International Journal of Cognitive Behavioral Therapy
https://doi.org/10.1007/s41811-025-00258-z

CBT Integrated with the 4 T Psychoeducation Model for Muslim Scrupulosity: A Case Study

Nurşin Çetiner[1,3] · **Taha Burak Toprak**[2,3]

Accepted: 5 June 2025

Abstract

Scrupulosity is a subtype of obsessive–compulsive disorder (OCD) characterized by obsessions and compulsions with religious content. A strong research supports that exposure and response prevention (ERP) intervention and cognitive behavioral therapy (CBT) are effective for the treatment of OCD. However, it is necessary to be careful in the application of therapy and ERP in religious individuals. Because individuals may not find the interventions compatible with their religious values and may not be motivated enough, in this case study, the process of cognitive psychoeducational model (4 T model) and religious psychoeducation integrated CBT with a Muslim woman with scrupulosity is presented. The therapy process consisted of 11 face-to-face sessions, including cognitive interventions, religious psychoeducation, and ERP interventions. At the end of the intervention, obsession and compulsion symptoms were reduced, and this improvement was maintained at 1-week and 3-month follow-ups. This case illustrated the importance of using religious content in treating scrupulosity.

Keywords Scrupulosity (religious OCD) · Cognitive behavioral therapy (CBT) · Religious psychoeducation · 4 T model

Abbreviations

OCD	Obsessive compulsive disorder
ERP	Exposure and response prevention
CBT	Cognitive behavioral therapy
4 T model	The 4 T model is a psychoeducational cognition model developed by Toprak (2016) based on the works of Islamic scholars

✉ Nurşin Çetiner
nursincetiner@hotmail.com

[1] Department of Psychology, Hasan Kalyoncu University, Gaziantep, Turkey

[2] Department of Psychology, Ibn Haldun University, Istanbul, Turkey

[3] Association for Psychology and Psychotherapy Research, Istanbul, Turkey

Published online: 04 July 2025

Introduction

Scrupulosity is a subtype of obsessive compulsive disorder (OCD) characterized by obsessions and compulsions with religious/moral content (Siev et al., 2021). In the literature, various terms, such as "religious OCD, OCD with religious content, and scrupulosity," are used to describe this subtype of OCD. In this article, we have chosen to use the term "scrupulosity." In its broadest sense, scrupulosity means the fear of an unrealized sin. Abramowitz & Jacoby suggest that common obsessions in scrupulosity are suspicions of having sinned or made a mistake related to an immoral situation, intrusive thoughts and images related to sacrilege or blasphemy, doubts about not being sufficiently religious, moral, and pious (faith doubt), fears of not being able to perform a worship or religious ritual correctly, and fear of being punished and cursed by God for eternity. Common compulsions in scrupulosity include excessive worshipping, repeating religious rituals or verses until they feel "perfect," seeking unnecessary reassurance from people and clergy whose religious knowledge is trusted, and excessive or maladaptive confession. Individuals with scrupulosity generally avoid places of worship (e.g., mosques, masjids), sacred texts and religious icons, listening to sermons or religious conversations, reading texts with religious content, and situations and stimuli that trigger their obsessions (e.g., pornography, alcohol, and texts about atheism or the devil) (Abramowitz & Jacoby, 2014).

According to the "Treatment Effectiveness Report" of the American Psychological Association published in 2015, the most effective treatment supported by research in the treatment of OCD is ERP (exposure and response prevention) and the most effective therapy is cognitive behavioral therapy (CBT) (American Psychological Association, 2021). Both CBT and ERP are found to be effective in the treatment of OCD, including scrupulosity by many research groups (Ponniah et al., 2013; McKay et al., 2015; Farhoodi et al., 2019). Studies have shown that both CBT and ERP are superior to control conditions in reducing OCD symptoms (Mclean et al., 2001). While some studies suggest that specific OCD subtypes, such as hoarding and scrupulosity subtypes, generally show poorer responses to ERP (Starcevic & Brakoulias, 2008; Siev et al., 2021; Mataix-Cols et al., 2002; Ferrão et al., 2006; Alonso et al., 2001) the evidence regarding scrupulosity's treatment resistance remains mixed. Some research indicates that scrupulosity responds to ERP similarly to other OCD subtypes (Abramowitz & Jacoby, 2014), while others highlight unique challenges in distinguishing religious beliefs from OCD symptoms, which can complicate treatment engagement (Garcia, 2008).

Contrary to the concern that ERP inherently conflicts with religious beliefs, appropriately implemented ERP does not seek to change beliefs but instead helps individuals regain control over compulsive behaviors in a way that is consistent with their values (Siev & Huppert, 2017). However, research on treatment adherence suggests that religious individuals with OCD were more likely to receive pastoral counseling and less likely to continue medication compared to non-religious individuals with OCD (Siev et al., 2011). Additionally, CBT for religious patients requires awareness of issues that are not encountered in the treatment of OCD patients with other types of symptoms and that when not sensitive to

religious values, clients may not be sufficiently motivated to participate in standard treatment methods or may perceive these interventions as insensitive to their beliefs (Abramowitz and Jacoby, 2014).

