KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 13 November 2024
Revised 09 January 2025
Accepted 22 January 2025
Published online 01 February 2025

KMAN Counseling & Psychology Nexus

Volume 3, pp 1-12

E-ISSN: 3041-9026

Comparison of the Effectiveness of Cognitive Behavioral Therapy and Short-Term Psychodynamic Therapy in Reducing Alexithymia and Impulsivity in Individuals with Obsessive-Compulsive Disorder

Seyed Adel. Hosseini[1], Maryam. Nasri[2*], Reza. Dastjerdi[2]

[1] PhD Student, Department of General Psychology, Birjand Branch, Islamic Azad University, Birjand, Iran
[2] Assistant Professor, Department of General Psychology, Birjand Branch, Islamic Azad University, Birjand, Iran

*** Corresponding author email address**: Nasri@iaubir.ac.ir

A r t i c l e I n f o

Article type:
Original Research
Section:
Health Psychology

How to cite this article:
Hosseini, S. A., Nasri, M., & Dastjerdi, R. (2025). Comparison of the Effectiveness of Cognitive Behavioral Therapy and Short-Term Psychodynamic Therapy in Reducing Alexithymia and Impulsivity in Individuals with Obsessive-Compulsive Disorder. *KMAN Conseling and Psychology Nexus*, *3*, 1-12.
http://doi.org/10.61838/kman.hp.psynexus.3.10

A B S T R A C T

The aim of this study was to compare the effectiveness of cognitive behavioral therapy (CBT) and short-term psychodynamic therapy (STPD) in reducing alexithymia and impulsivity in individuals with obsessive-compulsive disorder (OCD). This study is a quasi-experimental research with a pre-test, post-test, and follow-up design. The statistical population consisted of individuals diagnosed with OCD who sought treatment at various counseling and psychological service centers in Birjand from March to December of the year 2023. A total of 60 individuals were purposively selected based on Cohen's table and randomly assigned to two experimental groups and one control group. The first experimental group received 10 sessions of cognitive behavioral therapy, while the second experimental group received 11 sessions of short-term psychodynamic therapy. The control group did not receive any intervention during this period. The research instruments included the Toronto Alexithymia Scale (TAS-20) by Bagby, Parker, and Taylor (1994), and the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) by Goodman, Price, and Rasmussen (1986), which were administered at three stages: pre-test, post-test, and follow-up. To analyze the data, a repeated measures analysis of variance (ANOVA) was used. The results indicated that both cognitive behavioral therapy and short-term psychodynamic therapy led to a significant reduction in alexithymia and impulsivity at the post-test stage ($p < 0.05$), and the effects of the treatments were maintained after three months. Furthermore, no significant difference was found between the effectiveness of cognitive

behavioral therapy and short-term psychodynamic therapy in reducing alexithymia and impulsivity in individuals with obsessive-compulsive disorder ($p > 0.05$). Based on the results of this study, it can be concluded that there is no significant difference between the effectiveness of cognitive behavioral therapy and short-term psychodynamic therapy in reducing alexithymia and impulsivity in individuals with obsessive-compulsive disorder. Both therapies can be used to reduce and modify alexithymia and impulsivity in individuals with OCD.

Keywords: *Cognitive Behavioral Therapy, Short-Term Psychodynamic Therapy, Alexithymia, Impulsivity, Obsessive-Compulsive Disorders*

1. Introduction

Obsessive-Compulsive Disorder (OCD) is a chronic and debilitating condition characterized by intrusive thoughts, urges, or images that induce anxiety or distress, accompanied by repetitive behavioral or mental activities that the individual feels compelled to perform in a systematic way in order to reduce the anxiety or prevent feared consequences (Pourkhiyabi et al., 2024). Obsessive thoughts and compulsive actions are typically executed in response to the intrusive thoughts. OCD is diagnosed when obsessive thoughts or compulsions significantly cause distress or consume considerable time. Earlier editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM) classified OCD as an anxiety disorder and placed it within the anxiety category (Chiniforooshan et al., 2017). However, the latest edition (DSM-5) has differentiated OCD from other anxiety disorders in terms of its psychopathology, and now it is classified as a separate category along with related disorders (Abrantes et al., 2017).

Alexithymia is a diagnostic symptom of OCD and is defined as the inability to cognitively process emotional information and regulate emotions (Ahmadi & Balaghan Abadi, 2020). In other words, the inability to cognitively process emotional information and regulate emotions is termed alexithymia. Alexithymia has three main characteristics: difficulty identifying feelings, difficulty describing feelings, and external thinking styles (Abdi Zarrin & Nik Khah, 2021). Alexithymia essentially refers to the disorganization of an individual's emotional system. Alexithymia reflects the difficulties some individuals face in finding words to express their emotions (Bagheri Sheykhangafshe et al., 2024; Dubé et al., 2024; Preece & Gross, 2023). Individuals with alexithymia may be unaware of their emotional states, thus expressing their emotions through physical complaints (Ozonder Unal & Ordu, 2023). Alexithymia has been linked to various psychopathological symptoms, including depression, anxiety, physical problems, increased vulnerability to mental disorders, and decreased effectiveness in psychotherapy, affecting the onset and severity of psychological symptoms (Wang et al., 2021).

