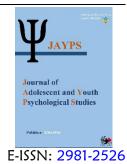


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Comparison of Cognitive Behavioral Therapy and Acceptance and Commitment Therapy on Enhancing Resilience, Cognitive Flexibility, and Distress Tolerance in Adolescents with Obsessive-Compulsive Disorder

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ABSTRACT

Objective: The aim of the present study was to compare the effects of Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) on improving resilience, cognitive flexibility, and distress tolerance in adolescents diagnosed with Obsessive-Compulsive Disorder (OCD).

Methods and Materials: This study employed a quasi-experimental pre-test-post-test design with a control group. The statistical population consisted of all adolescents diagnosed with OCD who were referred to psychological service centers in Mashhad in 2025. Using convenience sampling, 45 participants were selected and randomly assigned to three groups: CBT, ACT, and control. To collect data, the Connor-Davidson Resilience Scale (2003), the Cognitive Flexibility Inventory by Dennis and Vander Wal (2010), and the Distress Tolerance Scale by Simons and Gaher (2005) were administered. The CBT intervention was based on the Wilhelm and Steketee (2006) protocol and delivered over eight 90-minute sessions. The ACT intervention followed the protocol developed by Dahl et al. (2014), also implemented in eight sessions. The control group was placed on a waitlist. After the interventions, a post-test was administered to all groups. Data were analyzed using multivariate analysis of covariance (MANCOVA) with SPSS version 24 in both descriptive and inferential sections.

Findings: The results of the analysis indicated that both Cognitive Behavioral Therapy and Acceptance and Commitment Therapy had statistically significant effects on improving resilience, cognitive flexibility, and distress tolerance in adolescents with Obsessive-Compulsive Disorder.

Conclusion: Based on the findings, both Cognitive Behavioral Therapy and Acceptance and Commitment Therapy are recommended for enhancing resilience, cognitive flexibility, and distress tolerance in adolescents suffering from OCD.

Keywords: Cognitive Behavioral Therapy, Acceptance and Commitment Therapy, Resilience, Cognitive Flexibility, Distress Tolerance, Obsessive-Compulsive Disorder.



1. Introduction

bsessive-Compulsive Disorder (OCD) is recognized as one of the most debilitating psychological disorders and, in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), it has been separated from other anxiety disorders (Ergenc et al., 2020). OCD is a relatively common condition that, due to its disabling nature, negatively impacts personal capabilities, occupational functioning, social adaptability, interpersonal relationships (Enea et al., 2021). It is characterized by symptoms such as obsessions and compulsions. Obsessions are recurrent and persistent thoughts, mental images, or urges that are perceived at some point during the disorder as intrusive and inappropriate, causing marked distress. These thoughts are not merely excessive concerns about real-life problems; the individual attempts to ignore, suppress, or neutralize them (mental resistance) and is aware that these thoughts originate from their own mind (Benatti et al., 2020). Compulsions are repetitive behaviors or mental acts that a person feels driven to perform in response to an obsession, typically executed according to rigid rules. These behaviors or mental acts aim to prevent or reduce distress or avoid a dreaded event or situation, yet they are not realistically connected to what they are meant to neutralize or are clearly excessive (American Psychiatric Association, 2022).

One variable associated with OCD is distress tolerance, defined as an individual's ability to experience and endure negative emotional states (Manning et al., 2018). Distress tolerance is increasingly recognized as a significant construct in understanding the onset and maintenance of psychological disorders, as well as in prevention and treatment (Zvolensky et al., 2011). Research indicates that distress tolerance is significantly related to OCD symptomatology (Macatee et al., 2013). Another relevant variable is cognitive flexibility, which also has a direct association with OCD (Oguz et al., 2019). Cognitive flexibility, a crucial component of executive functioning, refers to the capacity to adapt effectively to changes (Rosa-Alcázar et al., 2021) and is defined as the ability to shift thoughts and behaviors in response to changing situational demands and problems (Walser et al., 2015). Cognitively flexible individuals are more self-aware, critically evaluate themselves, and possess superior self-observation abilities compared to those with lower cognitive flexibility (Hayes, 2016; Hayes & Strosahl, 2010). This complex behavior involves effective interaction among multiple brain

processes such as identifying situational changes, directing attention to altered elements, determining the inappropriateness of previous strategies, suppressing prior responses, and generating new strategies (Oguz et al., 2019; Rosa-Alcázar et al., 2021).

