




Research Article

Rethinking Cognitive Psycho-education -4T Model- in the Psychotherapy of Religious Obsessive-Compulsive Disorder: Report of Three Resistant Cases

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Abstract

In religious obsessive-compulsive disorder (OCD), the current cognitive model does not seem to be convincing enough for patients to understand the source of their obsessions and to distinguish between their obsessions and their religious beliefs (iman) and values, which affects secure relationships in therapy. Therefore, there is a need for both religious sensitivity and model proposals to solve the problem of lack of persuasiveness of cognitive psycho-education. From this perspective, the present case study uses the 4T model (tahayyul (imagination), tasawwur (conceptualization/detailed imagination), taakkul (reasoning/reflecting), tasdiq (confirmation)), which is a hierarchical cognitive model and adapted with the inspirations from the texts of Muslim scholars (specifically from Nursi's text of Treatise on Scrupulosity) on cognitive processes. A case report of three individuals with religious OCD is presented to demonstrate the effectiveness of this treatment method. Symptoms were measured in therapy using the Yale-Brown Obsessive Compulsive Scale, Beck Depression Inventory, Beck Anxiety Inventory, and Padua Inventory scales. Feedback was obtained for post-intervention assessment. The participants received 30 individual face-to-face therapy sessions, one per week, with an average duration of 50 minutes per session, and follow-up sessions were also conducted after the completion of treatment. The results from the three cases of individuals with religiously resistant OCD symptoms, which resulted in improvement on all scale scores, demonstrate that the model is substantially effective, particularly in addressing thought-action fusion (TAF). Furthermore, the thought hierarchy offered by the model is practical and compelling in the process of cognitive restructuring.

Keywords:

Religious OCD (Scrupulosity) • Cognitive • Behavioral • Therapy • 4T Model

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Introduction

Obsessive-compulsive disorder (OCD) is distinguished by two primary features: Obsessions and compulsions. Obsessions are described as recurring, intrusive, unwanted thoughts, ideas or impulses, and compulsions are described as repetitive, ritualistic behavioral or mental actions that attempt to decrease, neutralize, or prevent harm associated with these obsessions (American Psychiatric Association, 2013; Giasuddin & Hossain, 2020).

It has been recognized by the World Health Organization as one of the top ten most disabling disorders (World Health Organization, 2001; Murray, 1996), and is highly comorbid with other psychiatric disorders such as depression, generalized anxiety, or panic disorders (Tukel et al., 2002; Torres, 2006; Van Oudheusden et al., 2020; Sadock et al., 2021).

The presence of persistent and distressing intrusive thoughts is a fundamental characteristic of OCD and can even be seen in people without a diagnosis, for example, one study found obsessional experiences in 99 (80%) of 124 non-diagnosed/normal people from different professions (Rachman, 1978). These intrusive and distressing thoughts might be misinterpreted as excessively important, leading to an inflated sense of responsibility for one's own thoughts (Rachman, 1998; Clark, 2019). This inflated responsibility is considered a significant contributor to the development and perpetuation of obsessive-compulsive symptoms (Bouchard, 1999; Wilson, 1999; Mantz & Abbott, 2017; Collins & Coles, 2018). Individuals with a heightened sense of inflated responsibility reportedly have a greater likelihood of engaging in thought-action fusion (TAF), which is linked to cognitive bias that can occur in the development of obsessive thoughts (Amir, 2001; Ciftci & Kuru, 2013).

Thought-action fusion (TAF), refers to the responsibility for assuming inappropriate everyday relationships between one's own thoughts and external reality, either a) as the moral equivalent of physical actions (TAF-morality, e.g., wishing to harm someone is equivalent to actually harming them) or b) by making a physical outcome more likely (TAF-probability, e.g., thinking about a particular situation increases the likelihood that it will actually happen) (Williams et al., 2013). There are some differences in the approach to the importance of regular/typical intrusive thoughts. For example, in Christianity, thoughts are considered morally equivalent to actions, whereas in Judaism thoughts are given less importance than actions (Siev, 2007). Interestingly, Islam places both thought and action at the optimal level of importance in the human life cycle. In Islam, both actions/deeds and intentions play a role in the results but in different layers. For example, in order to be responsible for evil, both the intention and the performance of the action/deed are required, because intending evil and not doing it does not bring evil, but it brings good, whereas in order to be responsible for good, only the intention is sufficient (Besiroglu et al., 2014).

The most discussed psychotherapies in the treatment of OCD are Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), and Exposure and Response Prevention (ERP) (Koran et al., 2007; Mathes, 2015; Ponniah, 2013; Twohig et al., 2018). According to these models, maladaptive or metacognitive beliefs combined with intrusive thoughts can lead to an increase in anxiety, and the person may engage in compulsions as a strategy to reduce this anxiety, resulting in the vicious cycle of OCD. Both CBT and ACT accept intrusive thoughts as normal experiences (Duarte, 2021; Mathes, 2015) and do not attach importance to the content and frequency of specific thoughts (Twohig, 2015). Yet, according to these models, there is no clarity about which thoughts should be considered important or neutral/normal. Moreover, in “disengagements”, they suggest devaluing the importance and effectiveness of the thought in order to change the interpretations of intrusive thoughts (Healy et al., 2008).

Treatment of Obsessive-Compulsive Disorder

The behavioral treatment of OCD which is based on the learning model of obsessions and compulsions and called as ERP, has been used since the 1970s (Clark, 1999). Although ERP was found to be effective in washing and checking compulsions (Stanley, 1995; Starcevic & Brakoulias, 2008), hoarding, primary obsessional slowness, symmetry and ordering compulsions, religious and repugnant obsessions were reported to be less responsive to ERP (Clark, 2005). Furthermore, a substantial number of patients (20-30%) do not commence with the therapy of ERP or give up such treatment approaches very early (Stanley, 1995). Thus, cognitive restructuring interventions either alone or in conjunction with ERP have been developed in the last two decades, aiming to encourage patient participation, decrease high dropout rates, and to be effective in treatment of obsessions without overt compulsions (Salkovskis, 1985; Abramowitz, 2006; Koran et al., 2007). Abramowitz et al. (2005) was the first who argued that cognitive intervention has little effect over ERP alone. A review of 45 randomized clinical trials (Ponniah, 2013) reported that both CBT and ERP approaches were effective in the treatment of OCD. Nevertheless, the authors have questioned whether adding cognitive restructuring increases the efficacy of behavioral interventions or not? In the last decade, new wave cognitive approaches including mindfulness-based therapies referencing TAF, have encouraged the patients not to engage with their obsessions and let them decay naturally instead of using compulsive rituals (Fisher, 2009). Thus, the obsessions are not being worked through in a comprehensive way via ‘detached mindfulness’ within these new wave therapies. But, as mentioned above, the concept of ‘detachments’ implies a devaluation of the importance and effectiveness of thought in altering the interpretation of intrusive thoughts and lacks a convincing etiological explanation.

Religious OCD and Treatment

Religious OCD, also referred to as “scrupulosity,” is a subtype of OCD typified by persistent doubts and uncertainties about sin and guilt along with an overwhelming need to participate in excessive religious activities (Abramowitz et al., 2002). In addition to the shortcomings mentioned above, religious OCD, has its own challenges (for example, the client with religious OCD may not feel safe in terms of religious knowledge in the therapy or they have difficulty in distinguishing obsessions from religious beliefs) has increased the need for religious models (Huppert & Siev, 2010; Siev et al., 2017; Toprak, 2018). As the literature is analyzed, the CBT oriented treatments directed to religious OCD are sorted into two main categories by Toprak (2022) which are the religiously sensitive regular CBT (Abramowitz et al., 2004; Abramowitz & Jacoby, 2014; Peris & Rozenman, 2017; Siev & Huppert, 2017; Abramowitz & Hellberg, 2020) and original treatments weaving religious knowledge and practices into the framework of CBT (Akuchekian et al., 2015; Aouchekian et al., 2017; Md Rosli at al., 2018; Md Rosli et al., 2019). For example, Religious Integrated CBT is the first manualized model of such an integrative treatment in the field of religious-spiritual integrated psychotherapies (Pearce et al., 2015). Another unique example, the 4T model which is a psycho-educational cognitive model, offers a new cognitive model, unlike other models that do not have their own original cognitive model (Toprak & Emül, 2016). Up to now, the 4T model has been used in some studies. One of them integrated the 4T model into group cognitive behavioral therapy (GCBT) and examined the effectiveness of this integration on two groups, one receiving only GCBT and the other receiving 4T model integrated GCBT. Result of the study showed that the 4T model integrated group made significant progress as much as the other group (Toprak, 2022). The other study conducted a 5-session individual psycho-educational intervention, involving only the 4T model, to a patient with OCD who received CBT and still had difficulties, and observed that 4T model intervention has a positive projection on the patient (Karakan & Toprak, 2023).

In the current study, the ‘4T model,’ incorporates religious sensitivity and presents an alternative perspective regarding cognitive structure.

4T Model

The 4T Model is a psycho-educational cognition model developed by Toprak based on the works of Muslim scholars, especially Nursi, on cognitive processes. It has been primarily used in OCD and especially religious OCD patients (Toprak & Emül, 2016; Toprak, 2022; Karakan & Toprak, 2023). In the process, it has also been used in trauma and related disorders. For example, in one study, following the sessions with a client (suffering from post-traumatic stress disorder (PTSD) experiences sexual assaults and has religious guilt and feelings of unfairness, in which the 4T model,

repentance (tawbah) CBT and ACT are used (4T model and repentance (tawbah) is especially used to deal with beliefs in unfairness and to balance guilt and afterlife beliefs), it is found that there is a significant reducing in the PTSD symptoms of the client (Isik & Toprak, 2023).

The Muslim scholar Said Nursi¹, in his work “Treatise on Scrupulosity (Risalah Waswasah)”, explains the etiology of “intrusive thoughts” in a broader sense (Nursi, 2008; Besiroglu, 2014). He emphasizes the hierarchical aspect of intrusive thoughts (Nursi, 2008), in contrast to the current explanation of contemporary therapy schools, which study intrusive thoughts on a continuum (Abramowitz, 2003). Moreover, although many Muslim scholars in the *Ilm an Nafs* (knowledge of self)² tradition have written about scrupulosity (waswasa) (Gazali, 1998; Beydavi, 2011; Belhi, 2012; Ibn Hazm, 2012; Er-Razi, 2019;), it is in Nursi’s work that it is seen for the first time such extensive use of human cognitive structure and functioning to explain and intervene in scrupulosity (waswasah) processes and wrote his texts in a way that everyone could understand. At first Nursi explains the relationship between mind and heart on seven stages based on a continuum framework of “*Dimağda Meratib-i Ilm*” (stages of knowledge in the mind): *tahayyul* (imagination), *tasawwur* (conceptualization), *taakkul* (reasoning / reflecting), *tasdiq* (confirmation), (these four stages are the functions of the mind) *izân* (submission), *iltizam* (full support) and *itikat* (commitment / devotion) (these three stages are the functions of the *qalb* (heart) (spirituality) (Nursi, 2010).³⁴⁵

“There are stages of knowledge in the mind with different consequences that can be confused with each other. One first imagines (*tahayyul*) something, then grasps it, and gives it a form so that conceptualization (*tasawwur*) occurs. After that, you reason/reflect (*taakkul*) on it, then you confirm (*tasdiq*) it, then you become completely submitted (*iz’ân*) on it. Then they fully

1 Said Nursi (1878-1960) is a Muslim scholar whose comprehensive education spanned both madrasahs (traditional Muslim educational institutions) and a broad array of disciplines, encompassing religious studies, logic, philosophy, anatomy, mathematics, and physics. As a testament to this diverse education, his contributions bridge the chasm between traditional Islamic teachings and contemporary academic thought.

