## Knowledge and competency standards for specialized cognitive behavior therapy for adult obsessive-compulsive disorder

Debbie Sookman,\*<sup>a,b</sup> Katharine A. Phillips,<sup>c</sup> Gideon E. Anholt,<sup>d</sup> Sunil Bhar,<sup>e</sup> Victoria Bream,<sup>f</sup> Fiona L. Challacombe,<sup>g</sup> Anna Coughtrey,<sup>h,i</sup> Michelle G. Craske,<sup>j</sup> Edna Foa,<sup>k</sup> Jean-Philippe Gagné,<sup>1</sup> Jonathan D. Huppert,<sup>m</sup> David Jacobi,<sup>n</sup> Karina Lovell,<sup>o,p</sup> Carmen P McLean,<sup>q,r</sup> Fugen Neziroglu,<sup>s</sup> Rebecca Pedley,<sup>t</sup> Sean Perrin,<sup>u</sup> Anthony Pinto,<sup>v</sup> C. Alec Pollard,<sup>w,x</sup> Adam S. Radomsky,<sup>1</sup> Brad C. Riemann,<sup>y</sup> Roz Shafran,<sup>z</sup> Gregoris Simos,<sup>aa</sup> Ingrid Söchting,<sup>bb</sup> Laura J. Summerfeldt,<sup>cc</sup> Jeff Szymanski,<sup>dd</sup> Michael Treanor,<sup>ee</sup> Barbara Van Noppen,<sup>ff,gg</sup> Patricia van Oppen,<sup>hh,ii,jj</sup> Maureen Whittal,<sup>kk,ll</sup> Monnica T. Williams,<sup>mm</sup> Timothy Williams,<sup>nn</sup> Elna Yadin,<sup>oo</sup> David Veale<sup>pp</sup>

<sup>a</sup>Department of Psychology, McGill University Health Center, 1025 Pine Ave W, Montreal, Quebec, H3A 1A1, Canada, debbie.sookman@mcgill.ca

<sup>b</sup>Department of Psychiatry, McGill University, 845 Sherbrooke St W, Montreal, Quebec, H3A 0G4, Canada

<sup>c</sup>Department of Psychiatry, Weill Cornell Medicine,1300 York Ave, New York, NY 10065, United States, hap0161@mod agreell edu

kap9161@med.cornell.edu

<sup>d</sup>Department of Psychology, Marcus Family Campus, Ben-Gurion University of the Negev, Beer Sheva, P.O.B. 653 Beer-Sheva, 8410501, Israel, ganholt@bgu.ac.il

<sup>e</sup>Department of Psychological Sciences, Faculty of Health, Arts and Design, Swinburne University of Technology, 1 John St, Hawthorn, Victoria, 3122, Australia, sbhar@swin.edu.au

<sup>6</sup>Oxford Health Specialist Psychological Interventions Clinic and Oxford Cognitive Therapy Centre, Warneford Hospital, Oxford, OX3 7JX, United Kingdom, Victoria\_bream@hotmail.com

<sup>g</sup>Institute of Psychiatry, Psychology and Neuroscience, Kings College London, De Crespigny Park, London, SE5 8AF, United Kingdom, fiona.challacombe@kcl.ac.uk

<sup>h</sup>Great Ormond Street Hospital for Children, London WC1N 3JH, United Kingdom

<sup>1</sup>UCL Great Ormond Street Institute of Child Health, 30 Guilford St, Holborn, London WC1N 1EH, United Kingdom, anna.coughtrey.10@ucl.ac.uk

<sup>j</sup>Anxiety and Depression Research Center, Depression Grant Challenge, Innovative Treatment Network, Staglin Family Music Center for Behavioral and Brain Health, UCLA Department of Psychology and Department of Psychiatry and Biobehavioral Sciences, Box 951563, 1285 Franz Hall, Los Angeles, California, United States, MCraske@mednet.ucla.edu

<sup>k</sup>Center for the Treatment and Study of Anxiety, University of Pennsylvania Perelman SOM, 3535 Market Street, Philadelphia, Pennsylvania 19104, foa@mail.med.upenn.edu.

Department of Psychology, Concordia University, 7141 Sherbrooke St. West, Montreal, Quebec

H4B 1R6, Canada, jean-philippe.gagne@concordia.ca, adam.radomsky@concordia.ca

<sup>m</sup>Department of Psychology, The Hebrew University of Jerusalem, Mt. Scopus, Jerusalem, 91905, Israel, jonathan.huppert@mail.huji.ac.il <sup>n</sup>Rogers Behavioral Health, 34700 Valley Road, Oconomowoc, Wisconsin, 53066, United States, David.Jacobi@rogersbh.org <sup>o</sup>Division of Nursing, Midwifery and Social Work, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Oxford Rd, Manchester, M13 9PL, United Kingdom

<sup>P</sup>Manchester Academic Health Science Centre, Greater Manchester Mental Health NHS Foundation Trust, Manchester, M13 9PL, United Kingdom, karina.lovell@manchester.ac.uk

<sup>q</sup>National Center for PTSD, Dissemination and Training Division, VA Palo Alto Healthcare System, 795 Willow Road, Menlo Park, California, 94025, United States

<sup>r</sup>Department of Psychiatry and Behavioral Sciences, Stanford University, 450 Serra Mall, Stanford, California, 94305, United States, carmen.mclean4@va.gov

<sup>s</sup>Bio-Behavioral Institute, 935 Northern Boulevard, Suite 102, Great Neck, New York, 11021, United States,

neziroglu@biobehavioralinstitute.com

<sup>1</sup>Division of Nursing, Midwifery and Social Work, School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Manchester Academic Health Science Centre, Manchester, M13 9PL, United Kingdom,

rebecca.pedley@manchester.ac.uk

"Department of Psychology, Lund University, Box 213, 22100, Lund, Sweden, sean.perrin@psy.lu.se

<sup>v</sup>Zucker School of Medicine at Hofstra/Northwell, Zucker Hillside Hospital – Northwell Health, 265-16 74<sup>th</sup> Avenue, Glen Oaks, New York, 11004, United States, apinto1@northwell.edu

"Center for OCD and Anxiety-Related Disorders, Saint Louis Behavioral Medicine Institute, 1129 Macklind Ave, St. Louis, Missouri, 63110, United States

\*Department of Family and Community Medicine, Saint Louis University School of Medicine, Saint Louis, Missouri, 63110, United States, charles.pollard@slu.edu

v34700 Valley Road, Rogers Behavioral Health, Oconomowoc, Wisconsin, 53066, United States, Bradley.Riemann@rogersbh.org

<sup>2</sup>Population, Policy and Practice Research and Teaching Department, UCL Great Ormond Street Hospital Institute of Child Health, Holborn, London, WC1N 1EH, United Kingdom, r.shafran@ucl.ac.uk

<sup>aa</sup>Department of Educational and Social Policy, University of Macedonia, 156 Egnatia Street, 54636 Thessaloniki, Greece, gsimos@uom.edu.gr

<sup>bb</sup>Departments of Psychology, University of British Columbia, 2136 West Mall, Vancouver, British Columbia, V6T 1Z4, Canada, isochting@psych.ubc.ca

<sup>cc</sup>Department of Psychology, Trent University, 1600 West Bank Drive, Peterborough, K9L 0G2, Ontario, Canada, lsummerfeldt@trentu.ca <sup>dd</sup>International OCD Foundation, 18 Tremont Street, #308, Boston, Massachusetts, 02108, United States, jszymanski@iocdf.org

<sup>ee</sup>Anxiety and Depression Research Center, University of California, Los Angeles, Box 951563, 1285 Franz Hall, Los Angeles, California, United States, mtreanor@psych.ucla.edu

ffClinical Psychiatry and Behavioral Sciences, OCD Southern California, 2514 Jamacha Road Ste, 502-35

El Cajon, California, 92019, United States

<sup>gg</sup>Department of Psychiatry and Behavioral Sciences, Keck School of Medicine, University of Southern California, 2250 Alcazar Street, Suite 2200, Los Angeles, California, 90033, United States, vannoppe@med.usc.edu

hhDepartment of Psychiatry, Amsterdam UMC, location VUmc, Netherlands, p.vanoppen@ggzingeest.nl

<sup>ii</sup>Amsterdam Public Health research institute – mental health, Netherlands

<sup>jj</sup>GGZ inGeest Specialized Mental Health Care, Netherlands

<sup>kk</sup>Vancouver CBT Centre, 302-1765 W8th Avenue, Vancouver, British Columbia, V6J5C6, Canada, maureen.whittal@vancouvercbt.ca <sup>ll</sup>Department of Psychiatry, University of British Columbia, Vancouver, British Columbia, Canada

<sup>mm</sup>School of Psychology, University of Ottawa, 136 Jean-Jacques Lussier Pvt, Ottawa, K1N 6N5, Ontario, Canada, Monnica.Williams@uOttawa.ca

<sup>nn</sup>Department of Psychology, University of Reading, PO Box 217, Reading, Berkshire, RG6 6AH, United Kingdom, timothy.williams@reading.ac.uk

<sup>oo</sup>Department of Psychiatry, University of Pennsylvania, 3535 Market Street, 2<sup>nd</sup> Floor, Philadelphia, Pennsylvania 19104, United States, yadin@pennmedicine.upenn.edu