Resilience, defined as the capacity or outcome of successfully adapting to challenging and threatening circumstances, allows individuals to enhance social functioning and overcome difficulties despite significant stress and risk exposure (Darbani & Parsakia, 2023; Schwalm et al., 2022). In past research, limited attention has been paid to psychological resilience in adolescents with OCD (Deveci et al., 2023). Lower resilience has been associated with more severe OCD and anxiety symptoms in this population (Hezel et al., 2022). Conversely, higher resilience in adolescents with OCD has been linked to reductions in depression, anxiety, and stress. It has also been shown that resilience correlates with lower symptom severity in OCD (Zakiei et al., 2017). Several studies have found that adolescents with OCD tend to have low levels of resilience (Holm et al., 2019; Malas & Tolsá, 2022).

OCD is one of the most common and impairing psychological disorders, ranked as the fourth most prevalent disorder after phobias, substance abuse, and depression. If left untreated, OCD can significantly disrupt an individual's life, as constant exposure to obsessions and compulsions throughout the day often leads to distress, relational conflicts, occupational impairment, and disruptions in daily functioning. Between 80% and 100% of individuals with severe OCD report severe dysfunction in home, work, and interpersonal settings (Ruscio et al., 2010).

Various treatments are employed for individuals with OCD, including Cognitive Behavioral Therapy (CBT), exposure and response prevention (ERP), and pharmacotherapy. While these treatments are effective and validated, studies have shown that some adolescents do not respond adequately and continue to experience symptoms and functional impairment. Some adolescents cannot tolerate the anxiety elicited by ERP or find the treatment unacceptable (Izadi & Abedi, 2013; Yarahmadi et al., 2020).

Recently, Acceptance and Commitment Therapy (ACT) has emerged as a therapeutic strategy aimed at improving treatment outcomes for individuals with OCD. ACT, a mindfulness-based behavioral therapy, posits that the human mind's psychological processes often result in suffering. Compared to CBT, ACT places greater emphasis on acceptance and willingness to experience internal events. It avoids disputing or altering negative thoughts (Zhang et al.,



2018). ACT consists of six core processes—acceptance, cognitive defusion, committed action, values, contact with moment, and self-as-context-which present collectively enhance resilience, cognitive flexibility, and distress tolerance (Izakian et al., 2019). In ACT, clients are encouraged to accept suffering as a natural part of human experience and to respond to it adaptively (Ejei et al., 2018). ACT teaches adolescents to relate differently to obsessive thoughts and anxiety-provoking emotions—for example, recognizing that a thought is merely a thought and that anxiety is just a feeling, thereby helping them redirect attention. ACT encourages adolescents to commit to valuesdriven action rather than expending effort on suppressing obsessions or avoiding anxious feelings. Consequently, ACT enhances psychological flexibility, which is the ability to pursue meaningful life goals regardless of unpleasant internal experiences (Twohig et al., 2018; Yarahmadi et al., 2020).

The cognitive-behavioral approach, one of the most empirically supported models for explaining OCD, asserts that most symptoms are driven by dysfunctional beliefs that create a vicious cycle of stress, anxiety, and repetitive behaviors (Abramowitz & Reuman, 2020). Cognitive theories argue that individuals' beliefs exacerbate their disorder, contributing to psychological distress and behavioral dysfunction. Among various psychological treatments, CBT remains one of the most applied for OCD. This method teaches adolescents to observe their thoughts from a broader perspective and develop a decentered relationship with their internal experiences (Görmezoğlu et al., 2020). What matters in this treatment is fostering a sense of freedom to understand that most thoughts are just thoughts and not objective reality (Huang et al., 2023). Simply recognizing thoughts as such can liberate patients from distorted perceptions and often leads to greater insight and a stronger sense of control over life (Hoppen et al., 2021).

