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# Comparing the Effectiveness of Paradoxical Therapy and Cognitive-Behavioral Therapy on Body image in Women with Body Dysmorphic Disorder

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#### ABSTRACT

**Objective:** The aim of this study was to compare the effectiveness of Paradoxical therapy and cognitive-behavioral therapy (CBT) on body image in women with body dysmorphic disorder (BDD).

Methods and Materials: A quasi-experimental design with pretest, posttest, and three-month follow-up and a control group was used. The statistical population comprised all women seeking cosmetic surgery who attended aesthetic clinics in Tehran between October–December 2023. To identify individuals with BDD symptoms, the Body Dysmorphic Evaluation Scale (Rabaii et al., 2011) was administered to all clinic visitors. After scoring, those with elevated scores were evaluated through a diagnostic interview by a clinical psychologist. Ultimately, 45 participants were purposively selected and randomly assigned to two experimental groups and one control group. Research instruments included the Body Image Satisfaction Questionnaire (Soweto and Garcia, 2002) and the BDD scale (Rabaii et al., 2020). Data were analyzed in SPSS-2 using repeated-measures ANOVA.

**Findings:** Results indicated no significant difference between the Paradoxical therapy and CBT groups in body image scores (F = 0.886, p > .05). However, the statistical analyses confirmed that both interventions significantly reduced body image relative to the control condition among women with body dysmorphic disorder.

**Conclusion:** Based on these findings, it can be concluded that the effectiveness of Paradoxical therapy and CBT in improving body image among women with body dysmorphic disorder does not differ significantly.

**Keywords:** Paradoxical therapy; cognitive-behavioral therapy; body image; body dysmorphic disorder.

#### 1. Introduction

Body dysmorphic disorder (BDD) is a severe psychiatric condition characterized by an excessive preoccupation with perceived flaws in physical appearance, often leading to significant emotional distress and impairment in social, occupational, and daily functioning (Jassi & Krebs, 2023). The disorder was formally classified within the obsessive–compulsive and related disorders category in DSM-5, which highlights its intrusive and repetitive nature (Han & Kim, 2022). Patients often spend hours daily ruminating over minor or imagined defects, engaging in repetitive behaviors such as mirror checking, reassurance seeking, or camouflaging perceived flaws, which can reinforce their anxiety and exacerbate psychological dysfunction (Greenberg et al., 2023).

BDD is not a rare condition. Epidemiological studies estimate its prevalence to be between 1.7% and 2.4% in the general population, with higher rates among individuals seeking cosmetic or dermatological interventions (Jassi & Krebs, 2023). Because these patients often present to cosmetic surgeons rather than mental health professionals, they remain underdiagnosed and undertreated, which can lead to poor outcomes and chronicity (Bernstein, 2024). Importantly, research shows that surgical interventions rarely alleviate BDD symptoms; instead, they may worsen psychological distress when the perceived defect is not "fixed" to the patient's satisfaction (Greenberg et al., 2022). This underscores the critical need for psychotherapeutic approaches that address the cognitive and emotional underpinnings of the disorder rather than its physical manifestations.

Cognitive-behavioral therapy (CBT) remains the goldstandard psychological intervention for BDD and related disorders, offering structured protocols that focus on cognitive restructuring, exposure with response prevention, and behavioral experiments (Ritter et al., 2023). CBT aims to break the cycle of obsessive thoughts and compulsive checking by challenging dysfunctional beliefs and gradually exposing patients to feared stimuli (Gu & Zhu, 2023). Research consistently demonstrates its efficacy in reducing symptom severity, improving insight, and enhancing quality of life (Greenberg et al., 2023). In their pilot randomized controlled trial, Ritter and colleagues (2023) found that CBT produced significant improvements in BDD symptom severity compared to waitlist controls, with large effect sizes maintained at follow-up. Furthermore, internet-based CBT programs, such as BDD-NET, have shown promising results

in increasing treatment accessibility and scalability, with sustained clinical benefits in public health settings (Lundström et al., 2023).