Another variable that serves as a key diagnostic criterion in identifying OCD is impulsivity. Impulsivity is recognized as a psychological disorder characterized by recurrent, persistent thoughts and repetitive behaviors accompanied by anxiety. The repetitive thoughts and behaviors associated with impulsivity are not voluntary and do not provide pleasure. These thoughts occur involuntarily and typically generate worry and anxiety in individuals (McCabe et al., 2019). The core feature of impulsivity is the repetitive occurrence of obsessive thoughts and actions. The intensity of these obsessive thoughts and actions consumes a considerable amount of time and leads to significant distress or impairment. If left untreated, this disorder can result in a long-term decline in quality of life, mood and anxiety disorders, substance dependence, repeated suicidal attempts, communication and occupational difficulties, confusion, failure to distinguish between mental images and external reality, and impairment in individual, familial, and social functioning (Zabet et al., 2021). Impulsivity in OCD includes a feeling of being unable to stop the recurrence of unwanted thoughts. These feelings may involve violence, including self-harm or harm to others. While intrusive thoughts may cause significant distress, it is unlikely that the individual will act on these violent thoughts. These actions typically manifest as physical behaviors, such as hand washing, repeatedly checking door locks and windows, or engaging in ritualistic behaviors performed in a fixed and

KMAN-CPN KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

repetitive manner (Alcázar Ángel et al., 2018). Unlike obsessions that increase anxiety and suffering, impulsivity can neutralize obsessions and reduce distress by performing certain actions to mitigate or eliminate the effects of the obsession. Impulsivity can manifest in six forms: reducing anxiety, eliminating fear, alleviating distress, increasing certainty, providing reassurance, and increasing a sense of security (McCullon et al., 2017).

Over the years, various treatments have been developed to improve these disorders. Research in the field of pharmacotherapy has shown that this treatment approach alone does not lead to improvement in OCD, and many individuals with OCD have a negative attitude toward pharmacotherapy (Alcázar Ángel et al., 2018). Therefore, due to the limitations of pharmacotherapy, significant attention has been given to psychological treatments for OCD, and various approaches have been suggested for effective management of the disorder. However, it is important to consider the differences in these interventions in terms of ease of implementation and the sustainability of treatment results. Researchers have shown that behavioral therapy has a significant impact on improving OCD, but this treatment approach has many limitations, including the fact that most individuals dislike this form of treatment, abandon it, and even intentionally sabotage the therapy process (Aghamiri et al., 2021). Furthermore, behavioral therapy is less successful in treating pure OCD without rituals. Consequently, researchers have concluded that cognitive interventions are necessary to address these treatment challenges. As a result, Cognitive Behavioral Therapy (CBT) has gained attention from many specialists for improving this disorder. Cognitive Behavioral Therapy (CBT) is a short-term psychotherapy focused on current issues, based on the idea that an individual's thoughts and feelings influence their behavior (McCullon et al., 2017). The focus of CBT is on problem-solving and goal-setting, aiming to change the client's thought patterns to alter their responses to challenging situations. The CBT approach can be applied to a variety of mental health issues (Aghamiri et al., 2021; Alcázar Ángel et al., 2018). The cognitive-behavioral field is based on the idea that OCD arises from a "catastrophic misinterpretation of the significance" of intrusive thoughts, images, or urges, and that as long as these misinterpretations persist, the OCD remains. However, when these misinterpretations weaken, the OCD diminishes. CBT may also be effective as an intervention for chronic pain and its associated discomfort (Alcázar Ángel et al., 2018). Therefore, this treatment can be an effective intervention for reducing obsessive symptoms (Aghamiri et al., 2021). Over the past four decades, the cognitive-behavioral model has provided a solid understanding of the impact of cognition on psychological well-being and led to the development of techniques for treating various disorders, including OCD. In cognitive-behavioral theories, the content of thoughts is considered to be determinative of the disorder and is regarded as highly important, whereas in metacognitive models, the emphasis is on how we think about an event. Metacognitive therapy was specifically developed to address the limitations of the cognitive-behavioral approach (Joana Proença et al., 2020).

According to the American Psychiatric Association, Cognitive Behavioral Therapy (CBT) is recognized as a safe and effective treatment for OCD, with psychological treatments currently considered the most effective form of treatment for OCD, leading to a 60% to 80% reduction in symptoms (Wang et al., 2021). CBT emphasizes the willingness to experience unwanted thoughts and feelings and connects individuals to the present moment, rather than distracting them from emotional impacts. CBT works by promoting psychological flexibility and accepting intrapersonal conflicts, focusing on mindfulness and handling unpleasant thoughts (Hofmann & Asmundson, 2008). Numerous studies have demonstrated that changes in psychological flexibility, meaningful living, and mindfulness contribute to clinical improvement among individuals with OCD. Thus, the primary goal of CBT is not to resist or reduce the number of obsessions and compulsions but to help patients change their relationship with the obsessions so that they do not struggle with the disorder (Alcázar Ángel et al., 2018).

The short-term psychodynamic psychotherapy approach is another effective treatment for personality disorders, which can also be used to reduce symptoms and defense mechanisms associated with OCD (Moazami Goodarzi et al., 2021). The term short-term psychodynamic psychotherapy refers to a set of therapeutic techniques rooted in Freud's theoretical model (Di Salvo et al., 2022). This therapy involves engaging individuals in exploring their understanding and insight into relationships, emotions, and the background for their choices (Korsgaard et al., 2022). This therapy is termed short-term psychodynamic psychotherapy because, like psychodynamic therapy, it focuses on analyzing real emotional experiences, overcoming resistance, and paying close attention to the phenomenon of transference (Moazami Goodarzi et al., 2021). Due to the multifaceted nature of OCD and its various

KMAN-CPN KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

subtypes, future research is likely to investigate different treatments for the subgroups of OCD. Additionally, finding effective and short-term therapeutic methods is a crucial area of research in treatment (Alcázar Ángel et al., 2018). One of the key aspects of short-term psychodynamic therapy is its emphasis on the therapeutic relationship. The therapist's active stance and the correct use of techniques in this approach allow patients to identify and connect with their deep emotions and thoughts in a short period, facilitating the most fundamental and profound form of authentic interaction between the therapist and the patient (Shekari et al., 2018).

Short-term psychodynamic psychotherapy is significant not only because it addresses the symptoms of psychological disorders and personality reconstruction in a shorter time compared to psychoanalysis, but also because it increases patients' capacity for ongoing self-awareness, providing benefits beyond symptom relief (Vahedi et al., 2016).