According to the literature on the treatment of scrupulosity, the importance and difficulty of separating the religious beliefs and rituals of the person from the obsessions and compulsions that are manifested as symptoms, the significance of preventing people from performing only compulsions and not religious rituals, and the necessity of interventions that are sensitive to the culture and the values of the client and the need for collaboration with clergy are emphasized (Siev & Huppert, 2017). A systematic review of scrupulosity found that religiously sensitive approaches contribute to the treatment process (Toprak & Özçelik, 2024). Similarly, Garcia (2008), in a case study of a 21-year-old Catholic scrupulosity client, noted the ethical and practical difficulties of distinguishing between thoughts and behaviors to be targeted as a symptom of OCD and actual religious beliefs to be protected. Moreover, in a group study conducted by Aouchekian et al. (2017) with Muslim clients, religious CBT with religious psychoeducational sessions and conducting the process in collaboration with a clergyman were found to be effective in treating scrupulosity. In addition, Bonchek and Greenberg (2009) have shown that fear-guided prayer, a variant of ERP, is a promising practice in Orthodox Jews with scrupulosity.

The 4 T model is a psychoeducational cognitive model developed by Toprak and Emül (2016), grounded in Islamic scholarship, particularly the works of Bediüzzaman Said Nursi. It is built upon psycho-ontological principles derived from *Ilm an-Nafs*, which integrates scientific, philosophical, and theological perspectives (Toprak, 2024a). According to Toprak (2024b), in religious OCD, the current cognitive model does not always provide a convincing explanation for patients struggling to distinguish between their obsessions and their religious beliefs (faith) or values. This difficulty may affect the establishment of secure relationships in therapy. The 4 T model aims to address this challenge by offering a more persuasive form of psychoeducation, incorporating a religiously sensitive approach and a structured model. According to Toprak (2021), this psychoeducation provides a new framework for the cognitive faults of "overemphasizing thought/thought-action fusion," which are found to be common in OCD patients.

Unlike cognitive behavioral therapy, which conceptualizes cognition without a structured hierarchy, this model defines a staged process of mental functioning. The four stages of mind, abbreviated as 4 T, include tahayyul (imagination), tasawwur (conceptualization/detailed imagination), taakkul (reasoning/reflecting), and tasdiq (confirmation) (Toprak, 2024b). The part expressed as "tasawwur" in the model was replaced by the concept of "tawahhum," which was used by the author in the sense of "conjecture," in a later study using the model (Toprak, 2024b), considering it to be simpler and more effective. According to this model, while the first two stages are against the will of the person, the third stage is partly willful and partly non-willful, and the person is not held responsible for the thoughts occurring in the first three stages. The only stage that is fully willful, and thus the only stage for which a person is responsible, is tasdiq, defined as the stage of "confirmation." This stage is not considered to reside in the mind but rather in the heart.

In summary, the 4 T model has three critical points that are different from the existing CBT cognitive psychoeducation. First, it presents a hierarchy of mental processes and defines actions as being approved in the heart. Second, it emphasizes that not all mental processes are willful. Finally, it states that individuals are not responsible for thoughts they do not confirm (Toprak, 2021; Toprak & Emül, 2016).

In addition, the 4 T model differs from acceptance and commitment therapy (ACT) in that it conceptualizes the heart as a distinct entity, localizing values within it. It also works with thought by defining a hierarchy in thought processes instead of defusing it.

The 4 T model has been applied to patients with religious OCD and is suitable for clinical practice and integrative work. The model has been used in resistant cases of religious OCD, and treatment has been shown to result in improvement (Toprak, 2024b). In addition, a randomized control trial applying the 4 T model to patients with religious/moral intrusions has reported significant reductions in OCD symptoms. Notably, patients demonstrated significant improvements in scores on the Beck depression inventory, Yale-Brown obsession compulsion scale, and Padua nventory, alongside positive verbal feedback about the model (Toprak, 2018, 2022). Although this model was primarily developed for OCD, particularly scrupulosity, it has also been used in various disorders such as post-traumatic stress disorder (Işık and Toprak, 2024).

This study aims to present the implementation and results of religious psychoeducation (4 T model) integrated CBT therapy and other religious information (anecdotes from the lives of Islamic figures) with a Muslim client with scrupulosity in a case study.

Method

Case Presentation

Descriptive Information

Here is a 24-year-old female, a university graduate currently not employed. She lives with her parents and five siblings. She describes her family as adherent to religious values. There is no one in the family with a psychiatric diagnosis. The client also has no past psychiatric diagnosis or physiological illness but describes herself as a generally anxious person. One year ago, she stated that she had recurrent behaviors for ablution and ghusl, but these did not affect her life very negatively and do not continue now.

