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The effectiveness of paradoxical therapy on relational practical obsessive-compulsive symptoms

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ABSTRACT

Background and Aim: Previous studies have shown that compared to the general population, patients with obsessive-compulsive disorder often have disorders in relational functioning, including interpersonal problems, mistrust, and unhappiness in interpersonal relationships, and the probability of marriage is lower and increased. Marital problems, ambivalence, severe interpersonal conflicts, revenge, and sexual problems are common. Thus, the present study aimed to determine the effectiveness of paradoxical therapy on relational practical obsessive-compulsive symptoms. **Methods:** In terms of the practical purpose and data collection method, the current research design was a single-case experiment of the multiple baseline type, sometimes called a single-subject experiment or a time series experiment. It is an experiment that consists of intensive research on a person or several people who are considered a single group. Among the single-subject designs, the baseline-intervention-follow-up (A-B-C) design was used in this study. The research community included all undergraduate, graduate, and doctoral students aged 20 to 45 years in Tehran. For sampling, six people were selected from the available sampling method and completed the treatment sessions. The clinical interview was used to diagnose the relational obsessive-compulsive disorder and its differential diagnoses. Quantitative data was collected by completing questionnaires and research scales in three phases: baseline, intervention, and follow-up. **Results:** The statistical analysis of the research data showed that the hypothesis of the research entitled "Paradoxical psychotherapy improves ego strength in relational obsessive-compulsive patients" was confirmed with 56.5% overall improvement. **Conclusion:** Based on the findings of the visual analysis of six participants and the results of the strong effect size and the improvement rate of relational obsessive-compulsive disorder symptoms, the results of the paradox treatment can be considered very effective.

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Introduction

Obsessive-compulsive disorder is characterized by the presence of obsessive thoughts or actions. Obsessions include: recurrent and persistent thoughts, desires, or images that are unwanted and disturbing. Obsessive compulsive behavior includes: repetitive mental actions or behaviors that a person feels he must perform in response to an obsession or based on unavoidable rules (American Psychological Association, 2013; Stan et al., 2019). Obsessive-compulsive disorder has a wide and diverse range of obsessive topics such as contamination, order, symmetry, hoarding, fear of harming oneself or others (Abramwitz et al., 2008). Previous research has shown that, compared to the general population, OCD patients often have disturbances in relational functioning, including: interpersonal problems (Selman et al., 2015); mistrust and unhappiness in interpersonal relationships (Talawi et al., 2016; Mortiz et al., 2011); less likely to marry and increase marital distress (Doron et al., 2012); ambivalence and severe interpersonal conflicts (Mortiz et al., 2013); Revenge (Fetfuta, 2015) and common sexual problems (Pose, 2020; Rail, 2013). Such obsessive-compulsive symptoms that focus on close or intimate relationships and directly affect primary relationships are a manifestation of relational obsessive-compulsive disorder (Doron et al., 2012a, 2012b). Relational obsessions can occur in different types of close relationships such as parent-child (Levi et al., 2020), relationship with a teacher and even one's God. However, obsessive-compulsive symptoms focusing on romantic relationships have recently received the attention of researchers (Doron et al., 2012, 2014).

Among the common manifestations of relational obsessive-compulsive disorder are doubts and mental preoccupations focused on the feeling of one's suitability for the partner, the "rightness" of this relationship, and the perceived nature of the partner's feelings towards himself. This manifestation of obsessive-compulsive symptoms is called relationship-oriented (Doron et al., 2012a). Relational obsessive-compulsive disorder can also involve debilitating preoccupations with the relationship partner's perceived shortcomings (such as the partner not being smart enough). Such symptoms are called partner-focused obsessive-compulsive symptoms (Doron et al., 2012b). In some ways, it is similar to what is mentioned in the research literature as vicarious body deformity (focusing on other people's physical defects) (Josefsozen and Hollander, 1997; Greenberg et al., 2013). However, partner-focused obsessive-compulsive symptoms refer to extensive obsessive preoccupation with the partner's maladaptive traits (morality, sociability, achievement) (Doron et al., 2014; Shipsnell et al., 2016). Doron et al. (2012a) found a very strong relationship between relationship-oriented and partner-focused obsessive-compulsive disorder, and in a longitudinal study, they showed that these two forms of relational obsessive-compulsive disorder become and affect each other.

Besharat (2017) introduces a model of paradoxical therapy, called paradoxical psychotherapy (paradox + schedule = therapy), which has integrated various foundations, hypotheses and theoretical models in a new order and made this therapeutic model more effective. The theoretical root of paradox therapy is in psychodynamics, psychoanalysis, and systemic theories, and it considers systemic, analytical, and behavioral aspects in therapy, but in terms of practice and therapeutic techniques, it is loyal to behavioral techniques. In a review study, Batiani and Gutman (2006) with a study of thirty-seven studies showed that in twenty-five studies the paradoxical method has useful clinical results and is considered one of the effective methods of psychotherapy. Asher (2005) showed that the paradoxical method is appropriate in the field of obsessive-compulsive treatment. Frankel (2004) successfully treated patients with obsessive-compulsive disorder and phobias with the paradoxical method. This treatment has strong research support from the American Psychiatric Association (Lewis, 2016). The paradoxical treatment model (Besharat, 2017) is very successful and effective as a new and comprehensive approach in the treatment of a wide range of psychological disorders: Intellectual-practical obsession (Ahmadi et al., 2020; Besharat, 2017, 2018; Mohammadi et al., 2019); disease anxiety (Besharat and Naqipour, 2019a); social anxiety (Besharat, 2019; Besharat & Naqipour, 2019b; Maba, 2017); body deformity disorder (Ataoglu, 2003; Besharat, 2019b); couple therapy (Besharat, 2020a); Binge eating disorder (Ghadimi Noran et al., 2019) and insomnia (Zang et al., 2016).

There are two basic elements in this treatment that accelerate the speed of treatment. The first component, i.e. the paradox, means the prescription of the disease symptom, the patient reproduces the same symptoms and behaviors he suffers from according to the order prescribed for him. The second component is the time schedule based on which the authorities reconstruct the signs according to a specific time and duration. The four effective mechanisms of paradoxical treatment include: formalization/artificialization, disconnection of the symptom and anxiety, changing the meaning of the symptom, and finally the strength of the self. The main and ultimate goal of treating psychological disorders in the treatment of paradox is my consistency and strength. The process of ego strength starts and takes place at the same time as relieving anxiety from the symptoms of the disease, in parallel with doing homework in the form of synthetic mechanisms, disconnecting the relationship between the symptom and anxiety, and changing the symptom (Besharat, 2019).