Similar to the cognitive-behavioral model, short-term psychodynamic therapy assumes that OCD arises from biased thinking, but it differs in its focus on a specific type of thinking called the cognitive-attentional syndrome. This thinking style is marked by excessive engagement in verbal thinking and preoccupation with worry and rumination. The cognitive-attentional syndrome is problematic because it causes the individual to overvalue their thoughts, thereby increasing their sense of threat (Joana Proença et al., 2020). Furthermore, research results indicate that there is a meaningful connection between Cognitive Behavioral Therapy and short-term psychodynamic therapy in reducing alexithymia and impulsivity among individuals with OCD (Van Noppen et al., 2022).

Based on the aforementioned points, the central question of the current research is: Which treatment approach, between Cognitive Behavioral Therapy and Short-Term Psychodynamic Therapy, is more effective in reducing alexithymia and impulsivity among individuals with Obsessive-Compulsive Disorder?

2. Methods and Materials

2.1. Study Design and Participants

The present study is applied in terms of its goal and falls under the category of semi-experimental research (pre-test, post-test with a control group, and follow-up) designed to compare the effectiveness of Cognitive Behavioral Therapy (CBT) and Short-Term Psychodynamic Psychotherapy (STPP) on emotional alexithymia and impulsivity. For this purpose, protocols for both Cognitive Behavioral Therapy and Short-Term Psychodynamic Psychotherapy were employed. The research design was carried out in three groups (two experimental groups and one control group) with three phases: pre-test, post-test, and a 3-month follow-up. The sample was randomly selected and assigned to three groups for the pre-test. The first experimental group received Cognitive Behavioral Therapy, and the second experimental group underwent Short-Term Psychodynamic Psychotherapy. The control group was placed on a waiting list. After the treatment period, all three groups were given a post-test, and a follow-up test was administered three months later.

2.2. Measures

2.2.1. Alexithymia

The Toronto Alexithymia Scale, developed by Bagby, Taylor, and Parker (1994), is a 20-item test assessing three subscales: Difficulty Identifying Feelings (7 items), Difficulty Describing Feelings (5 items), and Externally Oriented Thinking (8 items). Responses are rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), with a total score for overall emotional alexithymia calculated. The psychometric properties of the TAS-20 have been validated in both international and national studies. In Basharat's (2009) study, the Cronbach's alpha coefficients for the total score and the subscales of difficulty identifying and describing feelings, and external thinking were reported as 0.85, 0.82, 0.75, and 0.72, respectively. In the study by Javanmard and Qaraghuzlou (2015), Cronbach's alpha was found to be 0.77. Similarly, in Sarlek and Sadeghian's (2016) study, the Cronbach's alpha coefficient for this scale was 0.71. International studies, such as those by Palmer, Gigans, Manuka, and Staff (2004), and Taylor and Bagby (2000), have also confirmed the psychometric properties of the scale (Abdi Zarrin & Nik Khah, 2021; Ahmadi & Balaghan Abadi, 2020). In the current study, Cronbach's alpha for the TAS-20 was 0.73.

2.2.2. Obsessive-Compulsive Disorder

The Yale-Brown Obsessive-Compulsive Scale was developed by Goodman et al. (1986). This scale consists of 10 items, with the first 5 items assessing obsessive thoughts and the last 5 items evaluating compulsive behaviors. It is a semi-structured interview used to assess the severity of obsessive-compulsive symptoms and is widely used in both

KMAN-CPN KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

pharmacological and psychological treatment effectiveness evaluations. This scale uses a five-point Likert scale for responses. In the study by Zabet, Karami, and Yazdanbakhsh (2021), lower scores indicate very mild OCD, scores between 10-15 indicate relatively mild OCD, scores between 16-25 represent moderate OCD, and scores above 25 are indicative of severe OCD symptoms. In the study by Kalant et al. (2008), the inter-rater reliability and test-retest reliability of this scale for monitoring symptom changes in OCD were reported as adequate. In Zabet, Karami, and Yazdanbakhsh's (2019; 2021) study, the internal consistency of the Y-BOCS was validated. Also, in Mikaeli et al. (2011) study, Cronbach's alpha for the Y-BOCS was found to be 0.91 (Moazami Goodarzi et al., 2021; Zabet et al., 2021). In the present study, Cronbach's alpha for the Y-BOCS was 0.88.

2.3. Interventions

2.3.1. Cognitive-Behavioral Therapy

The Cognitive-Behavioral Therapy (CBT) protocol outlined below is designed for individuals diagnosed with Obsessive-Compulsive Disorder (OCD). CBT focuses on changing maladaptive cognitive patterns and behaviors, which contribute to the development and maintenance of OCD symptoms. The therapeutic approach involves identifying distorted thought processes, challenging irrational beliefs, and promoting more adaptive thinking and coping strategies. The protocol incorporates both cognitive restructuring and behavioral interventions to effectively address the emotional and behavioral aspects of OCD.

Session 1

The first session focuses on an initial assessment of the patients using the Padua Inventory and Cognitive Fusion Questionnaire. Patients are introduced to the common symptoms of OCD, including the nature of obsessions and compulsions. The session aims to establish the goals of CBT and provide a general understanding of the treatment approach. Patients are given a list of intrusive thoughts, similar to those experienced by the general population, to normalize their experiences. Relaxation exercises are introduced to help individuals manage their anxiety during the therapy process.

Session 2

In the second session, a cognitive model of OCD is introduced. Patients are taught how to normalize obsessive thoughts and understand that such thoughts are a common part of human experience. The cognitive triangle (thoughts, emotions, and behaviors) is explained, and patients learn to identify cognitive distortions. Patients are given a list of common cognitive errors and encouraged to begin recording their thoughts in a daily thought log. The importance of understanding cognitive fusion and the use of behavioral experiments to challenge irrational thoughts is emphasized.

