



Overview of Obsessive Compulsive Disorder (OCD), which Muslim make up more

Zohreh Mehravipour¹, Nafiseh Shemirani², Najmeh Alinaghian³, Ahmad Dehghani⁴, Elahe Mokariyanpour⁵, Roya Sabaghifar⁶

1Author, Address: 83B, Millad 19, Millad Town, Atsharan ST, Aghababaie AUT. POST CODE: 8198411119, Isfahan IRAN

2Co-Author, Address: n.shemirani@gmail.com

3Co-Author, Address: na.alinaghian@gmail.com

4Co-Author, Address: a.dehghani53@gmail.com

5Co-Author, Address: e.mokariyanpour@yahoo.com

6Co-Author, Address: Sabaghiroya1392@gmail.com

Original Article:

Received 25 July. 2017 Accepted 20 Aug. 2017 Published 17 Nov. 2017

ABSTRACT

Obsessive-compulsive disorder (OCD) is a common mental health condition in which a person has obsessive thoughts and compulsive behaviors. This study has a review on two most common sub-types, Scrupulosity, and hyper-responsibility. Unfortunately, there is still not known that How common is scrupulosity, but it's seen most commonly in the Muslim community. It can affect individuals from a variety of different faith traditions as well as Islam. Inflated responsibility beliefs play a vulnerability and maintenance cognitive factor for obsessive-compulsive disorder (OCD). In this study, we have a quick review on this two sub-type of OCD and how to measure them. Studies in Muslim communities are needed to better investigate the relation between O.C.D and the two given sub-type.

Keywords

Obsessive-compulsive disorder (OCD);
Scrupulosity;
hyper-responsibility;

*Corresponding author:

Email: mehravipour_zohreh@yahoo.com

Peer review under responsibility of Iranian Journal of Social Sciences and Humanities Research

Introduction

Paul Salkovskis in 1985 drew attention to the Role and Mechanism of Cognition in the process of formation the Obsessive Disorder. His main contributions have been in the areas of cognitive models and treatments of anxiety disorders and in health psychology. His theoretical paper (in 1985) on a cognitive theory of Obsessive compulsive disorder was a synthesis of the work of Beck and Rachman, and highlighted the role of the way in which intrusions were interpreted as a sign of "responsibility" for harm or its prevention. Such interpretations were described as motivating compulsive behaviour, paving the way for new cognitive strategies for the treatment of OCD*. With the growing evolution of OCD our understanding of key cognitive structures involved in this specific disorder, such as "over-importance of thought", "control of thought", "inflated feelings of responsibility or over-responsibility", "overestimation of threat" and "intolerance for uncertainty", "scrupulosity" become more advanced.

Obsessive-compulsive disorder is characterised by the presence of either obsessions or compulsions, but commonly both. An obsession is defined as an unwanted intrusive thought, image or urge, which repeatedly enters the person's mind. Unwanted intrusive thoughts, images or urges are almost universal in the general population and their content is usually indistinguishable from clinical obsessions (Rachman & de Silva, 1978). Compulsions are repetitive behaviours or mental acts that the person feels driven to perform, it is a repetitive behavior or mental act that is carried out in response to an obsession (Morgan LA, Kirkwood CK 2009). It happen because of alleviating the anxiety caused by an obsession. A compulsion can either be overt and observable by others, such as checking that a door is locked, or a covert mental act that cannot be observed as in repeating a certain phrase in the mind†. A compulsion does not bring pleasure to the patient (Morgan LA, Kirkwood CK). Often, the patient experiences shame and tries to keep this condition a secret because he or she knows that these thoughts or actions are excessive or unreasonable (Fenske JN, Schwenk TL). TABLE 1 lists some common obsessions (Fenske JN, Schwenk TL).