Despite the robust evidence base for CBT, its limitations must be acknowledged. CBT relies heavily on patients' cognitive engagement and insight, which some BDD patients—particularly those with poor insight or delusional intensity—may lack (Greenberg et al., 2022). High dropout rates and partial remission rates remain challenges, with some patients showing residual symptoms or relapse after treatment termination (Gu & Zhu, 2023). Consequently, alternative or adjunctive approaches have been explored to address these limitations and offer more individualized, rapid, and cost-effective solutions.

One such approach is paradox therapy, including the Paradoxical Timetable Cure (PTC), which has recently gained attention as a novel behavioral intervention targeting obsessive-compulsive spectrum disorders (Besharat, 2023). Paradox therapy utilizes counterintuitive techniques—such as instructing clients to intentionally engage in their problematic behaviors or thoughts at scheduled times—to reduce resistance, disrupt maladaptive reinforcement cycles, and reframe the patient's relationship with their symptoms (Besharat, 2020). This method is grounded psychodynamic and systemic principles yet operationalized through behavioral tasks, making it a flexible and integrative therapeutic option (Basharat, 2019a). By prescribing the very symptoms that patients typically avoid or suppress, paradox therapy promotes emotional acceptance and diminishes symptom-driven avoidance, leading to decreased anxiety and improved emotional regulation (Babaei et al., 2023).

Empirical studies have demonstrated paradox therapy's efficacy across multiple disorders. Basharat (2019) applied paradox therapy in treating social anxiety disorder and body dysmorphic disorder in case studies, reporting substantial reductions in avoidance behaviors and emotional distress (Basharat, 2019a, 2019b). Similarly, Dehaghin et al. (2023) confirmed its effectiveness for obsessive—compulsive symptoms, finding that paradoxical prescriptions resulted in significant reductions in compulsive rituals and cognitive intrusions (Dehaghin et al., 2023). Babaei et al. (2023) extended these findings by showing that paradoxical time management therapy significantly decreased anxiety sensitivity and improved attentional focus in individuals with social anxiety disorder, suggesting a transdiagnostic potential (Babaei et al., 2023).



Paradox therapy's unique advantage lies in its ability to convert the patient into an active participant in their therapeutic process, fostering self-efficacy and insight (Besharat, 2023). By deliberately scheduling and performing anxiety-provoking behaviors, patients experience habituation and symptom decoupling in a controlled manner (Ahmadi et al., 2020). This aligns with theoretical models of emotional processing, which emphasize the importance of exposure and cognitive reappraisal in reducing distress responses (Mohammadi et al., 2019). Unlike traditional CBT, which often emphasizes symptom reduction through cognitive restructuring, paradox therapy symptoms as vehicles for growth, helping patients reinterpret them as signals rather than threats (Chitgarzadeh et al., 2023).

The comparative evaluation of CBT and paradox therapy is particularly important in the context of BDD, given the disorder's multifaceted nature, including cognitive distortions, emotional dysregulation, and behavioral compulsions (Aliasgari et al., 2024). While CBT systematically targets dysfunctional thoughts, paradox therapy addresses resistance and emotional avoidance, which may be especially salient for patients with high perfectionism or rigid self-standards (Aliyari Khanshan Vatan et al., 2023). Combining or contrasting these two approaches could therefore inform more tailored treatment strategies. For instance, CBT may be more effective in reducing stress levels by teaching coping and restructuring skills, whereas paradox therapy may excel in lowering anxiety and depressive symptoms by reducing experiential avoidance and fostering acceptance (Bernstein, 2024).

From a theoretical standpoint, paradoxical interventions are also supported by models of psychological reactance, which propose that direct attempts to eliminate symptoms may provoke resistance and exacerbate symptom severity (Besharat, 2023). By "prescribing the symptom," paradox therapy bypasses this reactance, transforming the symptom into a therapeutic tool rather than a target of suppression (Besharat, 2020). This mechanism is particularly relevant for BDD patients, who often exhibit ambivalence toward change and struggle with shame and secrecy surrounding their symptoms (Greenberg et al., 2023).