2 A discipline of Islamic tradition in which scholars of medicine, philosophy, sufis and revivalist work on human psychology and produce knowledge on this subject (Toprak, 2018).

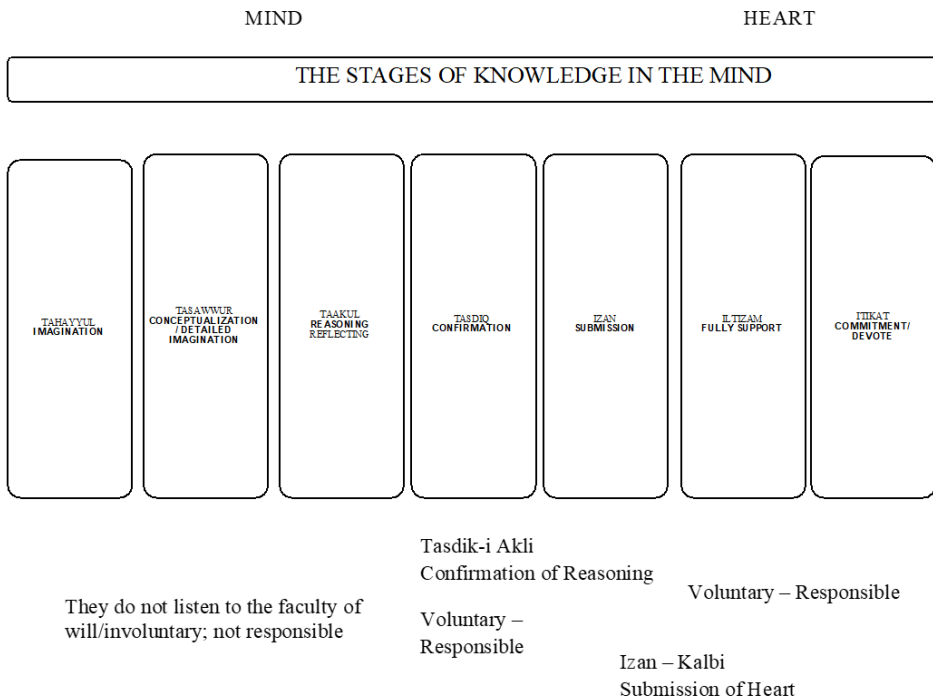
3 The dictionary meaning of *dimag* is brain, the organ inside the skull, and is sometimes also used in the meaning of mind. It is thought that the term mind is more appropriate as the meaning of the term *dimag* in the original text, as it is understood today.

4 Here, in the first four stages (imagination [*tahayyul*], conceptualization [*tasawwur*], reasoning/reflecting [*taakkul*], and confirmation [*tasdiq*]), knowledge is formed by the mind’s own internal processes, whereas in the submission (*iz’ân*) and subsequent stages (full support [*iltizam*] and commitment/devotion [*itikat*]), knowledge is formed with the contribution of the heart (*qalb*), but is ultimately stored in the mind (*dimag*) again. In more detail, both the processes of the mind (*dhihn/dimag*) and the heart (*qalb*) affect on *tasdiq* (confirmation), and confirmation with reason (*tasdik-i akli*) is followed by confirmation with heart (*qalb*) and thus belief (*iman*) and values are formed in the heart (*qalb*).

5 The *qalb* (heart) is one of the entity constituting the *nafs/ene* (self, core), which is the core essence of individuality, according to *Ilm an nafs* tradition (knowledge of self), and it establishes a link between the material body (*jism/badan*) and the metaphysical essence of the spirit (*ruh*), and it is the main decision center. The other entities constituting the *nafs/ene* (self) are body (*jism/badan*), which is the tangible manifestation, a corporeal facet of being, mind (*dhihn/dimag*), that is the abstract reasoning centre and located in the brain and imagination (*tahayyul*), conceptualization (*tasawwur*), memory (*khafiza*) and reasoning/reflecting (*taakkul*) are associated with it, conscience (*wijdan*), which transmits metaphysical information coming from the spirit (*ruh*) to the heart (*qalb*), spirit (*ruh*), that is an intangible essence defying confinement or precise definition, and finally powers (*quwwah*, explained below). (Toprak, 2021).

support (iltizam) it; then they become committed/devoted (itikat) to it. Their commitment/devotion (itikat) is different, and so is their full support (iltizam), each of which results in a different state or attitude: Steadfastness comes from commitment/devotion (itikat), while adherence comes from fully support (iltizam). Compliance comes from submission (iz’ân), advocacy comes from confirmation (tasdiq), and impartiality comes from reasoning/reflecting (taakkul), while no ideas are formed at the stage of conceptualization (tasawwur). If you remain at the stage of imagination (tahayyul), the result will be sophistry.” (Nursi, 2010, pp. 718-719) (see Figure 1).

Figure 1.
Dimağda Meratib-i İlim (The Stages of Knowledge in The Mind)

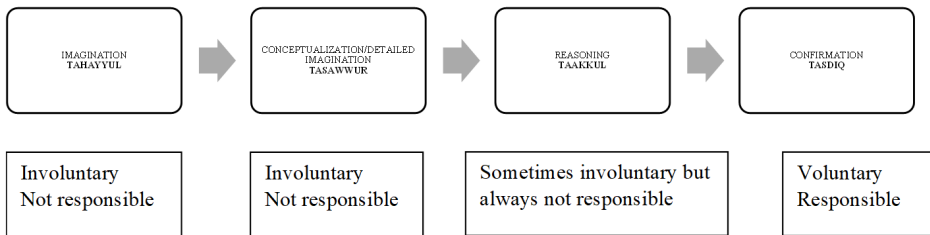


This passage outlines Said Nursi’s general cognitive approach, emphasizing the concepts related to the mind and the special relationship between these concepts and scrupulosity. According to Said Nursi (2008, p.285)

“Just as imagining (tahayyul) unbelief (kufr) is not unbelief (kufr), while conceiving (tasawwur) misguidance is not misguidance, so reflecting (tafakkur) on misguidance is not misguidance. All imagining (tahayyul) and suspecting/assuming baselessly (tewehhum), conceiving (tasawwur) and reflecting (tafakkur) are considered different from reasonable confirmation (tasdiq). They are free to a certain extent; they do not listen to the faculty of will; they are not included in the duties of religion. But confirmation (tasdiq) is not like that; it depends on a balance”⁶⁷⁸

Toprak (2016) offers an opportunity to employ cognitive therapy by restructuring interpretations without diminishing the significance and efficacy of one’s thoughts, and developed the 4T model utilizing the stage of the mind: tahayyul (imagination), tasawwur (conceptualization/detailed imagination), taakkul (reasoning/reflecting), and tasdiq (confirmation). In this paper, the terms used to describe the different stages of the mind are translated. Tahayyul is defined as an image or imagination, which is involuntary and not under the individual’s control. Tasawwur refers to conceptualization, the act of conceiving and/or detailed imagination, also involuntary and not under the responsibility of the person. Taakkul is the process of reasoning or reflecting, which can sometimes be voluntary but can also occur involuntarily. The individual is not responsible for this action. Finally, tasdiq is confirmation, which is a voluntary action, and the individual is responsible for executing it. It is referred to the “4T model (see figure 2),” an integrated restructuring approach for OCD (Toprak & Emül, 2016).

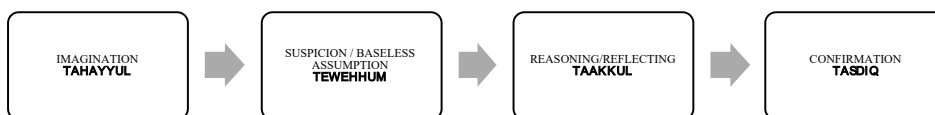
Figure 2.
4T Model



- 6 It is possible to find different references both in the literature and in Nursi’s texts on how to understand terms in 4T. The term tahayyul (imagination) can be understood as imagination both in the Islamic literature and Nursi’s text. However, tasawwur (conceptualization) is sometimes used as ‘conceptualization’ in the meaning of definition in logic, as a conceptualisation of definition, and sometimes as ‘detailed imagination’ in the meaning of a more detailed imagination. Both of these meanings are preferred depending on the context.
- 7 Another matter is the terms of ‘taakkul (reasoning/reflecting)’ and ‘tafakkur (reflection)’. In the literature of Islamic sciences in general, ‘taakkul (reasoning/reflecting)’ is described by the term ‘reasoning’ as reasoning, as operating thought processes on a subject. This refers more to a logical thinking process. On the other hand, ‘tafakkur (reflection)’ comes from the root ‘fikir (idea)’ and is described by the term ‘reflection/contemplation’, referring to reflecting deeply on a subject (Isgandarova, 2019) with the capabilities of one’s own inner experiences and feelings beyond logic (reflecting on the majesty of God’s creation (Rothman & Coyle, 2023)). In his Works, Nursi sometimes uses taakkul (reasoning/reflecting) and tafakkur (reflection) as synonyms and sometimes in a way pointing to this difference. Both of them are used in this study not only synonymously but also differently depending on the context.
- 8 In the English translation of the texts of Nursi, concepts related to mental health have been negotiated by professionals and replaced with concepts that are considered more appropriate.

The model has undergone revisions unifying the concepts of *tasawwur* (conceptualization / detailed imagination) and *tahayyul* (imagination) as a single concept, also add the term *tewehhum* (suspicion / baseless assumption) in the 4T model.⁹ (see Figure 3) This psycho-educational approach informs individuals that they bear no responsibility for their thoughts until they reach the “*tasdiq* (confirmation)” layer, and thus, it provides an understanding of the distinction of belief (*iman*) and values that can be formed as a result of confirmation (*tasdiq*) from other mental processes. Here, it was aimed to present cognitive psychotherapies for three cases of religious OCD by integrating the 4T model into an intrusive thought process. The practice was assumed to provide a broader cognitive explanation, consistent with religious values and could be useful in overcoming resistance.

Figure 3.
4T Model - revised final version in the further studies



Method

Research Design

The present study is a case study. Case studies, which involve detailed descriptions and analysis of individuals, typically use qualitative data. Many sources are used as data collection tools, including natural observations, archival records, interviews, and psychological tests. A clinical case study, on the other hand, often describes the implementation and outcomes of a particular treatment (Goz, 2021).

In this context, the results of a religion-focused psycho-education program using the 4T model in three resistant cases with religious OCD are presented. The measurement tools used before and after the therapy are Yale-Brown Obsessive Compulsive Scale, Padua Inventory, Beck Depression Inventory, and Beck Anxiety Inventory. The tests

⁹ The distinction between “*tasawwur* (conceptualization/detailed imagination)” and “*tahayyul* (imagination)” is considered redundant and the two are merged into a single concept, also the term “*tewehhum* (suspicion/baseless assumption)” is added to the model, thus, especially doubt obsessions become easier to understand and explain. By substituting more meaningful terms like “*tewehhum*” “*zan*,” and “suspicion/baseless assumption” with less powerful ones like “*tasawwur* (conceptualization)” or “*tasvir*,” this modification sought to simplify and boost the psychoeducational process (Toprak, 2021). In order to increase the relevance of the model, especially for religious psycho-education, religious concepts and knowledge were used more actively and the critical position of the concept of the heart (*qalb*) was crystallized. like “*tewehhum*” “*zan*,” and “suspicion/baseless assumption” with less powerful ones like “*tasawwur* (conceptualization)” or “*tasvir*,” this modification sought to simplify and boost the psychoeducational process (Toprak, 2021). In order to increase the relevance of the model, especially for religious psycho-education, religious concepts and knowledge were used more actively and the critical position of the concept of the heart (*qalb*) was crystallized. psycho-education, religious concepts and knowledge were used more actively and the critical position of the concept of the heart (*qalb*) was crystallized.

were repeated after 10 sessions and the results were compared with the ones in the baseline visit. Participants were also asked to express their thoughts verbally and orally about what was beneficial to them and how. Participants received a total of 30 individual face-to-face therapy sessions, one session per week, with each session lasting an average of 50 minutes.

