

Original research

Effectiveness of Treatment based on Acceptance and Commitment on Perfectionism and Quality of Life in Patients with Obsessive Compulsive DisorderMaryam Ezzatpour,¹ Zahra Tanha*,² Kourosch Amraei,³ Kourosch Goodarzi⁴**Abstract**

Introduction: Treatment based on acceptance and commitment can have a positive effect on many symptoms and clinical manifestations of obsessive-compulsive disorder, such as avoidance, thought inhibition, impaired quality of life, and mood problems. This research was conducted with the aim of investigating the effectiveness of treatment based on acceptance and commitment on perfectionism and quality of life in patients with obsessive-compulsive disorder.

Research method: This research was a semi-experimental type with a pre-test, post-test and follow-up design with a control group. The statistical population of the research included all the patients of Mehr Neurological and Psychiatric Hospital, Imam Reza and Khorramabad Health Center in the second half of 1402, and 30 participants were selected from this population by available sampling and placed in experimental and control groups. They responded to the perfectionism questionnaires of Hill et al. and the quality of life questionnaire of War and Sherboom in 3 stages, and for the intervention group, 8 sessions were planned based on the treatment protocol, and the control group did not receive training, and the data obtained by variance analysis It was analyzed by repeated measures.

Findings: The results showed that the treatment based on acceptance and commitment is significant on the maladaptive dimension of perfectionism ($P=0.004$) and on the mental health dimension of quality of life ($P=0.047$).

Conclusion: Based on this, it was concluded that treatment based on acceptance and commitment is an effective method to reduce maladaptive perfectionism and increase the mental health dimension of quality of life in patients with obsessive-compulsive disorder.

Keywords: Acceptance and Commitment Therapy, Perfectionism, Quality of Life, Obsessive Compulsive Disorder

Received: 27/ february/ 2024**Accepted: 30/ june/ 2024**

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Introduction:

Obsessive Compulsive Disorder or Obsessive Compulsive Disorder is one of the psychological disorders that affect the mental, emotional and communication health of people. Although the course of obsessive-compulsive disorder is usually severe and weak, but this course tends to become chronic and leads to a decrease in life satisfaction, damage to social, academic, occupational and family functions (1). The age of onset of this disease is usually between early adolescence and early adulthood (2). Studies in recent decades have confirmed the widespread prevalence of this disease at the age of 12 (3).

Until recently, it was believed that obsessive-compulsive disorder is a rare disease with a prevalence of about 0.05%. But many researchers conducted during the last two decades show that the prevalence of this disease is much higher than what was previously thought (4). Regional epidemiologic studies have reported the lifetime prevalence of this disease as 2.5% (one out of every 40 people) and its prevalence in six months as 1.6%. Also, in this research, the prevalence of this disorder in children and adolescents is between 1 and 4% (5). The prevalence of this disease in the Iranian population is estimated at 1.8% (0.7% in men and 2.8% in women) (6).

Obsessive-compulsive disorder symptoms interfere significantly in the mental health and general functioning of affected children and adults and lead to the individual's incompatibility in the family or academic and work environments (7). According to the announcement of the World Health Organization, this disorder is the 10th most prominent cause of disability in the world, which manifests as disability in social functioning and quality of life (8). because; Obsessions have many effects on people's lives, such as the inability to concentrate, creating distractions, avoiding the main tasks, and mental fatigue. And they create natural life, job function, usual social activities or individual relationships (9).

This disorder imposes a lot of economic, emotional and social burden on the sufferers, their families and the society and often creates a chronic and widespread condition so that the sufferers experience frequent relapses. Due to the fact that obsessive behaviors happen many times, a person feels unable to control them and therefore experiences corrosive anxiety when facing them (10). This disease also takes away a lot of energy and facilities from the patient and imposes a lot of medical and economic costs on the patient and his family (11).

Obsessed people usually have exaggerated responsibility and unacceptable thoughts due to the integration of thought and action (12); Non-avoidant behaviors are (13). This group of behavioral patterns in people suffering from this disorder has not only severely affected their physical health (14), but also caused other mental problems and disorders (15).

