

The Effectiveness of Paradoxical Timetable Therapy on Rumination and Referential Thinking in Women with OCD

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ABSTRACT

Objective: Obsessive thoughts are persistent, recurring thoughts, desires, or imaginations experienced intrusively and unwillingly. This study aimed to determine the effectiveness of paradoxical timetable therapy on mental rumination and referential thinking in women with obsessive-compulsive disorder.

Materials and Methods: The study was quasi-experimental, utilizing a pre-test, post-test, and follow-up design with a control group. The statistical population included all women in Tehran diagnosed with obsessive-compulsive disorder in 2023. Twenty-four women were selected non-randomly and then randomly assigned to experimental (12 persons) and control (12 persons) groups. The experimental group participated in eight sessions of paradoxical timetable therapy, with 11 successfully completing the therapy, while the control group received no intervention. For equalization, the number of participants in both groups was adjusted based on the dropout rate in the experimental group. The study utilized questionnaires for mental rumination and referential thinking. Data were analyzed by analysis of variance with repeated measurements in SPSS 22.

Findings: Results showed that the paradoxical timetable program significantly improved mental rumination ($F = 10.89, p < 0.001$) and referential thinking ($F = 10.83, p < 0.001$).

Conclusion: Based on the findings, interventions based on this approach could effectively improve mental rumination and referential thinking in women with obsessive-compulsive disorder.

Keywords: Paradoxical timetable therapy, mental rumination, referential thinking, obsessive-compulsive disorder.

1. Introduction

Obsessive-compulsive disorder (OCD) is considered a disabling and serious psychological disorder, comprising two parts: obsessions and compulsions. According to the DSM-5, the presence of either of these two is sufficient for diagnosis. Obsessions are persistent, recurring thoughts, desires, or images experienced as

intrusive and unwanted, while compulsions are repetitive behaviors or mental acts that an individual feels compelled to perform in response to an obsession or according to specific rules (Association, 2022). A major characteristic of these obsessions and compulsions is that they are not pleasurable for the affected individual, yet the patient continues to ruminate and repeat these actions, possibly to reduce the discomfort they cause. In the early stages of OCD,

patients may resist these obsessive thoughts and actions, but as the disorder progresses and becomes more severe, the affected individual may spend a significant portion of their day engaged in these mental or behavioral obsessions, which can disrupt and sometimes disturb their social, family, and personal life (Fradkin & Huppert, 2018). According to Myers et al. (2017), rumination is a critical cognitive aspect that can predict obsessive symptoms in line with existing theories (Myers et al., 2017). Rumination involves a class of conscious thoughts revolving around a specific and usual axis, repeated without immediate environmental demands, focusing on the causes and consequences of symptoms, hindering problem-solving, and leading to an increase in negative thoughts (Wang et al., 2021).

Referential thinking is a common mental and cognitive evaluation characteristic of individuals' lives, involving self-attributions derived from events, subjects, and behaviors that evoke a negative meaning for the person (Rassin et al., 2000). Referential thinking is closely related to emotional factors and is precisely defined through rumination, which is a main characteristic of worry and self-generated negative thoughts (McEvoy et al., 2013). Individuals with more characteristics of referential thinking experience greater psychological and emotional disturbance. This thinking is characterized by its repetitive nature, self-referentiality, and difficulty in stopping thoughts (Raines et al., 2017).

Various therapies exist for obsessive-compulsive disorder, but in psychotherapy, integrated methods can be more effective (Rubin et al., 2022). One of the latest of these integrated approaches is the paradoxical timetable therapy program. The paradoxical therapy model theoretically roots in psychoanalytic, psychoanalytic, and systemic theories, but in practical therapeutic actions, it adheres to behavioral techniques (Besharat, 2019). This approach, considering systemic, behavioral, and analytical aspects in therapy, can be suitable for all disorders, including anxiety and obsessive disorders (Dehaqin et al., 2023). In psychology, paradox refers to theories and clinical activities of Adler, Dunlap, and Frankl. This therapy involves two essential elements that accelerate the therapeutic process. The first element, paradox, means prescribing a behavioral symptom or a disease symptom. The second element is developing a timeline for these changes (Besharat & Naghipoor, 2019; Besharat, 2019). The pathology criterion in the paradox model is the ratio between the three bases of id, ego, and super-ego and their relationships, seen as the three fundamental structures of the psyche and personality. Mental health for an individual exists when the ego can control and

