

Implementation of Acceptance and Commitment Therapy in Obsessive Compulsive Disorder

Obsesif Kompulsif Bozuklukta Kabul ve Kararlılık Terapisi Uygulamaları

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ABSTRACT

Obsessive-Compulsive Disorder (OCD) is a mental disorder characterized by engaging in time-consuming mental or behavioral activities to reduce the impact and anxiety caused by intrusive and invasive thought content, leading to significant distress. OCD is often accompanied by anxiety disorders, depression, and suicidal thoughts, resulting in substantial functional impairments in work and social life, as well as a significant decline in quality of life. In the treatment of OCD, selective serotonin reuptake inhibitors (SSRIs) and cognitive-behavioral therapy (CBT) are commonly used. However, promising results suggest that Acceptance and Commitment Therapy (ACT), a third-generation therapy, may be effective in reducing OCD symptoms. Unlike directly eliminating symptoms, ACT aims to increase psychological flexibility. It progresses through six core processes: acceptance, cognitive defusion, being present, contextual self, contact with values, and commitment to value-driven behaviors. In the context of OCD, ACT teaches individuals to let go of controlling distressing thoughts and feelings, accept them, and pursue a meaningful life aligned with personal values despite these internal experiences. Studies indicate that ACT achieves reductions in OCD symptoms comparable to CBT and exposure therapy, particularly enhancing treatment efficacy when combined with SSRIs. In conclusion, ACT emerges as an effective option for OCD treatment, though further randomized controlled trials are needed.

Keywords: Obsessive compulsive disorder, acceptance and commitment therapy, treatment

ÖZ

Obsesif kompulsif bozukluk (OKB), müdahaleci ve rahatsız edici düşünce içeriklerinin etkisini ve anksiyete miktarını azaltmak amacıyla zaman alıcı zihinsel veya davranışsal aktivitede bulunma ile karakterize, belirgin sıkıntıya yol açan ruhsal bir bozukluktur. OKB'ye anksiyete bozuklukları, depresyon, intihar düşünceleri eşlik etmekle beraber çalışma ve sosyal hayatta önemli işlevsel bozulmalar ve yaşam kalitesinde büyük düşüşler görülmektedir. OKB tedavisinde sıklıkla seçici serotonin geri alım inhibitörleri (SSRI) ve bilişsel davranışçı terapi (BDT) müdahaleleri kullanılmakla beraber üçüncü nesil terapiler arasında yer alan Kabul ve Kararlılık Terapisi (KKT) uygulamalarının OKB semptomlarını azaltmada etkili olabileceğine yönelik umut veren sonuçlar görülmektedir. KKT, semptomları doğrudan ortadan kaldırmak yerine, psikolojik esnekliği artırmayı hedefler. Kabul, bilişsel ayrışma, anda kalma, bağlamsal benlik, değerlerle temas ve değer odaklı davranışlarda kararlılık olmak üzere altı temel süreç üzerinden ilerler. OKB bağlamında, KKT bireylere rahatsız edici düşünce ve duyguları kontrol etmekten vazgeçip onları kabul etmeyi, bu içsel yaşantılara rağmen kişisel değerleri doğrultusunda anlamlı bir yaşam sürdürmeyi öğretir. Yapılan çalışmalar, KKT'nin OKB semptomlarında BDT ve maruz bırakma terapisi ile karşılaştırılabilir düzeyde azalma sağladığını, özellikle SSRI tedavisine ek olarak uygulandığında tedavi etkinliğini daha da artırdığını göstermektedir. Sonuç olarak, KKT OKB tedavisi için etkili bir seçenek olarak öne çıkmakta, ancak daha fazla randomize kontrollü çalışmaya ihtiyaç duyulmaktadır.