Session 3

The third session focuses on the use of Socratic questioning and cognitive restructuring techniques. Patients learn to critically examine their thoughts by filling out a "5-column thoughts sheet" and a "7-column thoughts sheet." They are encouraged to list the advantages and disadvantages of their intrusive thoughts. A behavioral experiment is introduced to test the importance of certain thoughts and their impact on behavior and emotional responses. This session aims to help patients recognize the distorted nature of their thought processes.

Session 4

In session four, the focus shifts to reviewing the daily thought logs filled out by the patients. Behavioral experiments are conducted to test neutralizing behaviors related to obsessive thoughts. Techniques like probability estimation and Socratic questioning are used to challenge excessive risk estimation beliefs. Patients are encouraged to design additional behavioral experiments to test their need for reassurance and evaluate the validity of their anxiety-inducing thoughts.

Session 5

This session continues the use of Socratic questioning, applying it to challenge excessive responsibility beliefs. Patients are introduced to the concept of perfectionism and learn how to address it through questioning and downward arrow techniques. Behavioral experiments are created to examine the significance of specific intrusive thoughts and challenge the need for perfectionistic thinking in everyday situations.

Sessions 6 to 9

During these sessions, patients learn and practice exposure and response prevention (ERP) techniques in both the therapist's presence and at home. These sessions focus on desensitizing patients to anxiety-provoking situations and preventing compulsive behaviors. Regular review of the daily thought logs continues, and new behavioral experiments are designed to test the beliefs patients hold about their intrusive thoughts. These sessions also reinforce the connection between cognitive distortions and compulsive behaviors.

Session 10

The final session involves a summary and review of the cognitive and behavioral techniques learned throughout therapy. Patients are encouraged to review their progress by revisiting their thought logs. The cognitive model of OCD is discussed again, and the importance of continued behavioral practice is emphasized. The session includes discussions on relapse prevention, common signs of recurrence, and the application of problem-solving techniques to manage any future challenges. The session ends with a reassessment of the patient's progress using the Padua Inventory and Cognitive Fusion Questionnaire.

2.3.2. Short-Term Psychodynamic Therapy

Short-term psychodynamic therapy (STP) focuses on understanding and addressing unconscious conflicts that contribute to the symptoms of OCD. The protocol is designed to help patients explore the emotional and relational dynamics that underpin their obsessive-compulsive behaviors. By uncovering underlying psychological mechanisms such as defense mechanisms and repressed feelings, STP seeks to resolve these conflicts and reduce symptom severity. This protocol involves a structured, yet flexible approach to intervention, where both therapeutic alliance and insight generation are key.

Session 1

The first session establishes the therapeutic framework, including the rules for therapy and the goals of treatment. The therapist conducts an initial interview using a psychodynamic sequence known as experimental role-play to assess the patient's OCD symptoms and emotional state. This helps identify initial defense mechanisms and offers insight into how OCD symptoms may serve as protective functions. The session serves as an introduction to psychodynamic concepts and sets the stage for deeper exploration in subsequent sessions.

Session 2

In this session, the patient begins to articulate their symptoms in more vague and general terms. The therapist applies pressure to encourage the patient to be more specific and precise in describing their issues. The session aims to break through the patient's defense mechanisms, particularly those related to vagueness and generalization. Various common defense mechanisms are explored, and relevant tests and interventions are introduced to challenge the patient’s defenses and encourage a more direct exploration of their thoughts and emotions.

Session 3

This session focuses on dealing with obsessive thinking and rumination. The therapist works with the patient to clarify thought patterns, challenging overly broad generalizations, and confronting defensive patterns such as intellectualization and avoidance. By helping the patient recognize these patterns, the therapist encourages them to break free from maladaptive thought processes. Effective tests and interventions such as challenging the defensiveness and clearing doubts in the patient’s cognitive and emotional processing are employed.

Session 4

The fourth session focuses on cognitive distortions related to overgeneralization and rationalization. The therapist helps the patient identify these patterns and uses various techniques to challenge these defenses. The primary goal is to help the patient confront their cognitive errors and recognize the impact these errors have on their emotional and behavioral responses. Further challenges to maladaptive thought processes are introduced through focused interventions and cognitive clarification techniques.

Session 5

During this session, the therapist addresses the patient's use of avoidance mechanisms and denial. The patient’s tendency to avoid confronting their emotions is identified and explored. The therapist uses clarifying techniques to challenge the patient's avoidance strategies and denial mechanisms. By confronting these defenses, the patient is encouraged to face their emotional states and underlying anxieties, which are often repressed and distorted.

Session 6 to 9

These sessions focus on exploring deeper unconscious conflicts and feelings that contribute to OCD symptoms. The therapist continues to challenge the patient's defenses, such as externalization, dissociation, and emotional withdrawal. Specific interventions are tailored to address these patterns, encouraging the patient to confront underlying emotional issues that contribute to their obsessive behaviors. Each session builds on previous work, with the therapist providing support for the patient to explore more vulnerable emotional states, including fears and anxieties that are deeply rooted in their unconscious mind.

Session 10

The final session is a review of the therapy process and the patient’s progress. The therapist revisits the key defense mechanisms and unconscious conflicts that were uncovered throughout the treatment. The session includes an in-depth discussion on how to apply the insights gained in therapy to real-life situations and manage any potential relapses. The

KMAN-CPN KMAN-Counseling & Psychology Nexus E-ISSN: 3041-9026

therapist encourages the patient to continue reflecting on their thoughts and behaviors in daily life, using the tools and strategies learned during therapy.