Problem List

The client has been exhibiting OCD symptoms that manifested 2 months ago, characterized by obsessions like religious doubts, accompanied by compulsive rituals like reciting the Shahada and seeking repentance (tawbah). Moreover, she avoids situations that trigger these obsessions, including praying, reading the Qur'an, and

engaging with religious texts, and she seeks reassurance about her faith from individuals perceived to possess religious authority. Disturbing thoughts of a doubtful nature concerning fundamental religious principles disturb her mind ("Is there a God? Is there a prophet? Is there life after death? You do not believe in God"). She perceives herself as the sole recipient of these thoughts, endeavoring to suppress them by attributing their existence to the harm of her faith. She harbors a fear that failure to reaffirm her beliefs and suppress these intrusive ruminations successfully will result in a loss of her religious convictions. Over the past 2 months, the client has grappled with significant impairment in her daily functioning due to her overwhelming preoccupation with these obsessions and compulsions. She has been unable to adequately prepare for an upcoming examination, concurrently experiencing feelings of hopelessness and diminished social connectedness.

Conditions that Increase and Decrease Symptoms

The client stated that her obsessions increased before going to sleep, when she woke up in the morning, when she read religious texts or listened to conversations, read the Qur'an, and prayed, and decreased when she paid attention to a task. However, she stated that recently, obsessions arose unexpectedly, took up a lot of her time, and affected her daily life.

Situations that are Living Problems and Case Formulation

A situation in which the client had problems is presented below. The CBT formulation of OCD was made according to the formulation proposed by Rachman (1998) and Salkovskis (1999), and unlike the classical formulation of CBT in the form of state-thought-feeling-sensation-behavior, the client's negative interpretations and responsibility obsessions specifically defined in OCD were included. The formulation of the client's OCD symptoms is given in Fig. 1.

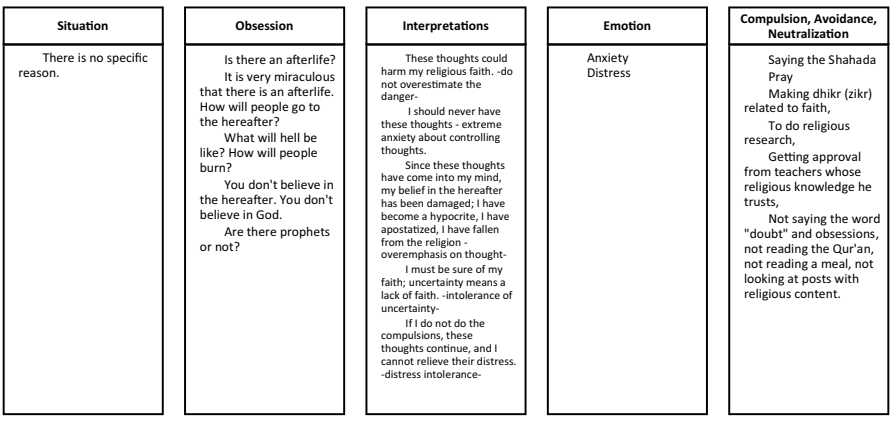

Fig. 1 Case formulation for client A

Materials

Yale-Brown Obsession and Compulsion Scale–Self Report (Y-BOCS–SR)

The self-report scale developed by Goodman et al. (1989) to measure the severity of obsessive–compulsive symptoms. The Turkish translation of the scale was conducted by Türkçapar (2005), and the validity and reliability study was conducted by Koçoğlu and Bahtiyar (2021). In the 19-item scale, each item is scored between 0 and 4, and the total score is calculated using only the first 10 items of the scale, including the first five items of obsessions and the first five items of compulsions. The total score obtained from the scale varies between 0 and 40 and is categorized as 0–7 subclinical; 8–15 mild; 16–23 moderate; 24–31 severe; 32–40 very severe (Koçoğlu & Bahtiyar, 2021).

Therapy and Therapist Assessment Form

It is a written feedback form prepared to evaluate whether the client benefited from the therapy, how the client benefited, and what the client attributed the benefits to. The form was prepared online, and the client was asked to fill it out one week after the therapy ended.

The Treatment

Client Selection

Client selection was realized by the client's self-referral to treatment and then the client's permission was obtained for publication. In the selection of the client, it was taken into consideration that the client had scrupulosity, that the Y-BOCS score met the OCD criteria (Y-BOCS = 26), that there was no ongoing medication and therapy, that the client wanted to receive treatment sensitive to religious values in the treatment process, and that the client agreed to receive psychoeducation with religious content in the treatment.

Information About the Interviewer

The treatment was administered by the first author, who holds a master's degree in clinical psychology and is pursuing a PhD in the same field. She undergoes supervision for cognitive behavioral therapy (CBT) training, adhering to the standards set by the Academy of Cognitive Therapy. Furthermore, weekly supervision was conducted with the second author of the article, who is a faculty member at the university. He is certified by the Academy of Cognitive Therapy (ACT) and the European Association for Behavioural and Cognitive Therapies (EABCT) as a therapist. He provides theoretical and practical training in CBT and is the "4 T Model" developer. The second author has been working on Islamic Psychology and Psychotherapy for

about 10 years and the first author for about 4 years, both on Islamic Sciences and their integration with the practice of psychotherapy. For many years, they have been part of a structure that has been interested in Islam, Psychology, and Psychotherapy research and has been continuously educating and training in this field. Studies are still carried out under the roof of the association (Association for Psychology and Psychotherapy Research).