Anahtar sözcükler: Obsesif kompulsif bozukluk, kabul ve kararlılık terapisi, tedavi

Introduction

Obsessive-compulsive disorder (OCD) is a mental disorder characterized by engaging in cognitive or behavioral activities to reduce the impact of intrusive and disturbing thought content and to decrease the level of anxiety, leading to significant distress (Santini et al. 2021, Guazzini et al. 2022). OCD is characterized by the presence of obsessions and compulsions. These symptoms are often associated with anxiety (Stein et al. 2019). Obsessions are defined as repetitive, intrusive, and unwanted thoughts, feelings, and images in the mind. Compulsions, on the other hand, are repetitive behaviors or mental actions that individuals feel compelled to perform in response to obsessions (Guazzini et al. 2022).

In OCD, there is a discrepancy between individuals' personal life goals and their behaviors. Patients describe this inconsistency as "strange", yet their insight remains intact, and they strive to gain greater control over their distressing symptoms (Stein et al. 2019, Santini et al. 2021). This situation causes the disease to be defined as ego dystonic (Santini et al. 2021).

OCD, as stated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (APA 2013), has a high disease burden, and is one of the leading causes of disability (Santini et al. 2021). The lifetime prevalence of OCD is 2.5%, and this rate increases when subthreshold OCD symptoms are taken into account. OCD symptoms occur more frequently in childhood/adolescence in males and in early adulthood in females. OCD is thought to occur due to a combination of multiple factors, such as stress, genetic vulnerability, and changes in neurochemical substances (Santini et al. 2021).

Although inpatient treatment for individuals diagnosed with OCD is rare, the high rates of comorbidity and treatment-seeking clearly highlight the need for early diagnosis and intervention (Santini et al. 2021). The treatment options offered in this context include Cognitive Behavioral Therapy (CBT), cognitive therapy, exposure, and selective serotonin reuptake inhibitors (SSRI), and one of the treatment methods applied is Acceptance and Commitment Therapy (ACT) (Yılmaz 2018, Vardarlı 2021, NICE 2022).

ACT is part of the third generation of CBT. In the context of ACT, the thoughts, feelings, or emotions involved in OCD are not treated as fundamentally dangerous or problematic. ACT encourages individuals to accept negative emotions and feelings, aiming to increase psychological flexibility, enhance awareness of thoughts, feelings, and sensations, and improve the ability to stay present in the moment. In this framework, it supports individuals in living a life aligned with their values (Evey and Steinman 2023). This review aims to examine the applications of ACT in OCD.

OCD Epidemiology

OCD is one of the most common mental disorders, and contributes to the global disease burden (Stein et al. 2019). While data on the lifetime prevalence of OCD varies across regions, it is reported to range between 2% and 3% (Ruscio et al. 2010, Subramaniam et al. 2012). In a meta-analysis by Sharma et al. (2021a), which analyzed 91 studies with a total of 15,508 samples from 1992 to 2020, it was noted that OCD was more prevalent in women than men in both adult and pediatric cases. The average age was between 11-15 in pediatric studies and 23-45 in the adult population.

OCD Etiology

OCD is a disorder that results from a combination of neurobiological, genetic, behavioral, cognitive, and environmental factors (Shapiro 2020). Procedural sequencing, reward- and habit-based learning, behavioral control selection, habits, and changes in the basal ganglia, which function in decision-making and habit formation, are primary causes of functional impairments in OCD. Abnormalities in the amygdala's threat detection system are associated with misinterpretation of fear, which is then conditioned and reinforced by compulsive or avoidant behaviors (Shapiro 2020). Differences in the frontal, striatal, and limbic regions are reported to explain aggressive/controlling and sexual/religious symptoms (Via et al.

2014). Serotonin, dopamine, and glutamate are defined as neurotransmitters that play a role in the pathogenesis of OCD. In OCD, serotonin (5-HT) levels are reported to be lower in the prefrontal and thalamic cortical regions but elevated in the caudate nucleus. Behaviors in the form of rituals and repetitive thoughts are associated with excessive activation of dopamine (Shapiro 2020).

Heredity plays a role in the development of OCD, accounting for approximately 40% of its occurrence (Shapiro 2020). Twin studies conducted between 1929 and 2005 show that genetic factors are responsible for 45-60% of the onset of early-onset OCD (van Grootheest et al. 2008). Among first-degree relatives, the recurrence risk of OCD ranges from 6% to 55% (Mahjani et al. 2021).