<sup>pp</sup>South London and the Maudsley NHS Foundation Trust & King's College London, Denmark Hill, London, SE5 8AZ, United Kingdom, David.Veale@kcl.ac.uk

**Corresponding Author:** Dr. Debbie Sookman, McGill University Health Center, Allan Memorial Institute, 1025 Pine Ave West, Montreal, Quebec H3A 1A1, Canada, 1-514-710-7063, debbie.sookman@mcgill.ca

#### Abstract

Obsessive-Compulsive Disorder (OCD) is a leading cause of disability world-wide (World Health Organization, 2008). Treatment of OCD is a specialized field whose aim is recovery from illness for as many patients as possible. The evidence-based psychotherapeutic treatment for OCD is specialized cognitive behavior therapy (CBT, NICE, 2005, Koran and Simpson, 2013). However, these treatments are not accessible to many sufferers around the world. Currently available guidelines for care are deemed to be essential but insufficient because of highly variable clinician knowledge and competencies specific to OCD. The phase two mandate of the 14 nation International OCD Accreditation Task Force (ATF) created by the Canadian Institute for Obsessive Compulsive Disorders is development of knowledge and competency standards for specialized treatments for OCD through the lifespan deemed by experts to be foundational to transformative change in this field. This paper presents knowledge and competency standards for specialized CBT for adult OCD developed to inform, advance, and offer a model for clinical practice and training for OCD. During upcoming ATF phases three and four criteria and processes for training in specialized treatments for OCD through the lifespan for certification (individuals) and accreditation (sites) will be developed based on the ATF standards.

Key Words: exposure and response prevention, cognitive therapy, evidence based treatment, training, certification, accreditation

#### **1** Introduction

Obsessive Compulsive Disorder (OCD) is a leading cause of disability world-wide (World Health Organization, 2008). Affecting approximately 3% of the population through the lifespan, OCD is recognized as a major mental illness from which sufferers experience impaired functioning across domains on par with major physical illnesses and schizophrenia (Koran et al. 1996; Bystritsky et al. 2001). Prevalence is reportedly higher with consideration of "prodromal syndromes" that are at high risk of development of serious illness (Fullana et al. 2009; Thompson et al, 2020). This disorder is commonly associated with high levels of distress, depression, and hopelessness, as well as serious psychosocial dysfunction and reduced quality of life secondary to symptoms (Hollander et al. 2010). Multi-sphere impairment often occurs in basic self-care and parenting, intra-familial and social functioning, and capacity for school or work. Without early accurate diagnosis and specialized intervention OCD often rapidly worsens and may result in longstanding or irreversible developmental impairment. Duration and severity of illness impact outcome, highlighting the importance of early intervention (Eisen et al. 2013; Fineberg et al. 2019). Severity and chronicity of illness are associated with high healthcare costs and hospitalizations. Approximately 25% of severely ill patients attempt suicide (Kamath et al. 2007).

Treatment of OCD is currently a specialized field whose aim is recovery of symptoms and restoration of psychosocial functioning for as many patients as possible. The first line evidencebased psychotherapeutic treatment of choice for OCD is specialized cognitive behavior therapy (CBT), including exposure and response prevention (ERP, NICE, 2005; Koran, 2007; Koran and Simpson, 2013). Most experts recommend that cognitive therapy (CT) and behavioral experiments be combined in evidence-based approaches for adult OCD (e.g., Berman et al. 2019; Falkenstein et al. 2020). Several studies have demonstrated the efficacy of both ERP and CT in reducing symptoms and related dysfunctional beliefs (Olatunji et al. 2013). Dropout rates have been reported to be lower with cognitive interventions (Foa et al. 2005; Wilhelm et al. 2009). Individuals with OCD report varied emotional responses and complex metacognitive dysfunction that may be difficult to ameliorate with ERP alone (Sookman, 2016). Importantly, patients with different OCD subtypes respond differentially to specific CBT interventions (e.g., Rachman et al. 2014; Radomsky et al. 2020a, 2020b), with approximately 81% of respondents endorsing multiple symptoms (Ruscio et al. 2010). There have been numerous studies on optimal procedural variants of CBT for OCD subtypes; however, there remains a lag between development of these approaches and methodologically adequate controlled outcome studies to examine their efficacy. Family/significant other involvement to reduce accommodation of symptoms and adherence to homework are important predictors of positive outcome (Simpson et al. 2012; Lebowitz et al. 2016). Internet based CBT for OCD has shown promise for dissemination to remote regions and requires further examination (e.g., Lenhard, et al. 2020; Wheaton et al. 2020). Research is ongoing to develop and examine innovative approaches, for example, specialty CBT for mental contamination (e.g., Rachman, 2015) and imagery re-scripting for patients reporting distressing imagery related to aversive memories (e.g., Veale et al. 2015; Maloney et al. 2019) or excessive feelings of guilt (Tenore et al. 2020).

Curative evidence-based specialized treatments are available at international specialized centers for OCD. However, these treatments are not currently accessible to many sufferers because of an insufficient number of clinicians and sites with the requisite knowledge, competencies, and experience. This mental health crisis characterized by lengthy delays in diagnosis and unavailability of evidence-based specialty treatment spans multiple international regions, resulting in progression to disabling illness for many persons (Dell'Osso et al. 2010; Szymanski, 2012; Drummond et al. 2013; Veale, 2018; Brakoulias et al. 2019). Early detection and evidence-based treatment improve recovery rates; however, evidence-based early intervention is not commonly available (Hollander et al. 2010, Fineberg et al. 2019). Without effective treatment, remission rates among adults with OCD are low (approximately 20%, Skoog and Skoog, 1999). "Stepped care" has to date not been sufficiently empirically validated for OCD and runs the serious risk of undertreating the disorder (Sookman and Fineberg, 2015; Lovell et al. 2017; Veale, 2018). Failure to receive CBT reliably predicts poor outcome; however, many individuals with OCD do not receive CBT, and fewer still receive specialized CBT for OCD delivered or supervised by a therapist experienced with this disorder (Stobie et al. 2007; Lovell and Bee, 2008; Shafran et al. 2009; Hipol and Deacon, 2013; Harned et al. 2014; Fernandez de la Cruzet al. 2015; Reese et al. 2016; Smith et al. 2017). Furthermore, medication prescription practices may often not be consistent with evidence-based guidelines or optimized for OCD (Van Ameringen et al. 2014; Isomura et al. 2016). These results highlight the urgent need for dissemination of expertise in evidence-based treatments for OCD.

The International Obsessive-Compulsive Disorders Accreditation Task Force (ATF) was created by The Canadian Institute for Obsessive Compulsive Disorders (CIOCD, <u>www.ciocd.ca</u>) to address the urgent need to develop measurable knowledge and competency standards recommended for specialized treatments for OCD through the lifespan, deemed by experts to be foundational to transformative change in this field. Currently available guidelines for care are essential but insufficient because of highly variable clinician knowledge and competencies specific to this disorder. The specialty standards developed by the ATF during phase two comprise evidence-based knowledge and competencies *operationalized as abilities* that are specific (and teachable/trainable), unlike existing guidelines (NICE, 2005; APA et al. 2007; Koran and Simpson, 2013). A rigorous methodological protocol has been outlined by the task force to ensure development of evidence-based standards that are integrated with expert opinion. The ATF currently comprises experts in OCD and related disorders through the lifespan representing 14 nations (Chair, Debbie Sookman, PhD Canada and Co-Chair, David Veale, MD, UK). Please see the Introductory paper of this series for further information about ATF development and mandates.

The ATF phase two series, of which this paper is a part, elaborates knowledge and competency standards for specialty cognitive behavior therapy and pharmacotherapy for pediatric and adult OCD developed by this task force. The ATF aim is to achieve transformative improvement globally in quality and accessibility of evidence-based treatments for this crippling disorder. Upcoming phases three and four will involve development and implementation of training protocols at the level of certification (individual clinicians) and accreditation (clinical sites) based on the ATF standards.

#### 2 Method

This paper presents knowledge (K) and competency (C) standards recommended for specialized cognitive behavior therapy (CBT) for adult OCD. The overall knowledge standards presented in the Pittenger et al. paper in this series on pharmacotherapy for adult OCD that are applicable to all clinical work with these patients (e.g., clinical and diagnostic characteristics, phenomenology) are not duplicated in this paper whose focus is specialty CBT. The first author and the ATF assembled an international group of specialist clinicians with expertise in assessment and specialty CBT for adults with OCD. This group generated a list of areas of knowledge and competence, with reference to published guidelines (NICE, 2005; Koran, 2007;

Koran and Simpson, 2013), relevant literature, and their own clinical expertise. This list was refined through several iterations; topics were then distributed to group members for further elaboration.

Each section was developed by one or more members of the ATF Adult CBT group based on their specific clinical and research expertise. Categories of K and C were organized into sections presented in tabular format. Each K and C was worded *as an observable ability* with specification of the research sources selected for verification, citation of evidence using the ATF evidence legend developed for standardization across papers (Table 1), and associated references. At least two ATF authors/experts verified that a specific K or C (or class of K or C) would be considered for ATF standards based on the evidence selected. Each section includes introductory text with brief overview, definition of key terms, statement on evidence, and suggestions for future research.