Table 1. Common Obsessions and Compulsions

Obsessions
Aggressive impulses (e.g., hurting a child or parent)
contamination (e.g. becoming contaminated by shaking hands with someone)
Need for order (e.g, extreme distress when objects are asymmetrical or out of order)
Religion (e.g., blasphemous thoughts or worry about unknowingly sinning)
Repeated doubts (e.g., wondering whether a door was left unlocked)
Sexual imagery (e.g., recurrent pornographic images)
Compulsions
Checking (e.g., repeatedly checking appliance, alarm or locks)
Cleaning (e.g., repetitive handwashing)
Hoarding (e.g., saving useless item or trash)
Mental acts (e.g., counting, praying or silently repeating

words)

Ordering (e.g., rearranging object to achieve symmetry)

Reassurance -seeking (e.g., repetitively asking others for reassurance)

Repetitive actions (e.g., repeatedly walking in and out of a doorway)

Familial and the Unique Environment are two significant factor in causing the O.C.D. Family studies have quite convincingly shown that early-onset OCD is familial (Pauls et al. 1995; Nestadt et al. 2000). The remaining variance is almost entirely explained by unique environment, D. C. Cath, shown some important environmental factors involved in OC symptomatology have been identified by the comparison of monozygotic (MZ) twins (Danielle C et al. 2008).. This phenomenon explains why terrorist occur in the family and friends' networks‡.

1. O.C.D Subtype

2.1 Scrupulosity

A specific subtype of OCD is known as Scrupulosity or Religious OCD. Individuals who suffer from Religious OCD have obsessive thoughts about committing sins, having blasphemous thoughts and images, behaving morally and going to hell. Compulsive behaviors include excessive praying, repeating religious rituals and bible verses, reassurance seeking, confessing and avoidance. It is quite common that the person with this type of OCD is often not aware that these symptoms are actually a type of OCD. Experts found that scrupulous obsessions in OCD were ranked as the fifth most common obsession, with 6% of participants endorsing it as their primary obsession. Additionally, it has been estimated that religious obsessions occur in 25% of individuals with OCD (Antony, Dowie, & Swinson, 1998). One study showed that OCD symptoms presentation can be influenced by one's religion and culture (Sica, Novara, Sanavio, Dorz & Coradeschi, 2002). Abramowitz, Deacon, Woods, & Tolin (2004) highlighted this point by finding that Protestant individuals with high levels of religiosity had the highest severity of OCD symptoms.

Nelson and Abramowitz by using a large sample of OCD patients examined (a) the relationship between religiosity and scrupulosity, (b) the association between scrupulosity and the severity of OCD, anxiety, and depressive symptoms, and (c) the connection between scrupulosity and cognitive domains related to OCD. They indicate that scrupulosity symptoms are present in each presentation of OCD. Scrupulosity was correlated with obsessional symptoms and several cognitive domains of OCD, including beliefs about the importance of, and need to control intrusive thoughts, an inflated sense of responsibility, and moral thought-action fusion. In their research Scrupulosity showed a significant associated with obsessional symptoms as assessed by the OCI-R. However, in contrast to their expectations, checking and neutralizing rituals were not related to scrupulosity. The moderately strong relationship between scrupulosity and obsessional problems is in line with the between-groups analysis discussed above, and with several studies finding that religious obsessions load together with sexual and

* <https://members.academyofct.org/i4a/pages/index.cfm?pageID=3310>

† OBSESSIVE-COMPULSIVE DISORDER AND BODY DYSMORPHIC DISORDER

‡ <https://www.theguardian.com/world/2015/nov/17/jihad-by-family-terrorism-relatives-isis-al-qaeda>

violent/aggressive obsessions and comprise a collection of especially anxiety evoking (unacceptable, repugnant, immoral) obsessional thoughts (McKay et al., 2004). Nelson and Abramowitz's finding is also in line with cognitive-behavioral models of OCD. That is, individuals with scrupulosity, who by their nature impose strict moral standards upon themselves and are hypervigilant of moral/religious sin, might be Exquisitely sensitive to intrusive sexual or sacrilegious thoughts that conflict with their belief/value system. For example, a scrupulous individual might find even the passing thought of an extramarital sexual encounter with a stranger more disturbing, and resist it more intensely than would an individual without scrupulosity, leading to obsessional problems (Elizabeth A. Nelson, Jonathan S. Abramowitz, Stephen P. Whiteside a, Brett J. Deacon 2006 2006). In other study, Abramowitz et al. (2003) found that mental compulsions that patients use to neutralize obsessional distress (e.g., mentally "cancelling out" bad thoughts) co-occurred with sexual, harming, and religious obsessions (Abramowitz et al. 2003). Hence, scrupulosity is unrelated to global OCD symptom severity (e.g., time spent with symptoms, functional interference) as assessed by the interviewer-administered Y-BOCS Tek & Ulug, 2001, Nelson, Abramowitz, et.al. 2006).