On the other hand, experimental studies also indicate that people suffering from obsessive-compulsive disorder have many psychological abnormalities, for example, people suffering from this disorder due to perfectionism are often stubborn and inflexible people, and this disorder is characterized by outbursts. Anger and hostility are related both at home and at work. These people have interpersonal problems based on hostility and are sensitive to the behavior based on intimacy and warmth by others and show less sincere behavior to others (16). The research of Zherdzinski, Burdzik, Zmuda et al. (17) indicates that; Intellectual-practical obsessions disrupt all aspects of the

sufferers' quality of life, and the quality of life in these people is lower than others (18). Also, in patients with obsessive-compulsive disorder, there is an avoidance of experiencing and enduring distress, which helps to create obsessive-compulsive symptoms and leads to difficulty in managing disturbing and unwanted thoughts, feelings, and other internal emotional experiences (19). All of which are known processes related to psychological flexibility (20).

Several treatments have been suggested for the treatment of obsessive-compulsive disorder. Among these treatments, the method that has received more attention in recent years is the treatment based on acceptance and commitment. Acceptance and commitment-based therapy, which was proposed in the 80s by Hayes et al. (21) at the University of Nevada and known as ACT (22). Treatment based on acceptance and commitment, unlike traditional cognitive behavioral therapy, does not directly reduce symptoms, but instead targets the usefulness and function of psychological experiences such as thoughts, feelings, memories, and psychological feelings. This method tracks meaningful life activities regardless of their existence (23). Its underlying principles include: 1- Acceptance (tendency to experience pain or other disturbing events without trying to control them); 2- Value-based action (commitment coupled with desire to act, as meaningful personal goals rather than eliminating unwanted experiences).

Also, there are linguistic methods and cognitive processes that lead to healthy functioning in interaction with other non-verbal dependencies. This method includes exercises based on exposure, linguistic metaphors and methods such as mental care. In this treatment, instead of changing cognitions, an attempt is made to increase a person's psychological connection with his thoughts and feelings. In this treatment, it is first tried to increase the person's psychological acceptance of mental experiences (thoughts, feelings) and reduce ineffective control actions (24). The patient is taught that any action to avoid or control these unwanted mental experiences is ineffective or has the opposite effect and causes them to intensify and should (these experiences without any internal or external reaction to remove them) Fully accepted (25). The central process of treatment based on acceptance and commitment teaches people how to stop inhibiting thoughts, how not to get mixed up with disturbing thoughts, and makes a person tolerate unpleasant emotions more (26). Treatment based on acceptance and commitment can have a positive effect on many symptoms and clinical manifestations of obsessive-compulsive disorder, such as avoidance, inhibition of thought, impaired quality of life, and mood problems (27). Therefore, the general purpose of the above study is that treatment based on acceptance and commitment has an effect on perfectionism and quality of life in patients with obsessive-compulsive disorder.

Research method:

This research was a semi-experimental type with a pre-test, post-test and follow-up design with a control group. The statistical population of the research included all the patients referred to the consultation centers of Mehr Neurological Hospital, Imam Reza and Khorram Abad Health Center in the second half of 1402, out of which 30 participants, taking into account the entry criteria (getting a score of 20 and above) of which in the obsessive-compulsive questionnaire; absence of obsessive-compulsive disorder duration; absence of other psychological and personality disorders)

and exclusion criteria (psychiatric and psychotropic medication use; from 2 sessions in therapy sessions; simultaneous participation in other courses and therapeutic interventions at the same time as research) were selected as available samples and placed in experimental and control groups and according to Hill et al.'s perfectionism questionnaires (2004) and quality questionnaires Zandivar and Sherboom (2000) responded in 3 states and the treatment group based on acceptance and commitment were trained in 8 sessions based on the treatment protocol according to the method of Hayes and colleagues (1999) and the control group did not receive training and in During the implementation of the research, the treatment based on acceptance and commitment (13 people) and the control group (15 people) were reduced. The obtained data were analyzed by repeated measure analysis of variance. The research tools were:

Hill's Perfectionism Questionnaire: The perfectionism scale was prepared by Hill et al. in 2004 and has 59 items and 8 subscales. In this scale, from the combination of the dimensions of order and organization, purposefulness, striving for excellence and high standards for others, the compatible aspect and from the combination of the scores of the dimensions of need for approval, focus on mistakes, perception of pressure from parents and rumination, the incompatible aspect of perfectionism is obtained. It becomes (28). The results of calculating the reliability and validity of this scale in Hill et al.'s research indicate that the reliability coefficient was obtained between 0.83 and 0.91 using Cronbach's alpha method (29). The validity and reliability of this scale was carried out in Iran by Jamshidi et al. in 2008. The validity of the entire scale was obtained in the preliminary survey of 68 participants using the Cronbach's alpha method, with an internal consistency of 0.80 (30).