It seems that people with obsessive-compulsive disorder have serious problems in relational functioning and need special attention. Therefore, due to the importance of these problems, special attention has recently been paid to these cases and a set of signs and symptoms of obsessive-compulsive disorder has been defined in the form of relational obsessive-compulsive disorder (Doron et al., 2012). In fact, relational obsessive-compulsive disorder is the same obsessive-compulsive disorder that the content and nature of obsessions are focused on "relationships", and recently it has been the focus of many researchers. Although most of the clients and therapists are unaware of relational obsessive-compulsive disorder and related phenomena and confuse the symptoms of relational obsessive-compulsive disorder with life problems or interpersonal problems. Worries and doubts, especially conflicts, are common during the relationship, and behaviors similar to obsessive-compulsive relationship disorder may occur during the normal period of relationship development, mainly in the stages of flirting, dating, or before committing to a relationship. According to these issues, diagnosing relational obsessive-compulsive disorder can be a complex endeavor. Therefore, due to the fact that there are very few researches and many research gaps about this disorder, it is necessary and necessary to conduct research on relational obsessive-compulsive disorder in order to know more about its component and related variables, appropriate treatment research and differential diagnosis.

On the other hand, the symptoms of obsessive-compulsive disorder require treatment and intervention, just like the symptoms of obsessive-compulsive disorder (Doron et al., 2016). The symptoms of relational obsessive-compulsive disorder begin in the early stages of a relationship and intensify as the relationship progresses or reaches decision points such as marriage. These relational obsessions continue regardless of conflict in the relationship. Relational OCD suspicion often reduces relationship satisfaction, and in fact OCD symptoms are linked to lower relationship satisfaction (Doron et al., 2012a; 2012b). Obsessive-compulsive disorder has the highest rate of referral to treatment centers among all anxiety disorders (Fantnel et al., 2006). Therefore, the society's need for intervention and the challenge of therapists with these patients has led studies and researches to always look for treatment methods that can be offered as suggestions to psychotherapists. (Abrantz et al., 2017; Olatunji et al., 2017). Among the common treatments for obsessive compulsive disorder, we can mention drug therapy (Reddy et al., 2017), cognitive therapy (Berman et al., 2015) and behavioral therapy (Mancio et al., 2017). Due to the side effects of the drug and the possibility of relapse after stopping the drug (Batlan et al., 2017), many researchers have turned to psychotherapy. Experimental evidence shows that exposure therapy and response prevention are the first line of treatment for patients with obsessive-compulsive disorder. (Oss et al., 2016; Rodríguez-Ramagura et al., 2016; Lambardi and Rodríguez, 2019; McCue et al., 2015; Wheaton et al., 2016). Many researches that cognitive-behavioral therapy interventions and exposure therapy and response inhibition have been effective for obsessive-compulsive disorder. However, research evidence has shown that about half of patients either do not respond to treatment, or drop out, or refuse to follow treatment orders and drop out of treatment (Arch & Krasek, 2009). Therefore, for a more comprehensive effect, complementary or complementary

approaches are needed (Insta-Speluda and Storch, 2017; Shuratz et al., 2016; Newman et al., 2015). It seems that in the discussion of psychotherapy, the use of integrated methods can have more effects (Persuti and Baraka, 2013). One of the most recent of these integrative approaches is paradoxical therapy. The results of paradox therapy have been very effective and decisive, one of the unique advantages of the paradox psychotherapy model is that it is very simple and short-term. This feature greatly reduces the possibility of patients dropping out, and it is also economical for them. The profound and definite effectiveness of paradoxical treatment also greatly reduces the possibility of disease recurrence (Besharat, 2020). So far, no research has investigated the effectiveness of paradox therapy on relational obsessive-compulsive disorder. Therefore, it seems necessary to evaluate the principles and techniques of paradoxical treatment in this research, considering the mentioned advantages, its introduction, and its validity on relational obsessive-compulsive disorder. As a result, the aim of the current research is to determine the effectiveness of paradoxical therapy on relational practical obsessive-compulsive symptoms.

Method

In terms of the practical purpose and data collection method, the current research design was a single-case experiment of the multiple baseline type, which is sometimes called a single-subject experiment or a time series experiment. It is an experiment that consists of intensive research on a person or a number of people who are considered as a single group. Among the single-subject designs, the baseline-intervention-follow-up (A-B-C) design was used in this study. The research community included all undergraduate, graduate and doctoral students in the age range of 20 to 45 years in Tehran. For sampling, 6 people were selected from the available sampling method and completed the treatment sessions. Clinical interview was used to diagnose relational obsessive-compulsive disorder and its differential diagnoses. Quantitative data was collected by completing questionnaires and research scales in three phases: baseline, intervention and follow-up. Entry criteria: completion of the ethical consent form to participate in the research by the volunteer; Obtaining a score one standard deviation higher than the sample mean in relational obsessive-compulsive questionnaire; Answering all questions of the questionnaire or at least 90% of the total questionnaires if 10% of the questions are not consecutively unanswered. Exclusion criteria: absence from treatment in three consecutive sessions; Receiving psychotherapy or drug therapy at the same time; Identifying mental disorders other than obsessive-compulsive disorder through clinical interview; Identification of drug and alcohol addiction through clinical interview; The subject's willingness to leave the research at any stage; Failure to complete more than 10% of the questions of questionnaires and research scales.