manage conflicts and tensions between the id and super-ego. The proximity and distance of the ego to other personality parts determine the quantity and quality of mental health. Reducing this distance, meaning the ego aligns horizontally with the id and super-ego or even falls below the line, entails mental disorder, and the strengthening of the ego, as the reconstruction of its capability and as the main pillar of personality, enables profound and extensive changes (Besharat & Naghipoor, 2019; Besharat, 2019). Examination of the theoretical aspects of this therapy shows that emphasizing the systemic, behavioral, and analytical aspects can have significant effects separately. For example, research by Dehaqin et al. (2023) showed that this therapy could reduce relational obsession (Dehaqin et al., 2023).

Given the evidence presented for paradoxical therapy in anxious and obsessive patients as an alternative integrated method, further research is necessary to establish it as a primary therapy line for obsessive-compulsive disorder. Therefore, the current study aims to answer whether the paradoxical timetable therapy is effective on rumination and referential thinking in women with obsessive-compulsive disorder.

2. Methods and Materials

2.1. Study Design and Participants

The present study is an applied, quasi-experimental investigation using a pre-test and post-test design with a control group. The statistical population of this research consists of all women in Tehran diagnosed with obsessive-compulsive disorder (OCD) who sought psychological therapy at a Psychological Services and Counseling Center in 2023. For sample selection, initially, 24 individuals were chosen from the population through purposive non-random sampling based on the research's inclusion criteria. These individuals were then randomly assigned to either the experimental group (12 persons) or the control group (12 persons). The experimental group underwent therapy using the paradoxical timetable method in eight 90-minute sessions, and ultimately, after attrition, 11 participants successfully completed the therapy. The control group, meanwhile, did not receive any intervention. It is important to note that to equalize the numbers in both groups, members were randomly removed from the control group to match the attrition in the experimental group.

2.2. Measures

2.2.1. Rumination

Rumination Scale is designed to assess rumination and addresses its indicators, consisting of 20 questions. It includes three subscales: expressive rumination, active rumination, and irrelevant mental rumination. A cut-off point of 50 or higher classifies individuals as having significant rumination. The Cronbach's alpha reliability of the questionnaire with a sample of 18 master's students from various fields at Payame Noor University, Tehran, is 0.90 (Ramezani et al., 2023).

2.2.2. Referential Thinking

Referential Thinking Questionnaire (2010) is developed by Ehrling et al. (2010); this questionnaire comprises 15 statements using a 5-point Likert scale. The questions measure a general scale and three subscales: perceived inefficiency, mental capacity takeover, and main characteristics of referential thinking. The subscales are assessed with specific questions: main characteristics (questions 1, 2, 3, 6, 7, 8, 11, 12, 13); perceived inefficiency (questions 4, 9, 14); and mental capacity takeover (questions

5, 10, 15). Participants rate their agreement or disagreement with each statement on a Likert scale ranging from never = 0, rarely = 1, sometimes = 2, often = 3, to always = 4. Ahreing et al. (2010) reported satisfactory internal consistency for this scale, with a Cronbach's alpha of 0.95 for the entire test, 0.94 for the main characteristics subscale, 0.83 for perceived inefficiency, and 0.86 for mental capacity takeover. The retest reliability for the entire test was 0.69, main characteristics 0.66, perceived inefficiency 0.68, and mental capacity takeover 0.69. The significant correlation of this scale with other measures of referential thinking, such as the State Worry Questionnaire, Beck Depression Inventory, State-Trait Anxiety Inventory, and Depression Syndrome Questionnaire, indicates its high convergent validity. Internal stability based on the Cronbach's alpha for the current research sample was 0.79 for the entire test and 0.78, 0.71, and 0.69 for the subscales, respectively (Ehrling et al., 2011).

2.3. Intervention

2.3.1. Paradoxical Therapy

Below is a summary of the paradoxical therapy approach (Besharat & Naghipoor, 2019; Besharat, 2019).