Var and Sherboom Quality of Life Questionnaire (SF36): This tool is a self-report questionnaire that is mainly used to check the quality of life and health. This questionnaire has proven its effectiveness for purposes such as clinical work, evaluation of health policies, as well as research and studies of the general population. This questionnaire was created by Warr and Sherburne in 2000 and has 36 items and evaluates health and quality of life in two general dimensions, physical and mental health (31). The way of answering the questions of the quality of life questionnaire varies from a binary yes-no (answer package) to a range of 6 grades. This questionnaire evaluates the health status in eight subscales, each scale is measured by a set of questions based on which it is scored. The dimension of physical health has 4 subscales of physical function, physical limitation, physical pain, and general health, and the dimension of mental health has 4 subscales that include vitality and vitality, social functioning, emotional limitation, and mental health (32). The validity and reliability of this questionnaire has been investigated in different groups of patients. The concepts measured by this questionnaire are not specific to age, group or patient. The purpose of this questionnaire is to assess health in terms of both physical and mental health, which is obtained by combining the scores of the eight areas that make up health. The lowest score in this questionnaire is zero and the highest score is 100. Researches about the quality of life show that this questionnaire has validity and clinical validity (33). The reliability and validity of the Persian version of this questionnaire in Iran has been confirmed in various studies. The validity and reliability of the Persian version of this questionnaire was evaluated for the first time in Iran by Montazeri, Ghstasbi, Vahidnia and Gandek (34) in 4163 people aged 15 years and above,

according to their report, the reliability coefficient of eight after 77 to 95% It was 65% later in life (34).

Acceptance and Commitment Therapy: In the current study, a treatment protocol was developed based on the method of Hayes and his colleagues in 1999. This program was implemented by the therapist in 8 weeks, 1 session of 90 minutes per week for patients suffering from obsessive-compulsive disorder.

Table 1: Description of the acceptance and commitment treatment package

meeting	purpose	The content of the meetings
First	Interview and assessment, explanation of conditions and treatment process, explanation of the underlying model of ACT	Training and implementation of mindfulness exercises that must be implemented in each session, change through the use of mood frustration exercise, hard cover exercise to explain the treatment process.
Second	Explaining the concept of acceptance and living in the now	Mindfulness practice, in this session we talk about satisfaction, primary and secondary suffering, using the metaphor of a wanderer, using the metaphor of walking in the rain.
Third	Explanation of the concept of contextual self	Practicing mindfulness, considering oneself as a context, allegorizing smooth sands, axing at the root of reasoning, using the incongruous technique.
Fourth	Explaining the concept of breaking from language threats	Practicing mindfulness, putting yourself in context, practicing facing the giant iron man, doing the "yes, but" method.
the fifth	Initial assessment of values and explanation of goals	Mindfulness practice, thought suppression practice
the sixth	Clarification of values	Mindfulness practice, bus values compass, goal setting, activity planning
the seventh	Explanation of the concept of committed action	Mindfulness practice, observer practice, chess board analogy
the eighth	Ending meetings and conclusions with the aim of preparing for relapse to preventing relapse	Practice the content on the flashcards, let's live life's lifelong assignments.

The data were statistically analyzed using repeated measures analysis of variance and $P < 0.05$ significance level and using SPSS version 23 software.

Findings:

In this research, there were 28 participants in 2 treatment groups based on acceptance and commitment (13 people) and the control group (15 people). The mean and standard deviation of the age of the participants in the treatment group based on acceptance and commitment were 29.31 and 5.44 years respectively, and in the control group it was 32.27 and 5.22 years. There were 3 men and 10 women in the group based on acceptance and commitment, and 4 men and 11 women in the control group. In the treatment group based on acceptance and commitment, the level of education of 3 of the participants was under diploma, 5 had a diploma, 2 had a bachelor's degree, and 3 had more than a bachelor's degree. In the control group, the level of education of 3 of the participants was under diploma, 8 had a diploma, 1 had a bachelor's degree, and 3 had more than a bachelor's degree. In the group based on acceptance and commitment, 4 people were single, 7 people were married, and 2 people were separated from their spouses, and in the control group, 5 people were single, 9 people were married, and 1 person was separated from their spouse.