Participants

The study involved three participants diagnosed with religious OCD who were admitted to the psychiatric clinic of Cerrahpaşa Medical Faculty in February and April 2015. Their symptoms included religious obsessions, compulsions, and behaviors such as obsessional slowing, crying, avolition, anhedonia, and noncompulsive obsessions. The participants' ages ranged from 35 to 38, and the mean age was 36.33. One participant experienced depressive symptoms, while another reported anxiety and depressive symptoms in addition to OCD.

Data Collection Tools

Yale-brown obsessive compulsive scale (Y-BOCS)–self-report form. It is a self-report scale developed by Goodman et al. (1989), translated into Turkish by Turkcapar (2005) and validity-reliability study was performed by Kocoglu and Bahtiyar (2021). This scale aims to assess the subtypes and severity of obsessive-compulsive symptoms. Each of the 10 items in the scale is scored from 0 (no symptoms) to 4 (extreme symptoms) and the total score ranges from 0 to 40. 10 items of the scale are used to determine the total score; the sum of the first five items about obsessions and the sum of the second five items about compulsions are taken. Scores obtained from the scale are classified as 0-7 subclinical; 8-15 mild; 16-23 moderate; 24-31 severe; 32-40 very severe. In the validity and reliability study of the Turkish version, the Cronbach's alpha internal consistency coefficient was .96 for the total sample (Kocoglu & Bahtiyar, 2021).

Beck depression inventory (BDI). It is a 21-item self-report scale developed by Beck et al. (1961) to assess behavioral symptoms of depression. Each item is scored from 0 to 3. The total score obtained from the scale ranges from 0 to 63, and higher score indicates more severe depression. Hisli (1989) found that the Cronbach alpha internal consistency coefficient of the scale was .80 in the validity and reliability study of the Turkish version of the scale. According to the results of the study, the scale is a valid and reliable tool for measuring depression symptoms (Hisli, 1989).

Beck anxiety inventory (BAI). It is a 21-item self-report scale developed by Beck et al. (1988) to assess the severity of anxiety. Each item is scored from 0 to 3. The total score of the scale ranges from 0 to 63, and higher score indicates severe anxiety. Ulusoy et al (1998) found that the Cronbach alpha internal consistency coefficient

of the scale was .93 in their validity and reliability study of the Turkish version. The authors of the study concluded that the scale was a valid and reliable measure of anxiety severity (Ulusoy et al., 1998).

Padua inventory (PI). It is a self-report scale consisting of 60 questions which was developed by Sanavio (1988) to determine the severity and distribution of OCD symptoms. It has five sub-dimensions: cleanliness, preoccupation, impulsivity, control, and safety. Each item is scored from 0 to 4. The total score is obtained by summing the scores of all the subscales. An increase in the total score indicates an increase in the level of OCD symptoms. Besiroglu et al. (2005) found that the Cronbach alpha internal consistency coefficient of the scale was .95 in their validity and reliability study of the Turkish version (Besiroglu et al., 2005).

Treatment

During the therapy, the steps described by Clark (1999) for the cognitive-behavioral treatment model of OCD was followed which are: a) education, b) normalization of intrusions, accepting that thoughts lie on a continuum from normal to pathological, c) cognitive restructuring of faulty appraisals of intrusions, d) behavioral experimentation and alternative interpretation of obsessions, e) correction of dysfunctional beliefs (Clark, 1999). After psycho-education of the cognitive model of OCD, the 4T model as a hierarchical model of intrusions according to their underlying mechanisms in the mind was explained. As mentioned above, ERP is not effective in patients with religious obsessions and patients who do not have overt compulsions. After recognizing the inefficacy of the classical cognitive restructuring model in addressing religious OCD, it was decided to integrate this 4T model, as depicted in [the table 2](#), in the 7th or 8th session. After introducing the classical cognitive model of OCD, it was begun to personalize the model with the patients' own obsessions and compulsions. It was taught the patients the critical importance of the person's own interpretations of their thoughts. So, it was begun to talk about how the interpretations can be changed and why they should. Due to the inadequacy of the classical cognitive explanation, this was the main point at which resistance in the patients were observed. At this point, 4T model was used to explain the process of obsessive symptoms by looking at their symptoms and offering new alternative interpretations.

In the intervention phase of the 4T model, it was first introduced Nursi as a Muslim scholar who has a cognitive explanation for religious OCD. It was then explained to them the four main concepts of 4T: tahayyul (imagination), tasawwur (conceptualization/detailed imagination), taakkul (reasoning/reflecting), and tasdiq (confirmation), emphasizing what he means by them and which of these concepts corresponds to which level of responsibility. Their feedback was taken to make sure that they understood the model. Then, firstly, one the of the obsessions, in question,

Table 2.*Intervention session content***Assessment****First sessions of psychotherapy**

- Psycho-education about OCD
 - Explaining the cognitive model using the patient's symptoms
- Here, the patients' symptoms were again addressed with the 4T model.*

Cognitive restructuring (regarding 1st and 2nd threats)

- Working with comments
 - Normalization of obsessive thoughts in obsessional patients
- Here the psycho-education was deepened, using relevant text examples and normalization of symptoms on the 4T model.*

Behavioral techniques

- Behavioral experiments, release of neutralizations and suppression
- Exposure to external avoidance

was selected and place it in the model scheme as one of tahayyul (imagination), tasawwur (conceptualization/detailed imagination), or taakkul (reasoning/reflecting) and fill in the other blanks with what was appropriate for clients' obsessions. The hierarchy of responsibility was emphasized and the equivalent stages of clients' obsession in 4T model based on Nursi's text was showed. According to Said Nursi (2008, p.285)

“Just as imagining (tahayyul) unbelief (kufr) is not unbelief (kufr), while conceiving (tasawwur) misguidance is not misguidance, so reflecting (tafakkur) on misguidance is not misguidance. All imagining and suspecting/assuming baselessly, conceiving (tasawwur), and reflecting are considered different from reasonable confirmation (tasdiq). They are free to a certain extent; they do not listen to the faculty of will; they are not included in the duties of religion. But confirmation (tasdiq) is not like that; it depends on a balance.”(see [Figure 4](#)).

Then, it was tried to come to terms regarding new interpretations of intrusive thoughts.

Course of Treatment

Initial Sessions and Classic CBT. In the initial sessions, the clients were informed about what cognition, emotion, and behavior are. The relationship between events, thoughts, emotions, and behaviors was illustrated through the clients' own experiences. In this way, the clients could acquire the ability to gain distance from his own internal processes by following them. To reinforce this skill, the clients were instructed to bring thought records to each new session. In behavioral experiments, through mind experiments such as the “pink elephant”, it was taught that “trying to block a thought increases that thought” (In a brief behavioral experiment in which the clients were forbidden to think about a pink elephant for one minute, afterwards any thought, including the pink elephant, was allowed for one minute, it was shown that the prohibition increased the amount of the intrusive thought by increasing attention to the thought). Thoughts about Allah and the Prophet were also studied using this

pink elephant analogy. As a normalizing intervention, it was explained that their obsessions were related to what they really valued in life, with examples of religious people with similar obsessions.

The clients' religious obsessions were written down. In order to cognitively restructure their misinterpretations on the subject and to separate their own perfectionist expectations from the demands of religion, for example, she (one of the clients, case C) was asked to search for the answers to questions such as "Is the basmala (the religious sentence Muslims use at the beginning of all actions, except ones forbidden in Islam, and means 'in the name of Allah, the most gracious, the most merciful') obligatory?" from the fatwa line and to record the answers. "Is belief (iman) 100% certain?", "Can you have suspicious questions about belief issues even though you have belief (iman)?" , "What kind of thinking does not conform with belief (iman)?" "Is it possible for me to be 100% sure of something in life?" and to briefly exchange ideas with the people around them.

After the cognitive preparation was partially completed, an obsession-compulsion-anxiety graph was drawn before the commencement of ERP explaining the relationship between recovery and tolerance of anxiety. A distinction was made between doubt and curiosity. The problem list, including all the obsessions and compulsions the client wanted to get rid of, was evaluated and rewritten according to the Event-Thought-Comment-Emotion-Behavior scheme. Afterwards, the awareness of the vicious cycle formation process was reinforced in the client's mind.

4T Model Psycho-education. During the therapy session, clients expressed uncertainty about the cognitive therapy explanation of thought: "How do we differentiate between normal thoughts and obsessions?" If the importance of thought emphasized in cognitive psycho-education is correct, then advising to disregard thoughts defined as obsessions would be illogical for the clients. It was unclear how or by whom this decision was made, specifically regarding which thoughts were considered "normal" versus "obsessive". This left them confused and without a clear understanding. Another question they had pertained to the origin of their obsessive thoughts, which CBT did not provide a direct answer to, but rather acknowledged as a "natural human experience". The clients expressed dissatisfaction with how cognitive therapy explained their thoughts, as it did not fully align with their experience. "How can we distinguish a typical thought from an obsession?" If the critical role of cognition in psycho-education were authentic, then the instruction to disregard specific thoughts designated as obsessive would have seemed illogical. It was uncertain to them who determined which thoughts were "normal" or "obsessions", and the advice simply did not make sense to them. Another inquiry was about the origin of obsessive thoughts, which CBT did not provide a direct answer to, but acknowledged as a common human experience. The question posed was, "Why does

the index person experience these thoughts and not someone else?”

The 4T model introduces a hierarchical structure with four stages within the cognitive aspect of CBT. This enables the differentiation of intrusive thoughts and the thoughts that have the ability to incite emotions, actions, and character formation. All obsessions of the clients were expounded through this model. For instance, the presence of an unsavory and immoral image of Allah in the client’s mind was attributed to “imagination (tahayyul)” and considered to be beyond his control and accountability. A more detailed offensive or sexual depiction of Allah manifested as an “imagination (tahayyul)” and was not under his control or responsibility. Inquiries like “Is it appropriate to disrespect Allah?” and “How can the most merciful Allah allow a world like this?” were examples for “taakkul (reasoning/reflecting),” neutral considerations that aimed to find the appropriate answer within themselves. Hence, they could be a matter of choice, but did not entail a moral obligation. However, stating “Yes, I have chosen to disobey Allah” would constitute an objective statement, free from subjective evaluation of emotions such as sadness or fear.

The patients attentively and keenly absorbed the model and implemented it to address their symptoms. As a result, their resistance to ERP promptly decreased. Subsequently, it was gradually diminished the amount of time for ablution (washing the parts of the body before performing worship) and ghusl (washing whole body especially after specific cases such as sexual intercourse, seminal emission, menstruation etc., requiring ghusl and before performing worship), and instructed them to reintroduce the previously avoided worship practices due to OCD. Throughout this process, the severity of the patients’ symptoms gradually diminished. Naturally, the alleviation of severe symptoms experienced by the clients for the first time in years presented an opportunity for us to delve into the underlying aspects of the illness and decipher the message conveyed by the symptoms.