Recent literature further suggests that both CBT and paradox therapy may share underlying mechanisms, such as promoting emotional tolerance, cognitive flexibility, and self-regulation, but they achieve these outcomes via distinct routes (Gu & Zhu, 2023; Ritter et al., 2023). Lundström et al. (2023) argued that implementation factors—such as

delivery format, therapist expertise, and patient readiness—play critical roles in determining treatment success (Lundström et al., 2023). Therefore, direct comparative studies are needed to clarify not only which treatment is superior for particular symptom clusters but also which mechanisms mediate their effects on body image.

## 2. Methods and Materials

## 2.1. Study design and Participant

This study employed a quasi-experimental design. The target population comprised all women with body dysmorphic disorder (BDD) who were seeking cosmetic surgery and attended aesthetic clinics in Tehran from October to December 2023. Sampling was purposive: from Tehran's 22 municipal districts, districts 2, 3, and 4 were deliberately selected. From the clinics operating in these three districts, three clinics were purposively chosen. The Body Dysmorphic Disorder Evaluation Scale (Rabiei et al., 2011) was administered by the researcher to all women seeking cosmetic surgery at these clinics. After scoring, women who obtained high scores were evaluated by a clinic psychologist through a diagnostic interview. Ultimately, 45 participants were selected purposively and then randomly assigned—by replacement—to two experimental groups and one control group.

To implement the study, clinic managers were briefed about the procedures. In total, 45 eligible women were identified and randomly allocated to three groups (two treatment groups, one control). A G\*Power analysis recommended 15 participants per group (power = .80,  $\alpha = .05$ , effect size = 0.50).

Inclusion Criteria: A BDD diagnosis established by a specialist psychologist via clinical interview; age 18–45 years; no concurrent psychological intervention during the study; and at least basic literacy sufficient to understand instructions and complete questionnaires.

Exclusion Criteria: Presence of comorbid disorders (anxiety, depression, stress, eating disorders, or obsessive—compulsive disorder); use of psychotropic medications affecting mood or cognition (e.g., antidepressants, anxiolytics, or mood stabilizers); pregnancy or breastfeeding due to potential physiological effects on emotions and body image; absence from more than two treatment sessions; or voluntary withdrawal at any stage.



#### 2.2. Measures

The Body Image Satisfaction Questionnaire, developed by Soweto and Garcia (2002), is a 22-item instrument designed to assess individuals' satisfaction or dissatisfaction with their body image. Each item is rated on a five-point Likert scale ranging from "strongly disagree" to "strongly agree," with scores ranging from 1 to 5 per item. The total score is obtained by summing the item responses, where higher scores indicate greater satisfaction with body image, and lower scores reflect higher dissatisfaction with one's physical appearance. The original study confirmed the questionnaire's validity, reporting a Cronbach's alpha of 0.89. Subsequent research by Jafari and Nobaveh Vatan (2022) found a reliability coefficient of 0.87. In the present study, the internal consistency of the questionnaire was measured again, yielding a Cronbach's alpha of 0.88, indicating a high level of reliability.

#### 2.3. Interventions

The CBT intervention followed an emotion-focused variant adapted from The Cognitive Therapy Treatment Planner (Matthew McKay, 2002; Persian translation by Mohammadkhani et al., 2005) and was delivered in eight 90minute group sessions. The first session focused on introductions, building, rapport reviewing Dysmorphic Disorder (BDD)-related symptoms, presenting the CBT rationale alongside administering the pretest. The second session targeted cognitive beliefs and distortions by providing psychoeducation on appearance preoccupation, listing common distortions, and training participants to record maladaptive thoughts. In the third session, participants practiced realistic thinking, explored behavioral and emotional consequences of beliefs, engaged in cognitive reframing, identified rituals and avoidance patterns, and learned self-monitoring skills. The fourth session addressed emotions by identifying their types, functions, and significance, teaching emotion acceptance and observation, and overcoming barriers to healthy emotional experiences through regulation strategies. The fifth session involved systematic desensitization and selfsoothing, constructing hierarchies of emotion-provoking situations, reviewing vulnerabilities and strengths, and practicing relaxation techniques. The sixth session targeted experiential avoidance through psychoeducation, mirror retraining as a behavioral experiment, and active coping practice. The seventh session emphasized value-based action, helping participants clarify personal values, identify

value-driven activities, and develop problem-solving skills. The eighth and final session consolidated treatment gains by troubleshooting difficulties, comprehensively reviewing learned skills, planning for ongoing self-improvement, and conducting the posttest.