Table 2: The mean, standard deviation and Shapiro-Wilk index (significance level) shows the dimensions of perfectionism and quality of life in the participants of the research groups, in the three stages of pre-test, post-test and follow-up.

Table 2: Average, standard deviation and Shapiro-Wilk index (significance level) dimensions of perfectionism and quality of life

Variable	component	group	Pretest	Posttest	followup
Mean and standard deviation	Perfectionism adaptive dimension	- ACT	58.77 ± 7.62	43.84 ± 6.96	47.00 ± 6.25
			61.67 ± 9.63	59.67 ± 7.06	60.10 ± 7.15
	Perfectionism - the maladaptive dimension	Control group	96.61 ± 13.87	70.61 ± 8.27	72.62 ± 9.37
			95.93 ± 10.24	97.66 ± 8.85	95.13 ± 10.39
	Quality of life physical health	- ACT	46.25 ± 7.11	57.60 ± 7.68	54.39 ± 9.02
			46.30 ± 8.87	45.42 ± 8.20	46.056 ± 7.32
Quality of life mental health	- Control group	38.87 ± 6.65	55.07 ± 7.05	52.79 ± 9.01	
		37.76 ± 6.70	38.21 ± 6.92	37.88 ± 6.03	
Shapiro-Wilk Test (sig)	Perfectionism adaptive dimension	- ACT	0.923 (0.279)	0.909 (0.279)	0.919 (0.244)
			0.960 (0.699)	0.904 (0.111)	0.955 (0.602)
	Perfectionism - the maladaptive dimension	Control group	0.952 (0.635)	0.892 (0.105)	0.911 (0.193)
			0.925 (0.233)	0.922 (0.206)	0.957 (0.646)
		ACT	0.949 (0.586)	0.942 (0.488)	0.950 (0.598)

Quality of life - physical health		0.939 (0.369)	0.925 (0.227)	0.942 (0.404)
Quality of life - mental health	Control group	0.943 (0.501)	0.971 (0.230)	0.948 (0.567)
		0.955 (0.605)	0.971 (0.714)	0.946 (0.467)

Table 2 shows that in the two test groups, the average scores of both dimensions of perfectionism decreased in the post-test and follow-up stages, and the average scores of both physical and mental health dimensions of quality of life increased. On the other hand, no similar changes were observed in the mentioned stages in the control group. In order to test the assumption of normality of data distribution, the Shapiro-Wilk values of the variables in all three groups were examined, and as Table 2 shows, the Shapiro-Wilk index of none of the dimensions of the two variables perfectionism and quality of life in the three groups and stages Performance was not significant. Therefore, the assumption of normality of data distribution among the data was maintained.

In this research, Lon's test was used to evaluate the homogeneity of the error variances of the dependent variables and the results showed that the difference in the error variance of the scores related to any of the dimensions of the two dependent variables in the groups and in the three stages is not significant. This finding shows that the assumption of homogeneity of error variances was maintained among the data related to the research variables. Next, the assumptions of homogeneity of the covariance matrices of the dependent variables were examined using the M. Box statistic and the sphericity condition or the assumption of the equality of the covariance matrix of the errors using the lag test, the results of which are presented in Table 3.

Table 3: The results of testing the assumptions of the equality of the variance-covariance matrices and the equality of the error covariance matrix

Variable	Dimensions	Equality of variance matrix of covariances			Equality of the error covariance matrix		
		M.Box	F	p	Mauchly's	χ^2	p
perfectionism	Adaptive dimension	7.19	0.53	0.896	0.939	2.39	0.303
	Inconsistent dimension	21.15	1.56	0.095	0.921	3.13	0.209
quality of life	physical health	6.50	0.48	0.928	0.620	18.16	0.001
	mental health	12.45	0.92	0.525	0.786	9.13	0.010

The results of the analysis in Table 3 show that M. Box's statistical index is not significant for any of the dimensions of the two variables perfectionism and quality of life. This article shows the assumption of homogeneity of the covariance matrices of the dependent variables among the data. Also, Table 3 shows that the Chi-square value obtained from Moheli's test is significant for both dimensions of physical health ($p=0.001$) and mental health ($p=0.010$) of quality of life. This

finding indicates that the assumption of sphericity for the dimensions of quality of life was not established, and for this reason, the degrees of freedom related to those scores were modified using Geisser-Greenhaus method.