“In matters of belief (iman), what occurs to one in the form of doubts are scruples. The unhappy man suffering from scruples sometimes confuses imagination (tahayyul) with reasoning/reflecting(taakkul). That is, he suspects/assumes baselessly (tewehhum) a doubt that has occurred to his imagination (tahayyul) to be a doubt that has entered his reason, and supposes that his beliefs (iman) have been damaged. Sometimes he suspects/assumes baselessly (tewehhum) a doubt he has supposed to have harmed his belief (iman). Sometimes he supposes a doubt he has concepted (tasawwur) to have been confirmed by his reason (tasdik-i akli). Sometimes he supposes reflecting (tafakkur) in a matter related to unbelief (kufr) to be unbelief (kufr). That is, he supposes to be contrary to belief (iman) his exercising his ability to reflect in (tafakkur) the form of understanding the causes of misguidance, and his ability to study and reason in impartial fashion. Then, taking fright at these suppositions, which result from the whisperings of Satan, he exclaims: “Alas! My heart is corrupted, and my beliefs spoiled.”

Since those states are mostly involuntary, and he cannot put them to rights through his faculty of will, he falls into despair. The cure for this wound is as follows:

“Just as imagining (tahayyul) unbelief (kufr) is not unbelief (kufr), neither is suspecting/assuming baselessly (tewehhum) unbelief (kufr), unbelief (kufr). And just as conceiving (tasawwur) misguidance is not misguidance, so too reflecting (tafakkur) on misguidance is not misguidance. For both imagining (tahayyul), and suspecting/assuming baselessly (tewehhum), and conceiving (tasawwur), and reflecting (tafakkur), are different from confirmation with the reason (tasdik-i akli) and submission of the heart (iz’an-i kalbi), they are other than them; they are free to an extent; they do not listen to the faculty of will; they are not included among the obligations of religion. But confirmation (tasdiq) and submission (iz’an) are not like that; they are dependent on a balance. And just as imagining (tahayyul), suspecting/assuming baselessly (tewehhum), conceiving (tasawwur) and reflecting (tafakkur) are not confirmation (tasdiq) or submission (iz’an), so they cannot be said to be doubt or hesitation.” (Nursi, 2008, p.285)

Additionally, it is included the information that this hierarchy of responsibility is Nursi’s view, and it is added Nursi’s etiology about obsession:

“Satan first casts a doubt into the heart. If the heart does not accept it, it turns from a doubt into abuse. It depicts before the imagination (tahayyul) some unclean memories and unmannerly, ugly states which resemble abuse, and causes the heart to declare: “Alas!” and fall into despair. The person suffering from scruples supposes that he has acted wrongfully before his Sustainer and feels a terrible agitation and anxiety. In order to be saved from it, he flees from the Divine presence and wants to plunge into heedlessness. The cure for this wound is this: O wretched man suffering from scruples! Do not be alarmed! For what comes to your mind is not abused, but something imaginary. And like to imagine (tahayyul) unbelief (kufr) is not unbelief (kufr), to imagine (tahayyul) abuse is not abuse either for according to logic, an imagining (tahayyul) is not a judgement, and abuse is a judgement. Moreover, those ugly words are not the words of your heart, because your heart is saddened and sorry at them. Rather they come from the inner faculty situated near the heart which is a means of Satanic whisperings. The harm of scruples is suspecting/assuming baselessly (tewehhum) the harm. That is, it is to suffer harm in the heart through suspecting/assuming baselessly (tewehhum) them to be harmful. For it is suspecting/assuming baselessly (tewehhum) to be reality an imagining (tahayyul) which is devoid of judgement. Also, it is to attribute to the heart Satan’s works; to suppose his words to be from it. Such a person thinks it is harmful, so it becomes harmful. That is anyway what Satan wanted.” (Nursi, 2008, pp.281-282)

All patients had curiosity about the origins of these intrusive thoughts. As it was mentioned above, the intrusive thoughts are originated from “Lumme-i Satan¹⁰” which might be as a remembrance of “detachment of mind” as in third wave therapies and metacognitive therapy.

Also, in the following part of the same text, he mentions that intrusive thoughts may stem from the unique working principles of the mind (such as the interaction between the bodily needs and imagination, the principle of opposition in associations and deep associative bonds between things whose secrets are difficult to know) (Nursi, 2008).

10 The place, close to the qalb (heart), where the satan whispers.

“It is this: there are certain hidden connections between things. There are even the threads of connections between things you least expected. They are either there in fact, or your imagination made them according to the art with which it was preoccupied, and tied them together. It is due to this mystery of connections that sometimes seeing a sacred thing calls to mind a dirty thing. As stated in the science of rhetoric, “Although opposition is the cause of distance in the outer world, it is the cause of proximity in the imagination.” That is, an imaginary connection is the means of bringing together the images of two opposites. The recollection which arises from this connection is called the association of ideas.” (Nursi, 2008, pp.282-283).

In addition, Nursi mentioned three basic powers (quwwah) in his another texts “Signs of Miraculousness(Isharat al-I’jaz)”, in which he explained the importance of using one’s potentials in balance.

“...When Allah (May He be exalted and glorified!) housed spirit (ruh) in man’s body (jism/badan), which is changing, needy, and exposed to dangers, He deposited three powers in it to ensure its continued existence. The First: the power of desire (quwwah shahwiyyah) to attract benefits. The Second: the power of anger (quwwah ghadabiyyah) to repulse harmful and destructive things. The Third: the power of intellect (quwwah aqliyyah) to distinguish between benefit and harm. However, since His wisdom necessitated that humanity should achieve perfection through the mystery of competition, Allah placed no innate limitation on these powers, as He did on those of other living beings. He did however limit them through the Shari’a (Islamic Law), for it prohibits excess (ifrât) and deficiency (tafrît) and enjoins the middle way (wasat).” (Nursi, 2012, p.29)¹¹

According to the Nursi, there are three basic powers in human beings: power of desire (quwwah shahwiyyah), which refers to all kinds of desires, the power of anger (quwwah ghadabiyyah), which refers to all kinds of self-preservation, and the power of intellect (quwwah aqliyyah), which refers to all kinds of reasoning activities. The first two of these, shahwiyyah (desire) and (anger), represent the instinctual-animal side of human beings and are the basic energy sources of our existence. They are in a constant state of functioning as long as people live, and since they have no moral-conscientious purpose, and their only purpose is the continuation of the species, they have unlimited desires (Nursi, 2012, pp.29-30). Considering the relationship between these powers (the power of desire [quwwah shahwiyyah] and the power of anger [quwwah ghadabiyyah]) and intrusive thoughts, in the context of *ilm an nafs* (knowledge of self) texts and the writings of Nursi, an explanation is given as follows: They (the power of desire [quwwah shahwiyyah] and the power of anger [quwwah ghadabiyyah]) send these unlimited impulses to the mind through imagination (tahayyul) and conceptualization/detailed imagination (tasawwur).

¹¹ In the English translation of the texts of Nursi, concepts related to mental health have been negotiated by professionals and replaced with concepts that are considered more appropriate.

Some imaginations and thoughts coming to the mind from time to time result from the interaction of our two basic powers (shahwiyyah and ghadabiyyah) with the mind, operating beyond our control. The intellect evaluates this data by reasoning and transmits what it deems appropriate to perform to the heart, which is the main decision center. Here it is either accepted and turn into action or rejected and does not turn into action (Toprak, 2018).¹²

Thus, the questions on the origin of the intrusive thoughts, that the patients are so curious about, are explained in three different possibilities, depending on the symptoms and the context, sometimes as a result of lumme-i Satan, sometimes as a result of association principles and sometimes as a result of the natural workings of the powers representing the biological/animal aspect of human beings.

The therapy initially used CBT and it was subsequently integrated 4T model to overcome the shortcomings of CBT. The method successfully resolved the problems associated with cognitive structures that had negatively affected their life balance, and helped reorganize their cognitive processes using new insights and experiences. During this process, individuals struggling to overcome symptoms of OCD found that the 4T cognitive model, which is rooted in the hierarchy of responsibility, helped them revise their theoretical knowledge that didn't align with their experience. Additionally, the hierarchy's adaptable structure facilitated the proper reevaluation of their symptoms. A comprehensive account of the origins of intrusive thoughts and a systematic approach to addressing cases pertaining to self-awareness and control is furnished by using Nursi's texts as supplementary information. Consequently, it is highly appropriate for prospective deployment. With the integration of 4T and additional information in the texts with the fundamental concepts and interventions of CBT, patients displayed an openness to new experiences, as well as learning and progress.

Results

This study presents content from a total of 3 participants who completed the psycho-educational intervention. This content includes brief information about the case participant patients and post-intervention assessment results. The participants' levels of obsessive-compulsive symptoms are shown in Table 1.

¹² In the process, the subject of powers (quwwah) is developed into a psycho-educational model explaining basic impulses, mind and human maturation by Toprak (2018) under the name of 3K Model based on the first letters of the powers (kuvve) in their Turkish spelling.

Table 1.
Y-BOCS and PI scores of the patients before and after “4T Model” psycho-education.

Patient	Age	Y-BOCS Score					PI Score				BDI Score			BAI Score			
		Assessment Session	10.Session	20.Session	30.Session	3 Years Follow Up	Assessment Session	10.Session	20.Session	30.Session	3 Years Follow Up	Assessment Session	Final session	3 Years Follow Up	Assessment Session	Final session	3 Years Follow Up
A	38/M	18	14	16	13	19	32	22	19	16	31	11	4	7	15	5	4
B	36/M	36	16	25	37		80	51	65	64		44	37		17	18	
C	35/F	29	20	16	22	6	79	70	50	42	43	28	25	9	31	8	11

Note. Y-BOCS = Yale Brown Obsessive Compulsive Disorder; PI = Padua Inventory; BDI = Beck Depression Inventory; BAI: Beck Anxiety Inventory