In this context, McKay et al. (2015) and Olatunji et al. (2013), in their review studies, examined the efficacy of CBT in improving adolescents with OCD. The results showed both short-term and long-term effectiveness, leading to cognitive restructuring and reduction of depressive and anxiety symptoms, thereby facilitating recovery (McKay et al., 2015). In relation to the current research, findings by Baqeri Sheikhan-Ghafsheh et al. (2023) demonstrated that CBT significantly reduced emotional dysregulation and increased cognitive flexibility (Baqeri Sheikhangafshe et al., 2022). Similarly, Sadeghzadeh, Razani, and Piryaei (2024)

concluded that both CBT and Metacognitive Therapy (MCT) were effective in improving resilience and quality of life in adolescents with OCD, with CBT being more effective for resilience (Sadeghzadeh et al., 2024). Yarahmadi et al. (2020) found that ACT significantly reduced OCD symptoms and increased distress tolerance, with a stronger effect on obsessions than on distress tolerance (Yarahmadi et al., 2020).

Given that OCD includes numerous cognitive and mental dimensions that can disrupt a patient's life trajectory, it is essential to first improve emotional and cognitive functioning through psychological interventions. Considering the increasing prevalence of OCD in society and the importance of examining adolescents from multiple dimensions, this study aims to answer the question: Is there a significant difference between the effects of Cognitive Behavioral Therapy and Acceptance and Commitment Therapy on enhancing resilience, cognitive flexibility, and distress tolerance in adolescents with OCD?

2. Methods and Materials

2.1. Study Design and Participants

The present study employed a quasi-experimental design with a pre-test-post-test structure and a control group. In this study, Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) were considered independent variables, while resilience, cognitive flexibility, and distress tolerance were the dependent variables. The statistical population consisted of all adolescents diagnosed with Obsessive-Compulsive Disorder (OCD) who referred to psychological service centers in Mashhad in 2025. A total of 45 participants were selected through convenience sampling and were randomly assigned to three groups: the first experimental group (15 participants), the second experimental group (15 participants), and a control group (15 participants). After identifying eligible participants based on inclusion criteria, they were randomly allocated to one of the three groups. Two groups were assigned as intervention groups, and the third served as the control group.

The inclusion criteria were as follows: (1) age range between 20 and 40 years; (2) education level of at least a high school diploma; (3) diagnosis of OCD based on psychiatrist and psychologist evaluations and initial interviews confirming OCD symptoms; (4) completion of the informed consent form; (5) no history of hospitalization or psychotic features. The exclusion criteria were: (1)



receiving any psychological or pharmacological treatment in the past six months, or having severe psychiatric disorders such as schizophrenia, bipolar disorder, brain injuries, substance abuse, or intellectual disability; (2) absence from more than two treatment sessions and lack of cooperation during sessions; (3) failure to complete therapeutic assignments; and (4) receiving any simultaneous intervention or training.

After obtaining the necessary approvals and completing the sampling process, 45 adolescents diagnosed with OCD were randomly assigned to two experimental groups and one control group. The selected instruments were administered to all participants in all groups. Participants were provided with detailed explanations about the potential benefits, effects, and limitations of the therapeutic interventions. Data collection occurred in two stages. The first stage consisted of a literature review of relevant books, articles, journals, and theses. The second stage involved the implementation of the therapeutic interventions.