After evaluating the assumptions of the analysis and ensuring their establishment, the data were tested using the variance analysis method with repeated measurements. Table 4 shows the results of multivariate analysis comparing the effect of treatment based on acceptance and commitment on dimensions of perfectionism and quality of life.

Table 4: Results of multivariate analysis in evaluating the effect of independent variables on perfectionism and quality of life

Variable	Dimensions	Wilks Lambda	F	df	p	η^2	Power of a test
perfectionism	Adaptive dimension	0.577	6.02	4, 76	0.001	0.241	0.987
	Inconsistent dimension	0.509	7.63	4, 76	0.001	0.2886	0.996
quality of life	physical health	0.758	2.82	4, 76	0.031	0.129	0.744
	mental health	0.714	3.49	4, 76	0.011	0.155	0.841

Table 4 shows that the effect of implementing independent variables on adaptive dimensions (Wilks' lambda = 0.577, $2\eta = 0.241$, $P = 0.001$, $F = 6.02$) and maladaptive dimensions (Wilks' lambda = 0.509, 286 Perfectionism is significant. Also, the effect of implementing independent variables on physical health dimensions (Wilks' lambda = 0.758, $2\eta = 0.129$, $P = 0.031$, $F = 2.84$) and mental health (Wilks' lambda = 0.714, 0.155) = $2\eta 2$, $P = 0.011$, $F = 3.49$) quality of life was also significant. Table 4 shows the results of the analysis of variance with repeated measures in explaining the effect of the treatment based on acceptance and commitment on the dimensions of perfectionism and quality of life.

Table 6: Results of variance analysis with repeated measurement in explaining the effect of independent variables on perfectionism and quality of life

Variable	Dimensions	Effects	sum of squares	sum of squared error	F	P	η^2
		Group effect	2488.51	5109.46	9.50	0.001	0.328
	Adaptive dimension	The effect of time	1141.40	814.13	54.68	0.001	0.584

perfectionism		The interaction effect of group × time	673.94	1515.71	8.67	0.001	0.308
		Group effect	5554.15	4463.28	24.32	0.001	0.557
Inconsistent dimension		The effect of time	4386.65	4604.81	37.17	0.001	0.488
		The interaction effect of group × time	3988.12	7560.88	10.27	0.001	0.345
quality of life	physical health	Group effect	1055.26	4298.90	4.79	0.014	0.197
		time effect	630.10	1687.89	14.56	0.001	0.272
		The interaction effect of group × time	675.22	2258.84	4.45	0.008	0.186
	mental health	Group effect	2570.28	2385.71	21.01	0.001	0.519
		time effect	997.87	2260.52	17.22	0.001	0.306
		The interaction effect of group × time	1055.48	3706.81	5.56	0.002	0.222

Table 6 shows that in addition to the group effect and the time effect, the interaction effect of group × time for the adaptive dimension ($\eta^2=0.308$, $P=0.001$, $F=8.67$) and the incompatible dimension ($\eta^2=0.345$), $P = 0.001$, $F = 10.27$) perfectionism is significant. Also, the interaction effect of group × time for the dimensions of physical health ($F = 0.222$, $P = 0.008$, $P = 0.008$) and mental health ($F = 0.222$, $P = 0.002$, 5.56) = F) quality of life was significant. In the following table 5, the results of the Ben Feroni test show the scores related to the total dimensions of perfectionism and quality of life in three groups and in three stages of implementation.

Table 7: Results of Ben Feroni's post hoc test for pairwise comparisons of the effect of groups and times for perfectionism and quality of life

Variable		times		mean difference	Standard error	probability value
perfectionism	Adaptive dimension	pre-test	post test	8.78	1.04	0.001
		pre-test	follow up	7.39	1.00	0.001
		post test	follow up	-1.40	0.84	0.311
		pre-test	post test	16.46	2.20	0.001

	Inconsistent dimension	pre-test	follow up	14.48	2.38	0.001
		post test	follow up	-1.97	1.85	0.882
quality of life	physical health	pre-test	post test	-6.81	1.62	0.001
	physical health	pre-test	follow up	-5.49	1.44	0.001
		post test	follow up	1.32	0.86	0.401
		mental health	pre-test	post test	-8.88	1.72
		pre-test	follow up	-6.91	1.66	0.001
		post test	follow up	1.98	1.05	0.201
Variable		Differences between groups		mean difference	Standard error	probability value
	Adaptive dimension	ACT	Control group	-10.60	2.50	0.001
	Inconsistent dimension	ACT	Control group	-16.30	2.34	0.001
	physical health	ACT	Control group	6.69	2.30	0.018
	physical health					
	mental health	ACT	Control group	10.96	1.71	0.001