Materials

1. Relationship obsessive-compulsive questionnaire (ROCI): includes 12 items and 3 subscales of spouse love (question numbers 1, 7, 10, 14), relationship integrity (3, 5, 9, 12) and spouse love (4, 6, 11, 13) on a Likert scale from not at all (0), to very much (4) (questions 2 and 8 are to check the correctness of the answers to the other questions). Doron et al. (2012) found good internal consistency for this instrument. ROCI correlation coefficients in the range of 0.66 to 0.92 were significant at the 0.001 level. Also, the ROCI subscales showed a good correlation with the (OCI-R) subscales at the 0.001 level. In addition, the correlation of ROCI subscales with OBQ subscales is between 0.16 and 0.34; with the stress, anxiety and depression scale (DAS) between 0.34 and 0.56; With the scales of avoidance and anxiety from experiencing close relationships (ECR) between 0.24 and 0.36 and finally with the relationship assessment scale (RAS) between -0.39 and -0.61, all of which were significant at the 0.001 level. The results of the factor analysis showed that the three factors of this tool have a good fit, for example, the CFI index of 0.96 and the RMSEA index of 0.089 were obtained, which indicate a good fit. ROCI subscales showed good internal consistency and test-retest reliability. Cronbach's alpha coefficient of 0.93 and a significant correlation of this tool with the obsessive-compulsive symptoms questionnaire related to the spouse, the obsessive-compulsive disorder questionnaire, the obsessive beliefs questionnaire, the depression, anxiety and stress scale were reported as an index of the convergent validity of this tool. . Also, Qomian et al. (2019) conducted it on 459 married students from universities in Tehran to

investigate the psychometric properties of this questionnaire in Iran. The obtained results showed that the internal homogeneity of ROCI in the range of 0.66 to 0.89 is significant at the level of 0.01, also the residual reliability correlation coefficient of this questionnaire is in the range of 0.65 to 0.84 and Cronbach's alpha for the whole questionnaire is 0.88. And for the subscales, it was estimated in the range of 0.74-0.79. The findings of convergent and diagnostic (differential) validity showed that the subscales and the total score of ROCI have a negative and significant correlation with Spanier Marital Adjustment Questionnaire (DAS) in the range of -0.27 to -0.56 at the 0.01 level. Positive and significant correlation with stress, anxiety and depression scale (DAS), relational beliefs questionnaire (RBI) and Padua questionnaire (PI-WSUR) in the range of 0.26 to 0.61 were significant at the 0.01 level. In the factor analysis, the fit indices showed the appropriate fit of this questionnaire. As a result of these coefficients, this questionnaire has good validity and reliability.

2. Paradox therapy: Besharat (2017) presented a new model of paradox psychotherapy for the treatment of OCD, which is called PTC and stands for Paradox + Time = Cure; In this study, using this model, the samples selected for the study were treated, and the summary of the paradox therapy sessions implemented in the present study is as follows:

Table 1. Summary of paradox therapy sessions

Session	Content
1	The social stage of the interview: including greetings, duration of the disorder, marital status, number of children, special family and social issues. Problem stage: getting a detailed description of the problems or disorders focusing on the problems, behaviors, interactions and consequences of these problems, describing the treatment plan and determining the treatment goals, prescribing homework according to the symptoms and problems.
2	Behavioral analysis: Examining how to implement the tasks of the previous session, possible problems and limitations of the implementation of the tasks, the consequences of doing the tasks, estimating the percentage of possible treatment changes by the clients, the possible necessity of continuing the previous tasks. (For example: re-explaining the assignment of the first session and correcting the functional problems of the references in the implementation of the assignments and the order to continue the assignments of the previous session)
3	Behavioral analysis: Examining how to implement the tasks of the previous session, possible problems and limitations of the implementation of the tasks, the consequences of doing the tasks, estimating the percentage of possible treatment changes by the clients, the possible necessity of continuing the previous tasks. (for example: prescribing the continuation of the assignments of the previous session by the authorities), determining and prescribing new assignments
4	Behavioral analysis: Examining how to implement the tasks of the previous session, possible problems and limitations of the implementation of the tasks, the consequences of doing the tasks, estimating the percentage of possible therapeutic changes by the clients, the possible necessity of continuing the previous tasks (for example: prescribing the continuation of the tasks of the previous session by the clients). Determining and prescribing new assignments
5	Behavioral analysis: Examining how to implement the tasks of the previous session, possible problems and limitations of the implementation of the tasks, the consequences of doing the tasks, estimating the percentage of possible therapeutic changes by the clients, the possible necessity of continuing the previous tasks (for example: prescribing the continuation of the tasks of the previous session by the clients). Determining and prescribing new assignments, using paradoxical complementary techniques if needed
6	Description of the client's self-treatment plan in the future, if needed, in the final session, completing the questionnaire and research scales.

Implementation

After the approval of the proposed plan, by making the necessary arrangements, the implementation of the research started with the collection of data related to testing the hypotheses. At first, the participants were informed about the objectives of the research and the confidentiality of the answers in written form, and then the consent form to participate in the research was placed to be completed and signed. Based on the entry and exit criteria, 6 people were selected from among them (taking into account at least two dropouts). In the first meeting, information confidentiality, research objectives and the freedom to withdraw from the research at any time were explained. With their permission, the sessions were recorded and provided to the supervising professors. After completing the informed consent form to participate in the research, the questionnaires and scales of the second phase of the research were measured at least three times as a baseline three weeks before the start of the first treatment session. Questionnaires were completed four times by the subjects during the therapy sessions, and for the follow-up line, they completed the questionnaires once after two weeks and once a month after the last therapy session. For the participants who did not meet the entry and exit criteria, just like the people who met the entry and exit criteria, they received free treatment sessions with informed consent, only their information was not included in the research and they were informed about this. To analyze the data of the research, the methods of visual analysis of the graph, percentage of recovery index, which is the most common interpretation method in such researches, were used. In the visual analysis, the changes resulting from the intervention were analyzed and interpreted based on the level, trend, variability of observations. The size level is the magnitude of the dependent variable, the trend is called the pattern of the dependent variable, along the baseline and is similar to the slope, and variability refers to the degree of stability and continuity of the dependent variable. The minimum points needed to evaluate the level, trend and variability are three points.

Results

In terms of demographic characteristics, among the 6 members of the research sample, 4 were women and 2 were men. Also, 3 of these people were married, 2 were single and one had a fiance.