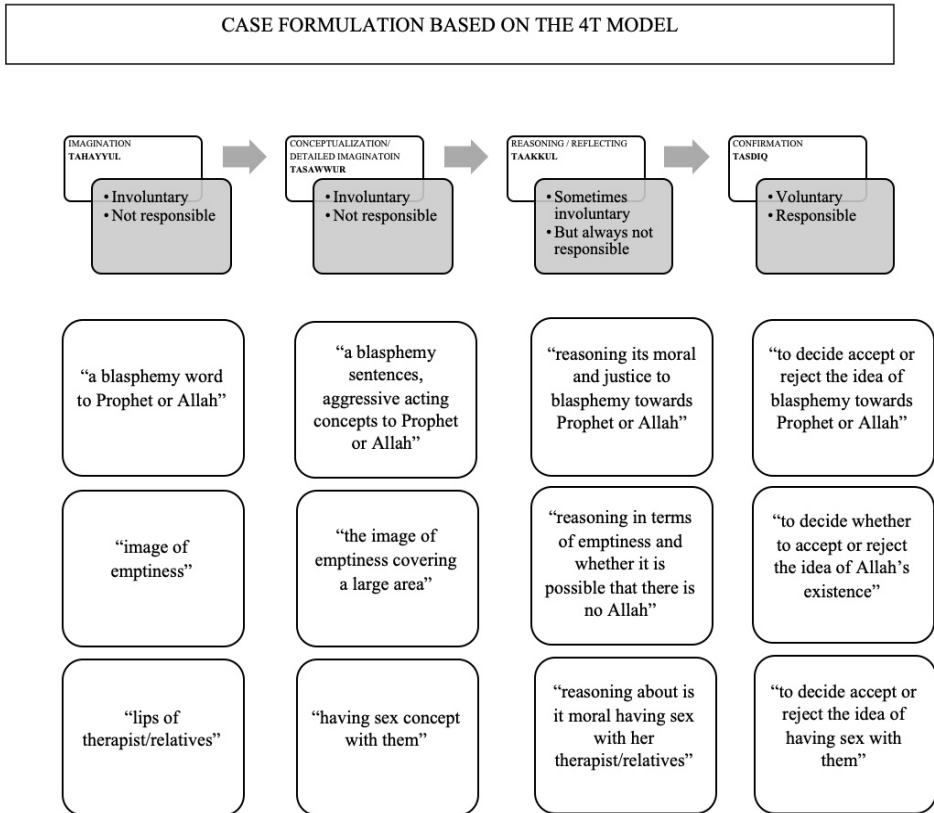
Case Examples

Case A. A 38-year-old single male presented to our outpatient clinic complaining of obsessions, compulsions, and obsessional slowing. He stopped using his psychiatric medications three months before his presentation and was reluctant to take any psychopharmacological agent. The obsessions were as follows: the emptiness of an image, which means the non-existence of God, fear of being Godless because of sacrilege and blasphemy, need for exactness in acts related to religion or non-religious behaviors, fear of uncertainty in routine acts, and aggressive obsessions. The compulsions were repeating internal speeches about being a self-believer in God or convincing himself of the existence of God, repeating behaviors while praying or doing routine acts, control behaviors, and avoiding behaviors for aggressive obsessions. He had been treated with various anti-obsessive treatments, including clomipramine, fluoxetine, sertraline, fluvoxamine for 24 years. His older sister is being followed in our psychosis clinics with a diagnosis of schizophrenia. His mental examination did not reveal any symptoms other than obsessions and compulsions. The initial scores of Y-BOCS and PI were 18 and 32 points, respectively. The scores of Y-BOCS and PI were 13 and 16 points, respectively at the 30th session which took place on the 8th month of therapy. The baseline and final BDI scores were 11 and 4 and the corresponding BAI scores were 15 and 5. The patient, becoming free of obsessions and overt compulsions after introducing the 4T model, stated the following: “4T was rational, I realized they were images (*tahayyul*) and not related to my belief (*iman*) or will. The results of the three-year follow-up tests for Y-BOCS, PI, BDI, and BAI were 19, 31, 7, and 4, respectively. Throughout the follow-up sessions, the patient mentioned that “I learned that as long as it is an imagination (*tahayyul*) and not a confirmation (*tasdiq*), it does not harm belief (*iman*).” Rather than normalizing intrusive thoughts (Matthes, 2015) or giving the thought no meaning (Twohig, 2015), it was worked through this intrusive thought by sharing the 4T model of intrusive thought occurrence.

Case B. A 36-year-old married man, a civil servant, presented to our outpatient clinic complaining of obsessions and compulsions. He was receiving aripiprazole 15mg/day, clomipramine 225 mg/day, and risperidone 1mg/day, but was not compliant with the treatment regimen. His obsessions were as follows: intrusive thoughts about the non-existence of God and the afterlife, concern about being godless because of sacrilege and blasphemy or approving non-Islamic facts/objects, need for exactness in acts related to religion, concern about uncertainty in routine acts. The compulsions included the need to ask or tell to receive reassurance about being a believer to God, repetition of mental imaginative compulsions such as ejaculating behaviors to non-Islamic facts/objects and bowing behaviors to Islamic facts/objects, and control behaviors. He has been treated for 24 years with various anti-obsessive treatments, including clomipramine, fluoxetine, sertraline, fluvoxamine, pimozide, thioridazine, benzodiazepine, and 7 sessions of electroconvulsive therapy (ECT). In addition to depressive symptoms, obsessions and compulsions were the main symptoms in his psychiatric examination. The initial Y-BOCS and PI scores were 36 and 80 points, respectively. The final Y-BOCS and PI scores were 37 and 64 points, respectively, at the 40th session which took place on the 11th month of therapy. The initial and final BDI scores were 44 and 37 points, and the corresponding BAI scores were 17 and 18 points. Follow-up measurements could not be conducted because the patient was lost to follow up. In addition, after explaining the 4T model to the patient, he emphasized that after learning the hierarchy of existence of intrusive thoughts, he acknowledged that these thoughts were free of his will/not under his control, for which he should not feel responsible. The patient declared *“When I remember 4T, I find out that the things that go through my mind are just imagination (tahayyul), they are not real”*. It is well known that depression is common in patients with OCS. Although the patient B’s anti-depressive treatment was not modified, his depressive symptoms improved along with his OCD symptoms. The follow-up scores of the patient B cannot be obtained due to lack of contact.

Case C. A 35-year-old married female applied to our outpatient clinic with depressive symptoms including crying, avolition, and anhedonia, and obsessions without compulsions. The obsessions were as follows: intrusive thoughts of inexistence of God and afterlife, aggressive thoughts about herself or others, cheating or being cheated, concern about being Godless because of sacrilege and blasphemy or approving non-Islamic facts/objects, incestuous sexual obsessions, worries about jinns, fear of dying, and avoidance behaviors. She was receiving olanzapine 20mg/day and clomipramine 150 mg/day. She had been treated with paroxetine 20 mg/day for one year 11 years before her presentation to our clinic. Her anxiety and depressive symptoms were considered to be secondary to the obsessions. The initial scores of Y-BOCS and PI were 29 and 79 points, respectively, while the scores of Y-BOCS and PI were 22 and 42 points, respectively, at the 30th session which took

Figure 4.
Case symptom formulation based on the 4T model.



place on the 10th month of therapy. The initial and last BDI scores were 28 and 25 points, and the corresponding BAI scores were 31 and 8 points. As evidence that the patient’s thought-action fusion had been overcome/progress had been made. Patient C emphasized that it is the behavioral outcome that is most important, not the intrusive thoughts/images. *“I was impressed with the 4T model. I used to try to control my feelings and thoughts before learning this. I understood that what matters is the behavior. What I will be responsible for is what I execute.”* The results of the three-year follow-up tests for Y-BOCS, PI, BDI, and BAI were 6, 43, 9, and 11, respectively, and the patient remembered the acquisitions related to 4T without being asked specifically about 4T and stated the following: *“It’s good to know that thoughts before confirmation (tasdiq) are not sinful nor under my responsibility.”*, *“It made me think freely about my thoughts.”*, *“I know that there’s no harm to my belief (iman) unless I confirm (tasdiq) these thoughts.”*

Discussion

The aim of this study under the umbrella of religious knowledge integrative intervention is to evaluate the effect of the 4T model, which tries to provide a persuasive explanation of the source of obsessions and to teach the cognitive distinction between obsessions, values, and beliefs. In this regard, quantitative results of this study showed that OCD, depression, and anxiety symptoms decreased in all patients immediately after the 4T model intervention. Although there were partial fluctuations during the process, this decrease was observed in the follow-up, except for patient B. Furthermore, when the feedback received from the patients is evaluated, it is seen that they internalized the main idea that the 4T model wanted to convey, thus they distinguished between their obsessions and their values and beliefs, and in this context, they learned to make a distinction (defusion) in the fusion between cognitive processes and responsibility for action which constitutes the basis of TAF.

As the effect of CBT on OCD is analyzed, not only in the meta-analysis but also in the individual studies, CBT is found to be effective to decrease the symptoms of OCD (Abramowitz, 1997; Abramowitz, 2006; Simpson et al., 2006; Rosa-Alcazar et al., 2008; Olatunji et al., 2013; Ost et al., 2015). In long term consequences one study found that in 2-years follow-up, patients pretended the improvements on OCD (which was the reduction in symptoms) after getting CBT (Whittal et al., 2008), another study found the effects of CBT on OCD pretended on a 5-year follow-up (Oppen et al., 2005), and similar results were also shown in internet-based CBT with a 2 year follow-up (Andersson et al., 2014). The positive effect of CBT on obsessions and compulsions does not only remain at the individual level, but also in group therapies (Kearns et al., 2010; Safak et al., 2014), which is also shown in follow-up sessions (Haland et al., 2010). In the case of religious OCD, Abramowitz (2001) found a positive effect of ERP and/or cognitive intervention on religious OCD. However, some researchers asserted that having religious symptoms in OCD estimate poor treatment results (Mataix-Cols et al., 2002; Rufer et al., 2005; Ferrao et al., 2006; Alonso et al., 2011), and patients with religious OCD may be resistant to some CBT intervention approaches (such as ERP) and as a result, the effectiveness of the therapy is affected (Mataix-Cols, 2002; Ferrao, 2006). Thus, in religious OCD, the unique challenges of the treatment process arise (Abramowitz, 2001; Siev & Huppert, 2017). Some of these challenges include how to differentiate between religious obsessions and compulsions and normal religious thoughts and behaviors, as well as determining who will do this, under what authority, and with what standards, and another is determining when religious leaders will participate in the therapeutic process (Huppert & Siev, 2010). These challenges can only be overcome by adjusting the current therapies to the unique requirements and sensitivities (cultural/religious sensitivities) of patients with religious OCD (Huppert et al., 2007; Witzig, 2017). In

this regard, some studies having cultural/religious sensitivity found improvement in patients after conducting ERP and/or cognitive interventions (Garcia, 2008; Huppert & Siev, 2010; Peris & Rozenman, 2016; Siev & Huppert, 2017).

When religious knowledge integrative interventions related to religious OCD in the literature are examined, it is seen that many studies have investigated how combining religious knowledge with CBT affects religious obsessive-compulsive disorder. They discovered that this merged approach effectively reduced the intensity of obsessive contents and compulsive behaviors measured by Y-BOCS, thereby lessening the severity of OCD symptoms (Akuchekian et al., 2015). Similar research, applying pre and post-test of Y-BOCS, reinforced these outcomes by demonstrating a reduction in symptom severity (Akuchekian et al., 2011). Another study noted a significant decline in religious OCD symptoms, by using Y-BOCS, following the intervention, even the scores persisted during the follow-ups at 3 and 6 months. (Aouchekian et al., 2017). Furthermore, a randomized controlled clinical trial study, using Y-BOCS, highlighted that the positive impact of incorporating religious content into the therapy enhance the treatment responses for religious OCD patients (Omranifard et al., 2011). According to Alimadadi et al. (2020), following spiritual group psychotherapy for adults with OCD, there was a decrease observed in OCD symptoms, including thought-action fusion, obsessive beliefs, and religious obsessions. In line with the results of the other studies, therapies integrating Islamic values and using cognitive and/or behavioral (ERP) techniques have also showed a relief in the patients' symptoms (Singh and Khan; 1997 [as cited in Md Rosli et al., 2019]; Badri, 2017; Md Rosli et al., 2017). A study in the literature, applying religious strategies into the therapy, used both Y-BOCS and Penn Inventory of Scrupulosity (PIOS) and found that patients' scores of Y-BOCS and PIOS decreased after interventions (Arip et al., 2018). When the studies directly integrating the 4T model into the therapy are examined, it is seen that positive results are obtained similar to the studies aforementioned. For example, an OCD patient having received CBT but has still problems is given a 5-session individual psycho-education intervention using only the 4T model and the study found that the patient responded well to the 4T model intervention and the decline of the severity of the symptoms is pretended during follow-ups up to 3 months (Karakan & Toprak, 2023). The positive results of the 4T model on OCD have been shown not only in individual psychotherapy intervention but also in group interventions. To illustrate, Toprak (2022) conducted a study comparing two groups consisted of religious OCD patients: One group receives only group CBT, while the other group receives 4T integrated group CBT. The results showed that both group interventions are significantly effective in treating OCD, and this effect persists during the one-month follow-up period. There is no significant difference found between the two group treatments, with the exception that 4T produces better insight with a moderate effect. Over the course

of 4T intervention, it is discovered that the 4T model is more effective than CBT in obsessive and compulsive symptoms as well as obsessive beliefs. In this study, the fact that the participants' Y-BOCS and PI scores decreased after the application of the 4T model shows that the results of this study is consistent with the both general and specially 4T literature. Overall, these findings highlight the potential benefits of CBT combined with religious knowledge and CBT integrated with original models developed from religious texts in reducing religious OCD symptoms.