The paradox therapy protocol was derived from the original client-centered model developed by Mohammad Ali Besharat (2017) and adapted for group delivery to enhance feasibility and harness group dynamics. After expert review and validation using the Content Validity Index (CVI), the finalized protocol consisted of eight 90-minute weekly sessions over two months. The first session involved social and problem-stage interviews to welcome participants, gather demographic information, define BDD, explain the treatment framework, set goals, and assign initial homework to modify body image. The second session introduced behavioral analysis by reviewing homework implementation, identifying barriers, refining assignments, and estimating progress while continuing paradoxical tasks. In the third session, participants reviewed previous assignments, discussed perceived consequences, estimated therapeutic change, and continued prior tasks at a reduced dose while adding new paradoxical assignments. The fourth session continued behavioral analysis by addressing barriers, refining tasks, and estimating changes while maintaining homework. Sessions five and six focused on tapering the first and second prescribed tasks, reducing assignment frequency to twice daily, and continuing behavioral analysis. The final two sessions (seven and eight) served as followup: participants provided feedback on progress, continued homework while tapering to once daily, discontinued assignments in the last session, discussed their overall therapeutic experience, received a self-therapy plan for future use, and completed posttreatment evaluation.

## 2.4. Data Analysis

Statistics were conducted at descriptive and inferential levels. Frequencies, percentages, means, and standard deviations described study variables; demographic frequencies by group and chi-square tests compared groups at baseline. To test hypotheses, repeated-measures ANOVA (with requisite assumptions satisfied) was performed in SPSS v24.

#### 3. Findings and Results

The mean  $\pm$  SD ages were  $40.5 \pm 4.83$  (paradox therapy),  $40.25 \pm 4.46$  (cognitive-behavioral therapy), and  $40.06 \pm$ 

4.35 (control). By marital status, the paradoxical-therapy group included 5 single and 10 married participants; the CBT group, 4 single and 11 married; and the control group, 4 single and 11 married. By education, in each group 1

participant had a high-school diploma and 14 had university education. Statistical tests showed no significant betweengroup differences on demographic variables.

 Table 1

 Descriptive findings for the study variables in the experimental and control groups  $(M \pm SD)$ 

Variable	Group	Pretest	Posttest	Follow-up
Body Image	Paradox therapy	$66.46 \pm 11.51$	$83.33 \pm 8.02$	$81.13 \pm 9.17$
	CBT	$68.66 \pm 6.03$	$82.80 \pm 7.46$	$80.66 \pm 6.52$
	Control	$66.13 \pm 12.69$	$67.66 \pm 10.74$	$67.93 \pm 10.54$

To evaluate the assumptions of normal distribution and homogeneity of error variances for body image, Shapiro—Wilk and Levene's tests were conducted. Across the three groups and three time points, Shapiro—Wilk tests were nonsignificant (p > .05), indicating normal distributions for body image, and Levene's tests were nonsignificant (p > .05), indicating homogeneity of variances. Independence of the dependent variable at pretest from group membership (an essential assumption for repeated-measures ANOVA) was

assessed by multivariate analysis of variance comparing the experimental and control groups at pretest. Results were not significant, F(2, 45) = 4.302, p > .05, indicating no pretest group differences for body image and thus supporting the independence assumption. Because repeated-measures ANOVA was employed to test the hypotheses, Table 2 presents the multivariate results comparing the effect of the independent variables on body image.