Learning theories suggest that obsessive fears are acquired through classical conditioning. Obsessions may develop when a neutral stimulus becomes associated with a distressing event (e.g., contracting an infectious disease after using a dirty toilet). Over time, this pairing can lead to a conditioned response, such as intrusive thoughts of contamination, followed by the reinforcement of avoidance and compulsive cleaning behaviors as a means of alleviating distress. Over time, the fear response generalizes to other stimuli associated with the conditioned stimulus (e.g., a toilet faucet), leading these stimuli to become secondary conditioned stimuli (Jalal et al. 2023). According to learning theories, obsessive-compulsive behaviors develop as conditioned responses to traumatic events. The traumatic experience induces anxiety, prompting individuals to adopt avoidance behaviors to mitigate distress. This process is categorized as passive avoidance when the individual refrains from engaging with anxiety-inducing stimuli, whereas it is classified as active avoidance when the individual performs specific behaviors to prevent anxiety (Sadock and Sadock 2007). This perspective of learning theories forms the operational mechanism of exposure/response prevention interventions (Jalal et al. 2023).

The cognitive model proposes that cognitive distortions, such as an inflated sense of responsibility, excessive belief in the power of thoughts, a strong desire to control thoughts, exaggerated threat perception, perfectionism, and intolerance of uncertainty, contribute to the development of obsessions and anxiety. It further highlights that ritualistic behaviors are performed as a means of alleviating distressing thoughts. Additionally, individuals with OCD exhibit impaired cognitive flexibility and a diminished ability to redirect attention appropriately, which has been linked to dysfunction in frontostriatal circuits, including the dorsolateral and ventrolateral prefrontal cortex, as well as the striatal regions (Jalal et al. 2023).

OCD Symptoms and Signs

OCD causes significant functional impairments in work and social life, and leads to a considerable decline in quality of life (Subramaniam et al. 2020, Santini et al. 2021). OCD presents with significant heterogeneity in its clinical manifestations but is fundamentally characterized by obsessions and compulsions. Obsessions are intrusive and unwanted thoughts, impulses, or images that arise involuntarily. While individuals recognize that these thoughts are not genuine products of their mind, they struggle to dismiss or ignore them. Common obsessions include fears of contamination, doubts about whether an action has been completed, concerns that things are not perfectly aligned, fears of self-harm, and unwanted sexual thoughts (Rector et al. 2016). Compulsions are repetitive physical or mental actions performed in response to the distress caused by obsessions (Stein et al. 2019). These behaviors are goal-directed, follow rigid rules, and are carried out involuntarily (Yılmaz 2018). Common compulsions include mental rituals such as cleaning/washing, checking, organizing, and counting (Rector et al. 2016).

OCD Treatment

The study by Dell'Osso et al. (2016) reported that more than 50% of individuals with OCD first experienced symptoms during childhood or adolescence. However, despite the high prevalence of early onset, seeking professional help and receiving a timely diagnosis during this period remain uncommon. According to Dell'Osso et al. (2019), the average duration between symptom onset and diagnosis is approximately seven years. Given these delays, the importance of prevention, early diagnosis, and timely treatment of OCD is

increasingly recognized.

Primary prevention interventions should include psychoeducation, family interventions, and programs for teachers. Family interventions should focus on increasing mental health literacy, psychoeducation, changing parenting styles, and improving family cohesion. During childhood and adolescence, training programs for teachers should be organized to help them recognize OCD symptoms early and provide appropriate referrals. Early intervention programs for OCD can be offered to families and children/adolescents, similar to early intervention programs used for psychosis. These interventions may include assessing the alignment with OCD symptoms, exposure, and family interventions (Brakoulias et al. 2019).