2.2 Scrupulosity Questionnaire

Penn Inventory of Scrupulosity (PIOS; Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002) is a 19-item self-report measure developed to assess scrupulosity in the context of OCD (i.e., religious obsessions). The PIOS consists of two subscales: one measuring fears of having committed a religious sin (Fear of Sin; e.g., I am afraid of having sexual thoughts), and the other measuring the fears of punishment from God (Fear of God; e.g., I worry that God is upset with me). Items are scored on a 5-point scale ranging from 0 (never) to 4 (constantly). Participants are also asked to indicate their current religious affiliation and degree of religious devotion on a scale from 1 (not at all devoted) to 5 (very strongly devoted).

2. Hyper-Responsibility/ Inflated Responsibility

One of the driving forces behind obsessive-compulsive disorder (OCD) is an inflated sense of responsibility, known as hyper-responsibility. Those who suffer from hyper-responsibility believe they have more control over what happens in the world than they actually do[§].

Individuals diagnosed with OCD exhibit non-functional beliefs in the form of an inflated sense of responsibility with relation to the need for protecting themselves and their environment, accompanied by a belief that they will face serious negative consequences while fulfilling this responsibility. To mitigate the anxiety stemming from this inflated sense of responsibility, individual does compulsive behaviors. Such behaviors soothe the individual in the short term, while feeding the obsessions, beliefs, intrusive thoughts and self-evaluations in the long-term (Salkovsis, 1989; 2000). In a number of studies highlighting the importance of hyper-responsibility, patients in the high responsibility condition were reported to display higher levels of compulsive behaviors than those in the low responsibility condition (Arntz, Voncken and Goosen, 2007;

Ladouceur, Freeston, Gagnoa, Thibodeau, and Dumont 1995; Freeston et al., 1997).

3.1 latent aggression, Inflated responsibility

Inflated responsibility is increasingly regarded a pathogenetic mechanism in obsessive-compulsive disorder (OCD). Some studies show there is mounting evidence that latent aggression is also elevated in OCD (Moritz et 2009/2010). Despite the high frequency of violent and aggressive thoughts associated with OCD, there is no significant evidence that these individuals are at risk of acting on their obsessions. In fact, some evidence suggests that the presence of OCD is actually protective against aggression (Booth, B., el. 2014). In explaining these findings, it can be stated that people with the OCD experience significant feelings of anger and aggression, but are unable to express these feelings (Navidi A. 2008). There is no research to examine what if individual who suffers by OCD take authority to do violence what would be done. Moreover, there is no study explicitly stating that inflated responsibility increases the control behavior in OCD cases, which reveals that "inflated responsibility" beliefs alone do not suffice to explain OCD (Neslihan Arıcı ÖZCAN 2017). It is suggested a studying about Hyper-Repsobsicibity when individual who suffers by OCD recieves the permission from their sources of authority to show shows their violcen. Recently, Salkovskis et al. (2000) proposed that two levels of responsibility-related cognitions (responsibility assumptions and responsibility appraisals) interact with other cognitive factors (e.g. general threat appraisals, other assumptions about controllability etc.) in obsessional problems. In order to evaluate the extent and specificity of responsibility assumptions and appraisals, they designed two tests, the Responsibility Attitude Scale (RAS) and the Responsibility Interpretations Questionnaire (RIQ).