Table 2. Visual-inferential analysis of changes in obsessive variables in the first participant

Variable	**ROCD**		
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	32	18	10/5
Mean	32/33	19	10/5
Standard deviation	0/58	71.2	2/12
Variation range	33-32	23-17	12-9
Stability range	25/38-6/4	14/4 -21/6	8/4- 12/6
The percentage of data in the storage container	100	100	100
The range of stability chamber changes	Constant	Constant	Constant
Relative style change	+0/5	-3	-
Absolute style change	+1	-6	-4
Trend direction	Same level	Descending	Descending
Process stability	Constant	Constant	Constant
Cross-situational indicators			
Trend type	Negative		
Change stability	Constant to Constant		
Relative change	20/5 to 32/5		
Absolute change	32 to 33		

Median change	18 to 32	
Mean change	19 to 32/33	
Percentage of overlapping data	100%	
Percentage of overlapping data	0%	
Effect size	-47%	-72%

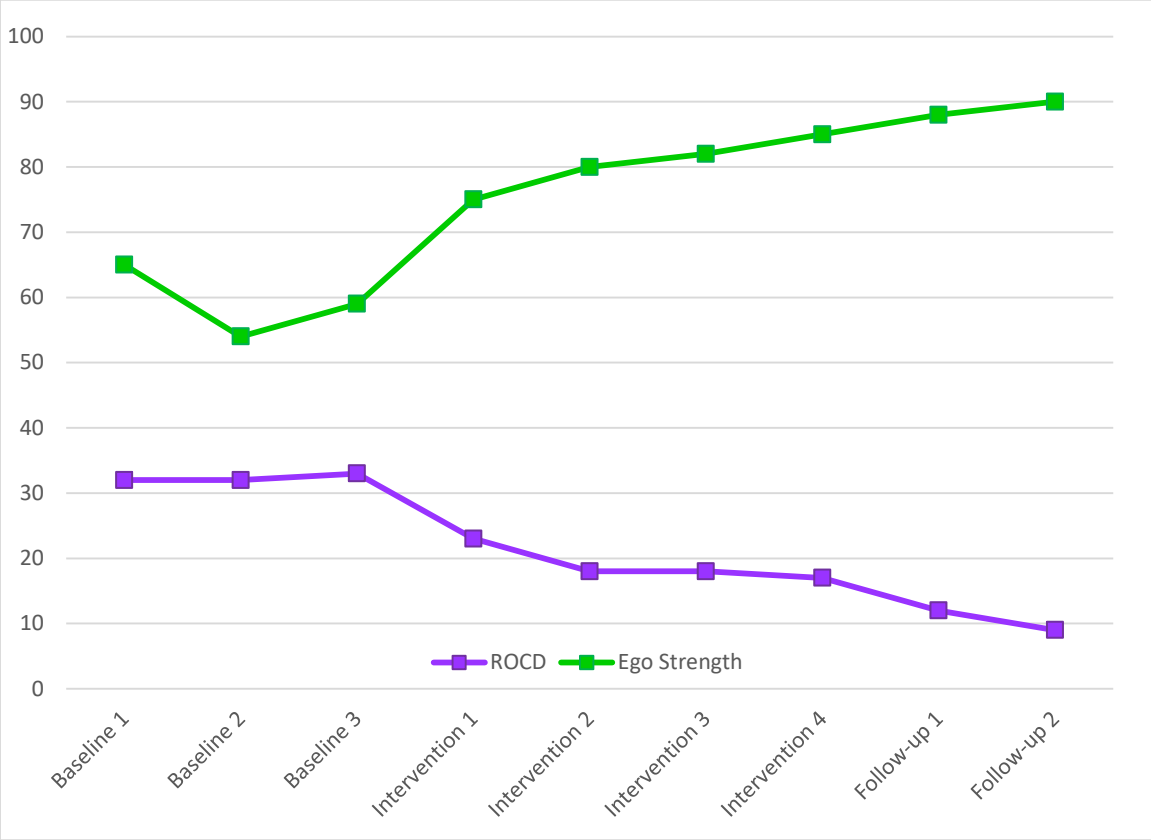

Figure 1. The process of changing the scores of relational obsessive-compulsive symptoms of the first participant

As the findings in Table 2 and Figure 1 show, the baseline, intervention and follow-up scores on the Relational-Obsessive-Compulsive Scale and Ego strength are completely within the 20% range of the stability box, so the data are stable. Obsessive-compulsive disorder scores have a flat shape and a constant trend in the baseline. And with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is still observed in the follow-up phase. The mean relational obsessive-compulsive scores increased from 32.33 in the baseline to 19 in the intervention and to 10.5 in the follow-up. In relational obsessive-compulsive scale, 47% recovery in the intervention stage and subsequent 25% improvement in the follow-up stage, shows the high effectiveness of the intervention and maintaining and continuing its effects after the end of the treatment.

Table 3. Visual-inferential analysis of changes in obsession variables in the second participant

Variable	**ROCD**		
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	37	17/50	9
Mean	36/67	17/75	9

Standard deviation	1/53	6/08	1/41
Variation range	38-35	23-17	10-8
Stability range	29/6 -44/4	21-14	7/2 -10/8
The percentage of data in the storage container	100	75	100
The range of stability chamber changes	Constant	Changing	Constant
Relative style change	+0/5	-9/5	-
Absolute style change	+1	-14	-2
Trend direction	Same Level	Descending	
Process stability	Constant	Constant	Constant
Cross-situational indicators			
Trend type	Negative		
Change stability	Constant to Constant		
Relative change	22/5 to 36/5		
Absolute change	25 to 38		
Median change	17/5 to 37		
Mean change	17/75 to 36/67		
Percentage of overlapping data	100%		
Percentage of overlapping data	0%		
Effect size	-70%		-78%