The high comorbidity of OCD with generalized anxiety disorder (33.56%) (Sharma et al. 2021b), the lifetime suicide rates ranging from 6% to 51.7%, and the prevalence of suicidal thoughts reported by 26.3% to 73.5% of individuals (Albert et al. 2019) underscore the critical need to minimize the delay between symptom onset and treatment initiation. Given their effectiveness and tolerability in reducing OCD symptoms, SSRIs are considered the first-line pharmacological treatment (Koran and Simpson 2013). In their meta-analysis of placebo-controlled studies, Skapinakis et al. (2016) stated that there was no difference in efficacy among different SSRIs. It is recommended that SSRIs should be used at the maximum tolerated dose for at least 8 to 12 weeks (Hirschtritt et al. 2017). Exposure, response prevention, and CBT are considered evidence-based treatments for OCD (Stein et al. 2019). There are studies in the literature showing that CBT is more effective than serotonergic treatments, including SSRIs (Öst et al. 2015). In cases where psychopharmacology and psychotherapy methods are insufficient, interventions focusing on increasing flexibility and resilience may contribute to improving treatment outcomes (Deveci et al. 2024). ACT, either alone or combined with exposure, is considered a promising approach in the treatment of OCD (Swierkosz-Lenart et al. 2023).

ACT

ACT was developed to promote greater psychological flexibility by intervening in six interrelated and comprehensive psychological processes, rather than working on a specific psychopathology to reduce symptoms (Dindo et al. 2017). ACT includes a model of psychological flexibility that consists of six interrelated processes: acceptance, cognitive defusion, being present with flexibility, contextually bound self, contact with values, and commitment to value-based behaviors (Twohig et al. 2023).

Psychological Flexibility Model

The ultimate goal of ACT interventions is psychological flexibility. This is achieved through the ability to stay open, remain in the present, and act in alignment with personal values (Herbert and Afari 2023). Each of the processes within the psychological flexibility model supports the others, and all fundamentally aim to foster the development of psychological flexibility in the individual (Hayes et al. 2006).

1. Cognitive Defusion

By reducing the automatic effect of the mind on behavior, cognitive defusion allows for better engagement with other behavioral regulation resources. It may enable the individual to accept, make contact with themselves and their values contextually, and direct their actions in the present moment (Ruiz et al. 2023). Within this process, cognitive defusion techniques such as word repetition exercises, writing thoughts on paper, repeating a thought until it loses meaning, altering the shape or size of a thought, writing the thought with colored paints, and using metaphors like "hands as thoughts" can be utilized (Yavuz 2015, Toprak and Karaaziz 2023). Exercises such as word repetition or distancing allow clients to observe that thoughts are temporary (Ruiz et al. 2023). These methods aim to reduce the impact of thoughts on behaviors by helping the individual become aware of their thoughts (Yavuz 2015).

2. Acceptance

Acceptance refers to the individual's desire to come into contact with all of their experiences, including

any unpleasant internal experiences that may arise. In ACT, individuals are encouraged to accept their experiences, rather than avoid challenging ones such as anxiety, sadness, and physical pain (Gordon and Borushok 2017).

3. Contact with the Present Moment

Contact with the present moment is defined as a voluntary and flexible orientation focused on present moment experiences (Hayes et al. 2012). Flexible contact with the present moment contributes to increased awareness of experienced events, recognition of problematic behavior patterns or responses to internal stimuli, and enhances individuals' flexibility and adaptability. It can also help prevent avoidance behaviors (Gordon and Borushok 2017, Bilgen 2022).

4. Self as Context

Self as context helps individuals separate themselves from their self-definitions and evaluations. Essentially, the contextual self suggests the view that "I am different from my inner experiences; I am the bearer of these experiences" (McHugh and Stapleton 2023). A metaphorical perspective defines it as a safe space where one can make room by being open to challenging thoughts and feelings. When faced with difficult thoughts and feelings, it involves stepping back and adopting a flexible perspective from which thoughts and feelings can be observed. Metaphors such as the chessboard, stadium, bus, and stage performance can be used to help individuals recognize the observing self and separate it from the self as context. These metaphors aim to help individuals adopt the perspective that emotions, thoughts, and feelings are natural aspects of life, varying between positive and negative experiences. Regardless of their nature, individuals are encouraged to embrace a mindset that allows these emotions, thoughts, and feelings to arise and pass without resistance or over-identification. For example, in the stage performance metaphor, individuals are asked to consider life as a stage performance, where all feelings and thoughts are part of the stage and are constantly changing. Then, they are encouraged to step back and notice the part of themselves that is observing the stage, and to recognize their ability to zoom in or zoom out on parts of the performance or focus on the bigger picture. It is emphasized that no matter how good or bad the performance is, the observing part remains the same (Harris 2022).