Intervention Program

The program consisted of a structured 1-h assessment interview and 11 face-to-face psychotherapy sessions lasting 45–50 min each. Session frequency varied between one and two weeks, depending on the client's participation level. The intervention procedure was based on the group study conducted by Toprak (2022) in which the 4 T intervention, which is a cognitive behavioral therapy approach integrated psychoeducation with religious content, was implemented.

In this intervention program, the initial step involved conducting a comprehensive assessment and formulating the client's symptoms according to the cognitive model of OCD. Subsequently, psychoeducation regarding OCD and the cognitive model of OCD was presented to the client, addressing negative interpretations associated with obsessions (such as excessive responsibility and thought-action fusion). Upon completion of the cognitive intervention, the client was offered supportive psychoeducation with religious content (4 T Model). Progressive exposure and response prevention intervention (ERP) was implemented. The subsequent intervention sessions following the assessment are described in detail below.

Session 1: In this session, the client received psychoeducation about OCD and was presented with the cognitive-behavioral model of OCD. A "symptom list" was shared with the client, and homework was given so that the client could identify and note the areas of obsessions, compulsions, and erroneous beliefs.

Session 2**:** At the beginning of the session, the client arrived having completed her homework. Firstly, the homework was reviewed, and then the focus shifted to addressing negative interpretations associated with obsessions. Specifically, interpretations related to "inflated responsibility," "importance thoughts," and "beliefs about the importance of controlling one's thoughts" were addressed. The session incorporated the"favorite person"experiment to challenge overemphasizing thoughts and the "white bear" experiment to confront beliefs about the importance of controlling one's thoughts. The client's belief level in these interpretations was assessed before and after the interventions, revealing a noticeable decrease in negative beliefs. Additionally, alternative interpretations for each area were collaboratively generated and recorded.

Session 3: Upon entering the session, the client reported reduced obsessions. However, she expressed anxiety regarding the uncertainty concerning the persistence of doubts and the loss of her faith (iman), making efforts to confirm these aspects. In light of the client's statements, the session addressed the mistaken belief domain known as "intolerance of uncertainty." Throughout this session, the client was guided through various uncertainties in life, and anecdotes from the lives of

Islamic figures emphasizing uncertainties related to faith (iman) were shared with the client. This anecdote is as follows:

> *Umar ibn al-Khaṭṭāb went to Hudhayfah (ra), to whom the Prophet (s) confided the names of the hypocrites in Madeenah, and said to him: "I adjure you, by Allah. Has the Prophet (s) named me (among the hypocrites)?"*(pg 57, Ibn Qayyim al-Jawziyya, 2006.)

Session 4: In this session, a decrease in the client's motivation was observed, prompting the application of motivational interviewing techniques to assess the benefits and harms of both the current situation and potential change. Unlike the standard motivational interview, here, the client's values (such as being a good Muslim) were emphasized, and the compatibility of continuing with OCD with her values was evaluated.

Session 5: In this session, "overestimation of threat," one of the areas of mistaken beliefs, was studied. The "What is my main problem? OCD or Faith Problem" table was filled out with the client and shared with her so that she could read it until the next interview.

Session 6: The client expressed curiosity about the views of Islamic scholars on this subject because of the religious content of the obsessions and that she needed a statement on a religious dimension. Upon this request, the 4 T model was shared with the client, and the client's symptoms were addressed within the framework of this model (Fig. 2).

Within the framework of this model, firstly, the relevant sections from Nursi's (2008) "Treatise on Scrupulosity" were read together with the client. The sections read are as follows: [1]

> "Just as imagination (tahayyul) unbelief (kufr) is not unbelief (kufr), while conceptualization (tasawwur) misguidance is not misguidance, so reflecting (tafakkur) on misguidance is not misguidance. All imagining (tahayyul) and

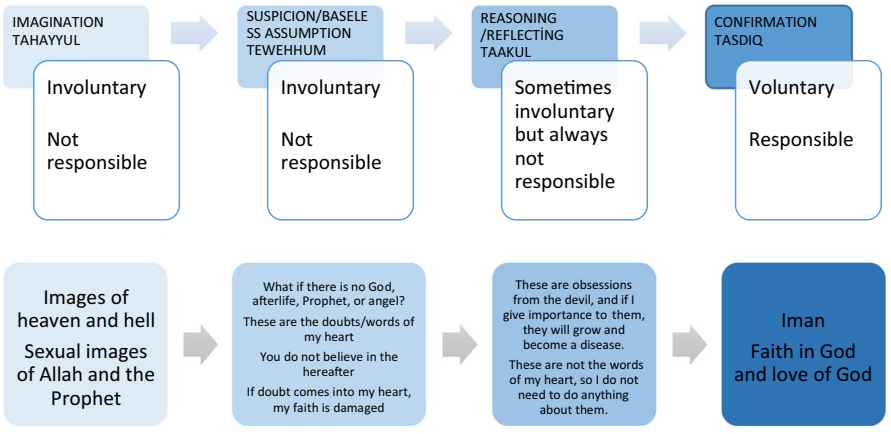

Fig. 2 Case formulation according to the 4 T model

suspecting/assuming baselessly (tewehhum), conceptualization (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. However, confirmation (tasdiq) is not like that; it depends on a balance" (Toprak, 2024b).

