT	1884.62	2	942.31	28.13	0.0014	0.008
	MiCBT	1875.49	2	937.74	28.05	0.0017	0.007
	Control	1863.22	2	919.05	27.80	0.01	0. 01
post-test and follow-up	CBT	1254.77	2	627.38	19.01	0.069	0.004
	ACT	1222.97	2	611.48	17.75	0.001	0.001
	MCT	1321.72	2	660.84	19.53	0.072	0.003
	MiCBT	1236.06	2	618.03	18.09	0.0001	0.006
	Control	1296.19	2	644.40	19.79	0.01	0.02

Discussion

The findings of this study showed that MiCBT, MCT, ACT, and CBT were effective in improving the symptoms of OCD in the short term; however, there was no significant difference in long-term effectiveness between MCT and CBT. Also, in the long term, the ACT and MICBT maintained their therapeutic effects. MiCBT, MCT, ACT, and CBT have been effective in relieving the symptoms of OCD in the short term; however, MiCBT and ACT showed more durable effects.

The finding that showed these therapies are appropriate for OCD is consistent with many studies. A meta-analysis highlighted the effectiveness of CBT in patients with OCD.[5] Another meta-analysis on the effectiveness of ACT on the range of anxiety and OCD concluded that ACT would be more effective than CBT. Others have highlighted the effects of metacognitive therapy on reduction of the obsessive-compulsive symptoms, signs of depression associated with them, and also demonstrated a dramatic change in the Yale-brown scale.[18,33] Another study showed that MiCBT is effective in patients with predominant obsession without apparent obsession. Also, this study showed that CBT can improve the person in the short term and reduce the symptoms of OCD, but not in the follow-up as it may be explained in the form of relapse.[5-7,25]

Behavioral therapy in the form of exposure and prevention of response is still the main part of CBT CT and cognitive-drug therapy are both effective in the therapy of OCD; therefore, CBT alone was more effective without using drugs.[34,35] CBT was divided into two sections: Exposure and response prevention and cognitive therapy, and it can be concluded that both of these are useful for obsessive-compulsive disorder; however, exposure and prevention of response have a more durable effect. Therefore, it may be possible to further explain the effectiveness of other therapies in comparison to the cognitive-behavioral therapeutic approach is more durable ineffectiveness. For example, in the MiCBT, people are asked to provide the necessary things for their silence and try not to respond to their thoughts, excitements, and body feelings, and using techniques such as bipolar exposure instead.[24]

The findings of this research regarding the effectiveness of MCT showed that it can improve the person in the short term and reduce the symptoms of OCD, but for prolonged periods, a type of relapse and a return to symptoms occur for individuals, returning the patient gradually onto the disease. This finding is in the line with many studies that study reported the effectiveness of MCT on reducing symptoms of OCD and increasing the level of performance in patients with OCD.[21]

In this regard, the findings of another study are in line with the effectiveness of MCT on the reduction of OCD symptoms as well as signs of depression associated with it.[18] Patients showed a dramatic change in the Yale-brown scale. Another study showed the possibility of the effect of MCT on the decrease of anxiety disorders in children.[23] In another study, the effect of MCT on rapid reciprocating thoughts and initial and non-primary incidence of anxiety showed that rapid MCT could have a positive effect on this regard.[23]

Also, in line with previous studies, the findings of this study indicated that ACT can improve both the short-term and long-term outcomes of the person and reduce the symptoms of obsessive-compulsive disorder Also, it demonstrated that this therapy is, firstly, effective in the therapy of obsessive-compulsive disorder, and secondly, it has an impact on the cognition for cognitive therapy. Mindfulness-integrated cognitive behavioral therapy can help to improve the individual both in the short and long term and to reduce the symptoms of obsessive-compulsive disorder.[15,16,33]

A similar pattern was observed for the MiCBT group. A large number of studies have already been done in this regard, which can be suggested by Kumar et al., which showed that MiCBT can be successful in treating patients with predominant obsessive-compulsive disorder.[25]

To explain the better performance of both ACT and MICBT therapies, it should be noted that these two therapeutic approaches, to increase resilience presumably as of the high

emphasis on thoughts,[36,37] and, in the long run, will have a significant effect on OCD. It can be argued that a patient with OCD needs help in accepting a thought as it is, but not changing or engaging with how and what it is. Consciousness increases the levels of positive emotions, enhances self-esteem and, successfully accepts negative experiences.[15]

In other words, in the mentioned interventions, thoughts are considered merely as a thought. It also helps to reduce the risk of thinking negatively. In other words, ACT and MiCBT give a more realistic assessment of the client's condition, and as a result of this, gradually, a radical change in one's understanding, perceptions, and attitudes and beliefs comes about, and these changes include changes in spiritual awareness.[38,39] These changes lead to the most protective factors against obsessive-compulsive disorder.

The obsession can be diminished because of reconsidering the thoughts and facing them only as a thought. Given that the cognitive component is the cause of the obsessive-compulsive disorder.[14] It means that gradually a radical change in understanding is achieved, as this process takes place in perceptions, attitudes, and beliefs, and these changes involve changes in the spiritual awareness of the individual.[14,38] CBT is focusing on the content of thought; a phenomenon that does not exist in the MCT. Also, the purpose of the therapy is to inform the person that she/he is aware of her/his though and face that as a thought. ACT aims to face a thought only as a thought. At MiCBT, the goal of the therapists is to familiarize the client with mindfulness and internalizing the skills to overcome obsessive thoughts. The similarities that these approaches have with each other are more clear and far beyond their differences. The common ground in all of the above therapies is that they are firstly about thoughts. And all of them are cognitive therapies and are divided into short-term therapies.[40,41]

The similarity between ACT and MiCBT approaches can be summarized in mindfulness and considering a thought solely at a measure and scale of thought, but MCT also tries to engage the thoughts and ideas with the help of knowledge of the thinking process and look at them from another point of view.

It should be noted that the better performance of ACT and the MiCBT due to the great emphasis on mind and thoughts, raising happiness and awareness and patience lead to suppression of obsessive thoughts, and then these thoughts tend to become extinguished. So the patient does not take the thoughts seriously. It can be argued that an obsessive patient needs to be helped in accepting thoughts without changing or engaging with them.

It should be noted that CBT and MCT, due to focusing on the content, the way, and the process of thinking, cannot be used as a durable therapeutic approach for OCD in the long term.

It is suggested that the effect of the therapy of ACT and MiCBT on obsessive-compulsive disorder should be considered whether these therapies can also have a preventive role. It is also suggested that researchers, by choosing wider samples and more attention to this disorder, perform research to make it possible to compare therapeutic groups in a better way.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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