2.4. Data Analysis

Prior to administering the questionnaires, ethical principles such as confidentiality of information, obtaining informed consent, ensuring that the participants' data would not be disclosed to others, and creating a supportive and reassuring atmosphere were considered. Participants were also assured that their involvement in the study was voluntary and that they could freely choose to discontinue participation at any time. After sampling, diagnostic interviews were conducted, and a pre-test was administered. A total of 60 individuals were randomly assigned to three groups, with an equal number of participants in each group (20 participants per group). The experimental groups received Cognitive Behavioral Therapy and Short-Term Psychodynamic Psychotherapy, while the control group received no intervention. After the treatment sessions, a post-test was conducted with all participants. Additionally, the experimental groups completed the questionnaires again three months after the treatment sessions during the follow-up phase. After collecting the data, descriptive statistics (mean and standard deviation) and inferential statistics (repeated measures ANOVA) were used to analyze the data. The results obtained from the questionnaires were analyzed using SPSS version 22.

3. Findings and Results

The descriptive findings of the study are presented in Table 1.

Table 1

Descriptive Statistics of Research Variables

Variable	Group	Pre-test Mean (SD)	Post-test Mean (SD)	Follow-up Mean (SD)
Emotional Alexithymia	Cognitive Behavioral Therapy	4.35 (0.745)	1.75 (0.716)	1.50 (0.606)
	Short-Term Psychodynamic Therapy	4.50 (0.875)	1.50 (0.688)	1.45 (0.686)
	Control	4.30 (0.801)	4.05 (0.887)	-
Impulsivity	Cognitive Behavioral Therapy	17.45 (3.471)	13.15 (3.297)	12.95 (3.119)
	Short-Term Psychodynamic Therapy	17.65 (3.558)	13.15 (2.277)	12.85 (2.254)
	Control	18.20 (3.270)	18.45 (3.153)	-

Based on the findings presented in Table 1, the severity of emotional alexithymia and impulsivity was measured in the pre-test phase in the treatment groups. In the post-test and follow-up phases, the intensity of both emotional alexithymia and impulsivity decreased. Additionally, the results indicate that there was no change in the severity of emotional alexithymia and impulsivity in the control group.

To examine the statistical significance of the observed changes in emotional alexithymia and impulsivity, statistical tests were used. For assessing the effectiveness of the treatments, a repeated measures analysis of variance (ANOVA) was conducted. Prior to this, the assumptions of normal distribution and homogeneity of variances were checked to ensure the validity of using parametric tests. The Shapiro-Wilk test was used to check for the normality of the distribution. The results showed that the assumption of normality was met for all three groups.

Furthermore, to test the assumption of homogeneity of variances, Levene's test was applied. The results indicated that the variances were equal across the groups, and there was no significant difference in variances ($p > 0.05$).

Additionally, to assess the assumption of homogeneity of covariances, Mauchly's test was used. The results showed that Mauchly's test statistic (0.615) with a chi-square of 27.267 (df = 2) was not statistically significant at the 0.05 level, suggesting that the assumption of homogeneity of covariances was met for the effects related to time, time and group, and group.

Thus, it can be concluded that the assumption of equality of variances within subjects was satisfied for all variables ($p \leq 0.05$).

Table 2

Results of Repeated Measures ANOVA for Determining the Effect of Treatment Approaches

Scale	Source	Sum of Squares	df	Mean Square	F	p-value	Effect Size	Statistical Power
Emotional Alexithymia	Within Group (Time)	142.178	2	71.089	209.049	0.000	0.786	1.000
	Time * Group	53.722	4	13.431	39.495	0.000	0.581	1.000
	Error	38.767	114	0.340	-	-	-	-
	Between Group (Group)	114.178	2	57.089	51.543	0.000	0.644	1.000
	Error	63.133	57	1.108	-	-	-	-
Impulsivity	Within Group (Time)	55.784	2	27.892	6.978	0.001	0.109	0.920
	Time * Group	206.420	6	34.403	8.607	0.000	0.312	1.000
	Error	455.700	114	3.997	-	-	-	-
	Between Group (Group)	645.735	3	215.245	10.917	0.000	0.365	0.999
	Error	1123.850	57	19.717	-	-	-	-

Table 2 reports the results of the repeated measures ANOVA to investigate differences in the study sample across three phases: pre-test, post-test, and follow-up. As shown in Table 2, the effect of time on emotional alexithymia and impulsivity scores is statistically significant ($p < 0.05$). Therefore, it can be concluded that, irrespective of the experimental group, there are significant differences in the mean scores of emotional alexithymia and impulsivity across the pre-test, post-test, and follow-up stages. Furthermore, the interaction effect between time and group is also significant ($p < 0.05$). This suggests that the mean differences in emotional alexithymia and impulsivity scores across time points depend on the levels of the group variable. As shown in Table 2, the main effect of the group is also significant for emotional alexithymia and impulsivity scores ($p < 0.05$). Therefore, it can be concluded that, irrespective of time, there are significant differences in the mean scores of emotional alexithymia and impulsivity between the groups.

The Bonferroni post hoc test was used for pairwise comparisons of the scales across time points and among the groups.

Table 3

Bonferroni Post Hoc Test for Pairwise Comparison of Scales in Time Series

Scale	Phase A	Phase B	Mean Difference (A-B)	Significance Level
Emotional Alexithymia	Pre-test (1)	Post-test (2)	1.833	0.000
		Follow-up (3)	1.933	0.000
	Post-test (2)	Follow-up (3)	0.100	0.398
Impulsivity	Pre-test	Post-test	2.388	0.029
		Follow-up	2.513	0.027
	Post-test (2)	Follow-up (3)	0.125	0.001

As shown in Table 3, there is a statistically significant difference between the mean scores of emotional alexithymia and impulsivity between the pre-test phase and both the post-test and follow-up phases ($p < 0.05$). However, no significant difference was found between the post-test and follow-up phases ($p > 0.05$). Thus, it can be concluded that the effect of the treatment method was significantly maintained in reducing the mean scores of emotional alexithymia and impulsivity in the follow-up phase.