2.2. Measures

2.2.1. Resilience

This 25-item scale was developed by Connor and Davidson (2003). Participants respond on a 5-point Likert scale ranging from "not true at all" (0) to "true nearly all the time" (4), with higher scores indicating greater resilience. The Cronbach's alpha coefficient for the scale is reported as 0.89, and test-retest reliability is 0.87. Criterion validity has been demonstrated through correlations with the Perceived Stress Scale (r = 0.76). The scale was standardized for use in Iran by Mohammadi (2005, as cited in Arya Pouran, 2021). To determine validity, item-total correlations and factor analysis using principal component methods were applied. All items, except item 3, had item-total correlations between 0.41 and 0.64. The KMO value was 0.87, and Bartlett's test of sphericity yielded a chi-square of 5556.28, both indicating adequacy for factor analysis. In another Iranian study, Cronbach's alpha was 0.84, and criterion validity was confirmed by correlations with the Beck Depression Inventory (r = 0.36) and the short form of the General Health Questionnaire (r = 0.57) at a significance level of less than 0.01 (Ahadianfard et al., 2023).

2.2.2. Cognitive Flexibility

The CFI is a 20-item scale designed to assess the type of cognitive flexibility required to challenge and replace

maladaptive thoughts with more adaptive ones. It uses a 7point Likert scale. The CFI evaluates three aspects: (1) perceiving difficult situations as controllable, (2) recognizing multiple alternative explanations for events and behavior, and (3) generating multiple alternative solutions for problems (Dennis & Vander Wal, 2010). The subscales of "alternative options" and "behavioral justification" are conceptually similar, while "perceived controllability" is treated as a distinct subscale. Cronbach's alpha coefficients for the total scale, alternative options, and perceived controllability were 0.91, 0.91, and 0.84, respectively. Testretest reliability coefficients were 0.81, 0.77, and 0.75, respectively. In an Iranian study by Bageri Sheikhan-Ghafsheh et al. (2022) with 170 participants, the scale demonstrated acceptable internal consistency (Bageri Sheikhangafshe et al., 2022). In the present study, concurrent validity and Cronbach's alpha were reported as 0.82 and 0.88, respectively.

2.2.3. Distress Tolerance

This self-report scale was developed by Simons and Gaher (2005) and consists of 15 items and four subscales: Tolerance (emotional distress tolerance), Absorption (tendency to be overwhelmed by negative emotions), Appraisal (subjective assessment of distress), Regulation (efforts to reduce distress). Items are rated on a 5-point Likert scale (1 = strongly agree to 5 = strongly disagree). Item 6 is reverse scored. The total score represents overall distress tolerance, and subscale scores are derived by summing relevant items. Higher scores indicate greater distress tolerance (Simons & Gaher, 2005). Cronbach's alpha coefficients for the subscales were 0.72, 0.82, and 0.70, with 0.82 for the overall scale. The scale has demonstrated good convergent and criterion validity. In Iran, Alavi et al. (2012) reported an internal consistency of 0.71. Esmaeili-Nasab et al. (2014) found Cronbach's alpha to be 0.67 and test-retest reliability for the total scale to be 0.81, with subscale reliabilities of 0.71 (Tolerance), 0.69 (Absorption), 0.77 (Appraisal), and 0.73 (Regulation) (Esmaeili Nasab et al., 2014).

2.3. Interventions

2.3.1. CBT

The CBT intervention was based on a comprehensive program designed to reduce psychological symptoms and obsessive-compulsive thoughts and behaviors in adolescents





with OCD (Wilhelm & Steketee, 2006). The experimental group received 10 CBT sessions, each lasting 90 minutes, while the control group did not receive any intervention.