Part I of the paper presents the sections on assessment, case conceptualization, psychoeducation, exposure and response prevention, cognitive therapy, homework, and family interventions. Part II presents the sections on symptom subtypes, overvalued ideation, treatment interfering behaviors, cultural adaptations, relapse prevention, and comment on co-morbidity. Individualized case conceptualization and strategies to strengthen the therapeutic relationship that are integral throughout treatment are addressed in several sections. The final standards were determined by a larger group of ATF co-authors with expertise in the specific competencies. In the interest of clarity and completeness there is some inevitable redundancy within each section's knowledge and competencies as well as between sections. These standards are deemed to be comprehensive but, necessarily, not all inclusive.

Following review of the paper sections and content editing of select sections by the first author, and iterative revision by co-authors; the paper draft was completed by the first author and circulated for commentary and edits by co-authors. The first author incorporated co-author input, and the paper was circulated to the CBT group for a second round of input. The paper was then submitted to the ATF leadership for final review and edits.

#### Table 1. ATF EVIDENCE LEGEND

TG: Treatment Guideline	OCT: Open-Label Clinical Trial	CQS: Clinical Qualitative Study
MA: Meta-Analysis	CC: Case-Control Study	ThP: Theoretical Paper
SR: Systematic Review	CSS: Cross-Sectional Study	TM: Treatment Manual or Book
OR: Other Review	PS: Psychometric Study	TrPN: Non-Data Based Treatment
		Paper
RCT: Randomized Controlled Trial	CR: Case Report or Series	Paper <i>EO</i> : Expert Opinion
<i>RCT</i> : Randomized Controlled Trial <i>RCS</i> : Randomized Clinical Study	<i>CR</i> : Case Report or Series <i>CES:</i> Clinical Experimental Study	1
-	-	EO: Expert Opinion

#### 3 Results

#### Knowledge and Competency Standards for Specialized CBT for Adult OCD: Part I

#### 3.1 Section Name: OCD assessment

#### Overview

Conducting a comprehensive assessment process is essential for treatment planning and implementation of specialized CBT for OCD. Assessment is a continuous and collaborative process that both drives the progression of treatment, and, in turn, evolves through information gained by self-monitoring and patients' response to therapeutic interventions. The focus of the current section is on the assessment process preceding the beginning of treatment. A detailed clinical history is a foundational competency for diagnosis and treatment planning (APA et al. 2007; Phillips and Stein, 2015; APA. 2016). This includes developmental, familial, psychosocial, medical, psychiatric, as well as treatment history, both psychotherapeutic and pharmacological. Developmental experiences that may be important as etiological and/or maintaining factors of illness should be assessed including early stressful experiences (e.g., Vidal-Ribas et al. 2020). Assessment must be carried out in a culturally sensitive manner with attention to the creation of an accepting interpersonal environment that fosters disclosure of distressing content as much as possible. Normalization of the patient's symptoms as characteristic of OCD with communication of common examples of the inner experience of others can be helpful in reducing commonly reported feelings such as fear and shame at self-disclosure. Risk assessment is a crucial component of the initial interview (e.g., suicidality, self-harm, care of self and children). Knowledge and competency in assessment includes communication to the patient about the results of the assessment in a clear and ethical manner as well as use of assessment information in case conceptualization and specialized treatment planning. Patients' outcome expectancies and treatment goals are discussed during assessment as well as during psycho-education (Constantino et al. 2018; Strauss et al. 2018; Priebe et al. 2020). Multidisciplinary collaboration as needed during assessment and treatment planning/implementation when combined treatments (pharmacotherapy and CBT) are considered is a fundamental competency.

Description of Key Terms

*Comorbidity*: OCD is a disorder with high comorbidity (Brakoulias et al. 2017), and various comorbidities may require modification of the treatment plan and goals. For example, some patients with severe comorbid depression may lack the resources to collaborate with the treatment regimen and may require pharmacotherapy as well as augmentation of psychological treatment (Abramowitz, 2004). Treatment of OCD symptoms with autism may also require adaptations such as extended psychoeducation, regular home-based sessions, highly graded exposures, and increased involvement of social systems (Krebs et al. 2016; Flygare et al. 2020). Available measures for structured diagnostic interview include the Mini-International Neuropsychiatric Interview (M.I.N.I., Sheehan et al. 1998), the Structured Clinical Interview for DSM-5 disorders, (SCID-5, First et al. 2015), or the Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders (DIAMOND, Tolin et al. 2018).

*Insight*: The degree to which patients recognize the irrational and illogical nature of their obsessions and compulsions (Kozak and Foa, 1994). Insight is a dimensional construct that may change over time and across symptoms, however, in general poor insight is an important predictor of poor treatment outcome (Catapano et al. 2010; Shavitt et al. 2014; Visser et al. 2017). Importantly, insight is a dimensional construct, and it is important to assess changes across time and possible differences across various symptoms and dimensions (Shavitt et al. 2014). The most commonly used measure for insight in OCD is the Brown Assessment of Beliefs Scale (BABS; Eisen et al. 1998). The section on overvalued ideation in this paper addresses this dimension further.

Measurement of symptom severity and symptom subtypes: The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS, Goodman et al. 1989ab) is a semi-structured interview which constitutes the gold standard of OCD severity measurement. It is unique in that it measures overall severity directly, unrelated to the number and subtype of symptoms patients have. OCD patients usually score 16 and above on the Y-BOCS (scores range from 0 to 40). The Y-BOCS is also the most sensitive measure of treatment change (Anholt et al. 2010). A revised, updated version of the Y-BOCS is available (YBOCS II, Storch et al. 2010a), although most studies thus far have been conducted using the original version. Although the Y-BOCS entails a checklist of symptoms, it does not measure severity of specific symptom subtypes. Therefore, it may be beneficial to separately administer a questionnaire measuring severity of various symptoms (e.g., the Padua Inventory-Revised, Van Oppen et al. 1995a) or the Obsessive-Compulsive Inventory-Revised, (Foa et al. 2002a). Congruency of Y-BOCS self- and clinician-rating over time is variable, and inferior for obsessions relative to compulsions (Hauschildt, et al. 2019). Other interviewbased assessment (e.g., International Intrusive Thoughts Interview Schedule-IITIS) was found to discriminate degree of intrusive thoughts while the self-report Y-BOCS and the Y-BOCS-Symptom Checklist did not (Simos and Ntouros, 2012) suggesting need for revision of Y-BOCS. In addition to these general OCD symptom scales measures have been developed to assess specific phenomena and symptom presentations, such as relationship OCD symptoms (the relationship OCD inventory, ROCI, Doron et al. 2012), scrupulosity (the Penn inventory of scrupulosity, PIOS, Abramowitz et al. 2002a), not just right phenomena (the Vancouver obsessional compulsive inventory – just right scale, VOCI-JR; Thordarson et al. 2004), and several mental contamination measures (the Vancouver obsessional

compulsive inventory—mental contamination scale, the contamination sensitivity scale, and the contamination thought-action fusion scale, Radomsky et al. 2014a).

*Functional analysis:* Central to psychoeducation and treatment planning in specialized cognitive-behavior therapy (CBT) is the functional analysis (Kim et al. 2016). This refers to the identification of the maintaining cycle of internal or external triggers, related obsessions (verbal, images, urges, and sensory phenomena), cognitions (appraisals, beliefs, core fears, catastrophic scenarios), compulsions, avoidance, and related feelings (e.g., distress, fear, guilt, shame). Relevant questions in understanding the patient's inner experience may include, for example: "When you had the obsession 'I may have forgotten the gas stove,' what was the meaning of this thought? What were you afraid would happen if you did not check?". Core fears can be ascertained through a series of downward-arrow questions. The downward-arrow should be followed systematically until the most catastrophic scenarios are exhausted (Huppert and Zlotnick, 2012). This information can be utilized later in behavioral experiments, in vivo or imaginal exposures, or in other interventions such as imagery rescripting. Finally, all compulsions (overt and covert), safety-behaviors (e.g., reassurance seeking) and avoidance should be assessed.

The two gold standard measures of OCD-related cognitions are: (1) the Interpretation of Intrusions Inventory (III) and (2) the Obsessive-Beliefs Questionnaire (OBQ) developed by the Obsessive-Compulsive Cognitions Working Group (OCCWG, 2001, 2005). The III measures current appraisal of intrusive thoughts related to responsibility, control, and importance of thoughts. The OBQ measures more general beliefs that are specific to or characteristic of OCD. The original OBQ-87 consisted of the following belief domains: inflated responsibility, overestimation of threat, intolerance of uncertainty, perfectionism, and importance and control of thoughts. These domains were later reduced to three through factor analytic procedures in the OBQ-44 (OCCWG, 2005). Use of the OBQ-87 has advantages clinically because of its separate subscales for overestimation of threat and inflated responsibility, important in assessing patients who do not report beliefs related to excessive responsibility. However, not all patients report an elevation in these cognitions (Taylor et al. 2006), and changes in the OBQ do not necessarily precede symptom change (Lorenzo-Luaces et al. 2016). OBQ is also available in shorter forms (Moulding et al. 2011; Fergus et al. 2019).