3.2 Responsibility Attitude Scale (RAS)

The RAS is a 26 items questionnaire^{**}, designed to assess general beliefs about responsibility. Each item is rated on a 7-point scale (from "totally agree" to "totally disagree"), according to how much the subject degrees or disagrees with specific statements, by choosing the anchor which best describes how he/she thinks (Salkovskis, et el. 2000).

3.3 RAS questionnaire, King's College University

RAS questionnaire lists different attitudes or beliefs which people sometimes hold. Read each statement carefully and decide how much you agree or disagree with it. For each of the attitudes, show your answer by putting a circle round the words which BEST DESCRIBE HOW YOU THINK. Be sure to choose only one answer for each attribute. Because people are different, there is no right answer or wrong answer to this statement. To decide whether a given attitude is typical of your way of looking things, simply keep in mind what you are like MOST OF THE TIME.

^{**} King's College London University offer the pdf version of the the Responsibility Attitude Scale (RAS) questionnaire
<https://www.kcl.ac.uk/ioppn/depts/psychology/research/ResearchGroupings/CADAT/Research/OCD-Questionnaires.aspx>

[§] <https://psychcentral.com/lib/ocd-and-hyper-responsibility/>

Table 2. Seven point scale

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE
------------------	-----------------------	-------------------	---------	----------------------	--------------------------	---------------------

1. I often feel responsible for things which go wrong.
2. If I don't act when I can foresee danger, then I am to blame for any consequences of it happens.
3. I am too sensitive to feeling responsible for things going wrong.
4. If I think bad things, this is as bad as doing bad things.
5. I worry a great deal about the effects of things which I do or don't do.
6. To me, not acting to prevent disaster is as bad as making disaster happen.
7. If I know that harm is possible, KI should always try to prevent it, however unlikely it seems.
8. I must always think through the consequences of even the smallest actions.
9. I often take responsibility for things which other people don't think are my fault.
10. Everything I do can cause serious problems.
11. I am often close to causing harm.
12. I must protect others from harm.
13. I should never cause even the slightest harm to others.
14. I will be condemned for my actions.
15. If I can have even a slight influence on things going wrong, then I must act to prevent it.
16. To me, not acting where disaster is a slight possibility is as bad as making that disaster happen.
17. For me, even slight carelessness is inexcusable when it might affect other people.
18. In all kinds of daily situations, my inactivity can cause as much harm as deliberate bad intentions.
19. Even if harm is a very unlikely possibility, I should always try to prevent it at any cost.
20. Once I think it is possible that I have caused harm, I can't forgive myself.
21. Many of my past actions have been intended to prevent harm to others.
22. I have to make sure other people are protected from all of the consequences of things I do.
23. Other people should not rely on my judgment.
24. If I cannot be certain I am blameless, I feel that I am to blame.
25. If I take sufficient care then I can prevent any harmful accidents.
26. I often think that bad things will happen if I am not careful enough.

It is clear that RAS questionnaire is based on European societies rather than the Muslim society, so here rewrite the most adapted questionnaire oriented to the Muslim society necessity to feel needed.

3.3 Responsibility Questionnaire (RQ)

The RQ (Kyrios, 1993) consists of 60 items^{††}. Each item is rated on a 7-point scale according to the degree with

specific statements (from 1="totally agree", to 7="totally disagree").

3. The Obsessive-Compulsive Cognitions Working Group (OCWG),

It was reported that false beliefs regarding inflated responsibility (Salkovskis PM 1985), perfectionism and certainty (Tolin DF, Abramowitz JS, Brigidi BD, Foa EB 2003, Frost RO, Steketee G 1997), and importance/control of thoughts are effective in developing OCD (Rachman S. 1997). Based on these findings, the Obsessive-Compulsive Cognitions Working Group prepared the Obsessive Beliefs Questionnaire that could be used to evaluate all these beliefs. The short version of this questionnaire categorizes the obsessive beliefs in three basic areas described here: "responsibility and threat estimation," "perfectionism and certainty," and "the importance/control of thoughts" (Obsessive Compulsive Cognitions Working Group 2005). Obsessive beliefs questionnaire: It is a self-assessment tool for the evaluation of beliefs associated with obsessive-compulsive symptoms. Consist of a 44-item version of the test (Obsessive Compulsive Cognitions Working Group 2001) was used, which was developed by the Obsessive-Compulsive Cognitions Working Group 2001. The scale tested the three subscale criteria described above including "responsibility and threat estimation," "perfectionism and certainty," and "importance/control of thoughts." The responsibility/ threat estimation, perfectionism/certainty, and importance/control of thoughts subscales could be exemplified with the respective following statements: "in daily situations, a failure to prevent harm is just as bad as deliberately causing them," "if I'm not absolutely sure of something, I'm bound to make a mistake," and "if I have a bad thought, it means I'm a bad person."