 Table 2

 Multivariate tests comparing the effects of the independent variables on body image

Outcome	Wilks' Lambda	F(4, 84)	p	Partial η <sup>2</sup>	
Body Image	0.491	8.766	.001	.300	

According to Table 2, the Group × Time interaction was significant for body image (Wilks'  $\Lambda = 0.491$ , partial  $\eta^2 = 0.300$ , p = .001, F(4, 84) = 8.766). Sphericity (equality of the

error-covariance matrices) was then evaluated using Mauchly's test; Table 3 presents the results.

 Table 3

 Mauchly's test of sphericity (equality of covariance error matrices)

Outcome	Mauchly's W	$\chi^2$	df	p
Body Image	0.615	19.92	2	.060

Mauchly's test was nonsignificant (p > .05) for body image, indicating that the sphericity assumption held. Table

4 shows the repeated-measures ANOVA results explaining the effects of the independent variables on body image.

 Table 4

 Repeated-measures ANOVA for the effects of the independent variables on Body Image

Outcome	SS	Error SS	df	F	p	Partial η <sup>2</sup>	
Body Image	534.460	267.23	2, 42	17.12	.001	.449	

Table 4 indicates significant Group × Time effects for body image (partial  $\eta^2$  = .449, p = .001, F(2, 42) = 17.12) at the .001 level. This shows that independent variable,

compared with another or with the control, significantly affected body image. To identify which independent variable differed from which, the analysis for each emotion was repeated three times, each time comparing only two groups; results are in Table 6.

**Table 5**Two-group comparisons of the Group × Time interaction for body image

Outcome	Groups Compared	SS	Error SS	df	F	p	Partial η <sup>2</sup>
Body Image	Paradoxical vs. CBT	36.460	18.233	1, 28	0.886	.418	.031
	Paradoxical vs. Control	1016.867	508.433	1, 28	0.001	.001	.546
	CBT vs. Control	160.000	724.622	1, 28	0.001	001	.428

For body image, there was no significant difference between paradox therapy and CBT (p = .418), but both

treatments were significantly more effective than control (p < .05).

Table 6

Bonferroni post-hoc comparisons of mean scores for body image

Variable	Groups Compared	Mean Difference	SE	p
Body Image	Paradoxical – CBT	-0.400	3.221	.990
	Paradoxical - Control	9.733	3.012	.001
	CBT – Control	10.133	3.125	.009

The statistical analyses confirmed that both interventions significantly reduced body image relative to the control condition among women with body dysmorphic disorder.

#### 4. Discussion and Conclusion

The present study aimed to compare the effectiveness of paradox therapy and cognitive-behavioral therapy (CBT) on body image in women with body dysmorphic disorder (BDD). Findings indicated that there was no significant difference between the paradox therapy group and the cognitive-behavioral therapy (CBT) group in body image satisfaction scores. The mean scores of body image satisfaction increased similarly in both groups, and no substantial difference was observed between them. Therefore, based on the third hypothesis test, it can be concluded that the effectiveness of paradox therapy and CBT in improving body image among women with body dysmorphic disorder does not differ significantly.

The interpretation of these findings can be attributed to the structural and functional similarities between paradox therapy and cognitive-behavioral therapy (CBT). Both therapeutic approaches focus on altering patients' cognitive and emotional patterns, aiming to correct distorted beliefs and negative attitudes toward body image. CBT assists individuals in identifying and restructuring negative thoughts and maladaptive behaviors through cognitive and behavioral skill training. In contrast, paradox therapy employs contradictory techniques and principles of