[1]The original text is in Turkish, with several English translations. This translation by Toprak (2024b) is preferred and quoted in this article as it is the translation of experts in the field.

After reading the text with the client, the client's symptoms were formulated within the framework of the 4 T model. The formulation of the client's symptoms is shown in Fig. 2. Thus, it was discussed whether the client's intrusive thoughts were intentional or not, whether the client was responsible for them or not, and the aim was for the client to learn that intrusive thoughts are not intentional and that the client is not responsible for them. In this context, religious explanations were not intended to resolve theological uncertainty, but rather to reduce the client's ambivalence about engaging in the ERP and to clarify that religious belief does not demand responsibility beyond the normal functioning of the mind.

Session 7: Past sessions were repeated, and then progressive exposure and response prevention intervention (ERP) steps were created with the client. The ERP steps are shown in Table 1. At the end of the session, homework was given to practice the first two steps.

Session 8: The client came to the session after applying the first two steps of ERP. She noted her distress level and observed that the distress level of the first two steps fell below 20%. We reviewed her experiences and discussed how she

Table 1 Exposure and response prevention (ERP) list of client

Avoidance situation	Distress degree
1. Praying the fard prayer when alone and not praying for OCD afterward	**40%**
2. Reading the Qur'an and not praying for OCD at that time	**45%**
3. Listening to religious talks and if obsessions come, not praying, not saying the Shahada, not repenting, not analyzing, not doing research on obsessions, not stopping the video	**50%**
4. Starting a religious conversation or commenting on a religious topic at home and not playing with the phone or leaving the room if the obsession comes up while the topic is being discussed	**55%**
5. Reading the Meal, if the obsession comes at that time, not praying, not saying the word-worship, not repenting, not analyzing, not doing research on obsessions, not stopping reading	**60%**
6. Reading texts with religious content, if the obsession comes at that time, not praying, not saying the Shahada, not repenting, not analyzing, not doing research on obsessions, not stopping the reading	**85%**
7. Saying the word "doubt" and then not praying, not saying the Shahada, not repenting, not analyzing, not researching obsessions	**90%**
8. Saying obsessions out loud and then not praying, not saying the Shahada, not repenting, not analyzing, not researching obsessions	**100%**

could proceed with the next steps. This week, the aim is to continue the first two steps and implement the next three steps.

Session 9: The client came to the session by applying the first two steps of ERP. The exposure intervention regarding saying the obsessions out loud, which is the last step of ERP, was performed as an in-session intervention. The client stated that she thought that if she said she did not want to talk about the obsessions at this stage, she would approve of them. This thought of the client was discussed together during the session, and the "4 T model Psychoeducation" was repeated, and the client was asked at which layer these thoughts were. The client stated that the thoughts were not "approved" because his heart did not approve of them, and he felt distressed about it. It was emphasized that expressing disapproved thoughts is not the same as approving them. Thereupon, it was observed that the client was more motivated to apply this step of ERP, and during the session, the client talked about his obsessions five times, and his distress level decreased. The aim is to continue all ERP steps during the week.

Session 10: The client stated that he continued to apply all ERP steps and that the distress level at the highest step dropped below 20%. The client stated that her obsessions have decreased now, that he does not have any compulsions or avoidances, and that he has intrusive thoughts while reading the text, but he thinks these are normal. However, when we started ERP, it was observed that there was an increase in reactive symptoms related to repeating ablution and performing ablution separately for each prayer. These symptoms were addressed by establishing a connection with previous sessions, and ERP steps related to these symptoms were determined. The aim was to implement these steps this week.

Session 11: All ERP steps were reviewed, a general review was made, therapy and therapist feedback was received, and the process was terminated after 1 month for a control interview.

After each session, the client was asked what he remembered from it, and feedback was received about the topics studied. The interventions applied during the sessions were noted in the therapy notebook followed by the client, and the client's notebook was read between each session, thus aiming to consolidate the interventions.

Results

Measurements were taken at the pre-intervention assessment interview (pre-test) and after intervention (post-test), in addition to before (6th session) and after (7th session) the religious content psychoeducation, which is a specific intervention, and at the 1-week and 3-month follow-up. The results are shown in Fig. 3. When the client's scale scores are examined, it is seen that the pre-treatment scores meet the criteria for OCD and are of high severity. However, there is a decrease as the sessions continue, and most of this decrease occurs after cognitive intervention and religious psychoeducation.