4. How the Measures O.C.D

Several different methods are used to assess obsessive-compulsive symptoms, including diagnostic interviews, clinician administered inventories, self-report measures and parent-report measures. In fact, in the past few years, numerous OCD measures have been developed and/or published. Interviews facilitate diagnostic decisions by utilizing specific questions to assess symptoms according to Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-IV) criteria^{††}. The most commonly used assessment instrument within clinical and research settings is the Yale- Brown Obsessive-Compulsive Scale (Y-BOCS) and its counterpart for children, the Children's Yale- Brown Obsessive- Compulsive Scale. The Y-BOCS and CY-BOCS are conducted in an interview format with a trained clinician, and measure OCD symptoms and severity over the

<https://www.kcl.ac.uk/ioppn/depts/psychology/research/ResearchGroupings/CADAT/Research/OCD-Questionnaires.aspx>

^{††}

<http://dsm.psychiatryonline.org/doi/book/10.1176/appi.books.9780890425596>

^{††} King's College London University offer the pdf version of the Responsibility Questionnaire (RQ) questionnaire at

previous week. The Y-BOCS and CY-BOCS consist of several parts, including items querying the presence of various obsessions and compulsions and items assessing the severity of symptoms. For example, there are questions about how much time obsessions and compulsions take, as well as how much distress they cause. Scores for all items are determined by the clinician on the basis of the person's report parent(s)/spouse's report and behavioral observations^{§§}. Brief self-reports are ideal tools to preliminarily identify symptoms and quantify severity in a time-limited setting. Self-report measures are cost effective, require minimal training to administer and interpret, and have the advantage of removing potential interviewer bias (Catapano F, et al. 2010). While there has been no evaluation of diagnostic sensitivity for any youth self-report measure, the OCI-CV and C-FOCI may serve as acceptable screening tools to identify symptoms in youth (Amy M. Rapp, R. Lindsay Bergman, John Piacentini, and Joseph F. McGuire).

Although the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) and the Padua Inventory-Revised (PI-R) are the most widely used instruments for assessing presence and severity of symptoms in obsessive-compulsive disorder (OCD), the correlation between the two instruments is surprisingly low (Anholt G.E 2009).

5.1 Padua Inventory-Revised

The Padua Inventory-Revised (PI-R; Burns, Keortge, Formea, & Sternberger, 1996) is a 39-item self-report measure of symptoms of OCD. Respondents are asked to identify the degree to which they agree with each item on a 5-item scale ranging from NOT at all to Very much. Scores are calculated for five subscale: contamination obsessions and washing compulsions, dressing/grooming compulsion, checking compulsions, obsessional thought of harm to self/others, and obsessional impulses to harm self/others. The PI-R has demonstrated strong psychometric properties (Bush S.S., 2014)

5.2 Beck Depression Inventory (BDI)

The BDI (Beck & Steer, 1987) is a 21-item questionnaire where subjects rate themselves (on a scale from 0 to 3) according to the extent to which they exhibit cognitive, affective, somatic, and vegetative symptoms of depression. The BDI has been extensively used in clinical and non-clinical samples^{***}.

5. Conclusion

The present review was the first to address the phenomenon of scrupulosity and inflated responsibility and its current measurement. We highlighted that that scrupulosity symptom mostly is present in each presentation of OCD in Muslim society. patients suffering primarily with severe unacceptable obsessional thoughts (i.e., religious, violent) evidenced greater levels of scrupulosity compared to those with primary contamination symptoms. Also, responsibility serves as an important construct for certain types of OCD.