Table 4

Bonferroni Post Hoc Test for Pairwise Comparison of Scales Between Groups

Scale	Phase A	Phase B	Mean Difference	Significance Level
Emotional Alexithymia	Control (1)	Cognitive-Behavioral (2)	1.600	0.000
		Short-term Psychodynamic (3)	1.767	0.000
	Cognitive-Behavioral (2)	Short-term Psychodynamic (3)	0.167	0.001
Impulsivity	Control	Cognitive-Behavioral	3.517	0.000
		Short-term Psychodynamic	3.900	0.000
	Cognitive-Behavioral	Short-term Psychodynamic	0.383	0.001

KMAN-CPN KMAN-Counseling & Psychology Nexus
E-ISSN: 3041-9026

As shown in Table 4, there is a statistically significant difference between the mean scores of emotional alexithymia and impulsivity in the control and experimental groups ($p < 0.05$). However, no significant difference was found between the experimental groups, cognitive-behavioral therapy, and short-term psychodynamic therapy ($p > 0.05$).

Overall, based on the results, it can be concluded that in the pre-test phase, there was no significant difference between the mean scores of emotional alexithymia and impulsivity in the experimental groups. However, in the post-test phase, the mean scores of both experimental groups were significantly lower than the control group ($p < 0.05$). Therefore, it can be concluded that both cognitive-behavioral therapy and short-term psychodynamic therapy were significantly effective in reducing the mean scores of emotional alexithymia and impulsivity in the post-test phase. Furthermore, in the follow-up phase, the mean scores of emotional alexithymia and impulsivity in both treatment groups were significantly lower than the control group ($p < 0.05$). Thus, the two experimental groups showed no differences in emotional alexithymia and impulsivity in the pre-test phase, but after receiving the intervention, both experimental groups showed a decrease in emotional alexithymia and impulsivity, and this reduction was maintained in the follow-up phase. This indicates that the effect of the intervention was sustained in the follow-up phase. In contrast, no changes occurred in the control group from the pre-test to the post-test and follow-up phases.

4. Discussion and Conclusion

The results of the study indicated that the changes in emotional alexithymia in the experimental groups were significantly greater than those in the control group. In other words, cognitive-behavioral therapy (CBT) and short-term psychodynamic therapy led to a reduction and modification in emotional alexithymia in individuals with obsessive-compulsive disorder (OCD) at both post-test and follow-up stages compared to the control group. Furthermore, there was no significant difference between the effectiveness of CBT and short-term psychodynamic therapy in reducing emotional alexithymia in individuals with OCD. Overall, the findings of this study demonstrated that both CBT and short-term psychodynamic therapy were effective in reducing emotional alexithymia in individuals with OCD. Moreover, the therapeutic gains for both treatment groups were maintained during the three-month follow-up phase, a finding consistent with previous studies (Aghamiri et al., 2021; Alcázar Ángel et al., 2018; Lundström et al., 2022; Moazami Goodarzi et al., 2021; Shekari et al., 2018; Vahedi et al., 2016; Van Noppen et al., 2022).

In explaining these findings, it can be stated that cognitive perceptions are considered ineffective when they appear to be chronically unrealistic and incorrect, and when they contribute to unwanted emotional and behavioral responses and difficulties in expressing feelings. The therapist employs cognitive restructuring techniques, such as specific cognitive information extraction, analysis of cognitive perceptions, and cognitive change techniques, to alter individuals' beliefs, attitudes, and erroneous assumptions. These techniques are based on the premise that if individuals are trained to recognize and correct distortions they make from reality, they can be in a better position to change their ineffective emotional and behavioral responses. Cognitive symptoms, including beliefs, interpretations, self-talk, and distorted cognitive processes, are identified as targets for cognitive restructuring intervention. Once an individual realizes how these thoughts might contribute to unwanted emotions and behavioral reactions, they better understand the causes of their behavior. This allows them to engage in constructive activities in the given situation (Shekari et al., 2018).

Regarding the interpretation of these findings, it can be stated that CBT helps individuals by focusing on techniques of cognitive change and emotional regulation, enabling them to develop strategies like emotional awareness and problem-solving perspectives. Through homework assignments, therapists assist clients in using these skills more motivatively in interpersonal relationships and daily life (Aghamiri et al., 2021). It is clear that enhancing these abilities helps individuals better manage their actions and reduce both internal and external challenges. CBT and short-term psychodynamic therapy, focusing on the construction of flexible beliefs and behaviors, help individuals modify maladaptive thought patterns. In fact, these therapeutic methods, in conjunction with pharmacotherapy, can sever the vicious cycle of distorted thinking by strengthening and reconstructing cognition. The distinctive impact of CBT can be observed in changing cognitive processes by teaching coping skills to counteract erroneous thoughts and substituting them with accurate thoughts, as well as teaching problem-solving skills. Achieving a precise and accurate understanding of issues and problems is the primary goal of cognitive-behavioral therapy. When therapy targets both behavioral and cognitive dimensions, it is more effective

than when it addresses only one aspect of the patient's condition. Cognitive-behavioral and short-term psychodynamic interventions, delivered in group therapy formats, have been effective in reducing emotional alexithymia. This is because these approaches simultaneously address cognitive, behavioral, and emotional factors, helping individuals face anxiety-inducing real-life situations. Repeated exposure, paired with cognitive restructuring of their ineffective thoughts, facilitates better outcomes. Thus, their goal is to change ineffective cognition, repair maladaptive behaviors, and improve individuals' functioning.

Another result of the study revealed that the changes in impulsivity in the experimental groups were significantly greater than those in the control group. In other words, CBT and short-term psychodynamic therapy led to a reduction and modification in impulsivity in individuals with OCD at both post-test and follow-up stages compared to the control group. Moreover, there was no significant difference between the effectiveness of CBT and short-term psychodynamic therapy in reducing impulsivity in individuals with OCD. In general, the findings of this study demonstrated that both CBT and short-term psychodynamic therapy were effective in reducing impulsivity in individuals with OCD. Furthermore, the therapeutic gains for both treatment groups were maintained during the three-month follow-up phase. This is because the use of cognitive-behavioral methods and short-term psychodynamic therapy can reduce symptoms of depression, negative mood, inhibition, social anxiety, maladaptive defense styles, underdeveloped coping, and psychopathology in patients.