The Ben Feroni test comparing the effect of time in Table 7 shows that the difference in the mean scores of the adaptive and maladaptive dimensions of perfectionism and quality of life in the pre-test-post-test and pre-test-follow-up stages is statistically significant, but the difference in the average scores in the post-test stages - The follow-up is meaningless. Also, the results of the Ben Feroni test comparing the group effects in Table 5 show that the average difference of both dimensions of perfectionism in the two experimental groups is statistically significant compared to the control group. So that the implementation of both methods of treatment based on acceptance and commitment caused the average adaptive and maladaptive dimensions of perfectionism to decrease in the post-test and follow-up stages compared to the pre-test stage. In line with the results related to the group effects in the Ben Feroni test, the change trend of the average scores of the dimensions of perfectionism in the graphs of Figure 1 shows that the changes caused by the treatment based on acceptance and commitment to perfectionism remained after the end of the treatment period.

The results of the Ben Feroni test comparing the effect of the group in Table 7 show that the difference in the mean of both dimensions of quality of life in the two treatment groups based on acceptance and commitment and control is statistically significant. So that the implementation of treatment based on acceptance and commitment has increased the average quality of life in the post-test and follow-up stages compared to the pre-test stage.

Table 7 showed that the difference in the effect of treatment based on acceptance and commitment on the maladaptive dimension ($p=0.004$) of perfectionism and on the mental health dimension of quality of life ($p=0.047$) is significant. So that the treatment based on acceptance and commitment reduced the maladaptive dimension of perfectionism and increased the scores of mental health dimension of quality of life. Based on this, it can be said that treatment based on acceptance and commitment is a more effective method for reducing maladaptive perfectionism and increasing the mental health dimension of quality of life in patients with obsessive-compulsive disorder compared to the control group.

Discussion and conclusion:

This research was conducted with the aim of investigating the effectiveness of acceptance and commitment therapy on perfectionism and quality of life in patients with obsessive-compulsive disorder and the results showed that acceptance and commitment therapy reduced the scores of the maladaptive dimension of perfectionism and the scores of the mental health dimension. It has increased the quality of life. Based on this, it can be said that treatment based on acceptance and commitment is an effective method for reducing maladaptive perfectionism and increasing the mental health dimension of quality of life in patients with obsessive-compulsive disorder.

In explaining the effectiveness of treatment based on acceptance and commitment to perfectionism in obsessive patients, it can be said that in this treatment approach, it is believed that pain is an inevitable part of life that can be accepted, while trying to avoid pain causes more suffering. Fighting pain is considered as a form of non-acceptance or resistance to "what is". The intensity of suffering depends on the degree of integration of clients with thoughts and emotions related to pain (35). Related studies show that avoidance is a common response to chronic pain and can take a myriad of forms, such as avoiding work or social activities or overusing alcohol, food, or medication. This method often helps in the short term, but in the long term, experiential avoidance leads to frustration, dissatisfaction with life, and feelings of insignificance (36).

In fact, acceptance techniques in acceptance and commitment therapy (such as observing and accepting thoughts and emotions as they are) help to tolerate pain. Pain acceptance seems to represent an adaptive form of coping with pain, whereby a person responds to pain-related experiences without trying to control them and engages in worthwhile activities as well as achieving personal goals, regardless of these negative experiences. (37). Therefore, the use of pain acceptance techniques is considered a positive way to regulate pain, which leads to lower levels of pain intensity and disability caused by it (38).

Research limitations: This research, like other researches, has limitations, including the number of samples, people with obsessive-compulsive disorder referred to the hospital, and therefore it is not possible to generalize the results to other patients with semi-clinical obsessive-compulsive disorders: limitation in the selection of the group The sample is another limitation of the present study due to some psychological variables (such as the knowledge and attitude of clients about therapeutic interventions, their psychological expectations and mentality) and demographic variables (such as the level of education and economic conditions).

Application of research: Therefore, it is suggested that obsessive people in the society such as the elderly, physically ill, students and students should also be done and in addition to that, the effect of follow-up should be investigated in the long term.

Acknowledgment: In this way, the researchers appreciate the people who participated in this research.

Conflict of interest: The authors declare that they have no conflict of interest.

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