We considered that the association between specific kinds of responsibility and obsessive-compulsive behaviors may have important implications. The current measurement is surely adapted to Western culture, moreover, as the measurement instruments should be compatible with the cultural environment so we strongly recommended designing a new questionnaire and measurement suitable for Muslim's area.

References

- 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.
- 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, 825-838.
- Arntz, A. Voncke, M., & Goosen, A. C. (2007). Responsibility and obsessive-compulsive disorder: An experimental test. *Behaviour Research and Therapy*, 45, 425-435.
- Abramowitz, J. S., Franklin, M., 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.
- Amy M. Rapp, R. Lindsay Bergman, John Piacentini, and Joseph F. McGuire; *Evidence-Based Assessment of Obsessive-Compulsive Disorder*;
- Antony, M. M., Downie, F., & Swinson, R. P. (1998). Diagnostic issues and epidemiology in obsessive compulsive disorder. In R. P. Swinson, M. M. Antony, S. S. Rachman, M. A. Richter, R. P. Swinson, M. M. Antony, M. A. Richter (Eds.), *Obsessive-compulsive disorder: Theory, research, and treatment* (pp. 3-32). New York, NY: The Guilford Press.
- Anholt G.E, Van Oppen P., Emmelkamp P.M.G. Cath D.C., Smit J.H., van Dyck R., van Balkom A.J.L.M. 2009, Measuring obsessive-compulsive symptoms: Padua Inventory-Revised vs. Yale-Brown Obsessive-Compulsive Scale *Journal of Anxiety Disorders*, VOL. 23 | 6, P. 830-835
- Booth, B., Hatters F., Curry, S. Ward, H., Stewart, S *Obsessions of Child Murder: Underrecognized Manifestations of Obsessive-Compulsive Disorder; The journal of the American Academy of Psychiatry and the Law*; 2014
- Bush S.S., (2014); *Psychological Assessment of Veterans*, Oxford University Press, P. 310
- Catapano F, Perris F, Fabrazzo M, Cioffi V, Giacco D, De Santis V, *Obsessive-compulsive disorder with poor insight: a three-year prospective study. Maj M Prog Neuropsychopharmacol Biol Psychiatry*. 2010 Mar 17; 34(2):323-30.
- Danielle C. Cath, corresponding author Daniel S. van Grootheest, Gonneke Willemsen, Patricia van Oppen, and Dorret I. Boomsma *Environmental Factors in Obsessive-Compulsive Behavior: Evidence from Discordant and Concordant Monozygotic Twins* 2008 Jan 11; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2257994/>

^{§§} More Information available at the

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994744/>

^{***} A pdf version of BDI questionnaire can be found at

https://www.bmc.org/sites/default/files/For_Medical_Professionals/Pediatric_Resources/Pediatrics_MA_Center_for_Sudden_Infant_Death_Syndrome_SIDS_Beck-Depression-Inventory-BDI.pdf