5. Contact with Values

Contact with values provides alternative guidance for larger behaviors than avoidance behaviors. It places painful internal experiences within the context of broader life goals, thereby facilitating acceptance (LeJeune and Luoma 2023). Metaphors such as birthday, tombstones, and miraculous interview, as well as value cards, can be used to establish contact with values. These methods involve asking the individual questions about how they would like to act, how they would like to behave towards the world, themselves, and others, what kind of person they would like to be, and what kind of skills they would like to develop. For example, questions like "What would you like people to say about you at your funeral?" or "What would you like your loved ones to say about you on your 80th birthday?" can be asked (Harris 2022).

6. Commitment to Value-Based Behaviors

While values provide motivating elements for participating in ACT, committed actions offer a way to increase the centrality of values in life. These actions possess a distinctive quality, as they contribute to a sense of meaning and vitality in life. For instance, engaging in regular exercise and maintaining a healthy diet align with the value of healthy living, reinforcing a purposeful and fulfilling lifestyle (Dixon et al., 2023). At this stage, similar to behavioral therapy, almost any behavior change method, including exposure, skill building, and goal setting, can be integrated into an ACT protocol (Hayes et al. 2006). The "monster on the bus" metaphor is one that can be used to work on commitment to value-based behaviors within the ACT protocol (Toprak and Karaaziz 2023).

While working through these six psychological flexibility processes, the ACT practitioner utilizes metaphors and experiential exercises. Through these methods, the goal is to increase the individual's psychological flexibility, enabling them to discover their values, explore their contextual self, establish flexible contact with the present moment, and engage in value-based behaviors (Akdağ 2023).

Implementation of ACT in OCD

From the perspective of ACT, compulsions that occur in any form can be functionally defined as experiential avoidance or an unwillingness to openly accommodate obsessions. Obsessions are often associated with feared experiences or outcomes that are incompatible with an individual's perceived self or values. This process can lead to compulsions becoming habitual rules seemingly followed to prevent destructive or undesirable events from occurring. Over time, these experientially avoided behaviors become a source of distress (Lee et al. 2023). The ACT perspective suggests that attempting to control obsessions is more of a problem than a solution. Rather than focusing on helping individuals control their obsessions, ACT emphasizes acceptance of obsessions and engagement in behaviors aligned with personal values (Karaca et al. 2020).

Table 1. Acceptance and commitment therapy studies in patients with obsessive-compulsive disorder

Author/ Year	Country	Design	Sample	Group/ Individual	Intervention	Follow-up Frequency	Results
Twohig et al. (2010)	USA	RCT	ACT: (n: 41) Progressive Relaxation Training: (n: 38)	Individual	Weekly one-hour sessions, total of 8 sessions	Pre-treatment, post-treatment, and 3-month follow-up	Significant improvements in OCD symptoms were observed in both groups, but the ACT group showed greater improvement.
Vakili et al. (2014)	Iran	RCT	ACT: (n: 10) SSRI: (n: 11) ACT + SSRI: (n: 11)	Individual	Eight weeks of one-hour individual ACT sessions	Pre-treatment, post-treatment	Participants in the ACT and combined treatment groups showed significantly greater improvement in obsessive-compulsive symptoms compared to the SSRI-only group post-treatment.
Rohani et al. (2018)	Iran	RCT	ACT + SSRI: (n: 23) SSRI: (n: 23)	Group	8 sessions	Pre-treatment, post-treatment, and 2-month follow-up	Significant improvements in OCD symptoms and depression levels were observed in both groups, with greater reduction in the ACT + SSRI group at follow-up.
Twohig et al. (2018)	USA	RCT	MTT: (n: 28) ACT + MTT: (n: 30)	Individual	Two sessions per week, 2-hour sessions, total of 16 sessions	Pre-treatment, post-treatment, and 6-month follow-up	OCD symptoms, depression, lack of psychological flexibility, and obsessive beliefs significantly decreased post-treatment, with effects sustained at follow-up in both groups.
Shabani et al. (2019)	Iran	RCT	ACT + SSRI: (n: 22) CBT + SSRI: (n: 22) SSRI: (n: 25)	Group	ACT: 10 one-hour sessions CBT: 12 one-hour sessions	Pre-treatment, post-treatment, and 3-month follow-up	Significant improvements in depression levels were observed in all groups, sustained at follow-up. OCD symptoms decreased in the ACT and CBT groups post-treatment and at 3-month follow-up.
Davazdah emami et al. (2020)	Iran	Single-case design	ACT: (n: 8)	Individual	Weekly 45-minute sessions, total of 8 sessions	Weekly follow-up	A 51-60% reduction in OCD symptoms was observed.