acceptance to reduce resistance to change, thereby indirectly promoting a reassessment of dysfunctional beliefs (Besharat, 2023). Since both methods facilitate the improvement of body image through different yet complementary pathways, the absence of a significant difference in their effectiveness appears reasonable. This interpretation suggests that either method can be selected based on patients' individual characteristics, preferences, and available clinical resources, as both are capable of producing sustainable positive changes in body image among women with body dysmorphic disorder (Besharat, 2020). By teaching relaxation techniques for individual and social situations, participants gained greater awareness and clarity about their emotions, leading to improved self-perception and a more positive view of themselves and society as a whole (Basharat, 2019a). Throughout CBT sessions, participants learned to enhance their cognitive, emotional, and behavioral responses to emotional states and social interactions. By adopting a "glass half full" mindset and engaging in realistic and positive evaluations of their body and appearance, they improved their tolerance and flexibility in the face of personal and social challenges (Babaei et al., 2023). This finding aligns with prior evidence showing paradox therapy's rapid and decisive impact on obsessivecompulsive and anxiety-spectrum conditions, where it disrupted maladaptive reinforcement cycles and enhanced emotional regulation (Ahmadi et al., 2020; Dehaghin et al., 2023; Mohammadi et al., 2019).

The effectiveness of paradox therapy, on the other hand, can be explained through its central goal of strengthening the ego. According to (Basharat, 2019a)., the ego, as the core structure of personality, may become weakened due to various reasons, leading to impaired functioning in behavior regulation, emotional processing, and personal or social performance. This dysfunction—where the ego fails to fulfill its role—is considered the key diagnostic marker in paradoxical psychotherapy (Greenberg et al., 2022). Theoretically, this dysfunction is analyzed within the framework of the ego-id-superego triangle. Regardless of the degree or nature of ego weakness, paradox therapy addresses it practically through the implementation of paradoxical scheduling tasks by the patient. Alongside therapeutic interventions that begin with anxiety reduction following the therapist's prescriptions after the first session, and concurrent with the effect of homework assignments involving artificialization mechanisms, the disconnection of symptoms from anxiety, and altered symptom meaning, the process of ego strengthening is initiated and consolidated (Gu & Zhu, 2023). CBT addresses maladaptive thoughts and behavioral rituals through graded exposure and cognitive disputation (Ritter et al., 2023), which can reduce hyperarousal and stress by restructuring appraisal patterns and teaching adaptive coping strategies. This aligns with prior evidence that CBT significantly improves stressrelated outcomes across a range of psychiatric disorders (Dargahi-Kafshgari et al., 2022), a pattern mirrored in the current findings.

## 5. Limitations and Suggestions

limitations warrant consideration when interpreting these findings. The sample consisted exclusively of women, which limits generalizability to men with BDD, who may exhibit different symptom profiles and emotional patterns. The sample size was relatively small and purposively selected, which may reduce statistical power and increase susceptibility to sampling bias. The interventions were delivered by different therapists, and potential variability in therapist skill and fidelity could have influenced treatment outcomes. Cultural and socioeconomic factors were not systematically controlled and may have shaped participants' responses to therapy. Additionally, outcome measures relied solely self-report on questionnaires, which are vulnerable to response biases and may not fully capture behavioral or physiological changes. Follow-up assessment occurred only once, three months after treatment, providing limited information about the long-term durability of treatment effects. Finally, repeated administration of the same measures across time points may have introduced retest effects that confound observed changes.

Future studies should address these limitations by recruiting larger, more diverse, and gender-balanced samples to enhance generalizability. Randomized controlled trials with multi-site recruitment would improve external validity and allow examination of potential moderators such as gender, age, cultural background, and baseline insight. Future research should also incorporate multi-method assessment strategies, including clinician-rated interviews, behavioral observations, and physiological measures, to triangulate self-reported outcomes and reduce bias. Longerterm follow-up with multiple assessment waves is needed to clarify the sustainability of treatment gains and detect potential relapse. Additionally, dismantling studies could isolate the active components of paradox therapy—such as scheduled symptom engagement—while process research could examine mechanisms of change, including reductions in avoidance, resistance, and emotional reactivity. Comparative effectiveness studies should explore hybrid protocols combining paradox therapy and CBT to determine whether integrated approaches yield superior outcomes for complex cases.