Based on Wilhelm and Steketee (2006), the CBT protocol for adolescents with obsessive-compulsive disorder began with psychoeducation on OCD symptoms and CBT goals, along with relaxation training and exposure to intrusive thoughts and images. In the second session, the cognitive model of OCD was introduced through normalization of obsessive thoughts, cognitive triangles, and a list of cognitive distortions, followed by daily thought recording and behavioral experiments on thought fusion. The third session employed Socratic questioning, the five-column thought record, and listing pros and cons of intrusive thoughts, along with behavioral experiments related to thought significance. The fourth session involved reviewing daily thought logs and conducting behavioral experiments on neutralization, overestimation of threat, and certaintyseeking beliefs using probability calculations and Socratic dialogue. The fifth session targeted inflated responsibility and perfectionism through Socratic questioning, pie chart techniques, double standard techniques, and downward techniques, with corresponding behavioral experiments. Sessions six through nine focused on teaching and implementing exposure and response prevention (ERP), with in-session practice and homework assignments, alongside continued review of thought records and experiments addressing thought significance. The tenth session was dedicated to reviewing CBT techniques, consolidating thought records, reiterating the cognitive model of OCD, discussing relapse signs, and teaching structured problem-solving steps.

2.3.2. ACT

The ACT sessions were based on the intervention protocol by Dahl et al. (2014), with minor adjustments approved by expert psychologists. The intervention consisted of eight weekly sessions lasting 60–75 minutes each.

The ACT protocol, adapted from Dahl et al. (2014), began with an introductory session that included mutual introductions, expression of pre-session emotions and expectations, reflection on past experiences, explanation of session rules, and psychoeducation on the principles of acceptance and commitment. The second session focused on semantic expansion strategies, teaching students to use imagery, key words, mnemonics, and analogies to enhance understanding and retention in both simple and complex tasks. The third session explored emotions and thoughts, encouraging participants to acknowledge them without judgment, and distinguishing between emotions, thoughts, and feelings. The fourth session introduced goal-setting and motivational strategies, teaching the application of organizational techniques such as categorization and diagramming for academic tasks. The fifth session emphasized non-judgmental awareness of emotions through mindfulness and encouraged being a witness to emotional states. The sixth session reviewed progress, introduced the concept of commitment as a core therapeutic process, and taught selective attention and body scan mindfulness techniques to manage intrusive thoughts. The seventh session revisited previous themes, addressed unresolved issues, and focused on behavioral commitment and valuebased decision-making, highlighting functional rather than habitual responses. The final session reviewed all content, reinforced post-intervention commitments, participant feedback, and concluded with post-testing.

2.4. Data Analysis

Statistical analysis included both descriptive and inferential methods. In the descriptive section, frequency distributions, percentages, central tendency indices, and dispersion measures were used. For inferential statistics, multivariate analysis of variance (MANOVA) was employed. Data analysis was conducted using SPSS version 24.

3. Findings and Results

The mean scores in the three experimental groups increased in the post-test stage compared to the pre-test on the Distress Tolerance Scale. Similarly, the mean scores for cognitive flexibility and resilience also increased in the three experimental groups at the post-test stage compared to the pre-test (Table 1).



 Table 1

 Mean and Standard Deviation of Resilience, Cognitive Flexibility, and Distress Tolerance by Assessment Phase and Group

Group	Variable	Statistic	Pre-Test	Post-Test	Follow-Up
Cognitive Behavioral Therapy (CBT)	Resilience	Mean	61.60	47.06	46.55
		Std. Deviation	15.17	14.38	11.34
Acceptance and Commitment Therapy (ACT)	Resilience	Mean	33.41	21.13	19.22
		Std. Deviation	13.36	7.48	8.97
Control	Resilience	Mean	58.33	59.13	59.10
		Std. Deviation	13.47	15.28	9.42
Cognitive Behavioral Therapy (CBT)	Cognitive Flexibility	Mean	55.53	41.98	39.20
		Std. Deviation	15.07	13.03	10.23
Acceptance and Commitment Therapy (ACT)	Cognitive Flexibility	Mean	31.09	25.76	22.45
		Std. Deviation	5.72	4.67	5.68
Control	Cognitive Flexibility	Mean	34.46	35.65	36.74
		Std. Deviation	4.92	6.50	6.52
Cognitive Behavioral Therapy (CBT)	Distress Tolerance	Mean	55.53	41.98	39.20
		Std. Deviation	15.07	13.03	10.23
Acceptance and Commitment Therapy (ACT)	Distress Tolerance	Mean	31.09	25.76	22.45
		Std. Deviation	5.72	4.67	5.68
Control	Distress Tolerance	Mean	34.46	35.65	36.74
		Std. Deviation	4.92	6.50	6.52