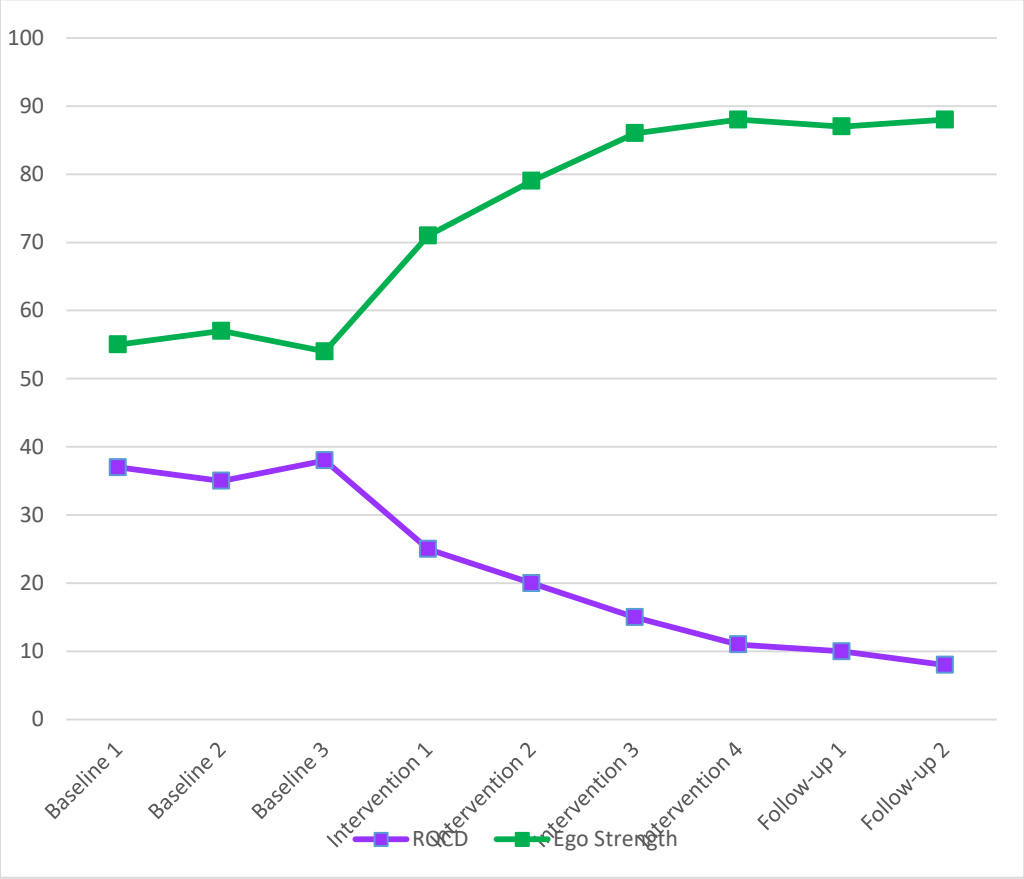

Figure 2. The process of changing the scores of relational obsessive-compulsive symptoms of the second participant

As the findings in Table 3 and Figure 2 show, the baseline scores on the ROCD and Ego strength scales are completely within the 20% stability bin, so the data are stable. ROCD scores in the baseline have a flat shape and a constant trend, and with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is still observed in the follow-up phase. The average scores of relational obsessive-compulsiveness increased from 36.67 in the baseline to 17.75 in the intervention and 9 in the follow-up. In relational obsessive-compulsive scale, 70% improvement in the intervention stage and subsequent 8% improvement in the follow-up stage, shows the high effectiveness of the intervention and maintaining and continuing its effects after the end of the treatment.

Table 4. Visual-inferential analysis of changes in obsession variables in the third participant

Variable	**ROCD**		
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	30	20/50	14/50
Mean	30	20	14/50
Standard deviation	1	2/94	2/12
Variation range	31-29	21-16	16-13
Stability range	36-24	16/4- 24/6	11/6 -17/4
The percentage of data in the storage container	100	75	100
The range of stability chamber changes	Constant	Changing	Constant
Relative style change	+1	-4	-
Absolute style change	+2	-5	-1
Trend direction	Same Level	Descending	Same Level
Process stability	Constant	Changing	Constant
Cross-situational indicators			
Trend type	Negative		
Change stability	Constant to Constant		
Relative change	22 to 30/5		
Absolute change	21 to 31		
Median change	20/5 to 30		
Mean change	20 to 30		
Percentage of overlapping data	100%		
Percentage of overlapping data	0%		
Effect size	-45%	-55%	

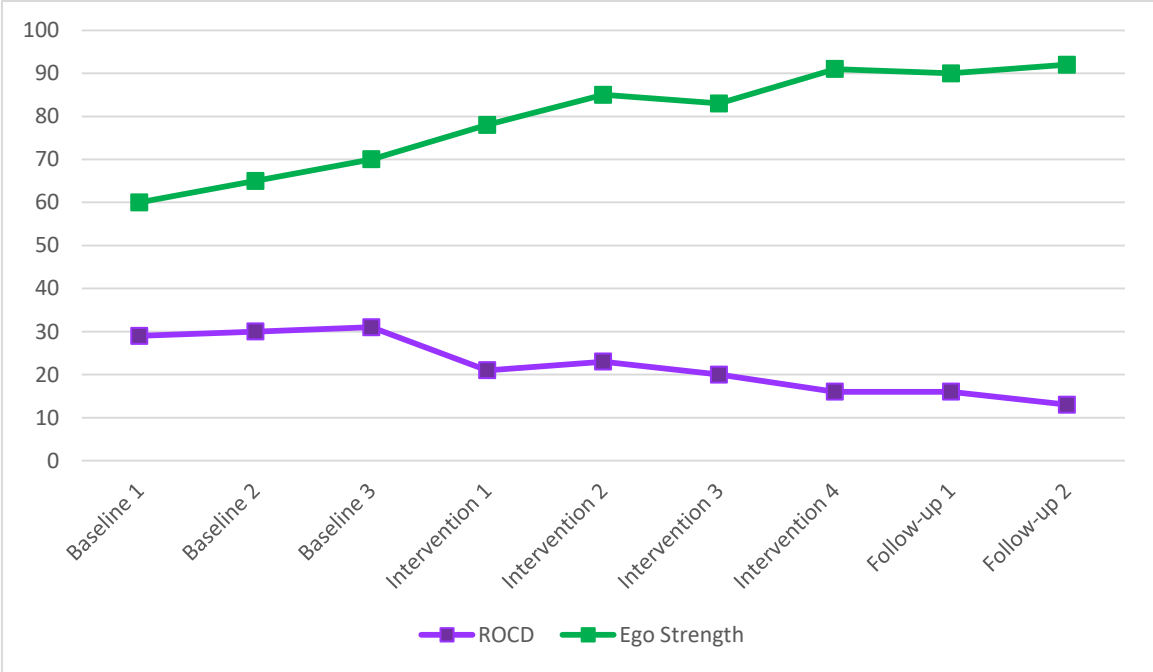

Figure 3. The process of changing the scores of relational obsessive-compulsive symptoms of the third participant

As the findings in Table 4 and Figure 3 show, on the ROCD scale and ego strength the baseline scores are completely within the 20% stability bin, so the data are stable. ROCD scores in the baseline have a flat shape and a constant trend, and with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is still observed in the follow-up phase. The mean relational obsessive-compulsive scores increased from 30 in the baseline to 20 in the intervention and 14.5 in the follow-up. In relational obsessive-compulsive scale, 45% improvement in the intervention stage and subsequent 15% improvement in the follow-up stage, shows the high effectiveness of the intervention and maintaining and continuing its effects after the end of the treatment.