Practitioners should consider assessing patients' emotional profiles and readiness for change when selecting interventions for BDD. Paradox therapy may be especially beneficial for patients with high resistance, perfectionistic tendencies, or low insight who struggle to engage with traditional CBT tasks. Conversely, CBT may be more suitable for patients who present with chronic stress and demonstrate cognitive flexibility and motivation to challenge their beliefs. Integrating paradoxical techniques at the outset of treatment could reduce emotional reactivity and resistance, potentially increasing patients' receptivity to subsequent CBT. Clinicians should receive training in both approaches to enable flexible, patient-centered treatment planning. Finally, clinical services should prioritize psychological interventions before cosmetic procedures, ensuring that emotional and cognitive contributors to BDD are addressed to prevent postoperative dissatisfaction and distress.

## **Authors' Contributions**

Authors contributed equally to this article.



#### **Declaration**

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

#### Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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#### **Declaration of Interest**

The authors report no conflict of interest.

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#### **Ethical Considerations**

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## References

- Ahmadi, S., Rezaei, A., Samani, S., & Kazemi, S. (2020). Comparing the Effect of Exposure and Response Prevention and Paradoxical Time Table Therapy Techniques on the Obsessive-Compulsive Disorder Patients [Original]. *Internal Medicine Today*, 26(3), 244-259. https://doi.org/10.32598/hms.26.3.3093.3
- Aliasgari, S., Farhangi, A., & Sedaghat, M. (2024). Comparison of the Effectiveness of Schema Therapy and Cognitive-Behavioral Therapy on Body Dysmorphic Disorder in Young Women with Body Dysmorphic Disorder. *Journal of Psychological Dynamics in Mood Disorders (PDMD)*, 3(1), 30-40. https://doi.org/10.22034/pdmd.2024.448850.1062
- Aliyari Khanshan Vatan, F., Ahadi, H., Kalhornia Golkar, M., & Sedaghat, M. (2023). Comparison of the effectiveness of cognitive behavioral therapy and emotion-oriented therapy on physical self-concept and distress tolerance of women with coronary heart disease. *frooyesh*, 12(9), 117-128. http://frooyesh.ir/article-1-4614-en.html
- Babaei, V., Aboualmali Hosseini, K., & Habib Mohammad, B. (2023). Investigating the Effectiveness of Paradoxical Time Management Therapy on Anxiety Sensitivity and Attention Focus in Individuals with Social Anxiety Disorder. Psychological Sciences Journal, 22(125), 983-967. https://psychologicalscience.ir/article-1-2074-fa.html
- Basharat, M. A. (2019a). The Application of Paradoxical Therapy for Treating Body Dysmorphic Disorder: A Case Study.