*Psychosocial functioning and quality of life:* Psychosocial functioning and quality of life of OCD patients are often greatly affected by symptoms (Huppert et al. 2009). Two relevant measures include the 36-Item Short Form Health Survey questionnaire (Wade, 1993) and the Work and Social Adjustment Scale (Mundt et al. 2002). It is useful to assess the direct influence that symptoms have on functioning in specific domains (e.g., impaired academic achievement) as well as the long term-consequences of symptoms. OCD is often extremely time consuming and disabling, and particularly subsequent to early onset or chronicity of symptoms important life functioning needs to be restored (Anholt et al. 2014). Treatment gains are more likely to be maintained if beyond symptom reduction there is also an increase in level of psychosocial functioning and quality of life. Special attention should be placed on self-care and care of children as, in some cases, symptoms may be endangering (e.g., not letting a baby crawl due to contamination obsessions). It is important to assess the influence of symptoms on parenthood, for example, maternal postpartum OCD can affect experiences of parenting and mother-infant interactions (Challacombe et al. 2016), and the risk for the development of OCD in children.

*Values and goals:* The assessment of values and goals is important in several ways (see also Huppert and Zlotnick, 2012). First, obsessions typically arise in response to intrusions of personally important values (Rachman, 2003). Compulsions often aim at preventing harm to these goals or values but exert a paradoxical effect. Addition of adjunctive interventions may improve treatment engagement for some

#### cases (e.g., acceptance and commitment therapy, Twohig et al. 2006).

*Familial accommodation*: The degree to which family members participate in compulsions or change their routine as a consequence of symptoms negatively impacts treatment outcome (Amir et al. 2000). Importantly, the opposite is also true -- being critical of symptoms also negatively impacts insight and is associated with higher symptom severity (De Berardis et al. 2008). This important area in elaborated elsewhere in this paper.

#### Level of Evidence

The Y-BOCS and symptom self-report measures, as well as measures assessing related constructs (e.g., relationship OCD; Doron et al. 2012), have good to excellent psychometric properties including high internal reliability, test-retest reliability, and convergent and divergent validity. Whereas many of the global self-report measures have been validated in clinical samples (e.g., OCI-R, BOCI, VOCI), validation of the related constructs has been slower (e.g., scrupulosity- Huppert and Fradkin, 2016). On initial assessment and when assessing treatment progress it is important to consider discrepancies between the Y-BOCS clinician interview, patients' self-report, and observed behavior.

#### Recommendations for Further Research

Further studies are needed to examine updated OCD measures (e.g., Fatori, et al. 2020) as well as the specificity of standardized measures used to assess OCD (Huppert et al. 2007; Huppert and Fradkin, 2016). Ongoing research on assessment and specialty treatments for the symptom subtypes discussed elsewhere in this paper is strongly indicated. Assessment of developmental experiences that may be relevant to intransigence of OCD symptoms merit further study (e.g., Sookman et al. 2001; Berman et al. 2019). Further research is indicated on case conceptualization in specialized CBT for OCD that integrates assessment with the case relevant evidence base in relation to outcome (Salkovskis and Forrester, 2002; Zivor et al. 2013a; Nattrass et al. 2015).

#### **Specialty Knowledge**

The ability to demonstrate knowledge of:

1. The elements and process to take a complete history, including developmental, familial, psychosocial, medical, psychiatric, and treatment history Evidence: *TG*: Koran et al. 2007, American Psychiatric Association 2016 • *MA*: Constantino et al. 2018 • *OR*:

Evidence: *TG*: Koran et al. 2007, American Psychiatric Association 2016 • *MA*: Constantino et al. 2018 • *OR*. Priebe et al. 2020 • *RCS*: Strauss et al. 2018 • *TM*: Phillips and Stein 2015

2. DSM 5/ ICD -11 criteria including knowledge of OCD diagnosis and importance of age of onset, differential diagnosis and co-morbidities (e.g., anxiety, mood, substance use/abuse, tics/Tourette's syndrome, body dysmorphic disorder, hoarding, psychotic disorders)

Evidence: **OR**: Abramowitz 2004 • **CSS**: Brakoulias et al. 2017 • **PS**: Sheehan et al. 1998 • **CR**: Krebs et al. 2016 • **CES**: Lobbestael et al. 2011

- 3. Various measures of symptom severity and symptom subtypes/ specific symptom presentations Evidence: *CSS*: Anholt et al. 2010, Simos and Ntouros 2012 • *PS*: Anholt et al. 2009, Coles et al. 2003, Doron et al. 2012, Fergus et al. 2019, Foa et al. 2002a, Goodman et al. 1989ab, Hauschildt, et al. 2019, Moulding et al. 2011, OCCWG 2005, Storch et al. 2010a, Van Oppen et al. 1995a • *TM*: Foa et al. 2012
- 4. Risk assessment including secondary risk (e.g., unintended consequences of acting on compulsions and urges to avoid distressing situations)

Evidence: *TM*: Foa et al. 2012 • *EO*: Veale et al. 2009

 5. Functional analysis and its implications for treatment planning Evidence: OR: Kim et al. 2016, Foa and McLean 2016 • ThP: Eelen and Van den Bergh 2018, Huppert and Zlotnik 2012 • TM: Foa et al. 2012

6. Case formulation and its implications for treatment planning Evidence: *OR*: Jacqueline and Lisa, 2015, Kuyken et al. 2008 • *CES*: Nattrass et al. 2015, Zivor et al. 2013a

7. How to communicate assessment results to the patient in a clear and ethical manner Evidence: *OR*: Foa 2010 • *TM*: Foa et al. 2012, Sookman 2016

8. The continuous nature of assessment through clinical data gathered from repeat administration of assessment measures, therapist observation and self- report, and ongoing assessment of adherence and response to treatment interventions

Evidence: **OR**: Foa 2010 • **TM**: Foa et al. 2012 • **EO**: Rapp et al. 2016

#### **Specialty Competencies**

Ability to:

1. Take a complete history including developmental, familial, psychosocial, medical, psychiatric, and treatment history

Evidence: TG: Koran et al. 2007, American Psychiatric Association 2016 • TM: Phillips and Stein 2015

- 2. Maintain the assessment focus despite symptom-related interference Evidence: CSS: Parrish and Radomsky 2010 • CQS: Halldorsson and Salkovskis 2017 • EO: Pence et al. 2010
- 3. Direct specific questions to ascertain differential diagnoses
   Evidence: *PS*: Osório et al. 2019, Sheehan et al. 1998 *TM*: Foa et al. 2012 *EO*: Rapp et al. 2016
- 4. Differentiate obsessions from other forms of repetitive thinking Evidence: *PS*: Dar and Iqbal 2015 • *AES*: Langlois et al. 2000 • *TM*: Foa et al. 2012
- 5. Differentiate obsessions from mental compulsions
   Evidence: *PS*: Williams et al. 2011 *TM*: Foa et al. 2012 *EO*: Gillihan et al. 2012

 6. Identify various levels of insight and differentiate between poor insight and delusional beliefs Evidence: OR: Kozak and Foa 1994 • CS: Catapano et al. 2010 • CSS: Shavitt et al. 2014 •

PS: Eisen et al. 1998, Neziroglu et al. 1999a
7. Evaluate the impact of symptoms on various life domains and developmental trajectory (e.g., self and
child care, academic, vocational, social functioning)
Evidence: <i>MA</i> : Pozza et al. 2018 • <i>CSS</i> : Challacombe et al. 2016 • <i>PS</i> : Abbey et al. 2007, Huppert et al. 2009,
Weidle et al. 2014
8. Collaboratively identify feared consequences and core fears. These include both external fears (e.g.,
harming) and internal fears (e.g., distress tolerance and appraisal, feared loss of cognitive-emotional
control)
Evidence: <i>ThP</i> : Huppert and Zlotnik 2012 • <i>TM</i> : Foa et al. 2012 • <i>EO</i> : Benito and Walther 2015, Gillihan et al.
2012
9. Assess values and goals despite effects of chronicity on level of functioning and self- perception
Evidence: CS: Rowa et al. 2005 • CR: Twohig et al. 2006 • ThP: Huppert and Zlotnik 2012
10. Assess the differences between functional and dysfunctional resistance to obsessions and between
realistic coping (e.g., COVID-19) and excessive compulsive behavior
Evidence: <b>PS</b> : Deacon and Abramowitz 2005, Woody et al. 1995 • <b>EO</b> : Fineberg et al. 2020, Thwaites and
Freeston 2005
11. Assess suicidality risk while differentiating between suicidality and obsessions of self- harm
Evidence: SR: Albert et al. 2019 • CSS: Velloso et al. 2016 • PS: Beck et al. 1979
12. Assess secondary risk (i.e., of unintended consequences of acting on compulsions and urges to avoid
distressing situations)
Evidence: <i>TM</i> : Foa et al. 2012 • <i>EO</i> : Veale et al. 2009
13. Differentiate between culturally syntonic behaviors (e.g., religious compulsions) and compulsive
behaviors that are excessive relative to the individual's cultural background
Evidence: SR: Nicolini et al. 2017 • PS: Chasson et al. 2017 • AES: Rosmarin et al. 2010
14. Communicate the results of the initial assessment to the patient in a clear and ethical manner
Evidence: OR: Foa 2010 • TM: Foa et al. 2012, Sookman 2016
15. Use assessment information in case conceptualization and treatment planning and implementation,
through the integration of clinical data from standardized scales, interview, and functional analysis
Evidence: OR: Foa and McLean 2016, Jacqueline and Lisa 2015, Kim et al. 2016, Kuyken et al. 2008 • CES:
Nattrass et al. 2015 • ThP: Eelen and Van den Bergh 2018, Huppert and Zlotnik 2012 • TM: Foa et al. 2012
16. Use assessment continuously throughout treatment in order to update its content and process in
communication and collaboration with the patient
Evidence: <b>OR</b> : Foa 2010 • <b>TM</b> : Foa et al. 2012 • <b>EO</b> : Rapp et al. 2016