Table 5. Visual-inferential analysis of changes in obsession variables in the fourth participant

Variable	ROCD		
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	39	24/50	18/50
Mean	39/67	23/50	18/50
Standard deviation	1/15	3/11	0/71
Variation range	41-39	26-19	19-18
Stability range	31/2 -46/8	19/6 -29/4	14/8 -22/2
The percentage of data in the storage container	100	75	100
The range of stability chamber changes	Constant	Changing	Constant
Relative style change	0	-3	-
Absolute style change	0	-7	-1
Trend direction	Same Level	Descending	Same Level
Process stability	Constant	Changing	Constant
Cross-situational indicators			

Trend type	Negative	
Change stability	Constant to Constant	
Relative change	25 to 40	
Absolute change	26 to 39	
Median change	24/5 to 39	
Mean change	23/5 to 39/67	
Percentage of overlapping data	100%	
Percentage of overlapping data	0%	
Effect size	-51%	-51%

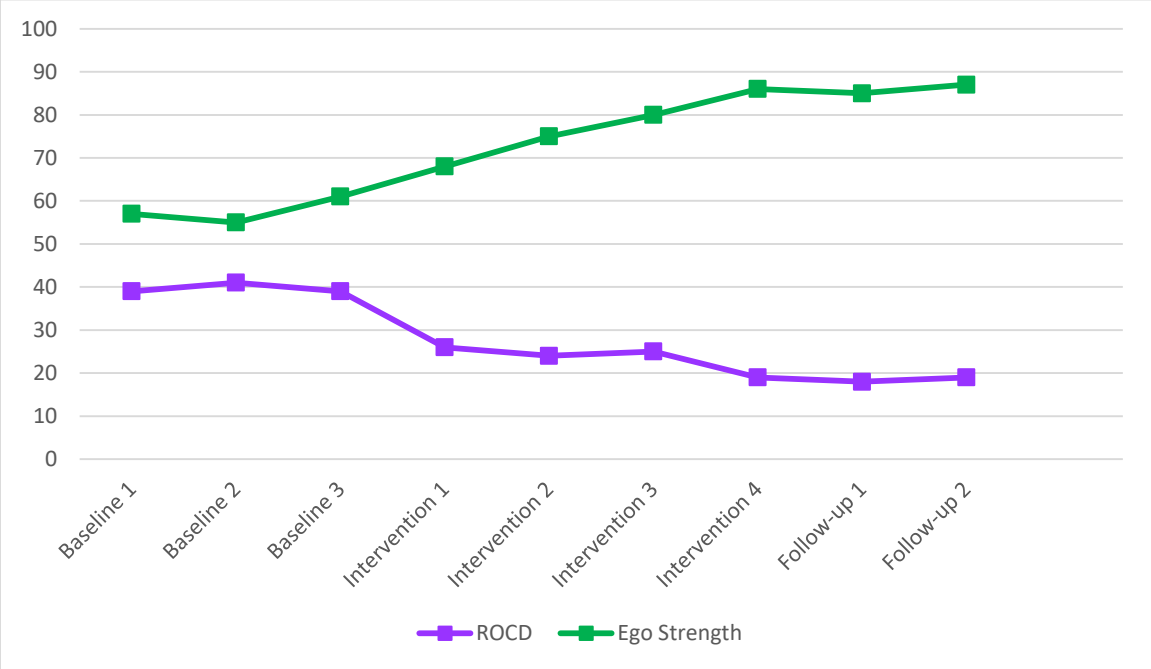

Figure 4. The process of changing scores of relational obsessive-compulsive symptoms of participant four

As the findings in Table 5 and Figure 4 show, on the ROCD scale and ego strength the baseline scores are completely within the 20% stability bin, so the data are stable. ROCD scores in the baseline have a flat shape and a constant trend, and with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is still observed in the follow-up phase. The mean relational obsessive-compulsive scores increased from 30 in the baseline to 20 in the intervention and 14.5 in the follow-up. In relational obsessive-compulsive scale, 45% recovery in the intervention stage and subsequent 15% improvement in the follow-up stage, shows the high effectiveness of the intervention and maintaining and continuing its effects after the end of the treatment.

Table 6. Visual-inferential analysis of changes in obsession variables in the fifth participant

Variable	**ROCD**		
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	40	19/50	12
Mean	39/67	20/75	12
Standard deviation	2/52	6/24	1/41
Variation range	42-37	29-15	13-11

Stability range	48-32	15/6 -23/4	9/6 -14/4
The percentage of data in the storage container	100	50	100
The range of stability chamber changes	Constant	Changing	Constant
Relative style change	+1	-9/5	-
Absolute style change	+2	-14	-2
Trend direction	Same Level	Descending	Descending
Process stability	Changing	Constant	Constant
Cross-situational indicators			
Trend type	Negative		
Change stability	Constant to Changing		
Relative change	25/5 to 39/5		
Absolute change	29 to 42		
Median change	19/5 to 40		
Mean change	20/75 to 39/67		
Percentage of overlapping data	100%		
Percentage of overlapping data	0%		
Effect size	-63%	-73%	