Table 1

Brief Guide to Paradoxical Therapy Sessions

Session	Stage	Description
1	Introduction	Greetings, information about marital status, employment, family issues. Problem Stage of Interview: Consultation reason, problem description, therapy plan, setting goals, prescribing tasks (e.g., Paradoxical Time Schedule).
2	Behavioral Analysis	Review of executed tasks, discussion of difficulties, outcomes from patient's/companion's perspective, estimation of therapeutic change, continuation of tasks or new tasks.
3	Behavioral Analysis	Addition of the first complementary technique if needed, focusing on not attempting to reduce symptoms.
4	Behavioral Analysis	Addition of the second complementary technique, focusing on maintaining symptoms at current level.
5 & 6	Behavioral Analysis	Review similar to previous sessions, announcement of end of therapy if goals achieved, or continuation of sessions.
Follow-up	Self-therapy Plan	Description of future self-therapy plan explained in the final session.

2.4. Data Analysis

In this descriptive study, statistical indices related to each of the research variables were calculated. In the inferential statistics section, a analysis of variance with repeated measures and SPSS-22 software were used.

3. Findings and Results

The mean (standard deviation) age of participants in the experimental group was 36.7 (8.1) and in the control group was 36.1 (7.4). The minimum and maximum ages in the experimental group were 30 and 46 years, respectively, and in the control group, they were 31 and 47 years.

Table 2

Mean and Standard Deviation of Research Variables

Variable	Group	Stage	Mean	Standard Deviation (SD)
Mental Rumination	Experimental	Pre-test	60.92	7.56
		Post-test	55.08	6.42
		Follow-up	49.75	6.10
	Control	Pre-test	61.17	7.82
		Post-test	61.33	7.88
		Follow-up	61.42	7.91
Referential Thinking	Experimental	Pre-test	68.00	5.67
		Post-test	60.17	4.81
		Follow-up	58.25	4.51
	Control	Pre-test	67.83	5.52
		Post-test	68.08	5.59
		Follow-up	68.17	5.63

The results of the Kolmogorov-Smirnov and Levene's tests for assessing the normal distribution of scores and the homogeneity of variances are presented. For the variable 'Mental Rumination', the experimental group showed a Kolmogorov-Smirnov statistic of 1.41 ($p = 0.22$) and a Levene's statistic of 1.50 ($p = 0.245$), while the control group had a Kolmogorov-Smirnov statistic of 0.78 ($p = 0.85$). In

'Referential Thinking', the experimental group had a Kolmogorov-Smirnov statistic of 0.81 ($p = 0.51$) and a Levene's statistic of 2.33 ($p = 0.18$), with the control group showing a Kolmogorov-Smirnov statistic of 0.97 ($p = 0.16$). The Mauchly statistics were also reported for both variables in the experimental group, indicating the assessment of variance homogeneity.

Table 3

The Summary of Analysis of Variance Results

Variable	Source of Effect	Sum of Squares	Degrees of Freedom	Mean Squares	F	Significance	Eta Squared
Mental Rumination	Time*Group	59.267	2	29.633	12.761	0.001	0.313
	Group	35.267	1	35.267	10.891	0.001	0.430
Referential Thinking	Time*Group	70.067	2	35.033	4.262	0.001	0.132
	Group	187.267	1	187.267	10.830	0.001	0.402

The results in Table 3 indicated a significant between-subjects effect (group), meaning that at least one of the groups differed from the others in at least one of the variables of rumination and referential thinking. The within-subjects effect (group*time) for the research variables was also

significant, indicating that there was a change in at least one of the variables' mean scores over time, from pre-test to follow-up. The Bonferroni post-hoc test was used for pairwise comparison of the groups.

Table 4

Results of Bonferroni Post-hoc Test for Comparing Mental Rumination and Referential Thinking

Variable	Group	Stages	Post-test	Follow-up
Mental Rumination	Experimental	Pre-test	8.20*	9.77*
		Post-test	-	0.39
	Control	Pre-test	0.30	0.40
		Post-test	-	0.10
Referential Thinking	Experimental	Pre-test	11.60*	10.75*
		Post-test	-	0.48
	Control	Pre-test	0.59	0.67
		Post-test	-	0.49

The results in Table 4 show that the scores for the variables of rumination and referential thinking in the experimental group at the post-test stage are lower than those in the control group. In other words, paradoxical therapy has been highly effective in reducing rumination and referential thinking in women. Additionally, these results indicate that rumination and referential thinking were significantly reduced in the follow-up stage in the experimental group compared to the control group.