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Author/ Year	Country	Design	Sample	Group/ Individual	Intervention	Follow-up Frequency	Results
Ebrahimi et al. (2022)	Iran	RCT	ACT: (n: 14) SSRI: (n: 13)	Group	Two one-hour sessions per week, total of 8 ACT sessions	Pre-treatment, post- treatment, and 3-month follow-up	No difference in quality of life between groups. Depression levels decreased in both groups.
Wang et al. (2023)	China	RCT	Linear intervention group: (n: 196) Loop psychotherapy module: (n: 196) Waitlist group: (n: 196)	Mobile online platform/Indi vidual	One session every five days, total of 6 online sessions	Pre-treatment, post- treatment, 2- and 3-month follow-up	Reductions in obsessive- compulsive symptoms and significant increases in psychological flexibility and sleep quality were observed in both groups.
Capel et al. (2023)	USA	Single- group design	ACT: (n: 8)	Individual	Three weeks of 3-hour sessions, 5 days per week	Pre-treatment, week 1, week 2, post- treatment, and 1-month follow-up	Significant reduction in OCD symptoms was observed, with improvements maintained during follow-up.

ACT: Acceptance and Commitment Therapy; RCT: Randomized Controlled Trial; SSRI: Selective Serotonin Reuptake Inhibitors; CBT: Cognitive Behavioral Therapy; MTT: Exposure-Based Therapy

In the treatment of OCD, ACT interventions focus on factors such as the relationship between OCD and maladaptive or dysfunctional beliefs, the overestimation of the significance of thoughts, the need to control thoughts, the exaggeration of perceived threats, and intolerance of uncertainty (Abramowitz 2006). ACT can help individuals accept the cognitive components of OCD, develop a new perspective, and develop an open and compassionate relationship with these experiences rather than engaging in a combative or submissive stance (Lee et al. 2023). In this process, the aim of ACT is not to control obsessions but to help individuals accept their obsessions and focus on maintaining value-oriented behaviors (Sevindik and Karaaziz 2024). The ability of ACT interventions to significantly increase willingness to engage in challenging activities while experiencing distressing emotions is seen as an effective approach to addressing the difficulty of change experienced by individuals with OCD. Individuals diagnosed with OCD tend to intensely focus on their obsessive thoughts and engage in avoidance behaviors to escape them. ACT aims to help individuals establish a new relationship with obsessive thoughts and anxiety in the treatment of OCD (Twohig et al. 2006). In the interventions of ACT for OCD, the use of "creative hopelessness" interventions allows individuals to explore their current situation and recognize that the strategies they have been using to solve their problems are ineffective. This realization may bring about feelings of fear and helplessness. Acceptance, one of the stages of psychological flexibility, involves allowing these internal experiences to occur rather than engaging in compulsions such as regulation and control (Kaymaklılı and Karaaziz 2024).