#### 3.2 Section Name: Case Conceptualization

#### Overview

The delivery of effective specialized CBT for OCD requires the therapist to have both a firm grasp of cognitive and behavioral principles as they apply to the development and maintenance of obsessions and compulsions (and accompanying difficulties) broadly and to the particular clinical presentation and context of the individual patient (Butler, 1998). The manner in which the cognitive behavioral principles apply to an individual patient with OCD is contained within the case conceptualization (CC). In this section, we describe the competencies relevant to the development of a CC for specialized cognitive behavioral treatment of OCD. Following Butler (1998), the CC is informed by the following:

Demographics including age, gender, education, occupation, ethnicity, family and social circumstances; description of the current difficulties including their impact on social and work-related functioning; history of the presenting complaint to include the precipitating events if known, the coping strategies adopted, and safety concerns; past mental health history including childhood experiences; developmental history including speech and social development that may clarify whether the OCD is comorbid with an Autistic Spectrum Disorder (ASD); family history of mental health problems; concerns and ideas that the patient may have about prognosis and treatability. The patient's understanding of their illness and degree of insight is also believed to play a role in its development (Ruscio et al. 2010), with the diagnosis in adulthood requiring that experience of symptoms be ego-dystonic.

CC is a developing process. The therapist and patient collaboratively update the CC with data obtained during treatment sessions, from homework assignments, and where necessary from family/significant others throughout treatment. The skill of the therapist in developing, presenting and revising the case conceptualization throughout treatment is hypothesized to play an important role in the development of a strong therapeutic alliance and positive expectancies about the delivered treatment, two "common factors" that are hypothesized to positively influence psychotherapy outcomes across conditions (Roth and Pilling, 2008). At the end of treatment a final CC may summarize the strategies learnt during treatment, to serve as a blueprint for preventing and managing any re-emergence of symptoms (Kuyken et al. 2009).

#### Definitions of key terms

#### Case conceptualization

Case conceptualization is the organization of information from interviews, observations and assessments using a well-founded theory so that the problem can be explained and hypotheses developed to inform the choice of intervention. In this instance, the case conceptualization is guided by cognitive behavioral principles. Predisposing, precipitating, perpetuating, and protective factors should be considered (John and Segal, 2014).

*Ego-dystonic refers to the* thoughts, feelings, and behaviors that are dissonant or inconsistent with the needs and goals of the person and their self-image.

#### Therapeutic alliance

Describes the collaborative relationship between patient and therapist to overcome the patient's problems. Bordin (1979) describes three elements: agreement on the goals of the treatment, agreement on the tasks, and the development of a personal bond made up of reciprocal positive feelings.

Strength of evidence

To date, no studies have been carried out that employ designs which allow reliable conclusions about whether the therapist's level of skill in CC is related to outcomes in CBT, including OCD, whether the treatment is delivered in research settings (trials) or routine care (Easden and Fletcher, 2020). However, good CC skills are often required for professional licensing. There is a widespread assumption that outcomes for CBT as delivered in routine care settings are often poorer than in treatment trials, and that this may partly reflect therapists having relatively little training and thus low use of case conceptualization in routine care (Kendjelic and Eells, 2007; Zivor et al. 2013a; Huisman and Kangas, 2018). There is preliminary evidence that time-limited and low-cost training can improve the case conceptualization skills of clinicians with prior experience and knowledge of CBT for OCD (Zivor et al. 2013a).

Available evidence robustly indicates that effective treatment of OCD requires specific psychotherapeutic interventions, for example exposure and plus response prevention, rather than common-factor influences (e.g., Strauss et al. 2018). Nonetheless, the case conceptualization represents an important tool in maintaining patient engagement in treatment and adapting evidence based CBT interventions to the specific circumstances of each patient (Hagen et al. 2016).

#### Recommendations for future research

Compared with the evidence for specialty interventions, the evidence on case conceptualization is sparse especially for obsessive compulsive and related disorders. It would be helpful to generate standards for training in case conceptualization and to identify minimum competencies for practitioners. Simultaneously, measures of clinical case conceptualization that allow for development over sessions could enable replicable processes. Further research is required to identify the strength of the influence of case conceptualization on providing the most effective specialty interventions for patients with OCD.

#### CASE CONCEPTUALIZATION

#### **Specialty Knowledge**

#### The ability to demonstrate knowledge of:

- **1. Etiology of OCD including evidence for genetic transmission as distinct from family history.** Example of questions:
  - Do other members of the family have similar problems?
  - Are you aware of links with medical-health (probing for possible PANDAS)
     Evidence: SR: Hannigan et al. 2017, Harvey and McCabe 2018 OR: Dougherty et al. 2018, O'Connell et al. 2018, Schultz 2019 ThP: Hezel and McNally 2016 TM: Sookman 2018
- 2. Components and questions required to develop a case conceptualization (please see assessment section of this paper for interview and psychometric contents for integrated conceptualization) Evidence: *TM*: Koran et al. 2007, APA 2016

#### 3. Precipitating factors in OCD

- Example of questions:
- When did this problem first start?
- Are you aware of any particular event that might have been the cause? e.g. pregnancy, brain injury, bullying, changes in relationships, etc;
- When did this problem first get noticed by yourself and others;
- When did it cause distress;
- When did it start to interfere with your life?
  - Evidence: CR: Thompson et al. 2020

#### 4. Theoretical models of OCD

Evidence: <b>OR</b> : Benzina et al. 2016, Hezel and MacNally 2016 • <b>ThP</b> : Rachman 1998, Salkovskis 1999, Abramowitz et al. 2018
5. OCD psychopathology, for example, difference between risky thoughts and risky behaviors and
impact on case conceptualization
Evidence: SR: Albert et al. 2019 • CR: Lewis et al. 2020, Edwards and Higham 2020
6. Difference between and impact on OCD of other co- morbidities, such as ASD, and impact on case
conceptualization
Evidence: OR: Bejerot 2007, Wu et al. 2014 • CS: Griffiths et al. 2017 • CC: Zandt et al. 2007
7. Coping mechanisms in OCD
Evidence: CSS: Moritz et al. 2018
8. Integration of patient reported clinical data with theoretical perspectives to form a case
formulation
Evidence: TM: Bream et al. 2017, Clark 2019, Williams and Wetterneck 2019
9. Use of the case conceptualization in treatment planning
Evidence: TM: Sookman 2016, Bream et al. 2017, Clark, 2019
10. Evolution of the case conceptualization in collaboration with the patient throughout treatment
Evidence: TM: Sookman 2016, Bream et al. 2017, Clark, 2019
Specialty Competencies
Specialty Competencies Ability to:
Ability to:
Ability to:         1. Identify individual differences in etiology and maintenance of OCD and related difficulties
Ability to:         1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016 </li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations         Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for</li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between</li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between risky and non-risky thoughts and behaviors</li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between risky and non-risky thoughts and behaviors <ul> <li>Evidence: SR: Albert et al. 2019 • CR: Lewis et al. 2020, Edwards and Higham 2020 • TM: Foa et al. 2012</li> </ul> </li> <li>3. Develop a case conceptualization collaboratively with the patient that evolves throughout treatment</li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between risky and non-risky thoughts and behaviors <ul> <li>Evidence: SR: Albert et al. 2019 • CR: Lewis et al. 2020, Edwards and Higham 2020 • TM: Foa et al. 2012</li> </ul> </li> <li>3. Develop a case conceptualization collaboratively with the patient that evolves throughout treatment <ul> <li>Evidence: TG: APA psychiatric case evaluation guidelines, Roth and Pilling 2007, Beshai et al. 2019 • RCS:</li> </ul> </li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between risky and non-risky thoughts and behaviors <ul> <li>Evidence: SR: Albert et al. 2019 • CR: Lewis et al. 2020, Edwards and Higham 2020 • TM: Foa et al. 2012</li> </ul> </li> <li>3. Develop a case conceptualization collaboratively with the patient that evolves throughout treatment <ul> <li>Evidence: TG: APA psychiatric case evaluation guidelines, Roth and Pilling 2007, Beshai et al. 2019 • RCS: Strauss et al. 2018 • CR: Wheaton et al. 2016 • CQS: Nattrass et al. 2015</li> </ul> </li> </ul>
<ul> <li>Ability to:</li> <li>1. Identify individual differences in etiology and maintenance of OCD and related difficulties relevant to conceptualization of diverse symptom presentations <ul> <li>Evidence: OR: Schultz 2019 • CS: van Oudheusden et al. 2018 • ThP: Hezel and McNally 2016</li> </ul> </li> <li>2. Distinguish OCD and co-morbid psychopathology and impact on case conceptualization, for example, difference between ego-syntonic and ego-dystonic thoughts and behaviors and between risky and non-risky thoughts and behaviors <ul> <li>Evidence: SR: Albert et al. 2019 • CR: Lewis et al. 2020, Edwards and Higham 2020 • TM: Foa et al. 2012</li> </ul> </li> <li>3. Develop a case conceptualization collaboratively with the patient that evolves throughout treatment <ul> <li>Evidence: TG: APA psychiatric case evaluation guidelines, Roth and Pilling 2007, Beshai et al. 2019 • RCS:</li> </ul> </li> </ul>