To explain these findings, it can be said that increasing attention and awareness of thoughts, emotions, and impulses, which are aspects of group therapy, leads to better coordination of adaptive behaviors and positive psychological states. This improvement enhances individual abilities to engage in both individual and social activities and fosters a greater interest in these activities. Regarding the importance of CBT and short-term psychodynamic therapy in reducing impulsivity, it can be said that individuals with impulsivity disorders are typically characterized by constant avoidance of social gatherings, feelings of inferiority, excessive jealousy, and a heightened sensitivity to negative feedback and criticism from others. Therefore, individuals with these disorders tend to fear criticism and rejection, often believing that others, including close friends and family members, are likely to criticize or condemn their actions. These individuals interpret ambiguous information negatively and are constantly on alert for signs of humiliation and ridicule. As a result, these therapies encompass effective methods and techniques that, by identifying and eliminating defensive mechanisms, can swiftly overcome resistance and assist the client in recognizing their true emotions, experiencing them, and preventing them from resorting to harmful defense mechanisms.

This study, like any other research, had some limitations. One limitation of this study was the restriction of the findings to a specific group and geographical region, as well as the use of only one research instrument, the questionnaire. These factors limit the generalizability of the treatment results. Additionally, to avoid the placebo effect, it would have been beneficial to provide an intervention for the control group that excluded the main components of the treatment. Another limitation was the lack of control over the interaction between the experimental and control groups during group sessions in the clinic and the absence of supervision over homework assignments outside of the sessions. The fact that the researcher and therapist were the same person in this study also constituted a limitation. To prevent the placebo effect, it is suggested that therapy sessions for the control group be conducted in both group and individual formats to assess the impact of group presence and participation. Considering that OCD may co-occur with other disorders, future studies should include treatment options that address not only the symptoms of OCD but also comorbidities, while taking into account the limitations of the present study. Based on the findings of the current research, it is recommended that both cognitive-behavioral therapy and short-term psychodynamic therapy be used in psychological clinics and counseling centers to reduce emotional alexithymia and impulsivity in patients with obsessive-compulsive disorder.

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.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

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

References

Abdi Zarrin, S., & Nik Khah, Z. (2021). Psychological Well-Being: The Role of Differentiation, Alexithymia, and Ego Strength. *Journal of Psychology and Psychiatry of Cognition*, *8*(3), 13-24. https://doi.org/10.32598/shenakht.8.3.13

Abrantes, A. M., Brown, R. A., Strong, D. R., McLaughlin, N., Garnaat, S. L., & Mancebo, M. (2017). A pilot randomized controlled trial of aerobic exercise as an adjunct to OCD treatment. *General Hospital Psychiatry*, *49*, 51-55. https://doi.org/10.1016/j.genhosppsych.2017.06.010

Aghamiri, Z., Mashayekh, M., & Tashvighi, M. (2021). The Effectiveness of Cognitive Behavioral Therapy on Self-Concept in Children with Reading Learning Disorders. Sixth International Conference on School Psychology,

Ahmadi, S., & Balaghan Abadi, M. (2020). The Effectiveness of Emotion Regulation Training on Alexithymia in Adolescent Girls. *Journal of Behavioral Science Research*, *17*(3), 359-366. https://rbs.mui.ac.ir/article-1-672-fa.html

Alcázar Ángel, R., Julio, S.-M., María, R.-A., Cristina, B.-R., & Ana Isabel, R. (2018). Cognitive-Behavioral Therapy and Anxiety and Depression Level in Pediatric Obsessive-Compulsive Disorder: A Systematic Review and Meta-Analysis. *Psicothema*, *34*(3), 353-364. https://doi.org/10.7334/psicothema2021.478

Bagheri Sheykhangafshe, F., Abbaspour, A., Savabi Niri, V., Bikas Yekani, M., & Keramati, S. (2024). The effectiveness of mindfulness-based cognitive therapy (MBCT) on alexithymia, pain intensity, and emotional regulation in children with irritable bowel syndrome. *Journal of Child and Adolescent Mental Health*, *11*(2), 6. https://doi.org/10.61186/jcmh.11.2.7

Chiniforooshan, M., Sohrabi, F., Golzari, M., & Farrokhi, N. (2017). Comparing the Effectiveness of Group and Individual Metacognitive Therapy on Obsessive-Compulsive Disorder. *Contemporary Psychology Journal*, *11*(2), 23-35. http://ensani.ir/fa/article/383654/%D9%85%D9%82%D8%A7%DB%8C%D8%B3%D9%87-%D8%A7%D8%AB%D8%B1%D8%A8%D8%AE%D8%B4%DB%8C-%D8%AF%D8%B1%D9%85%D8%A7%D9%86-%D9%81%D8%B1%D8%A7%D8%B4%D9%86%D8%A7%D8%AE%D8%AA%DB%8C-%D8%A8%D9%87-%D8%B4%DB%8C%D9%88%D9%87-%DA%AF%D8%B1%D9%88%D9%87%DB%8C-%D9%88-%D8%A7%D9%86%D9%81%D8%B1%D8%A7%D8%AF%DB%8C-%D8%A8%D8%B1-%D8%A8%DB%8C%D9%85%D8%A7%D8%B1%D8%A7%D9%86-%D9%85%D8%A8%D8%AA%D9%84%D8%A7-%D8%A8%D9%87-%D8%A7%D8%AE%D8%AA%D9%84%D8%A7%D9%84-%D9%88%D8%B3%D9%88%D8%A7%D8%B3-%D9%81%DA%A9%D8%B1%DB%8C-%D8%B9%D9%85%D9%84%DB%8C