Even as a secondary outcome, CBT is also found to be effective in reducing the depression symptoms in OCD (Hofman & Smits, 2008), and this outcome is reinforced in the results revealed in a meta-analysis conducted by Olatunji et al. (2013). Some studies found that the changes in the OCD symptoms, after getting ERP and/or CBT, accompanied with the changes in the depressive symptoms (Anholt et al., 2011; Zandberg et al., 2015). In some studies, in which pharmacological treatment was applied in addition to CBT for OCD, not only Subjective Y-BOCS scores but also BDI and BAI scores decreased (Koprivova et al., 2009; Vyskocilova, Prasko & Sipek, 2016). These outcomes, both the decrease in depression scores and the reduction in anxiety scores, are repeated in GCBT sessions as well (Haland et al., 2010; Safak et al, 2014). Moreover, the reduction in the scores of BDI and/or BAI are also found in the studies applying ERP and/or cognitive interventions on patients with religious OCD (Abramowitz, 2001; Garcia, 2008; Siev & Huppert, 2017)

Examining the secondary outcomes of religious knowledge integrative interventions, as reductions in anxiety and depression scores were found in non-religiously orientated treatment protocols, trend of reduction in the scores of anxiety and depression were also found in religious knowledge integrative interventions. For example, a case study using 4T, the patient's anxiety and depression scores decreased from mid-level to sub-clinical level (Karakan & Toprak, 2023). In a case study, Islamic integrated ERP (IERP) was applied for a patient, having contamination OCD, and found that in addition to decrease in Y-BOCS' scores, reduction in the scores of BAI and BDI were observed (Arip et al., 2018). Furthermore, similar results are found not only in individual therapies but also in group (CBT) therapies (Toprak, 2022). When the BDI and BAI scores of the patients in this study are analysed, it is seen that the decrease in these scale scores (after applying 4T model intervention) is parallel to the results in the literature.

In addition to the substantial reduction of the scores especially after the application of 4T, statement of case A, *"4T was rational, I realized they were images (tahayyul) and not related to my belief (iman) or will, and I learnt that as long as it is an imagination (tahayyul) and not a confirmation (tasdiq), it does not harm belief (iman)"*, showed the different influence of the model in terms of over-emphasis on thought , though-action fusion and over-responsibility on the control of thinking.

Similarly, both the decrease in scores and the Patient C's statement, "*I was impressed with the 4T model. I used to try to control my feelings and thoughts before learning this. I understood that what matters is the behavior. What I will be responsible for is what I execute.*", indicated that the model has a critical impact on the understanding of thought-action fusion and the realization of cognitive defusion. At the end of the 3-year-follow-up, both the scales got better and the Patient C's statement, "*(Without being directly questioned about 4T) It's good to know that thoughts before confirmation (tasdiq) are not sinful nor under my responsibility.*", "*It made me think freely about my thoughts.*", "*I know that there's no harm to my belief (iman) unless I confirm (tasdiq) these thoughts.*" are important to show in terms of showing that learning is consolidated and maintained. Likewise with positive feedback from other cases, the statement of Patient B "*When I remember 4T, I find out that the things that go through my mind are just imagination (tahayyul), they are not real*", showed that he learnt a new cognitive perspective in the areas of excessive anxiety related to thought-action fusion and thought control, which he had not learnt in previous treatments. However, when the scale results are analyzed, it is observed that there is a significant decrease in the weeks after the 4T intervention, but she could not maintain it afterwards. The patient encountered serious stressors such as divorce in the process, which affected his general condition. It can also be considered that the patient, who had experienced treatment resistance many times before, was also religiously affected by the cognitive structuring of 4T, but could not maintain his gains because there was no full internalization in the process.

Considering that the patients are resistant to treatment and do not respond to many pharmacological and psychotherapy interventions, it can be thought that in this treatment, they internalized cognitive psycho-education with the difference made by 4T model and this is reflected in their behavior. Lastly, in accordance with the literature, it was observed in this study that symptoms decreased with 4T model intervention. Moreover, as the feedback of the patients are taken into account, it can be assumed that they all experienced a cognitive restructuring through the 4T model in the areas of overemphasis on thought/thought-action fusion and excessive anxiety about the control of thought. The fact that they especially expressed the 4T model and in the meantime, they emphasized cognitive processes and expressed the difference between taking action and mental processes supported the effectiveness of the model.

Conclusion

In conclusion, the 4T model, which is both a religious sensitive approach and a unique intervention in the treatment of religious OCD, which has unique challenges in many aspects, has increased the treatment compliance and success of resistant patients by applying it together with the extra information from Nursi's texts

complementary information. Here, especially the 4T model, which offers a unique hierarchical approach to cognitive processes, seems to have a significant effect on patients in terms of separating beliefs and values from other cognitive processes, including obsessions.

Limitation & Recommendation

In addition, considering the emphasis on “intolerance of uncertainty” and “fusion of moral thought and action” on religious OCD symptoms (Abramowitz, 2014), it can be stated as the limitations of the study that no measurement was made with scales such as Obsessive Beliefs Questionnaire and Thought-Action Fusion Scale before and after the 4T model psycho-education intervention. Information from Nursi’s texts like 3K model have been also used to enhance the impact of the 4T model. Since these models also offer new explanations, more subtle methods should be used to distinguish their effects from the effects of the 4T model. Studies with mixed designs, especially RCTs, for both 4T and other models used will increase our knowledge about the effectiveness of the models.

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Ethical approval. This study was conducted with patients admitted to Medical Faculty in February and April 2015. Since ethics committee approval is not obtained for case series studies in a university hospital, no ethics committee approval document was obtained for this study.

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References

- Abramowitz, J. S. (1997). Effectiveness of psychological and pharmacological treatments for obsessive-compulsive disorder: A quantitative Review. *Journal of Consulting and Clinical Psychology, 65*(1), 44–52. <https://doi.org/10.1037/0022006X.65.1.44>
- Abramowitz, J. S. (2001). Treatment of scrupulous obsessions and compulsions using exposure and response prevention: A case report. *Cognitive and Behavioral Practice, 8*(1), 79–85. [https://doi.org/10.1016/S1077-7229\(01\)80046-8](https://doi.org/10.1016/S1077-7229(01)80046-8)
- Abramowitz, J. S. (2006). The psychological treatment of obsessive—compulsive disorder. *The Canadian Journal of Psychiatry, 51*(7), 407–416. <https://doi.org/10.1177/070674370605100702>
- Abramowitz, J. S., & Hellberg, S. N. (2020). Scrupulosity. In *Advanced casebook of obsessive-compulsive and related disorders* (pp. 71–87). Academic Press.
- Abramowitz, J. S., & Jacoby, R. J. (2014). Scrupulosity: A cognitive-behavioral analysis and implications for treatment. *Journal of Obsessive-Compulsive and Related Disorders, 3*(2), 140–149. <https://doi.org/10.1016/j.jocrd.2013.12.007>
- Abramowitz, J. S., Deacon, B. J., Woods, C. M., & Tolin, D. F. (2004). Association between Protestant religiosity and obsessive-compulsive symptoms and cognitions. *Depression and Anxiety, 20*, 70–76. <https://psycnet.apa.org/doi/10.1002/da.20021>
- Abramowitz, J. S., Franklin, M. E., Schwartz, S. A., & Furr, J. M. (2003). Symptom presentation and outcome of cognitive-behavioral therapy for obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology, 71*(6), 1049–1057. <https://doi.org/10.1037/0022-006X.71.6.1049>
- Abramowitz, J. S., Huppert, J. D., Cohen, A. B., Tolin, D. F., & Cahill, S. P. (2002). Religious obsessions and compulsions in a non-clinical sample: The Penn inventory of scrupulosity (PIOS). *Behaviour Research and Therapy, 40*(7), 825–838. [https://doi:10.1016/s0005-7967\(01\)00070-5](https://doi:10.1016/s0005-7967(01)00070-5)
- Abramowitz, J. S., Taylor, S., & McKay, D. (2005). Potentials and limitations of cognitive treatments for obsessive-compulsive disorder. *Cognitive Behaviour Therapy, 34*(3), 140–147. <https://doi.org/10.1080/16506070510041202>
- Abramowitz, J. S., Whiteside, S., Kalsy, S. A., & Tolin, D. F. (2003). Thought control strategies in obsessive-compulsive disorder: A replication and extension. *Behaviour Research and Therapy, 41*(5), 529–540. [https://doi.org/10.1016/s00057967\(02\)00026-8](https://doi.org/10.1016/s00057967(02)00026-8)
- Akuchekian, S. H., Almasi, A., Meracy, M. R., & Jamshidian, Z. (2011). Effect of religious cognitive behavior therapy on religious content obsessive compulsive disorder. *Procedia-Social and Behavioral Sciences, 30*, 1647–1651. <https://doi.org/10.1016/j.sbspro.2011.10.319>
- Akuchekian, S., Nabi, L. N., Emranifard, V., Najafi, M., & Almasi, A. (2015). The affect of religious cognitive-behavior therapy on quality of life obsessive—compulsive disorder. *Advanced Biomedical Research, 3*(1), 71–74. <https://doi.org/10.19070/2332-3000-1500013>
- Alimadadi, S., Najafi, M., Mohammadi, M., Rahimian Bogar, I., & Salmanian, M. (2020). Assessment the effect of spiritual psychotherapy protocol in groups on symptoms, cognitive factors and religious obsession in adult patients with obsessive compulsive disorder. *Islamic Life Journal, 4*(3), 18–25.
- Alonso, P., Menchon, J. M., Pifarre, J., Mataix-Cols, D., Torres, L., Salgado, P., & Vallejo, J. (2001). Long-term follow-up and predictors of clinical outcome in obsessive-compulsive patients treated with serotonin reuptake inhibitors and behavioral therapy. *Journal of Clinical Psychiatry, 62*(7), 535–544. <https://doi.org/10.4088/jcp.v62n07a06>