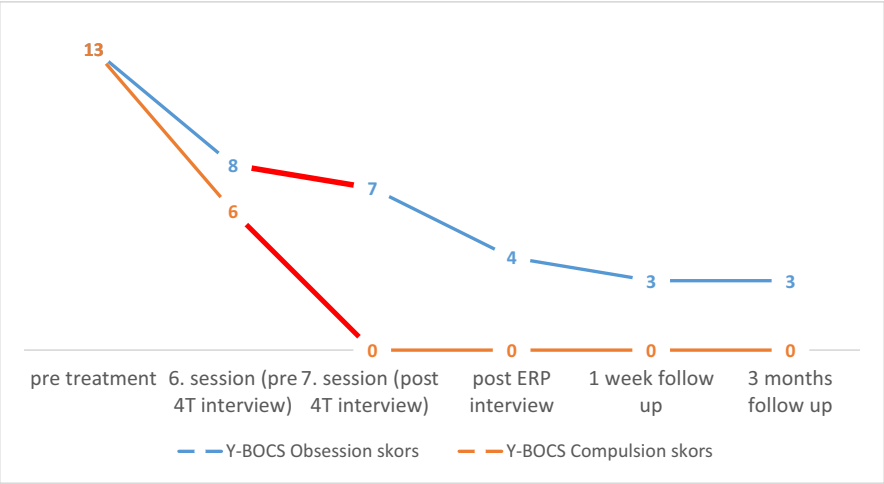

Fig. 3 Yale-Brown obsession and compulsion scale (Y-BOCS) scores

Especially after the psychoeducation with religious content, verbal feedback was received from the client, and this feedback was recorded with the client's permission. The verbal feedback of the client is as follows:

> *"I assumed that these thoughts were coming from my heart, but now I learned that they were not coming from my heart but from the Satanic whisperings. Before, when I was researching what the Imams said, I had read that if there was a doubt in the heart, the person should immediately turn away from this mistake and repent, and this had a terrible effect on me. Now, I have learned again from an Islamic scholar that my heart does not accept these things because they come to my mind, and my heart is disturbed by them. If these are not the words of my heart, then I don't need to do my compulsions such as repentance and Shahada."*

At the end of the therapy process, a "Therapy and therapist assessment form' was obtained from the client. The client's written feedback is as follows:

> Did you benefit from the therapy (How did you benefit?)?: *"Yes, I did. I learned that the compulsions and interpretations were putting my illness in a vicious circle. That was helpful. I was giving importance to the intrusive thoughts, and I had a great anxiety about controlling the thoughts. These were areas of erroneous beliefs. It was helpful to learn these. Said Nursi's "Treatise on Scrupulosity,"* an *anecdote about Hz. Ömer, the white bear experiment was also helpful.*"
> What were the most valuable things you learned in the therapy (Write in order of importance)?: *"First of all, I realized I gave too much importance to thoughts and always wanted to control them. These were areas of erroneous beliefs. Also, in the white bear experiment, I learned that the more I tried to*

block the thought, the more thoughts came. This was important for me because I thought that I was thinking these thoughts on purpose and that it was a problem for my faith that they came so often, but it was not. It was because I was suppressing the thoughts. Then I found out that the Vesuves come to the heart, then the heart is disturbed by it, and the heart does not accept it, and as a result, it comes to the mind, which made me very happy. I learned that imagination (tahayyul), suspicion/baseless assumption (tevehhüm), and reasoning/reflection (taakkul) three are involuntary, and confirmation (tasdiq) is voluntary. Then I learned that there is no complete certainty about anything in life and nothing complete and perfect in life. These were the most helpful things."

What do you think your therapist does particularly well? *"I didn't think healthy people have such thoughts, but I was wrong; healthy people also have such thoughts. My therapist explained this and showed me the research results on this subject. Then, he applied the white bear experiment. She talked about Said Nursi's "*Treatise on Scrupulosity*" and mentioned an anecdote about Hz. Ömer. I didn't know it, and I felt good to hear it."*

When do you think was the most profound moment of the therapy? *"What I heard Said Nursi say about waswasah (scrupulosity) in that session affected me, and it was a very relaxing moment. I was also impressed by what she said about Hz. Ömer."*

Why was this moment important for you? *"Because of my illness, I was constantly feeling the need to ask religious questions to hodjas or others. At the same time, I was doing research. I had listened to Nursi's videos (Treatise on Scrupulosity listening on YouTube) during my illness; I had also read his "*Treatise on Scrupulosity*," "but it was very superficial, and I didn't understand. However, at that moment, I was paying attention to more detail. I was relaxed by what I heard from a scholar."*

Discussion

In the present study, the implementation and results of a CBT intervention with added religious Information on a Muslim patient with scrupulosity are presented. According to the research findings, it was observed that OCD scores decreased in the client's assessment based on self-report scales. It was observed that this decrease continued throughout the sessions. In the process, the client's daily functionality also increased. In a systematic review study conducted in recent years (McDonald et al., 2023), it was reported that in eight studies consisting of cognitive therapy, ERP, and CBT applications conducted in the form of individual interviews using the Y-BOCS scale, a decrease of 4 to 10 points in Y-BOCS scores or a total score below 12 or a change of 35% was accepted as the criterion for improvement in the studies. Considering this criterion, it can be said that the client's OCD symptoms improved consistently with previous studies (Y-BOCS decreased from 26 to 4).

In addition, it is observed that there was a 7-point change in the client's OCD scores before and after the psychoeducation intervention with religious content. Considering that this session was only a 1-session intervention and the

inter-session period was 15 days, it is seen that there was a significant decrease in OCD severity from mild to sub-clinical level in 15 days with a 1-session intervention. This shows that OCD symptoms decreased after psychoeducation with religious content. The client's verbal feedback at the end of the session also supports this. This finding is similar to previous studies indicating the importance of religion-sensitive interventions and the effectiveness of religious CBT practices in religious clients with religious OCD symptoms (Aouchekian et al., 2017; Garcia, 2008; Siev & Huppert, 2017; Toprak, 2018, 2022).