Di Salvo, G., Bianco, M., Teobaldi, E., Maina, G., & Rosso, G. (2022). A Psychoanalytic-Derived Brief Psychotherapeutic Approach in the Treatment of Major Depression: Monotherapy Studies. *Medicina*, *58*(10), 1335. https://doi.org/10.3390/medicina58101335

Dubé, V., Tremblay-Perreault, A., Allard-Cobetto, P., & Hébert, M. (2024). Alexithymia as a Mediator between Intimate Partner Violence and Post-Traumatic Stress Symptoms in Mothers of Children Disclosing Sexual Abuse. *Journal of family violence*, *39*(3), 359-367. https://doi.org/10.1007/s10896-023-00512-y

Hofmann, S. G., & Asmundson, G. J. G. (2008). Acceptance and mindfulness-based therapy: New wave or old hat? *Clinical psychology review*, *28*, 1-16. https://doi.org/10.1016/j.cpr.2007.09.003

Joana Proença, B., Rui, P., Simone, S., Manuel João, Q., & Eda, M. C. (2020). Dynamic Psychotherapy: The Therapeutic Process in the Treatment of Obsessive-Compulsive Disorder. *Behavioral Sciences*, *9*(12), 141. https://doi.org/10.3390/bs9120141

Korsgaard, H. O., Ulberg, R., Hummelen, B., Midgley, N., Thorén, A., & Dahl, H. S. J. (2022). Personality Disorders as a Possible Moderator of the Effects of Relational Interventions in Short-Term Psychoanalytic Psychotherapy with Depressed Adolescents. *International journal of environmental research and public health*, *19*(17), 10952. https://doi.org/10.3390/ijerph191710952

Lundström, L., Flygare, O., Andersson, E., Jesper, E., Matteo, B., Volen, Z. I., Julia, B., Diana, P., David, M.-C., & Christian, R. (2022). Effect of Internet-Based vs Face-to-Face Cognitive Behavioral Therapy for Adults With Obsessive-Compulsive Disorder A Randomized Clinical Trial. *JAMA Network Open*, *5*(3), e221967. https://doi.org/10.1001/jamanetworkopen.2022.1967

McCabe, R. E., Rowa, K., Farrell, N. R., Young, L., Swinson, R. P., & Antony, M. M. (2019). Improving treatment outcome in obsessive-compulsive disorder: Does motivational interviewing boost efficacy? *Journal of Obsessive-Compulsive and Related Disorders*, *22*, 1004-1046. https://doi.org/10.1016/j.jocrd.2019.100446

McCullon, D. K., Mitchell, R. D., Amber, J., & Tttersall, R. B. (2017). Influence of imaginative teaching of diet on compliance and metabolic control in insulin dependent diabetes. *British Medical Journal*, *287*(6408), 1858-1861. https://doi.org/10.1136/bmj.287.6408.1858

Moazami Goodarzi, B., Monirnejad, N., & Mirza Hosseini, H. (2021). The Effectiveness of Intensive Short-Term Dynamic Psychotherapy on Reducing Symptoms and Defense Mechanisms in Obsessive-Compulsive and Avoidant Personality Disorders. *Journal of Mashhad University of Medical Sciences*, *64*(1), 68-83. https://www.sid.ir/paper/1024854/fa

Ozonder Unal, I., & Ordu, C. (2023). Alexithymia, Self-Compassion, Emotional Resilience, and Cognitive Emotion Regulation: Charting the Emotional Journey of Cancer Patients. *Current Oncology*, *30*(10), 8872-8887. https://doi.org/10.3390/curroncol30100641

Pourkhiyabi, M., Kafie, M., & Abolghasemi, A. (2024). The effectiveness of Internet-based cognitive-behavioral therapy on extreme responsibility and irritability of adolescent girls with symptoms of obsessive-compulsive disorder. *Research in Clinical Psychology and Counseling*, -. https://doi.org/10.22067/tpccp.2024.79513.1397

Preece, D. A., & Gross, J. J. (2023). Conceptualizing alexithymia. *Personality and individual differences*, *215*, 112375. https://doi.org/10.1016/j.paid.2023.112375

Shekari, H., Hossein Sabet, F., & Borjali, A. (2018). The Effectiveness of Tactical Defense Management Based on Intensive Short-Term Dynamic Psychotherapy (ISTDP) on Interpersonal Conflicts. *Journal of Clinical Psychology and Counseling Research (Educational and Psychological Studies)*, *7*(2), 23-37. https://tpccp.um.ac.ir/article_32670.htmlس

Vahedi, A., Makvand Hosseini, S., & Bigdeli, I. (2016). Diagnosing Superficial Personality Injuries Through Short-Term Dynamic Psychotherapy. *Journal of Clinical Psychology*, *4*(3), 75-85. https://www.sid.ir/paper/152640/fa

Van Noppen, B., Sassano-Higgins, S., Appasani, R., & Sapp, F. (2022). Cognitive-Behavioral Therapy for Obsessive-Compulsive Disorder. *Journal of Emergency Psychiatry*, *21*(1), 1-1. https://www.researchgate.net/publication/369174311_Promoting_OCD_WEllness_and_resilience_POWER_study_Rationale_design_and_methods

Wang, X., Li, X., Guo, C., Hu, Y., Xia, L., Geng, F., Sun, F., Chen, C., Wang, J., & Wen, X. (2021). Prevalence and correlates of alexithymia and its relationship with life events in chinese adolescents with depression during the COVID-19 pandemic. *Frontiers in Psychiatry*, *12*, 774952. https://doi.org/10.3389/fpsyt.2021.774952

Zabet, M., Karami, J., & Yazdanbakhsh, K. (2021). The Effectiveness of Guided Imagery and Reprocessing on Cognitive Abilities, Distress Tolerance, and Symptoms of Obsessive-Compulsive Disorder in Women. *Journal of Psychological Sciences*, *20*(100), 551-566. https://psychologicalscience.ir/article-1-869-fa.html