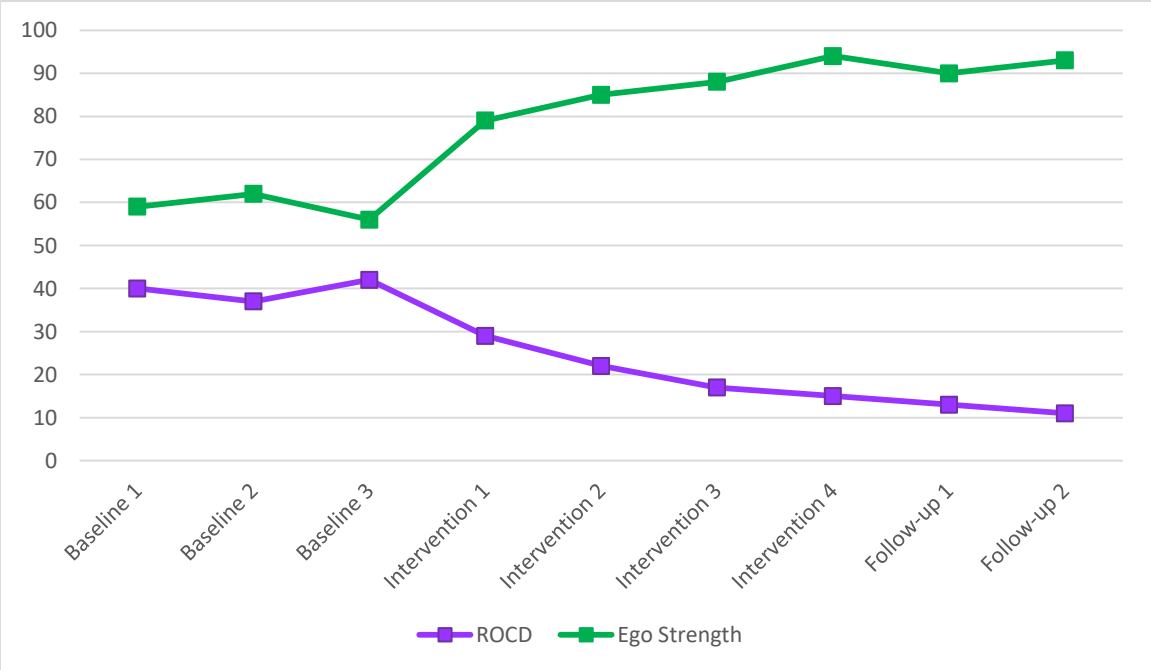

Figure 5. The process of changing scores of relational obsessive-compulsive symptoms of the fifth participant

As the findings in Table 6 and Figure 5 show, on the ROCD scale and ego strength the baseline scores are completely within the 20% stability bin, so the data are stable. ROCD scores in the baseline have a flat shape and a constant trend, and with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is still observed in the follow-up phase. The mean obsessive-compulsive relationship scores have increased from 39.67 in the baseline to 20.75 in the intervention and 12 in the follow-up. In relational obsessive-compulsive scale, 63% improvement in the intervention stage and subsequent 10% improvement in the follow-up stage, shows the high effectiveness of the intervention and maintaining and continuing its effects after the end of the treatment.

Table 7. Visual-inferential analysis of changes in obsession variables in the sixth participant			
Variable		**ROCD**	
In-situ indicators			
Level	Baseline	Intervention	Follow-up
Length	3	4	2
Median	34	28/50	25/5
Mean	36	28/25	25/5
Standard deviation	7/21	2/50	2/12
Variation range	44-30	29-25	27-24
Stability range	27/2 -40/8	22/8 -34/2	20/4 -30/6
The percentage of data in the storage container	75	100	100
The range of stability chamber changes	Changing	Constant	Constant
Relative style change	+7	-3/5	-
Absolute style change	+14	-6	+3
Trend direction	Aescending	Descending	Same Level
Process stability	Changing	Constant	Changing
Cross-situational indicators			
Trend type	Negative		
Change stability	Constant to Changing		
Relative change	30 to 39		
Absolute change	31 to 44		
Median change	28/5 to 34		
Mean change	28/25 to 36		
Percentage of overlapping data	75%		
Percentage of overlapping data	25%		
Effect size	-17%	-10%	

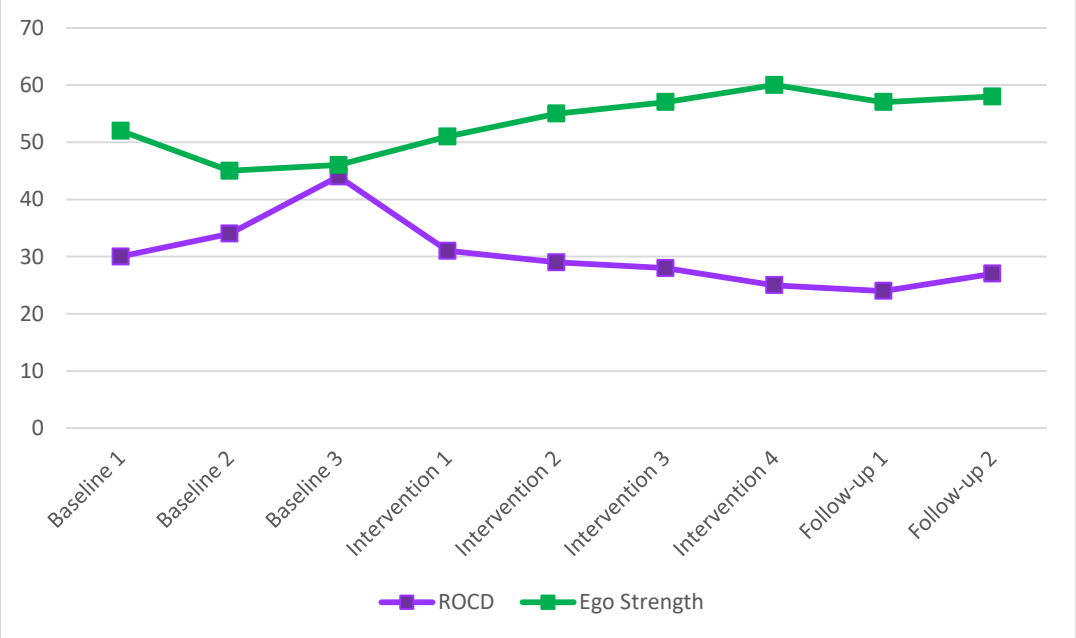

Figure 6. The process of changing the scores of relational obsessive-compulsive symptoms of the sixth participant

As the findings in Table 7 and Figure 6 show, in relational obsessive-compulsive scale, 75% of the baseline scores and 100% of ego strength scores are within the 20% range of the stability compartment, so the data have sufficient stability. ROCD scores in the base line are ascending and deteriorating, with the beginning of the intervention, it shows a decreasing and improving trend, and this downward trend is not observed in the follow-up phase. The mean relational obsessive-compulsive scores increased from 36 in the baseline to 28.25 in the intervention and 25.5 in the follow-up. In relational obsessive-compulsive scale, there was 17% improvement in the intervention phase and 10% improvement in the follow-up phase compared to the baseline phase, which is much lower than other participants. Finally, the statistical analysis of the research data showed that the research hypothesis entitled "Paradoxical psychotherapy improves ego strength in relational obsessive-compulsive patients" was confirmed with 56.5% overall improvement.