#### 3.3 **Section Name: Psychoeducation**

#### Overview

This section offers a summary of the key knowledge and clinical competencies required for offering psycho-education to patients with OCD. There is an emphasis on the treatment rationale for specialized cognitive behavior therapy (CBT) for OCD. The critical task for the clinician involves normalizing obsessions, highlighting the role of appraisals, and encouraging patients to collaborate in an optimal trial of specialized CBT, which will at times be distressing and challenging (Salkovskis, 1996; Sookman, 2016). The purpose of the psycho-education treatment component is to inform patients about the psychological mechanisms that maintain OCD symptoms such that this knowledge will support them in coping with often high levels of distress during CBT. Engagement is enhanced by patients' understanding of their illness, its developmental origins, and the psychological mechanisms that perpetuate the symptoms. Patients are informed that the purpose of

CBT is not complete elimination of all intrusive thoughts or discomfort, but rather to develop a new and more helpful way of understanding their obsessions and of coping with them without compulsions (Veale and Willson, 2019). Development of a strong therapeutic relationship aims to enhance the patient's ability to understand and to engage in treatment and to trust the therapist's support during distressing interventions (Kazantzis et al. 2017).

The psycho-education component may begin toward the end of the assessment phase when treatment recommendations are typically discussed. The initial psycho-education is considered the first treatment component following assessment, and usually lasts one or two sessions but occasionally longer. Treatment in the form of exposure and response prevention (ERP) or behavioral experiments does not begin until the psycho-education component has been completed. The quality of the therapeutic relationship is critical and sets the stage for ongoing productive collaboration between the patient and the therapist (or group therapists when treatment is offered in a group format).

#### Description of Key Terms

*Psycho-education:* A therapeutic intervention with a focus on the didactically skillful communication of key information within the framework of a cognitive-behavioral approach. The aim is that patients and their relatives be enabled to understand and accept the diagnosis of OCD and its treatment and begin to understand the nature of this illness and how to cope more successfully.

*Therapeutic Relationship:* An exchange between patient and therapist that develops for the purpose of sharing intimate thoughts, beliefs, and emotions in an endeavor to facilitate change. This relationship is generally characterized by a safe, open, nonjudgmental atmosphere that imbues trust and confidence adapted during therapist assistance in feared situations.

#### Key Components

Psycho-education is a critical component in the comprehensive treatment of OCD regardless of subtype of OCD and treatment format. Inaccurate or inadequate psycho-education can result in poor treatment adherence and outcome. The recommended approach does not differ depending on whether treatment is delivered in a group or individual setting; however, specific components such as involvement of family members necessarily require adjustment depending on treatment format and patient-specific factors.

As listed in the tabular knowledge section, key components include clinician's knowledge of the nature of obsession and their maintenance: through specific appraisals, attempts to neutralize the content of the obsessions by engaging in compulsive behaviors, avoidance, and reassurance seeking (Beck and Haig, 2014; Sookman, 2016).

#### Level of Evidence

Level of evidence for the required knowledge and competencies for psycho-education of OCD is high, including experimental research (e.g., Rachman et al. 2011), systematic reviews and neuroimaging twin studies (Van Grootheest et al. 2005), clinical case (Arch and Abramowitz, 2015), and naturalistic studies (Rachman and DeSilva, 1978; Veale et al. 2009).

#### Recommendations for Further Research

Further research in the area of psycho-education will be helpful in fine-tuning existing

recommended practices but will also pose new important questions. For example, retention of psycho-educational material can be a challenge for some patients if they experience significant distress when first discussing their symptoms. Psycho-education is not a one-time only treatment component but needs to be re-presented and discussed throughout treatment. Various optimization strategies such as presenting the treatment rationale more frequently and with enhanced formats may be necessary. Inclusion of a video or an app could potentially assist patients in better retaining the information and preparing for committing to treatment.

#### **PSYCHOEDUCATION**

#### Specialty Knowledge

#### The ability to demonstrate knowledge of:

- **1.** A bio-psycho-social model of the aetiology of mental health disorders in general and specifically OCD Evidence: *TM*: OCD-specific, Sookman 2016 *TrPN*: general psychopathology, Beck and Haig 2014
- 2. Genetic and neurobiological factors in the etiology of OCD Evidence: OR: Van Grootheest et al. 2005 • CC: Chamberlain et al. 2008, Saxena et al. 2009
- **3. Information processing factors (e.g. appraisals, distress) in the etiology of OCD** Evidence: *CR*: Mataix-Cols and van den Heuvel 2012 • *ThP*: Bolton 1996
- 4. Psychosocial (environmental) risk factors for OCD
- Evidence: SR: Brander et al. 2016
- **5.** Common occurrence of obsessions and how obsessions often reflect important personal values Evidence: *CR*: Rachman and DeSilva 1978, Veale et al. 2009
- 6. The role of appraisals in attaching meaning to obsessions and how distress co-varies with personal meanings attached to content of intrusive thoughts

Evidence: CSS: OCCWG 2003, 2005 • ThP: Salkovskis 1999

7. At least one cognitive model of OCD and the role of appraisals in perpetuating emotional distress, compulsions, avoidance, and other safety seeking behaviors

Evidence: **OR**: Blakey and Abramowitz 2016 • **CR**: Shafran et al. 2013 • **CES**: Rachman et al., 2011 • **ThP**: Salkovskis 1996

8. The rationale for exposure and response prevention, emphasizing both habituation and inhibitory learning

Evidence: *OR:* Craske et al. 2014, Jacoby and Abramowitz 2016 • *CES:* Lopatka and Rachman, 1995, Shafran, 1997 • *ThP, CR:* Salkovskis 1996, Arch and Abramowitz 2015, Benito and Walther 2015

#### **Specialty Competencies**

Ability to:

1. Present at least one specific CBT model of OCD and discuss individual components, including normalizing obsessions, highlighting the critical role of appraisals, and discussing neutralizing behaviors including avoidance and reassurance seeking

Evidence: TM: Foa and Wilson 2012, Söchting 2014, Sookman 2016

2. Communicate how neutralizing behaviors, whether overt or mental, offer temporary relief but perpetuate symptoms

Evidence: *TM*: Veale and Willson 2019

- **3. Discuss the theory and rationale for exposure and response prevention treatment (ERP)** Evidence: *TM*: Foa and Wilson 2012
- **4.** Discuss the theory and rationale for cognitive interventions, including behavioral experiments Evidence: *TM*: Wilhelm and Steketee 2006
- **5.** Prepare patients for in-session, out of office, and home practice of ERP and/or behavioral experiments Evidence: *TM*: Wilhelm and Steketee 2006, Foa and Wilson, 2012, Sookman 2016
- 6. Work with patients' family members to minimize accommodation and maximize support and adherence for home practice

Evidence: CQS, EO: Gomes et al. 2014, Sookman 2018

7. Make recommendations for length of treatment sessions based on understanding of an optimal treatment trial, including booster sessions as needed

Evidence: TG, EO: Sookman and Steketee, 2010 Sookman 2016

#### 8. Communicate the goal to patients of "becoming their own therapist" and to provide information on

identification and coping with lapse or relapse Evidence: EO: Sookman, 2016 9. Form a strong therapeutic alliance and to foster a collaborative relationship Evidence: TM: Kazantzis et al. 2017 • EO: Gilbert and Leahy 2007 10. Promote patients' self-efficacy to improve ability to resist compulsions and to restore psychosocial functioning and quality of life Evidence: CS: Schwartz et al. 2017 • ThP: Bandura 1977 • EO: Sookman 2016, Veale and Willson, 2019 11. Discuss risks and benefits of ERP, to determine patients' readiness and motivation, and to communicate their right to withdraw from treatment at any time Evidence: TG: Ledley et al. 2018 12. 1) Obtain informed consent following explanation of various treatment components in the therapist office, out of the office, and during home practice, 2) ensure that the patient has realistic expectations for treatment outcome (i.e., improvement of symptoms and functioning with aim of wellness or recovery where possible), and 3) discuss criteria that optimize outcome Evidence: TG: Canadian Psychological Association 2017, Evans 2004 13. Recommend self-help books that follow an evidence-based approach and to communicate how to use such books, i.e., not as a substitute for treatment Evidence: TG: Challacombe et al. 2011, Veale and Willson 2019

#### 3.4 Section Name: Exposure and Response Prevention and Behavioral Experiments

Overview

Exposure and response prevention (ERP or EX/RP) is a well-researched efficacious and effective behavioral intervention for OCD. This section outlines the key knowledge and competencies required for implementing EX/RP with patients with OCD.

#### Description of Key Term

*In vivo exposure:* Intentionally approaching people, places, situations, or objects that elicit obsessions and associated distress for therapeutic purposes.

*Imaginal exposure:* Exposure in imagination to feared disastrous consequences. Often used when in vivo exposure can't be realized because of real danger, legal, or ethical considerations. Also used to disconfirm patients' beliefs that thinking about the feared consequences will cause the consequence to materialize.