The results of Table 2 show that after controlling for the effect of the pre-test, the main hypothesis—stating that there are significant differences in resilience, cognitive flexibility, and distress tolerance across the three groups—is confirmed. The significance levels obtained for all components are lower than the Bonferroni-corrected alpha level of .016

(0.05/3), indicating that the intervention led to significant changes in the experimental groups compared to the control group. With 95% confidence, it can be stated that the components of resilience, cognitive flexibility, and distress tolerance significantly changed in the experimental groups compared to the control group.

Table 2

Results of Repeated Measures ANOVA

Variable	Source of Variation	SS	df	MS	F	Sig.	Eta Squared
Resilience	Group	396010.000	1	396010.000	2511.995	.000	.968
	Time × Group	25625.600	5	5125.120	32.510	.000	.659
Cognitive Flexibility	Group	65826.178	1	65826.178	1476.764	.000	.946
	Time × Group	5293.556	5	1058.711	23.751	.000	.586
Distress Tolerance	Group	65826.178	1	65826.178	1476.764	.000	.946
	Time × Group	5293.556	5	1058.711	23.751	.000	.586

As shown in Table 3, there are statistically significant differences (P < .05) among the three groups in the variables of resilience, cognitive flexibility, and distress tolerance. The results indicate that both the CBT and ACT intervention groups differ significantly from the control group (P < .05), suggesting that both interventions improved resilience,

cognitive flexibility, and distress tolerance compared to no treatment. Furthermore, the post-hoc test reveals that CBT and ACT had different levels of effectiveness (P < .05), with the mean scores indicating that CBT was more effective and efficient in improving the dependent variables.

Table 3

Tukey's Post-Hoc Test for Comparison of the Three Groups

Group 1	Group 2	Mean Difference	Std. Error	Sig.
CBT	ACT	-3.8667	2.34587	.231
CBT	Control	-10.9667*	2.34587	.000
ACT	CBT	3.8667	2.34587	.231
ACT	Control	-7.1000*	2.34587	.009
Control	CBT	10.9667*	2.34587	.000



Control	ACT	7.1000*	2.34587	.009
CBT	ACT	-13.8333*	5.07080	.021
CBT	Control	-17.9667*	5.07080	.002
ACT	CBT	4.1333	5.07080	.695
ACT	Control	-13.8333*	5.07080	.021
Control	CBT	4.1333	5.07080	.695
Control	ACT	17.9667*	5.07080	.002

4. Discussion and Conclusion

The objective of the present study was to compare the effectiveness of Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) on enhancing resilience, cognitive flexibility, and distress tolerance in adolescents with Obsessive-Compulsive Disorder (OCD). The results indicated that CBT had a statistically significant effect on improving resilience, cognitive flexibility, and distress tolerance. The effectiveness of both CBT and ACT in adolescents with OCD aligns with previous findings (Baqeri Sheikhangafshe et al., 2022; Sadeghzadeh et al., 2024; Yarahmadi et al., 2020) which all confirmed the efficacy of these treatments in enhancing resilience, cognitive flexibility, and distress tolerance in adolescents diagnosed with OCD.