In this review, experimental studies in which the sample consisted of individuals with OCD and in which ACT was applied as an intervention method were examined. Studies implementing ACT for OCD are summarized in Table 1. The analyzed studies indicate a notable increase in ACT research after 2010. A review of the literature suggests that ACT was first recognized as part of third-wave behavioral therapies in 2001 and experienced a rise in research and application after 2008 (Li et al., 2022). The majority of the analyzed studies were conducted in the USA and Iran. Furthermore, most studies (n = 6) implemented ACT through individual therapy sessions, while only three studies employed a group-based approach. Session durations ranged from 45 minutes to three hours and were conducted over a minimum of six to a maximum of 16 sessions. The studies frequently utilized the Yale-Brown Obsessive-Compulsive Scale to assess OCD

symptoms. In evaluating psychological flexibility levels, the Acceptance and Action Questionnaire-II, the Acceptance and Action Questionnaire, and the Multidimensional Psychological Flexibility Inventory were commonly used. ACT interventions were compared with progressive relaxation training, SSRI, exposure therapy, and CBT. The findings indicated that ACT was more effective than progressive relaxation training, while it produced similar outcomes to CBT and exposure therapy. Additionally, ACT was shown to increase treatment efficacy in patients using SSRIs.

Vakili et al. (2014) conducted a study comparing ACT, SSRIs, and a combined ACT + SSRI treatment approach in a sample of 32 individuals diagnosed with OCD. The study included various OCD subtypes, such as washing, checking, organizing, religious/sexual/aggressive thoughts, and hoarding. The intervention, structured according to ACT guidelines for OCD, was delivered in an individual format, with weekly sessions over a total of eight weeks. During the sessions, the "swamp metaphor" was used to demonstrate the ineffectiveness of efforts to control obsessions, while the "two scales metaphor" illustrated the benefits of accepting obsessions and anxiety rather than trying to control or reduce them. Additionally, the treatment focused on values, contact with the present moment, cognitive defusion skills, and mindfulness exercises.

Significant differences favoring ACT were found in the reduction of OCD symptoms from pre- to post-treatment, with no significant difference between ACT and ACT + SSRI groups. In the study by Twohig et al. (2010), which compared ACT and progressive relaxation training, 79 participants were assigned to individual ACT and progressive relaxation training groups. ACT was applied for a total of eight sessions, with one session per week. Similar to the study by Vakili et al. (2014), the swamp and two scales metaphors were used. The "passengers on the bus" metaphor was used as a cognitive defusion exercise. The study, which included pre-treatment, post-treatment, and a three-month follow-up, demonstrated significant reductions in OCD symptoms from pre- to post-treatment. The ACT group showed greater improvements in OCD symptoms compared to the progressive relaxation training group at both post-treatment and the three-month follow-up. Additionally, in a separate part of the study by Twohig et al. (2010), Twohig et al. (2015) reported that changes in psychological flexibility mediated changes in OCD symptoms.

Rohani et al. (2018) conducted a study with 46 participants in Iran and compared the group ACT intervention + SSRI with SSRI interventions. The ACT intervention was delivered in a group format over a total of eight sessions. The intervention followed the same progression as the study by Twohig et al. (2010). The sessions included interventions on creative hopelessness, control as the problem, acceptance, cognitive defusion, self-as-context, flexible contact with the present moment, values, and value-based actions. Significant within-group reductions in OCD symptoms were observed, and these reductions further increased during the 16-week follow-up. In that study, it was reported that improvements in the ACT + SSRI group were significantly greater at the 16-week follow-up. Additionally, ACT + SSRI was found to be more effective than SSRI alone in terms of psychological flexibility and rumination. The study also indicated that for OCD and depression, the use of ACT + SSRI was more effective than SSRI alone during follow-up (Rohani et al. 2018). These findings suggest that adding an ACT intervention to SSRI treatment leads to more effective outcomes in the treatment of individuals diagnosed with OCD. In a study conducted by Shabani et al. (2019) with 69 Iranian adolescents, ACT + SSRI, CBT + SSRI, and SSRI-only treatments were compared. The CBT group received twelve one-hour group therapy sessions, while the ACT group received ten one-hour group therapy sessions. In the ACT intervention, the creative hopelessness technique was used to assess the short- and long-term outcomes of actions aimed at eliminating obsessions. The intervention aimed to help participants recognize the long-term harm of control behaviors and consider acceptance as an alternative approach. In the study, interventions were conducted in sequence on creative hopelessness, acceptance, cognitive defusion, values, value-based behaviors, flexible contact with the present moment, and self-as-context. As a result of the study, it was stated that there was a significant decrease in OCD symptoms in ACT + SSRI and CBT + SSRI groups after treatment and at 3-month follow-up. In terms of psychological flexibility and mindfulness skills, the group receiving ACT + SSRI showed significantly greater improvements than the CBT + SSRI and SSRI-only groups, both during treatment and at follow-up. Furthermore, ACT + SSRI was considered comparably effective to CBT + SSRI for treating OCD in adolescents. In another study conducted with eight women diagnosed with OCD, individual ACT