4. Discussion and Conclusion

The current study aimed to determine the effectiveness of paradoxical timetable therapy on rumination and referential thinking in women with obsessive-compulsive disorder. The results showed that paradoxical timetable therapy significantly improved rumination and referential thinking. These findings are consistent with the previous research (Besharat & Naghipoor, 2019; Besharat, 2019; Dehaqin et al., 2023).

Explaining the results, it can be said that in this therapeutic method, individuals are instructed to think about their intrusive thoughts and feelings at specific scheduled times. The aim is for the patient to reconstruct and experience their symptoms at predetermined times (artificially). When the symptoms are artificially reconstructed and experienced, the patient encounters a new reality and experience where the symptoms can exist, but without anxiety and distress. Essentially, the patient experiences the symptoms of OCD in a safe environment, which reduces their anxiety (Besharat & Naghipoor, 2019; Besharat, 2019; Dehaqin et al., 2023). The patient reconstructs and lives with their illness, changing the meaning of the symptoms for both the patient and their family, thereby reducing many of their worries and anxieties.

On the other hand, rumination is a prominent problem in individuals with OCD, consisting of negative thought patterns based on automatic, ingrained cognitive habits, often manifesting as rumination and (inefficiently) invoked to avoid problematic situations in life. Rumination is defined as a response state where individuals repeatedly and passively focus on distress symptoms and their potential causes and consequences (Myers et al., 2017; Raines et al., 2017). In this therapy, as explained, anxiety is reduced, which can affect the patient's cognition and thinking. When the symptoms are artificially reconstructed and the patient does not experience stress with these symptoms, thinking is also influenced, and the value of these symptoms decreases.

As patients repeatedly practice and experience the worthlessness of the symptoms, their concerns about the illness and its problems diminish, meaningfully changing the significance of the symptoms for both the patient and their family. Symptoms previously perceived as harmful are interpreted differently, reducing obsessive behaviors and thoughts.

In general, it can be stated that in paradoxical therapy, unwanted, compulsory, and intrusive behaviors are performed by the patient at predetermined times, and voluntarily performing these unwanted, compulsory, and intrusive behaviors helps break habits and end them, whether these issues are thoughts or bothersome behaviors.

5. Limitations & Suggestions

The study's limitations include a small and possibly non-diverse sample size, which could limit the generalizability of the findings. Additionally, the use of self-report questionnaires might introduce response biases, and the follow-up period may have been too short to effectively assess the long-term impacts of the therapy.

Future research should aim to include a larger and more diverse sample to enhance the findings' generalizability. Implementing longitudinal studies with extended follow-up periods would provide more insight into the long-term effectiveness of therapies. Investigating additional psychological variables and integrating neurobiological measurements could offer a more comprehensive understanding of the therapy impacts.

The research highlights the potential effectiveness of paradoxical timetable therapies in managing mental rumination and referential thinking. This suggests that such approaches could be integrated into clinical practices, especially for patients with obsessive-compulsive tendencies. However, practitioners should consider the study's limitations and cautiously apply these findings, recognizing the need for further research to solidify these preliminary results.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Ethics Considerations

"This article is derived from the first author's master's thesis at the Aashtian unit of the Islamic Azad University, Aashtian, Iran." It has received the ethics code IR.IAU.ARAK.REC.1402.029 from the Ethics Committee of the Medical Faculty, Islamic Azad University, Arak Branch. Ethical considerations in this research were as follows: participation in this study was completely voluntary. Before the commencement of the project, participants were familiarized with the details and regulations of the plan. The attitudes and beliefs of individuals were respected. Members of both the experimental and control groups were permitted to withdraw from the research at any stage. Additionally, members of the control group were offered the opportunity to receive the same intervention as the experimental group in similar

therapeutic sessions after the completion of the project, should they express interest. All documents, questionnaires, and confidential records were exclusively accessible to the researchers. Informed written consent was obtained from all volunteers.

Authors' Contributions

Zahra Namazi and Mehryar Anasseri both contributed significantly to this research study. Zahra Namazi played a pivotal role in the study's design, data collection, and the implementation of Paradoxical Timetable Therapy for individuals with Obsessive-Compulsive Disorder (OCD). Mehryar Anasseri, as an Assistant Professor, provided expertise in research methodology, data analysis, and interpretation of the findings.