In summary, in this study, it was observed that the client's symptoms decreased from severe to subclinical levels in a relatively short 11-session intervention program. It is thought that the client's commitment to the therapy process and her openness to cooperation, trusting that it would be a process sensitive to her religious sensitivities, and the inclusion of the religious references she needed regarding her symptoms increased the momentum of improvement in the treatment process. The client's symptoms are related to having doubts about his/her faith and he/she seeks a religious reference, especially about the content of doubts and obsessions. As a matter of fact, in her written feedback after the treatment, the client stated that she was constantly looking for a religious reference by asking questions and doing research on people whose religious knowledge she trusted due to her illness, and therefore, evaluating her symptoms with a reference from a scholar relieved her. Based on the client's statements, the 4 T intervention increased the client's trust in the information obtained in the process and provided confidence. On the other hand, the client also stated in the verbal feedback that it was helpful for him to learn that the distinction between imagination (tahayyul), suspicion (teehhüm), reasoning (taakkul), and confirmation (tasdiq) and that only the part of assent is willful in this distinction so that obsessions are not things that his heart does not accept. When evaluated from this point of view, it is seen that the definition of a hierarchy in the 4 T model in the functioning processes of the mind and the separation of these processes as voluntary and involuntary are beneficial for the treatment process of this case.

Conclusion

In summary, the implementation of religious psychoeducation integrated CBT intervention in the treatment of a female patient diagnosed with scrupulosity with intrusions of religious doubt and compulsions of Shahada and repentance led to a significant decrease in obsessive and compulsive symptoms and a decrease in diagnostic criteria to a subclinical level. In addition, there was a significant decrease in the patient's OCD symptoms after the 4 T intervention. The findings of this study have contributed to clinicians and the literature for the treatment of scrupulosity, which is considered to be treatment-resistant, by showing that the inclusion of religious sensitivity and religious content in the treatment process for religious women with scrupulosity can positively affect the treatment outcomes.

Limitation and Future Study

In this study, psychoeducation with religious content was integrated into CBT intervention. In future studies, the effectiveness of only religious psychoeducation + ERP intervention can be examined. Case comparison studies can be conducted by applying another therapy school and the intervention program used in this study to different clients with the same symptoms.

In our study, psychoeducation intervention with religious content was applied in one session. In future studies, it can be supported by spreading it over several sessions. In addition, since the treatment process was recently terminated in this study, 1-month and 3-month follow-up measurements could not be taken yet. In future studies, 1-month and 3-month follow-up studies can be performed to evaluate the interventions in terms of preservation of improvement.

Our study is a case study. Therefore, it can be said that the intervention used in this study reduced OCD symptoms only in this particular case (a Muslim woman). To talk about the effectiveness of this intervention and to generalize it to other genders or religions, more studies, especially randomized controlled trials, are needed. Although there are randomized controlled studies in which the 4 T model was applied in larger samples (Toprak, 2022) and studies in which it was applied for other disorders such as posttraumatic stress disorder (Işık and Toprak, 2024), there is no data for the adaptation of the model to individuals from other religions. In this respect, it is evident that more studies on the 4 T model are needed. Perhaps future studies can focus on studies such as single case study design. In addition, only the Yale-Brown obsession compulsion scale and verbal and written feedback from the client were used as measurement tools in this study. In future studies, quantitative measurements can be supported with different measurement tools.

Author Contributions The concept of the article was developed jointly by both authors. Nurşin Çetiner was responsible for conducting the literature review, data collection, and implementation of the study, as well as writing the manuscript. Taha Burak Toprak provided supervision during the implementation process and critically reviewed the manuscript. Both authors have approved the final version of the manuscript.

Data Availability The data and materials supporting the findings of this case study are available from the corresponding author upon reasonable request. Due to confidentiality agreements, individual participant data cannot be made publicly available.

Declarations

Declaration of Generative AI and AI-assisted Technologies in the Writing Process During the preparation of this work, the authors used DeepL, Chat GPT, and Grammarly to translate the text and enhance the readability and clarity of the translation for the audience. After using this tool/service, the authors reviewed and edited the content as needed and took full responsibility for the content of the publication.

Ethics Approval This case study did not require ethical approval as it involved anonymized data and did not pose any risk to participants. This study was conducted in accordance with the Declaration of Helsinki.

Human Ethics and Consent to Participate Written informed consent was obtained from the patient for publication of this case study.

Competing interests The authors declare no competing interests.

References

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.

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*, 535–540.

American Psychological Association. (2021). *Treatment target: Obsessıve-compulsıve disorder.* Obsessive-Compulsive Disorder | Society of Clinical Psychology (div12.org) (7.12.2021).