interventions led to a 60-80% reduction in death anxiety and a 51-60% reduction in OCD symptoms (Davazdahemami et al. 2020).

In a randomized controlled trial conducted by Ebrahimi et al. (2022), 30 participants were assigned to ACT and SSRI groups. The ACT intervention was delivered in a group format with a total of eight sessions, two sessions per week. The intervention content was based on the protocol used in the study by Twohig et al. (2010). As a result of the study, it was stated that there was no significant difference between the groups in terms of quality of life, and that although the depression level decreased in both groups, there was more improvement in the SSRI group than in the ACT group. In the study by Wang et al. (2023), linear and cyclical CBT modules were compared with a waitlist group. In both ACT modules, core ACT processes were addressed, with the cyclical model following the steps of Beginning, Continuing, Transforming, and Integrating, inspired by the principles of continuous change and flow in the universe. As a result of the study, it was stated that there was a decrease in OCD symptoms and an increase in sleep quality in both groups, and that there was no significant difference between the groups. It is seen that the cycle psychotherapy model has a better intervention effect on psychological flexibility than the linear intervention. In the study by Capel et al. (2023), the effects of ACT and exposure response prevention interventions were examined with eight participants. The ACT intervention consisted of a total of 15 hours, delivered in 3-hour sessions, five days a week. In addition to core ACT components, interoceptive and imaginary exposure techniques were used. It was reported that participants experienced significant reductions in psychological inflexibility, depression, anxiety, and stress levels throughout treatment, with an average reduction of 58% in OCD symptom severity. In a study by Chacin-Fuenmayor et al. (2019), after applying ACT and exposure/response prevention interventions to a 30-year-old woman diagnosed with OCD, significant changes were observed in the reduction of OCD symptoms and improvements in well-being. In a systematic review examining the effectiveness of ACT interventions for OCD, it was noted that randomized controlled trials were limited, and that more randomized controlled studies were needed to explore the use of ACT in OCD treatment. Furthermore, the review highlighted that there were no studies directly comparing ACT with exposure/response prevention, and that most studies combined ACT with exposure/response prevention interventions (Evey and Steinman 2023).

Conclusion

OCD is one of the mental disorders that should be seriously addressed, including in primary healthcare, due to its association with comorbid psychiatric disorders, suicidal thoughts, and negative outcomes such as a decrease in quality of life and functionality. While SSRIs and CBT are commonly used in the treatment of OCD, it has been noted that individuals with OCD often face difficulties in continuing therapy. It has been shown that the addition of ACT interventions to pharmacological treatment in patients using SSRIs can positively affect the treatment process. Therefore, ACT can be offered as an additional option to pharmacological treatment. A review of the literature shows that ACT, which is classified as a third-generation therapy, holds promise in the treatment of OCD. It significantly improves OCD symptoms by increasing individuals' psychological flexibility, and also creates positive changes in depression, rumination, and death anxiety. However, the number of randomized controlled trials and sample sizes in these studies is limited. Based on this, it is recommended that the number of randomized controlled trials involving ACT interventions in individuals with OCD be increased. Additionally, the combined application of ACT and exposure/response prevention, as well as the comparison of their individual effectiveness, should be explored. It is also suggested that psychiatric nurses receive training to raise awareness about ACT interventions and use them in the care of individuals with OCD.

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