*Response/Compulsion Prevention*: Teaching patients how to stop engaging in compulsions (compulsions), particularly during exposure exercises. If necessary, patients may focus on preventing easier to resist compulsions first, and/or may be instructed in "spoiling" compulsions that were not successfully prevented by immediately engaging in an exposure.

*Safety seeking behaviors*: Any behavior (e.g., distraction, reassurance seeking, mental compulsions, symbolic compulsions) that interferes with the efficacy of exposure by limiting disconfirmation of the patient's beliefs that compulsions are necessary to prevent feared consequences.

*Home visits*: If practical and necessary, the therapist visits the patient's home to coach him/her in exposure exercises and compulsion prevention at home. Home visits may also be conducted through videoconferencing.

#### Level of Evidence

EX/RP has been evaluated in case series, small controlled and uncontrolled trials, as well as several large randomized controlled trials including studies comparing EX/RP to other efficacious psychotherapies and antidepressant medications. Studies show that both exposure and response prevention are critical, and that treatment is effective in a variety of delivery schedules (e.g., weekly, twice-weekly, daily). Given the large body of research on EX/RP treatment that has accumulated over the past 30 years, several expert consensus guidelines recommend EX/RP and medication, alone or in combination, depending on the degree of symptom severity and impairment.

#### Recommendations for Further Research

The application of prominent theories, such as emotional processing theory, to OCD emphasizes the role of disconfirmation of feared consequences. However, research to confirm hypothesized mechanisms of change in EX/RP is required, including whether these mechanisms differ across OCD subtypes including patients with obsessions without overt compulsions.

EXPOSURE AND RESPONSE PREVENTION AND BEHAVIORAL EXPERIMENTS
Specialty Knowledge
The ability to demonstrate knowledge of:
1. The theoretical background of EX/RP
Evidence: <b>OR</b> : Meyer et al. 1974 • <b>CR</b> : Foa 1979 • <b>ThP</b> : Foa and Kozak 1986, Rachman 1976a, Foa and McLean 2016
2. The differential effects of exposure and response prevention and the need to implement both
components
Evidence: <i>MA</i> : Abramowitz 1996 • <i>RCT</i> : Foa et al. 1984, Rachman et al. 1971
3. Patient preference for graduated approach to exposure over 'flooding'
Evidence: <i>CC</i> : Hodgson et al. 1972, Rachman et al. 1971
4. Why and how to integrate imaginal exposure
Evidence: <i>RCT</i> : Foa et al. 1980, Foa et al. 1984, Foa et al. 1985, Ito et al. 1995
5. The efficacy of EX/RP
Evidence: TG: Greist et al. 2003, NICE 2005, Koran and Simpson 2013 • MA: Hofmann and Smits 2008 • RCT:
Fals-Stewart et al. 1993, Marks et al. 1980, Marks 1981, Rachman et al. 1971, Lindsay et al. 1997, Cottraux et
al. 2001, McLean et al. 2001, Whittal et al. 2005, Foa et al. 1998a • <i>RCS</i> : McLean et al. 2015 • <i>CS</i> : Franklin et
al. 2000, Rothbaum and Shahar 2000, Warren and Thomas 2001 • <i>OCT</i> : Valderhaug et al. 2007
6. The efficacy of EX/RP and serotonin reuptake inhibitors for OCD alone and in combination
Evidence: <b>SR</b> : Foa et al. 2002b, Foa et al. 2005 • <b>RCT</b> : Foa et al. 2005, Foa et al. 2013, Simpson et al. 2008a,
Simpson et al. 2013, Tenneij et al. 2005 • <i>OCT</i> : Kampman et al. 2002, Tolin et al. 2004a • <i>CC</i> : Franklin et al. 2002
7. Who should and should not receive EX/RP (i.e., OCD should be the primary diagnosis when
comorbid diagnoses are present)
Evidence: CC: Foa et al. 1999, Abramowitz and Foa 2000, Abramowitz et al. 2000
8. When and how to implement home visits during EX/RP
Evidence: TM: Foa et al. 2012
9. Utility of adding motivational interviewing to EX/RP
Evidence: <i>RCT</i> : Simpson et al. 2010a • <i>OCT</i> : Simpson et al. 2008b
10. Options for EX/RP session frequency Evidence: <i>RCT</i> : Abramowitz et al. 2003a
11. Ethical concerns and solutions in implementing exposure therapy, particularly out of office
exposures and home visits
Evidence: <b>OR</b> : Altis et al. 2014 • <b>TrPN</b> : Olatunji et al. 2009, Wolitzky-Taylor et al. 2012
12. EX/RP efficacy with different OCD symptom subtypes
Evidence: <i>SR</i> : Ball et al. 1996 • <i>OR</i> : Williams et al. 2013a • <i>RCS</i> : Mataix-Cols et al. 2002, Chase et al. 2015 •
<b>CS</b> : Rufer et al. 2006, Williams et al. 2014 • <b>CSS</b> + <b>CS</b> : Abramowitz et al. 2003b
13. The importance of homework adherence
Evidence: RCS: De Araujo et al. 1996, Simpson et al. 2011, Wheaton et al. 2016b • CS: Abramowitz et al.
2002b • <i>OCT</i> : Tolin et al. 2004a
Specialty Competencies
Ability to:
1. Explain the rational for EX/RP to patients in a clear and compelling fashion
Evidence: <i>TM</i> : Abramowitz 2006a, Foa et al. 2012 • <i>TrPN</i> : Rowa et al. 2007, Abramowitz and Arch 2014

2. Instruct and support patients in identifying triggers, obsessions and compulsions (e.g. avoidance, washing, cognitive compulsions)

Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Rowa et al. 2007
3. Generate and order vivo and imaginal exposure
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Rowa et al. 2007, Abramowitz and Arch 2014,
Pence et al. 2010
4. Instruct patients in response prevention and how to re-expose oneself if a compulsion is conducted
Evidence: TrPN: Rowa et al. 2007
5. Implement home visits during EX/RP when feasible and appropriate
Evidence: TM: Foa et al. 2012, Abramowitz 2006a
6. Identify criteria to implement imaginal exposure to help patients confront disastrous consequences
that they fear will occur if they abstain from compulsions
Evidence: <i>TM</i> : Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i> : Rowa et al. 2007, Gillihan et al. 2012, Pence et al.
2010
7. Encourage patients to approach all feared situations to maximize gains and reduce risk of relapse
Evidence: <i>TM</i> : Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i> : Gillihan et al. 2012, Abramowitz and Arch 2014
8. Identify and effectively address subtle safety seeking behaviors (e.g., distraction, reassurance seeking,
mental compulsions, symbolic compulsions) that may be interfering with the efficacy of exposure and disconfirming the patient's beliefs that compulsions are necessary for their safety
Evidence: <i>TM</i> : Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i> : Gillihan et al. 2012, Pence et al. 2010, Arch and
Abramowitz 2015
9. Frame exposures as hypothesis testing and implement post-exposure processing to help patient attend
to and articulate learning that took place during the exposure
Evidence: <i>TM</i> : Abramowitz 2006a • <i>TrPN</i> : Gillihan et al. 2012, Arch and Abramowitz 2015
10. Plan and conduct home visits (when feasible) to support the transfer of treatment gains to the
patient's home environment
L
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Gillihan et al. 2012
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Gillihan et al. 201211. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework
Evidence: <i>TM</i> : Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i> : Gillihan et al. 2012 11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Gillihan et al. 2012         11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP         Evidence: TM: Abramowitz 2006a
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Gillihan et al. 2012         11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP         Evidence: TM: Abramowitz 2006a         12. Select and implement appropriate assessment tools to gather information about breadth and
Evidence: TM: Foa et al. 2012, Abramowitz 2006a • TrPN: Gillihan et al. 2012         11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework         recording forms to help patients engage in EX/RP         Evidence: TM: Abramowitz 2006a         12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP         <ul> <li>Evidence: <i>TM</i>: Abramowitz 2006a</li> </ul> </li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP         Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP         Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP <ul> <li>Evidence: <i>TM</i>: Abramowitz 2006a</li> </ul> </li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP <ul> <li>Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> </ul> </li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework</b> recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and</b> severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions</b> to provide the patient with evidence from their own experience about the accuracy of maladaptive</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework</b> recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and</b> severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions</b> to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP</b> <ul> <li>Evidence: <i>TM</i>: Abramowitz 2006a</li> </ul> </li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP</b> <ul> <li>Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> </ul> </li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions <ul> <li>Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and</li> </ul> </b></li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework</b> recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and</b> severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions</b> to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP</b> <ul> <li>Evidence: <i>TM</i>: Abramowitz 2006a</li> </ul> </li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP</b> <ul> <li>Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> </ul> </li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions <ul> <li>Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and</li> </ul> </b></li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions <ul> <li>Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> </ul> </li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics <ul> <li>Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al.</li> </ul> </li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li><b>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP</b> Evidence: <i>TM</i>: Abramowitz 2006a</li> <li><b>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</b></li> <li><b>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</b></li> <li><b>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics</b> Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al. 2001, Price and Salsman 2010</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al. 2001, Price and Salsman 2010</li> <li>15. Teach family/other support persons how to support the patient's EX//RP efforts without</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al. 2001, Price and Salsman 2010</li> <li>15. Teach family/other support persons how to support the patient's EX//RP efforts without accommodating their OCD symptoms (please see family-based interventions in this paper) Evidence: <i>RCT</i>: Emmelkamp et al. 1990, Emmelkamp and de Lange 1983, Mehta 1990, van Noppen et al. 1991, van Noppen et al. 1997a, Grunes et al. 2001 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al.</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al. 2001, Price and Salsman 2010</li> <li>15. Teach family/other support persons how to support the patient's EX/RP efforts without accommodating their OCD symptoms (please see family-based interventions in this paper) Evidence: <i>RCT</i>: Emmelkamp et al. 1990, Emmelkamp and de Lange 1983, Mehta 1990, van Noppen et al. 1991,</li> </ul>
<ul> <li>Evidence: <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al. 2012</li> <li>11. Employ standard and idiographic psychoeducational handouts, monitoring forms, and homework recording forms to help patients engage in EX/RP Evidence: <i>TM</i>: Abramowitz 2006a</li> <li>12. Select and implement appropriate assessment tools to gather information about breadth and severity of OCD symptoms (e.g., Y-BOCS) and OCD-related insight (BABS), and to select and use appropriate self-report measures (e.g., OCI) to plan treatment and monitor progress during EX/RP Evidence: <i>TG</i>: Koran and Simpson 2013 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a</li> <li>13. Use behavioral experiments to test expectations about consequences of abstaining from compulsions to provide the patient with evidence from their own experience about the accuracy of maladaptive thoughts and behaviors, and to reduce compulsions Evidence: <i>OR</i>: Abramowitz 2006b • <i>TM</i>: Abramowitz 2006a • <i>TrPN</i>: Abramowitz and Arch 2014, Arch and Abramowitz 2015</li> <li>14. Modify EX/RP for different ages, cultures, and other patient-specific characteristics Evidence: <i>RCT</i>: Simons et al. 2006, Bolton and Perrin 2008 • <i>CS</i>: Friedman et al. 2003 • <i>CR</i>: Franklin et al. 2001, Price and Salsman 2010</li> <li>15. Teach family/other support persons how to support the patient's EX//RP efforts without accommodating their OCD symptoms (please see family-based interventions in this paper) Evidence: <i>RCT</i>: Emmelkamp et al. 1990, Emmelkamp and de Lange 1983, Mehta 1990, van Noppen et al. 1991, van Noppen et al. 1997a, Grunes et al. 2001 • <i>TM</i>: Foa et al. 2012, Abramowitz 2006a • <i>TrPN</i>: Gillihan et al.</li> </ul>