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*, 158. https://doi.org/10.4103/abr.abr_115_16

Bonchek, A., & Greenberg, D. (2009). Compulsive prayer and its management. *Journal of Clinical Psychology, 65*(4), 396–405. https://doi.org/10.1002/jclp.20558

Farhoodi, F., Fadardi, J. S., Chamanabad, A. G., & Mirhoseini, S. H. (2019). Effectiveness of cognitive behavioral therapy based on exposure and response prevention on patients with contamination obsessive-compulsive disorder and scrupulosity. *Journal of Shahid Sadoughi University of Medical Sciences*. https://doi.org/10.18502/ssu.v27i11.2496

Ferrão, Y. A., Shavitt, R. G., Bedin, N. R., De Mathis, M. E., Lopes, A. C., Fontenelle, L. F., & Miguel, E. C. (2006). Clinical features associated with refractory obsessive-compulsive disorder. *Journal of Affective Disorders, 94*, 199–209.

Garcia, 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.

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.

Ibn Qayyim al-Jawziyya, (2006*). Spiritual disease and ıt's cure*. Al-Firdous.

Işık, H. R., & Toprak, T. B. (2024). Case report: Recovery from sexual assault: A religion-adapted cognitive behavioral therapy for a woman sexual assault survivor. *European Journal of Trauma & Dissociation*

Koçoğlu, F. & Bahtiyar, B. (2021). Yale-Brown Obsession Compulsion Scale-Turkish Self Report Form: A study of reliability and validity. Klinik Psikoloji Dergisi. 1. https://doi.org/10.5455/kpd.26024438m000047

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 behavior therapy: Results from a controlled trial. *Psychotherapy and Psychosomatics, 71*, 255–262.

McDonald, S., Melkonian, M., Karin, E., Dear, B. F., Titov, N., & Wootton, B. M. (2023). Predictors of response to cognitive behavioral therapy (CBT) for individuals with obsessive-compulsive disorder (OCD): A systematic review. *Behavioral and Cognitive Psychotherapy, 51*(4), 302–19.

McKay, D., Sookman, D., Neziroglu, F., Wilhelm, S., Stein, D. J., Kyrios, M., & Veale, D. (2015). Efficacy of cognitive-behavioral therapy for obsessive-compulsive disorder. *Psychiatry Research, 225*(3), 236–246.

McLean, P. D., Whittal, M. L., Thordarson, D. S., Taylor, S., Söchting, I., Koch, W. J., Paterson, R., & Anderson, K. W. (2001). Cognitive versus behavior therapy in the group treatment of obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology, 69*(2), 205–214.

Nursi, S. (2008). Sözler*, [The words],* Trans. Ş. Vahide. Sözler.

Ponniah, K., Magiati, I., & Hollon, S. D. (2013). An update on the efficacy of psychological treatments for 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

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

Salkovskis, P. M. (1999). Understanding and treating obsessive-compulsive disorder. *Behavior Research and Therapy, 37*, S29–S52.

Siev, J., Baer, L., & Minichiello, W. E. (2011). Obsessive-compulsive disorder with predominantly scrupulous symptoms: Clinical and religious characteristics. *Journal of Clinical Psychology, 67*(12), 1188–1196. https://doi.org/10.1002/jclp.20843

Siev, J., Rasmussen, J., Sullivan, A. D., & Wilhelm, S. (2021). Clinical features of scrupulosity: Associated symptoms and comorbidity. *Journal of Clinical Psychology, 77*(1), 173–188.

Siev, J. & Huppert, D. J. (2017). Treatment of scrupulosity-related obsessive-compulsive disorder. In Storch, E.A., Lewin, A.B., (Eds.), *Clinical handbook of obsessive– Compulsive and related disorders.* NewYork: Springer International Publishing

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). *An attempt for alternative approach for the structure of human and its applications: Ilm'u Nafs.* 22. World Congress of Psychotherapy June 7–9 Amsterdam.

Toprak, T. B. (2021). İslam ve Psikoterapi: Bir Model ve Uygulama Örneği. T. B. Toprak (Ed.), *İslam* Düşüncesinde *Psikoloji ve Psikoterapi* (ss. 151–210). İstanbul: Muhit Kitap.

Toprak, T. B. (2022). Dini içerikli psiko-eğitim eklenmiş bilişsel davranışçı grup psikoterapinin dini içerikli obsesyon ve kompulsiyonları olan hastalardaki etkililiği (Yayınlanmamış doktora tezi). Hasan Kalyoncu Üniversitesi, Gaziantep.

Toprak, T. B. (2024a). Rethinking psycho-ontology in the context of Ilm an-Nafs (the study of self by Muslim scholars) and clinical applications. *Spirituality in Clinical Practice*. https://doi.org/10.1037/scp0000390

Toprak, T. B. (2024b). Rethinking cognitive psycho-education-4T Model-in the psychotherapy of religious obsessive-compulsive disorder: Report of three resistant cases. *Spiritual Psychology and Counseling, 9*(1), 75–105.

Toprak, T. B. & Emül, H. M (2016). *A contribution attempt to contemporary ocd theories: "Meratib-i ilim of dimağ" framework within Islamic tradition*, 23. Annual OCD Congress July 27–31 Chicago.

Toprak, T. B., & Özçelik, H. N. (2024). Psychotherapies for the treatment of scrupulosity: A systematic review. *Current Psychology, 43*(26), 22361–75.

Türkçapar, H. (2005). Yale Brown obsesyon Kompulsiyon Ölçeği Kendi Kendini Değerlendirme Formu (YBOKÖ-Öz Bildirim).