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References

- Association, A. P. (2022). *Diagnostic And Statistical Manual Of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*. <https://doi.org/10.1176/appi.books.9780890425787>
- Besharat, M., & Naghipoor, M. (2019). The Application of a New Model of Paradox Therapy for the Treatment of Illness Anxiety Disorder: A Case Report. *Clin Case Rep Int*. 2019; 3, 1100. <https://www.clinicalcasereportsint.com/open-access/pthe-application-of-a-new-model-of-paradox-therapy-for-the-treatment-of-illness-anxiety-disorder-a-case-reportp-2282.pdf>
- Besharat, M. A. (2019). Evaluating the effectiveness of paradox therapy for the treatment of obsessive-compulsive disorder: A case study. *Journal of Psychological Studies*, 14(4), 7-36. <https://doi.org/10.22051/psy.2019.23631.1801>
- Dehaqin, V., Besharat, M. A., Gholamali Lavasani, M., & Naghsh, Z. (2023). The effectiveness of paradoxical therapy on relational practical obsessive-compulsive symptoms [Research]. *Journal of Adolescent and Youth Psychological Studies*, 4(4), 164-183. <https://doi.org/10.61186/jayps.4.4.164>
- Ehring, T., Zetsche, U., Weidacker, K., Wahl, K., Schönfeld, S., & Ehlers, A. (2011). The Perseverative Thinking Questionnaire (PTQ): Validation of a content-independent measure of repetitive negative thinking. *Journal of Behavior Therapy and Experimental Psychiatry*, 42(2), 225-232. <https://doi.org/10.1016/j.jbtep.2010.12.003>
- Fradkin, I., & Huppert, J. D. (2018). When our train of thought goes off track: The different facets of out-of-context thoughts in obsessive compulsive disorder. *Journal of Obsessive-Compulsive and Related Disorders*, 18, 31-39. <https://doi.org/10.1016/j.jocrd.2018.06.001>
- McEvoy, P. M., Watson, H., Watkins, E. R., & Nathan, P. (2013). The relationship between worry, rumination, and comorbidity: Evidence for repetitive negative thinking as a transdiagnostic construct. *Journal of affective disorders*, 151(1), 313-320. <https://doi.org/10.1016/j.jad.2013.06.014>
- Myers, S. G., Grötte, T., Haseeth, S., Guzey, I. C., Hansen, B., Vogel, P. A., & Solem, S. (2017). The role of metacognitive beliefs about thoughts and rituals: A test of the metacognitive model of obsessive-compulsive disorder in a clinical sample. *Journal of Obsessive-Compulsive and Related Disorders*, 13, 1-6. <https://doi.org/10.1016/j.jocrd.2017.01.007>

- Raines, A. M., Vidaurri, D. N., Portero, A. K., & Schmidt, N. B. (2017). Associations between rumination and obsessive-compulsive symptom dimensions. *Personality and individual differences, 113*, 63-67. <https://doi.org/10.1016/j.paid.2017.03.001>
- Ramezani, M., Ghorbaninezhad, M., Borji Khangheshlaghi, B., & Naimabady, Z. (2023). Examining the Role of Attachment Styles, Rumination and Psychological Coherence in Predicting the Intimacy Attitude and Quality Of Life of Nurses [Applicable]. *Quarterly Journal of Nursing Management, 11*(4), 69-80. <http://ijnv.ir/article-1-998-en.html>
- Rassin, E., Merckelbach, H., & Muris, P. (2000). Paradoxical and less paradoxical effects of thought suppression: A critical review. *Clinical psychology review, 20*(8), 973-995. [https://doi.org/10.1016/S0272-7358\(99\)00019-7](https://doi.org/10.1016/S0272-7358(99)00019-7)
- Rubin, M., Muller, K., Hayhoe, M. M., & Telch, M. J. (2022). Attention guidance augmentation of virtual reality exposure therapy for social anxiety disorder: a pilot randomized controlled trial. *Cognitive behaviour therapy, 51*(5), 371-387. <https://doi.org/10.1080/16506073.2022.2053882>
- Wang, P., Cao, W., Chen, T., Gao, J., Liu, Y., Yang, X., Meng, F., Sun, J., & Li, Z. (2021). Mediating Role of Rumination and Negative Affect in the Effect of Mind-Wandering on Symptoms in Patients With Obsessive-Compulsive Disorder [Original Research]. *Frontiers in Psychiatry, 12*. <https://doi.org/10.3389/fpsy.2021.755159>