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders, (DSM-5)*. APA.
- American Psychological Association. (n.d.). Psyche. In *APA dictionary of psychology*. APA.
- Amir, N., Freshman, M., Ramsey, B., Neary, E., & Brigidi, B. (2001). Thought-action fusion in individuals with OCD symptoms. *Behaviour Research and Therapy, 39*(7), 765–776.
- Andersson, E., Steneby, S., Karlsson, K., Ljótsson, B., Hedman, E., Enander, J., Kalso, V., Andersson, G., Lindfors, N., & Rück, C. (2014). Long-term efficacy of internet-based cognitive behavior therapy for obsessive-compulsive disorder with or without booster: A randomized controlled trial. *Psychological Medicine, 44*(13), 2877–2887. <https://doi.org/10.1017/S0033291714000543>
- Anholt, G. E., Aderka, I. M., van Balkom, A. J., Smit, J. H., Hermesh, H., de Haan, E., & van Oppen, P. (2011). The impact of depression on the treatment of obsessive-compulsive disorder: Results from a 5-year follow-up. *Journal of Affective Disorders, 135*(1–3), 201–207. <https://doi.org/10.1016/j.jad.2011.07.018>
- Aouchekian, S., Karimi, R., Najafi, M., Shafiee, K., Maracy, M., & Almasi, A. (2017). Effect of religious cognitive behavioral therapy on religious obsessive compulsive disorder (3 and 6 months follow-up). *Advanced Biomedical Research, 6*, 1-5. https://doi.org/10.4103/abr.abr_115_16
- Arip, A., Sharip, S., & Nabil, M. R. (2018). Islamic integrated exposure response therapy for mental pollution subtype of contamination obsessive-compulsive disorder: A case report and literature review. *Mental Health, Religion & Culture, 21*, 210–218. <https://doi.org/10.1080/13674676.2018.1436047>
- Arshad, M. (2019). The history of psychology in Islam. *American Journal of Humanities and Social Sciences Research (AJHSSR), 3*, 187-193.
- Badri, M. (2017). Müslüman psikologların çıkması [The dilemma of muslim psychologist], Trans. İ. N. Kaya. Mahya.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology, 56*(6), 893–897. <https://doi.org/10.1037/0022-006X.56.6.893>
- Beck, A. T., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J. (1961). Beck Depression Inventory (BDI). *Arch Gen Psychiatry, 4*(6), 561-571. <https://doi.org/10.1001/archpsyc.1961.01710120031004>
- Belhi (2012). *Beden ve ruh sağlığı [Sustenance for the body and soul]*, Trans. M. Uysal. Endülüs.
- Besiroglu, L., Agargun, M.Y., Boysan, M., Eryonucu, B., Gulec, M., & Selvi, Y. (2005). Obsesif-kompulsif belirtilerin değerlendirilmesi: Padua Envanteri'nin Türk toplumunda geçerlik ve güvenilirliği [The assessment of obsessive-compulsive symptoms: the reliability and validity of the padua inventory in a turkish population]. *Türk Psikiyatri Dergisi, 16*(3), 179-189.
- Besiroglu, L., Karaca, S., & Keskin, I. (2014). Scrupulosity and obsessive-compulsive disorder: The cognitive perspective in Islamic sources. *Journal of Religion and Health, 53*(1), 3–12. <https://doi.org/10.1007/s10943-012-9588-7>
- Beydavi (2011). *Envarut tenzil ve esraruttevil [The lights of revelation and the secrets of interpretation]*, Trans. A. Öztürk. Kahraman.
- Bouchard, C., Rhéaume, J., & Ladouceur, R. (1999). Responsibility and perfectionism in OCD: An experimental study. *Behaviour Research and Therapy, 37*(3), 239–248.

- Çiftçi, Ş., & Kuru, T. (2013). Thought action fusion in obsessive compulsive disorder. *Journal of Cognitive Behavioral Psychotherapy and Research*, 2, 138-146.
- Clark, D. A. (2005). Focus on “cognition” in cognitive behavior therapy for OCD: Is it really necessary? *Cognitive Behaviour Therapy*, 34(3), 131–139.
- Clark, D. A. (1999). Cognitive behavioral treatment of obsessive-compulsive disorders: A commentary. *Cognitive and Behavioral Practice*, 6, 408-415. [https://doi.org/10.1016/S1077-7229\(99\)80059-5](https://doi.org/10.1016/S1077-7229(99)80059-5)
- Clark, D. A. (2019). *Cognitive-behavioral therapy for OCD and its subtypes*. Guilford.
- Collins, L. M., & Coles, M. E. (2018). A preliminary investigation of pathways to inflated responsibility beliefs in children with obsessive compulsive disorder. *Behavioral and Cognitive Psychotherapy*, 46(3), 374–379. <https://doi.org/10.1017/S1352465817000844>
- Duarte, D. (2021). Cognitive behavioral therapy in obsessive-compulsive disorder: A review. *European Psychiatry*, 64(1), 418-S418. <https://doi.org/10.1192/j.eurpsy.2021.1117>
- Er-Razi (2019). *Et-tabbu’r-rûhânî [Spiritual medicine]*, Trans. H. Karaman. İz.
- Ferrão, Y. A., Shavitt, R. G., Bedin, N. R., de Mathis, M. E., Carlos Lopes, A., Fontenelle, L. F., Torres, A. R., & Miguel, E. C. (2006). Clinical features associated to refractory obsessive-compulsive disorder. *Journal of Affective Disorders*, 94(1-3), 199–209. <https://doi.org/10.1016/j.jad.2006.04.019>
- Fisher, P. L. (2009). Obsessive compulsive disorder: A comparison of CBT and the metacognitive approach. *International Journal of Cognitive Therapy*, 2(2), 107–122.
- García, H. A. (2008). Targeting Catholic rituals as symptoms of obsessive-compulsive disorder: A cognitive-behavioral and psychodynamic, assimilative integrationist approach. *Pragmatic Case Studies in Psychotherapy*, 4, 1-38. <https://doi.org/10.14713/pcsp.v4i2.931>
- Gazali (1998). *İhya’u ulum ‘id-din [The revival of the religious sciences]*, Trans. S. Gülle. Huzur.
- Giasuddin, N. A., & Hossain, M. J. (2020). Understanding obsessive compulsive disorder and management options. *Faridpur Medical College Journal*, 15(1), 38- 42.
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale. I. Development, use, and reliability. *Archives of General Psychiatry*, 46(11), 1006–1011.
- Goz, I. (Ed.). (2021). *Psikolojide araştırma yöntemleri [Research Methods in Psychology]*. Nobel.
- Håland, Å. T., Vogel, P. A., Lie, B., Launes, G., Pripp, A. H., & Himle, J. A. (2010). Behavioural group therapy for obsessive–compulsive disorder in Norway. An open community-based trial. *Behaviour Research and Therapy*, 48(6), 547-554. <https://doi.org/10.1016/j.brat.2010.03.005>
- Healy, H. A., Barnes-Holmes, Y., Barnes-Holmes, D., Keogh, C., Luciano, C., & Wilson, K. (2008). An experimental test of a cognitive defusion exercise: Coping with negative and positive self-statements. *The Psychological Record*, 58, 623–640. <https://doi.org/10.1007/BF03395641>
- Hisli, N. (1989). Validity and reliability of Beck Depression Inventory for university students. *Journal of Psychology*, 7(23), 3-13.
- Hofmann, S. G., & Smits, J. A. (2008). Cognitive-behavioral therapy for adult anxiety disorders: A meta-analysis of randomized placebo-controlled trials. *Journal of Clinical Psychiatry*, 69(4), 621. <https://doi.org/10.4088/jcp.v69n0415>

- Huppert, J. D., & Siev, J. (2010). Treating scrupulosity in religious individuals using cognitive-behavioral therapy. *Cognitive and Behavioral Practice, 17*(4), 382–392. <https://doi.org/10.1016/j.cbpra.2009.07.003>
- Huppert, J. D., Siev, J., & Kushner, E. S. (2007). When religion and obsessive-compulsive disorder collide: Treating scrupulosity in ultra-orthodox Jews. *Journal of Clinical Psychology, 63*, 925-941. <https://doi.org/10.1002/jclp.20404>
- Ibn-i Hazm (2012). *Ahlak ve davranış tarzları [Morals and behaviours]*, Trans. M. Çağrırcı. Türkiye Diyanet Vakfı.
- Isgandarova, N. (2019). Muraqaba as a mindfulness-based therapy in Islamic psychotherapy. *Journal of Religion and Health, 58*(4), 1146-1160. <https://doi.org/10.1007/s10943-018-0695-y>
- Isik H. R., & Toprak, T.B. (2023, October 4-7). *Am I religiously responsible about my sexual intrusive thoughts? The use of the 4t model to distinguish cognition hierarchy in the context of religious responsibility after sexual abuse: A case report* [Conference presentation]. European Association for Cognitive Behavioral Psychotherapies (EABCT), Antalya, Turkey.
- Karakan, B., & Toprak, T. B. (2023, October 4-7) *Using religiously extended psycho-educational 4t model for psychotherapy of scrupulosity: A case report* [Conference presentation] European Association for Cognitive Behavioral Psychotherapies (EABCT), Antalya, Turkey.
- Kearns, C., Tone, Y., Rush, G., & Lucey, J. V. (2010). Effectiveness of group-based cognitive-behavioural therapy in patients with obsessive-compulsive disorder. *The Psychiatrist, 34*(1), 6-9 <https://doi.org/10.1192/pb.bp.106.011510>
- Kocoglu, F., & Bahtiyar, B. (2021). Yale-Brown Obsession Compulsion Scale-Turkish self report form: A study of reliability and validity. *Journal of Clinical Psychology, 5*(3), 229-243.
- Koran, L. M., Hanna, G. L., Hollander, E., Nestadt, G., Simpson, H. B., & American Psychiatric Association (2007). Practice guideline for the treatment of patients with obsessive-compulsive disorder. *The American Journal of Psychiatry, 164*(7), 5–53.
- Mantz, S. C., & Abbott, M. J. (2017). Obsessive-compulsive disorder in paediatric and adult samples: Nature, treatment and cognitive processes. A review of the theoretical and empirical literature. *Behaviour Change, 34*(1), 1-34. <https://psycnet.apa.org/doi/10.1017/bec.2017.6>
- Mataix-Cols, D., Marks, I. M., Greist, J. H., Kobak, K. A., & Baer, L. (2002). Obsessive-compulsive symptom dimensions as predictors of compliance with and response to behaviour therapy: Results from a controlled trial. *Psychotherapy and Psychosomatics, 71*(5), 255-262. <https://doi.org/10.1159/000064812>
- Mathes, B. M., Van Kirk, N., & Elias, J. A. (2015). Review of psychotherapeutic approaches for OCD and related disorders. *Current Treatment Options in Psychiatry, 2*, 284-296.
- Md Rosli, A. N., Sharip, S., & Thomas, N. S. (2019). Scrupulosity and Islam: A perspective. *Journal of Spirituality in Mental Health, 1*-23. <https://doi.org/10.1080/19349637.2019.1700476>
- Md Rosli, A. N., Sharip, S., & Wan Ismail, W. S. (2017). Religious-integrated therapy for religious obsessive-compulsive disorder in an adolescent: A case report and literature review. *Mental Health, Religion & Culture, 21*(2), 204-209.
- Mohamad Arip, A. A., Sharip, S., & Md Rosli, A. N. (2018). Islamic integrated exposure response therapy for mental pollution subtype of contamination obsessive-compulsive disorder: A case report and literature review. *Mental Health, Religion & Culture, 21*(2), 210–218. <https://doi.org/10.1080/13674676.2018.1436047>