- Psychological Sciences Journal, 19(95), 1387-1371. https://psychologicalscience.ir/article-1-1025-fa.html
- Basharat, M. A. (2019b). Assessing the Effectiveness of Paradoxical Therapy on Social Anxiety Disorder: A Case Study. *Psychological Sciences Journal*, *18*(76), 396-383. https://psychologicalscience.ir/article-1-383-fa.html
- Bernstein, E. E. (2024). The Use of Coaching in Smartphone App-Based Cognitive Behavioral Therapy for Body Dysmorphic Disorder. *Internet Interventions*, 36, 100743. https://doi.org/10.1016/j.invent.2024.100743
- Besharat, M. A. (2020). Evaluating the effectiveness of paradoxical couple therapy for the treatment of couple problems: A case study. *Iranian Journal of Family Psychology*, 7(1), 1-18. https://doi.org/10.52547/ijfp.7.1.1
- Besharat, M. A. (2023). The Effective Mechanisms of the Paradoxical Timetable. In M. A. Besharat (Ed.), *Paradoxical Psychotherapy: A Practitioner's Guide* (pp. 23-27). Springer International Publishing. https://doi.org/10.1007/978-3-031-27717-7 5
- Chitgarzadeh, M. J., Asayesh, M. H., Besharat, M. A., & Hakkak, F. (2023). Investigating the effectiveness of paradoxical couple therapy (PTC) on marital conflicts and emotion regulation in conflicting couples [Research]. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, 12(2), 39-50. http://frooyesh.ir/article-1-4107-en.html
- Dargahi-Kafshgari, H., Yaghoubi-Hasankola, G., & Habibzadeh-Ahangarkolaei, Z. (2022). The effectiveness of cognitive-behavioral therapy on psychological distress and self-efficacy in patients with irritable bowel syndrome. *International Journal of Body, Mind and Culture*, 9(1), 22-28. https://doi.org/10.22122/ijbmc.v9i1.297
- Dehaghin, V., Basharat, M. A., Gholam Ali Lavasani, M., & Naqsh, Z. (2023). The effectiveness of paradoxical therapy on relational practical obsessive-compulsive symptoms. *Journal of Adolescent and Youth Psychological Studies*, 4(4), 164-183. https://www.magiran.com/paper/2592864
- Greenberg, J. L., Jacobson, N. C., Hoeppner, S. S., Bernstein, E. E., Snorrason, I., Schwartzberg, A., Steketee, G., Phillips, K. A., & Wilhelm, S. (2022). Early response to cognitive behavioral therapy for body dysmorphic disorder as a predictor of outcomes. *Journal of psychiatric research*, 152, 7-13. https://www.sciencedirect.com/science/article/pii/S00223956 22002989
- Greenberg, J. L., Phillips, K. A., Hoeppner, S. S., Jacobson, N. C., Fang, A., & Wilhelm, S. (2023). Mechanisms of cognitive behavioral therapy vs. supportive psychotherapy in body dysmorphic disorder: An exploratory mediation analysis. *Behaviour Research and Therapy*, 161, 104251. https://doi.org/10.1016/j.brat.2022.104251
- Gu, Y. Q., & Zhu, Y. (2023). A randomized controlled trial of mindfulness-based cognitive therapy for body dysmorphic disorder: Impact on core symptoms, emotion dysregulation, and executive functioning JO Journal of Behavior Therapy and Experimental Psychiatry. https://doi.org/10.1016/j.jbtep.2023.101869
- Han, A., & Kim, T. H. (2022). Efficacy of Internet-Based Acceptance and Commitment Therapy for Depressive Symptoms, Anxiety, Stress, Psychological Distress, and Quality of Life: Systematic Review and Meta-analysis [Review]. J Med Internet Res, 24(12), e39727. https://doi.org/10.2196/39727
- Jassi, A., & Krebs, G. (2023). Body Dysmorphic Disorder. Psychiatric Clinics of North America, 46(1), 197-209. https://doi.org/10.1016/j.psc.2022.10.005
- Lundström, L., Flygare, O., Ivanova, E., Mataix-Cols, D., Enander, J., Pascal, D., Chen, L. L., Andersson, E. M., & Rück, C.



- (2023). Effectiveness of Internet-based cognitive-behavioural therapy for obsessive-compulsive disorder (OCD-NET) and body dysmorphic disorder (BDD-NET) in the Swedish public health system using the RE-AIM implementation framework. *Internet Interventions*, 31, 100608. https://doi.org/10.1016/j.invent.2023.100608
- Mohammadi, Z., Soleimani, A., Fathi Ashtiani, A., Ashrafi, E., & Mokhaberi, K. (2019). Comparing the Effectiveness of Paradoxical Time Therapy, Exposure Therapy, Response Prevention, and Medication on Reducing Symptoms in Patients with Obsessive-Compulsive Disorder. *Disability Studies Journal*, 9, 63-63. https://jdisabilstud.org/browse.php?a\_id=1637&sid=1&slc\_1 ang=fa
- Rabiei, M., Salahian, A., Bahrami, F., & Palahang, H. (2011). Construction and Standardization of the Body Dysmorphic Metacognition Questionnaire. *J-Mazand-Univ-Med-Sci*, 21(83), 43-52. http://jmums.mazums.ac.ir/article-1-688-en.html
- Ritter, V., Schüller, J., Berkmann, E. M., von Soosten-Höllings-Lilge, L., & Stangier, U. (2023). Efficacy of Cognitive Therapy for Body Dysmorphic Disorder: A Randomized Controlled Pilot Trial. *Behavior therapy*, 54(1), 65-76. https://www.sciencedirect.com/science/article/pii/S00057894 22000010