This finding can be explained by noting that CBT helps individuals identify and replace maladaptive cognitive distortions, including dysfunctional thoughts, beliefs, and attitudes, with constructive and adaptive thoughts (Ejei et al., 2018). CBT employs techniques such as probability estimation, Socratic questioning, reassurance, exposure, and response prevention, enabling individuals to become aware of the link between cognition, emotion, and behavior, and to replace distorted negative thoughts and feelings with more rational and realistic alternatives (Baqeri Sheikhangafshe et al., 2022). Thus, adolescents with OCD, through CBT, learn to respond to stress with positive coping strategies, reframing their perspectives on stressful situations, which enhances their resilience. More specifically, CBT teaches techniques such as cognitive restructuring that allow individuals to reinterpret stressful events in ways that support resilience. It is believed that CBT enables individuals to identify and solve problems and adopt new strategies for managing the sources of their psychological distress (Ejei et al., 2018).

Regarding the effectiveness of ACT in reducing OCD severity, ACT is a behavioral treatment that utilizes mindfulness skills and cognitive defusion to enhance psychological flexibility. By cultivating the self-as-context, clients learn to experience unpleasant internal events in the

present moment and detach from distressing thoughts, memories, and emotions. In this form of therapy, individuals are trained to release thought suppression, overcome intrusive thoughts, strengthen the observing self, accept internal experiences instead of controlling them, clarify their values, and commit to action. ACT highlights the costs and difficulties of emotional control, emphasizing that the problem lies in control efforts rather than in distress itself (Hayes, 2016; Hayes & Strosahl, 2010).

The findings of this study indicate that the ACT intervention was successful in targeting and reducing OCD symptoms. Although in-session exposure was not implemented, behavioral commitment exercises that involved exposure to obsessive situations outside the sessions were included. The core therapeutic mechanism in the ACT sessions was to redirect adolescents' focus from symptom elimination to meaningful engagement with personally valued goals. When adolescents are taught to accept their emotions without using defense mechanisms and to disengage from exaggerated appraisals of internal experiences, they are better able to maintain cognitive and behavioral engagement with valued tasks, resulting in reduced psychological stress and increased psychological flexibility (Hayes, 2016; Hayes & Strosahl, 2010).

Therapeutic strategies that target experiential avoidance are effective in increasing distress tolerance. ACT, in particular, explicitly employs core processes designed to reduce ineffective and maladaptive avoidance of emotional suffering by fostering psychological acceptance and mindful awareness of thoughts and emotions (Walser et al., 2015). In ACT sessions, mindfulness and present-moment awareness are emphasized. Although adolescents with OCD may expect symptom reduction from therapy, ACT focuses on enhancing life meaning rather than merely alleviating symptoms (Hayes & Strosahl, 2010). Encouraging adolescents to identify values, set goals, anticipate obstacles, and commit to value-driven actions—even in the presence of symptoms-enables them to achieve goals and derive happiness, which, in turn, improves resilience, cognitive flexibility, and distress tolerance. ACT helps clients shift their relationship with thoughts and internal experiences, seeing them as transient mental events. By experiencing



events without defense or distortion, individuals learn to accept life as it is, reducing attempts to control or alter it.

Overall, the findings of this study demonstrate that both Cognitive Behavioral Therapy and Acceptance and Commitment Therapy are applicable and effective psychological interventions for adolescents with OCD. They can be used alongside other therapeutic approaches and may serve as effective treatments to enhance resilience, cognitive flexibility, distress tolerance, and reduce obsessive-compulsive symptoms.

5. Limitations & Suggestions

Among the limitations of this study was the inability to categorize adolescents based on the subtype of OCD, due to sample size constraints. Future studies are advised to control for OCD subtypes. Another limitation was the absence of qualitative assessments during the pre-test and post-test stages, as this study relied exclusively on self-report questionnaires. Additionally, the study did not evaluate comorbid psychiatric conditions, which could have influenced treatment outcomes. Future research is recommended to address these limitations.

The results of the present study further confirmed that ACT techniques effectively targeted and reduced OCD symptoms, even though in-session exposure was not utilized. Instead, behavioral commitment exercises that involved real-life exposure to obsessive triggers outside of therapy sessions were integrated into the intervention.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

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

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.

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Authors' Contributions

All authors equally contributed to this article.

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