- Elizabeth A. Nelson, Jonathan S. Abramowitz, Stephen P. Whiteside a, Brett J. Deacon 2006; *Scrupulosity in patients with obsessive-compulsive disorder: Relationship to clinical and cognitive phenomena*; *Anxiety Disorders* 20 (2006) 1071–1086, ELSEVIER Journal.
- Freeston, M. H., Ladouceur, R., Gagnon, F., Thibodeau, N., Rhe’aume, J., Letarte, H., & Bujold, A. (1997). Cognitive-behavioral treatment of obsessive thoughts: a controlled study. *Journal of Consulting and Clinical Psychology*, 65, 405–413.
- Frost RO, Steketee G. Perfectionism in obsessive-compulsive disorder patients. *Behav Res Ther* 1997; 35:291-296.
- Kyrios, M. and Bhar, S. S. (1995). A measure of Inflated Responsibility. Paper presented at the World Congress of Behavioural and Cognitive Therapies, Copenhagen, July.
- Ladouceur, R., Freeston, M. H., Gagnon, F., Thibodeau, N., & Dumont, J. (1995). Cognitive-behavioral treatment of obsessions. *Behavior Modification*, 19, 247-257.
- Mancini F., D’Ercole. S. 2001, Responsibility attitude, obsession and compulsion: a further support in a non-clinical sample. *Scuola di Specializzazione in Psicoterapia Cognitiva. Associazione di Psicologia Cognitiva Via Marcantonio Colonna, 60 – I-00192 Roma – Italia*
- Morgan LA, Kirkwood CK. Anxiety disorders. In: Linn WD, Wofford MR, O’Keefe ME, Posey LM, eds. *Pharmacotherapy in Primary Care*. New York, NY: McGraw Hill Medical; 2009:255-261.
- Moritz S, Kempke S, Luyten P, et al. Was Freud partly right on obsessive-compulsive disorder? Investigation of latent aggression in OCD. *Psychiatry Res* 2010; 147(1,2): 180-184.
- Moritz S, Wahl K, Ertle A, et al. Neither saints nor wolves in disguise: Ambivalent interpersonal attitudes and behaviors in obsessive-compulsive disorder. *Behav Modification* 2009; 33(2): 274–292.
- Navidi A. The effect of anger management training on high school boys’ coping skills in Tehran city. *Thought Behavior* 2008; 14(4): 394-403.
- Neslihan Arıcı ÖZCAN; Cognitive and Metacognitive Structures and Processes in Obsessive Compulsive Disorder; *Journal of Family, Counseling, and Education*, 2(1), 20-38
- Obsessive Compulsive Cognitions Working Group. Psychometric validation of the Obsessive Beliefs Questionnaire and Interpretation of Intrusions Inventory: Part 2: Factor analyses and testing of a brief version. *Behav Res Ther* 2005; 43:1527-1542.
- Obsessive Compulsive Cognitions Working Group. Development and initial validation of the obsessive beliefs questionnaire and the interpretation of intrusions inventory. *Behav Res Ther* 2001; 39:987-1006
- Pauls DL, Alsobrook JP 2nd, Goodman W, Rasmussen S, Leckman JF *Am J Psychiatry*. A family study of obsessive-compulsive disorder. 1995 Jan; 152(1):76-84.
- Rachman SJ, de Silva P. Abnormal and normal obsessions. *Behaviour Research and Therapy*. 1978;16:233–238.
- Rachman S. A cognitive theory of obsessions. *Behav Res Ther* 1997; 35:793-802.
- Salkovskis, P. M., Wroe, A. L., Gledhill, A., Morrison, N, Forrester, E., Richards, C., Reynolds, M., & Salkovskis, P. M. (1989). Cognitive-behavioral factors and the persistence of intrusive thoughts in obsessional problems. *Behavior Research and Therapy*, 27, 677–682.
- Salkovskis PM. Obsessional-compulsive problems: a cognitive-behavioural analysis. *Behav Res Ther* 1985; 23:571-583.
- Salkovskis, P.M., Wroe, A.L., Gledhill, A., Morrison, N., Forrester, E., Richards, C., Reynolds, M., Thorpe, S., (2000) Responsibility attitudes and interpretations are characteristic of obsessive compulsive disorder *Behaviour Research and Therapy* Vol 38, 347-372.
- Sica, C., Novara, C., & Sanavio, E. (2002). Religiousness and obsessive-compulsive cognitions and symptoms in an Italian population. *Behaviour Research and Therapy*, 40, 813-823.
- Tek, C., & Ulug, B. (2001). Religiosity and religious obsessions in obsessive-compulsive disorder. *Psychiatry Research*, 104, 99–108.
- Tolin DF, Abramowitz JS, Brigidi BD, Foa EB. Intolerance of uncertainty in obsessive-compulsive disorder. *J Anxiety Disord* 2003; 17:233-242.
- Thorpe, S. (2000). Responsibility attitudes and interpretations characteristic of obsessive compulsive disorder. *Behaviour Research and Therapy*, 38, 347–372.