Conclusion

The aim of the current research was to determine the effectiveness of paradoxical treatment on relational practical obsessive-compulsive symptoms; Based on the findings of the visual analysis of six participants and the results of the strong effect size and the improvement rate of relational obsessive-compulsive disorder symptoms, the results of the paradox treatment can be considered very effective. In the method of paradoxical treatment, a person is required to think about his recurring and disturbing thoughts and feelings in a specific time schedule. Clients can recreate and experience the symptoms of their disorder through grammaticalization techniques due to the schedule and by applying paradox in the form of symptom prescription. This leads to facing these symptoms in a stress-free manner, gradually during the ego strength strengthening processes, the conflicts between the institution and the patient's command that lead to pathological symptoms end (Besharat, 2018). The findings of the present study are in line with previous studies in this field (Hamchun, Mohammadi et al., 2020, Besharat, 2018).

As mentioned in the first, second and third chapters of this treatise, the paradox psychotherapy model, which is also called PTC paradox therapy, is a very innovative and comprehensive approach in the field of a wide range of neuropsychiatric disorders such as anxiety disorders (Maba, 2017). , physical disorder (Ataoglu, 2003), and various obsessive-compulsive spectrum disorders (Ahmadi et al., 2020; Besharat, 2018). According to the studies, the results of the paradoxical treatment are focused on the quick and decisive effectiveness of this method of psychotherapy. In fact, it can be said that the specific advantages of the paradoxical psychotherapy model are simplicity and speed of action (shortness of time to reach therapeutic goals). These cases lead to a decrease in the probability of patients leaving treatment and dropping out, increasing the cost-effectiveness of achieving treatment goals, and greatly reducing the probability of the disease returning (Besharat, 2020b).

Psychotherapy in the way of paradoxical treatment is actually a holistic treatment method that can be used for various psychological disorders. In the paradox psychotherapy model, by using a combination of principles and basic concepts of psychodynamic, cognitive, and behavioral theories, it targets the symptoms of obsessive-compulsive disorders in a very short-term, decisive and fast way; And by focusing on spontaneous obsessive thoughts or compulsive obsessive behaviors, it greatly reduces them (Besharat, 2020a).

The effective mechanisms of paradoxical psychotherapy that work on anxiety disorders and specifically relational thought-action obsessions are (Browning & Hull, 2021; Besharat, 2020b, 2018):

Reconstruction and re-experiencing of obsessive-compulsive symptoms by the patient based on the model taught by the therapist in the first session, just opposite to the forced and involuntary nature of the pathological symptoms of obsession, is a voluntary thing that has two command characteristics (according to the therapist's instructions) and being artificial (the patient himself produces them and they are not spontaneous). For this reason, the imposed, forced, annoying and unpleasant aspects of the disease symptoms are removed from them. This, by effectively reducing anxiety, leads to the reduction/elimination of the relationship between the patient's internal psychological stress, and as a result, the reduction of involuntary recurrent obsessive thoughts and, following them, the reduction of compulsive

obsessive behaviors that neutralize/invalidate obsessive thoughts in the patient.

Gradually and at a high speed, parallel to the command and artificialization of relational obsessive-compulsive symptoms and the constant repetition of schedule exercises, the obsessive thoughts and actions of the patients are separated from anxiety and a state of symptoms without anxiety and negative emotions is created. In this way, when a symptom without anxiety is present, it will no longer be considered a psychological disorder and a pathological symptom of a neuropsychiatric disease, and it will not be considered a source of tension and distress for a person.

Along with the optional and artificialization of the morbid symptoms of obsessive-compulsive disorder, as well as removing the connection between anxiety and these morbid symptoms, the meaning of these symptoms and the psychological disorder for the patient suffering from obsessive-compulsive disorder will quickly change. In other words, as soon as the person suffering from obsession can recreate and experience the symptoms of obsession with his relationship without worry and distress, the meaning and concept of the disease changes for him. This is a practical experience of fast and efficient emotional refinement and does not require any additional behavioral, cognitive or even insight psychotherapy methods.

As mentioned in the introduction, the main and ultimate goal of paradoxical psychotherapy is to strengthen and improve patients' ego strength. In obsessive-compulsive disorders, people have weak ego strength, and for this reason, the ego structure at the psychological level cannot perform its usual tasks and functions in the coordination of personality organization, management and regulation of behaviors, feelings, emotions and intra- and interpersonal interactions. This weakness of the ego that obsession indicates its failure to balance between it and the superego. In any case, the level, depth, and intensity can be overcome by the patient using paradoxical psychotherapy in a practical way and quickly in the exercises of the paradoxical schedule.

From a theoretical point of view, obsessive-compulsive disorder is a new subject that has not yet been mentioned as an independent branch with a separate diagnostic code in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders DSM-5 (American Psychiatric Association, 2013). . According to the conducted researches, the full description of which was presented in the introduction, it seems that relational obsessive-compulsive disorder is a newly recognized but long-lasting problem in family relationships (relationships between spouses and relationships between parents and children). Based on this, the current research has expanded the field of counseling and family psychology both from the point of view of diagnosis and etiology.

Based on the existing research literature, until now the effective components and typically the strengthening and influencing sub-sets on the nascent construct of relational obsessive-compulsive have not been identified. The present study has identified and proved the relationship between the variables of ego strength, intolerance of uncertainty, and perfectionism in the context of intensifying or weakening the pathological symptoms of relational obsessive-compulsive disorder using a quantitative method.

The effect of PCT paradoxical psychotherapy on obsessive-compulsive disorder was previously limited to only a handful of studies, none of which were related to obsessive-compulsive disorder. Based on this, it can be stated that the current research is from a practical aspect as a single subject design, another proof in line with the usefulness of PCT's paradoxical psychotherapy theory, especially in the fields of family and psychotherapy.

In addition, due to the complexity of relational obsessive-compulsive structure, knowing the structures and variables involved in the formation, maintenance or even exacerbation of the pathological symptoms of this particular type of obsessive-compulsive disorder will greatly help family therapists and couple therapists.

The present research has shown in a completely objective, concrete and slightly repeated way that PTC paradox psychotherapy is able to quickly, decisively and powerfully treat anxiety disorders, especially obsessive-compulsive disorder and its specific subspecies of relational obsessive-compulsive disorder. This is the promise of a new era in the field of psychotherapy for obsessive disorders and it can

soon lead to the withdrawal of obsession from the category of difficult and resistant mental disorders.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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