- Murray, C.J.L., & Lopez, A.D. (1996). The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. *Global Burden of Disease and Injury Series, 1*.
- Nursi, S. (2008). *Sözler, [The words]*, Trans. Ş. Vahide. Sözlcr.
- Nursi, S. (2010). *Sözler, [The words]*, Trans. H. Akarsu. The Light.
- Nursi, S. (2012). *İşaratül İcaz, [Signs of Miraculousness]*, Trans. V. Şükran. Sözlcr.
- Olatunji, B. O., Davis, M. L., Powers, M. B., & Smits, J. A. (2013). Cognitive-behavioral therapy for obsessive-compulsive disorder: A meta-analysis of treatment outcome and moderators. *Journal of Psychiatric Research, 47*(1), 33-41. <https://doi.org/10.1016/j.jpsychires.2012.08.020>
- Omranifard, V., Akuchakian, S., Almasi, A., & Maraci, M. R. (2011). Effect of religious cognitive-behavior therapy on religious content obsessive compulsive disorder and marital satisfaction. *European Psychiatry, 26*(2), 1742-1742. [https://doi.org/10.1016/S0924-9338\(11\)73446-0](https://doi.org/10.1016/S0924-9338(11)73446-0)
- Ost, L. G., Havnen, A., Hansen, B., & Kvale, G. (2015). Cognitive behavioral treatments of obsessive-compulsive disorder. A systematic review and meta-analysis of studies published 1993–2014. *Clinical Psychology Review, 40*, 156-169. <https://doi.org/10.1016/j.cpr.2015.06.003>
- Pearce, M. J., Koenig, H. G., Robins, C. J., Nelson, B., Shaw, S. F., Cohen, H. J., & King, M. B. (2015). Religiously integrated cognitive behavioral therapy: A new method of treatment for major depression in patients with chronic medical illness. *Psychotherapy (Chicago, Ill.), 52*(1), 56–66. <https://doi.org/10.1037/a0036448>
- Eric .A. S., Lewin, A.B., (Eds.). (2017). *Treatment of scrupulosity in childhood obsessive compulsive disorder*. Springer.
- Ponniah, K., Magiati, I., & Hollon, S. D. (2013). An update on the efficacy of psychological therapies in the treatment of obsessive-compulsive disorder in adults. *Journal of Obsessive-Compulsive and Related Disorders, 2*(2), 207–218. <https://doi.org/10.1016/j.jocrd.2013.02.005>
- Prasko, J., Raszka, M., Adamcova, K., Grambal, A., Koprivova, J., Kudrnovská, H., Latalova, K., & Vyskocilová, J. (2009). Predicting the therapeutic response to cognitive behavioural therapy in patients with pharmacoresistant obsessive-compulsive disorder. *Neuro Endocrinology Letters, 30*(5), 615–623.
- Rachman S. (1998). A cognitive theory of obsessions: Elaborations. *Behaviour Research and Therapy, 36*(4), 385–401. [https://doi.org/10.1016/s0005-7967\(97\)10041-9](https://doi.org/10.1016/s0005-7967(97)10041-9)
- Rachman, S., & de Silva, P. (1978). Abnormal and normal obsessions. *Behaviour Research and Therapy, 16*(4), 233–248. [https://doi.org/10.1016/0005-7967\(78\)90022-0](https://doi.org/10.1016/0005-7967(78)90022-0)
- Rosa-Alcázar, A.L., Sánchez-Meca, J., Gómez-Conesa, A., & Marín-Martínez, F. (2008). Psychological treatment of obsessive-compulsive disorder: A meta-analysis. *Clinical Psychology Review, 28*(8), 1310-1325. <https://doi.org/10.1016/j.cpr.2008.07.001>
- Rothman, A., & Coyle, A. (2018). Toward a framework for Islamic psychology and psychotherapy: An Islamic model of the soul. *Journal of Religion and Health, 57*, 1731-1744. <https://doi.org/10.1007/s10943-018-0651-x>
- Rufer, M., Grothusen, A., Maß, R., Peter, H., & Hand, I. (2005). Temporal stability of symptom dimensions in adult patients with obsessive-compulsive disorder. *Journal of Affective Disorders, 88*(1), 99-102. <https://doi.org/10.1016/j.jad.2005.06.003>
- A. Bozkurt. (Ed.). (2021). *Kaplan & Sadock's comprehensive textbook of Psychiatry*. Anxiety Disorders (pp.1718- 88). Günes Medical Bookstore.

- Safak, Y., Karadere, M. E., Ozdel, K., Ozcan, T., Turkcapar, M. H., & Kuru, E. (2014). Obsesif kompulsif bozuklukta bilişsel davranışçı grup psikoterapisinin etkinliğinin değerlendirilmesi [The effectiveness of cognitive behavioral group psychotherapy for obsessive-compulsive disorder]. *Turkish Journal of Psychiatry*, 25(4), 225-233.
- Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. *Behaviour Research and Therapy*, 23(5), 571–583. [https://doi.org/10.1016/0005-7967\(85\)90105-6](https://doi.org/10.1016/0005-7967(85)90105-6)
- Sanavio, E. (1988). Obsessions and compulsions: The Padua Inventory. *Behaviour Research and Therapy*, 26(2), 169–177. [https://doi.org/10.1016/0005-7967\(88\)90116-7](https://doi.org/10.1016/0005-7967(88)90116-7)
- Siev, J., & Cohen, A. B. (2007). Is thought–action fusion related to religiosity? Differences between Christians and Jews. *Behaviour Research and Therapy*, 45, 829–837. <https://doi.org/10.1016/j.brat.2006.05.001>
- Simpson, H. B., Huppert, J. D., Petkova, E., Foa, E. B., & Liebowitz, M. R. (2006). Response versus remission in obsessive-compulsive disorder. *The Journal of Clinical Psychiatry*, 67(2), 269–276. <https://doi.org/10.4088/jcp.v67n0214>
- Stanley, M. A., & Turner, S. M. (1995). Current status of pharmacological and behavioral treatment of obsessive-compulsive disorder. *Behavior Therapy*, 26(1), 163–186.
- Starcevic, V., & Brakoulias, V. (2008). Symptom subtypes of obsessive-compulsive disorder: Are they relevant for treatment? *The Australian and New Zealand Journal of Psychiatry*, 42(8), 651–661. <https://doi.org/10.1080/00048670802203442>
- Toprak, T. B. (2018). Dini obsesyon ve kompulsiyonların psikoterapisinde kuramlar, imkanlar, sınırlılıklar [The treatment of scrupulosity: between theories, opportunities and limits]. *Turkey Journal of Holistic Psychotherapy*, 1(1), 123-141.
- Toprak, T. B. (2022). *Dini içerikli psiko-eğitim eklenmiş bilişsel davranışçı grup psikoterapisinin dini içerikli obsesyon ve kompulsiyonları olan hastalardaki etkililiği* [Effectiveness of religious psycho-education integrated cognitive behavioral group therapy in the treatment of the patients with religious obsessions and compulsions](Publication No. 719272) [Master’s thesis, Hasan Kalyoncu University].
- Toprak, T. B. & Emül, H. M (2016, July 27-31). *A contrubition attempt to contemporary OCD theories: “Meratib-i ilim of dimağ” framework within Islamic tradition* [Conference presentation]. Annual OCD Congress, Chicago, United States.
- Toprak, T.B. (2018, June 7-9) *An attempt for alternative approach for the structure of human and its applications: Ilm’u nafs* [Conference presentation]. World Congress of Pyschotherapy, Amsterdam, Netherlands.
- Toprak, T.B. (Ed.). (2021). *İslam ve psikoterapi: Bir model ve uygulama örneği [Islam and psychotherapy: An example of a model and application]*. (pp.166-167). Muhit Book.
- Torres, A. R., Prince, M. J., Bebbington, P. E., Bhugra, D., Brugha, T. S., Farrell, M., Jenkins, R., Lewis, G., Meltzer, H., & Singleton, N. (2006). Obsessive-compulsive disorder: Prevalence, comorbidity, impact, and help-seeking in the British National Psychiatric Morbidity Survey of 2000. *The American Journal of Psychiatry*, 163(11), 1978–1985.
- Tukel, R., Polat, A., Ozdemir, O., Aksut, D., & Turksay, N. (2002). Comorbid conditions in obsessive-compulsive disorder. *Comprehensive Psychiatry*, 43(3), 204–209. <https://doi.org/10.1053/comp.2002.32355>.

- Turkcapar, H. (2005). Yale Brown Obsession Compulsion Scale Self-Assessment Form (YBOCS-Self-Report). <https://www.bilisseldavranisci.org/images/stories/olcekler/yobcshakan.pdf>
- Twohig, M. P., Abramowitz, J. S., Bluett, E. J., Fabricant, L. E., Jacoby, R. J., Morrison, K. L., Reuman, L., & Smith, B. M. (2015). Exposure therapy for OCD from an acceptance and commitment therapy (ACT) framework. *Journal of Obsessive-Compulsive and Related Disorders*, 6, 167–173. <https://doi.org/10.1016/j.jocrd.2014.12.007>
- Twohig, M. P., Abramowitz, J. S., Smith, B. M., Fabricant, L. E., Jacoby, R. J., Morrison, K. L., Bluett, E. J., Reuman, L., Blakey, S. M., & Ledermann, T. (2018). Adding acceptance and commitment therapy to exposure and response prevention for obsessive-compulsive disorder: A randomized controlled trial. *Behaviour Research and Therapy*, 108, 1–9.
- Ulusoy, M., Sahin, N.H., & Erkmen, H. (1998). Turkish Version of the Beck Anxiety Inventory. *Journal of Cognitive Psychotherapy*, 12, 163-172.
- van Oppen, P., van Balkom, A. J., de Haan, E., & van Dyck, R. (2005). Cognitive therapy and exposure in vivo alone and in combination with fluvoxamine in obsessive-compulsive disorder: A 5-year follow-up. *The Journal of Clinical Psychiatry*, 66(11), 1415–1422. <https://doi.org/10.4088/jcp.v66n1111>
- Van Oudheusden, L., van de Schoot, R., Hoogendoorn, A., van Oppen, P., Kaarsemaker, M., Meynen, G., & van Balkom, A. (2020). Classification of comorbidity in obsessive-compulsive disorder: A latent class analysis. *Brain and Behavior*, 10(7), e01641. <https://doi.org/10.1002/brb3.1641>
- Vyskocilova, J., Prasko, J., & Sipek, J. (2016). Cognitive behavioral therapy in pharmacoresistant obsessive–compulsive disorder. *Neuropsychiatric Disease and Treatment*, 12, 625-639.
- Whittal, M. L., Robichaud, M., Thordarson, D. S., & McLean, P. D. (2008). Group and individual treatment of obsessive-compulsive disorder using cognitive therapy and exposure plus response prevention: A 2-year follow-up of two randomized trials. *Journal of Consulting and Clinical Psychology*, 76(6), 1003–1014. <https://doi.org/10.1037/a0013076>
- Williams, A. D., Lau, G. & Grisham, J. R. (2013). Thought-action fusion as a mediator of religiosity and obsessive-compulsive symptoms. *Journal of Behavior Therapy and Experimental Psychiatry*, 44(2), 207–212. <https://doi.org/10.1016/j.jbtep.2012.09.004>
- Wilson, K. A., & Chambless, D. L. (1999). Inflated perceptions of responsibility and obsessive-compulsive symptoms. *Behaviour Research and Therapy*, 37(4), 325–335.
- Witzig, T. (2017, July 7-9). *Developing effective treatment plans for religious scrupulosity with emphasis on adult clients* [Conference presentation]. Annual OCD Congress, San Francisco, United States.
- World Health Organization. (2001). *Mental Health: A call for action*. Geneva: by World Health Minister. <https://www.mhinnovation.net/sites/default/files/downloads/resource/Mental%20Health%20A%20Call%20for%20Action%20by%20World%20Health%20Ministers.pdf>
- Zandberg, L. J., Zang, Y., McLean, C. P., Yeh, R., Simpson, H. B., & Foa, E. B. (2015). Change in obsessive-compulsive symptoms mediates subsequent change in depressive symptoms during exposure and response prevention. *Behaviour Research and Therapy*, 68, 76–81. <https://doi.org/10.1016/j.brat.2015.03.005>