### 3.5 Section Name: Inhibitory and Learning Theory Models of Exposure Therapy

An inhibitory and learning theory model of exposure therapy emphasize associative learning processes, such as extinction learning, as a principal mechanism of exposure therapy. Rather than focusing on within or between session reductions in fear, a learning theory model emphasizes interventions that enhance the acquisition, consolidation, generalization, and retrieval of extinction learning (e.g., Craske et al. 2008). This model of exposure therapy is based on decades of research in both animals and humans, as well as the overall validity of an associative learning model in the genesis, maintenance, and treatment of anxiety-related disorders (see below)

As described in the tabular overview, competency standards for targeting extinction learning through exposure therapy require a clinician to be aware of several key processes, as well as the supporting animal and human literature. These include, but are not limited to, a) knowledge of extinction learning as an error-correction mechanism, b) knowledge of the impact of "safety behaviors" on extinction learning, c) knowledge of strategies for maximizing extinction learning theory model.

Additional competencies are outlined in the tabular overview.

#### Level of Evidence

There is strong evidence for extinction learning as an important mechanism of exposure therapy. This level of evidence is derived from several factors. First, there is considerable evidence that individuals with anxiety-related disorders, included obsessive-compulsive disorder (OCD), demonstrate deficits in associative learning compared to healthy controls (e.g., Lissek et al. 2009; Milad et al. 2013; Geller et al. 2017), and that these deficits predict the emergence of psychopathology (Lommen et al. 2013). Thus, in addition to face validity, there is evidence for the construct and predictive validity of an associative learning model.

In regard to extinction learning as a mechanism of exposure therapy, there is good evidence that extinction learning, and its neurobiological substrates, change as a result of exposure therapy (Kircher et al. 2013; Lueken et al. 2013; Helpman et al, 2016). In addition, there is evidence that specific genetic substrates of extinction learning predict response to exposure therapy for OCD (Fullana et al. 2012) and other anxiety disorders (e.g., Felmingham et al. 2013). Finally, pharmacological agents known to target extinction learning enhance response to treatment (e.g., Kushner et al. 2007; Smits et al. 2013).

In addition, the translational applications of extinction learning to exposure therapy (e.g., Craske et al. 2008) are based upon an extremely strong empirical evidence base regarding mechanisms of extinction learning, derived from decades of research in both animals and humans (e.g., Bouton, 2004; Rescorla, 2006; Culver et al. 2015).

Although research will continue to delineate the role of associative learning processes in exposure therapy for OCD, the extant literature currently supports the notion that extinction learning is a mechanism of exposure therapy, and it is suggested that clinicians target extinction learning during treatment.

#### Recommendations for Further Research

Despite the strong evidence for an associative learning model of exposure therapy, there is a need for additional research to more firmly establish extinction learning as a principal mechanism, and the optimal parameters for targeting extinction learning during treatment.

For example, although there is evidence that extinction learning changes as a result of treatment, and that changes in extinction learning co-vary with symptom improvement (e.g., Kircher et al. 2013; Lueken et al. 2013; Helpman et al, 2016), this needs to be replicated across additional laboratories and clinical samples (including OCD).

In addition, it will be important to measure extinction learning throughout treatment (or at least mid way through treatment), in order to provide stronger evidence that changes in extinction learning drive changes in symptoms. Measuring extinction learning alongside additional mechanisms (e.g., habituation) will provide further evidence for the specificity of associative learning processes as a principal mechanism of exposure therapy. However, this is true of numerous evidence-based interventions, as very few studies have sufficiently measured treatment mechanisms, let alone multiple potential mechanisms simultaneously (Kazdin, 2007).

Future research should also examine the optimal parameters for targeting extinction learning during exposure therapy. The extant literature in animals and humans has identified several behavioral strategies that enhance extinction learning. However, future research that examines the effect of manipulating these strategies during exposure therapy will be informative.

#### INHIBITORY AND LEARNING THEORY MODELS OF EXPOSURE THERAPY

#### **Specialty Knowledge**

The ability to demonstrate knowledge of:

**1.** The elements and process to take a complete history, including developmental, familial, psychosocial, medical, psychiatric, and treatment history

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012 • *ThP*: Craske et al. 2014, Sewart and Craske 2020 • *EO*: Arch and Abramowitz 2015

## 2. Translational research supporting changes in associative learning as a potential mechanism of exposure therapy

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012, Lipp et al. 2020 • *CES*: Fullana et al. 2012 Felmingham et al. 2013, Geller et al. 2019, Helpman et al. 2016, Kircher et al. 2013, Kushner et al. 2007, Lueken et al. 2013, Lange et al. 2020, Smits et al. 2013 • *AES*: Brown et al. 2017, Deacon et al. 2013 • *ThP*: Craske et al. 2014

## **3.** Dominant models of associative learning, with an emphasis on the role of error correction or expectancy violation in learning (e.g., extinction learning)

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012, Lipp et al. 2020 • *ThP*: Craske et al. 2014, Sewart and Craske 2020 • *AR*: Rescorla and Wagner 1972

## 4. Research demonstrating the negative impact of avoidance behavior/conditional inhibitors on extinction learning

Evidence: *SR*: Craske et al. 2008; Craske et al. 2012 • *AES*: Lovibond et al. 2009 • *Th*: Craske et al. 2014; Sewart and Craske 2020 • *AR*: Rescorla 1969

5. Extinction enhancement strategies including deepened extinction, variability, occasional reinforced extinction, spacing of extinction/exposure trials, and increased attentional salience of the conditional stimulus

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012, Lipp et al. 2020 • *AES*: Culver et al. 2015, Lang and Craske 2000, Scheveneels et al. 2019, Struyf et al. 2018, Vansteenwegen et al. 2007, Zbozinek and Craske 2018 • *ThP*: Craske et al. 2014, Sewart and Craske 2020 • *AR*: Bouton et al. 2004, Leung et al. 2012

6. The resistance of evaluative processes (e.g., emotions such as disgust) to traditional extinction learning, and the potential efficacy of counterconditioning procedures in targeting evaluative processes

Evidence: AES: Baeyens et al. 1988, Engelhard et al. 2014, Kerkhof et al. 2011, Vansteenwegen et al. 2006

#### **Specialty Competencies**

The ability to:

1. Conceptualize cases from a learning theory perspective, with an emphasis on identifying unconditional stimuli, conditional stimuli, safety seeking behaviors/conditional inhibitors, and modulatory variables

Evidence: *ThP*: Craske et al. 2014

- 2. Provide rationale behind exposure therapy, with an emphasis on expectancy violation
   Evidence: SR: Craske et al. 2008, Craske et al. 2012, Lipp et al. 2020 ThP: Craske et al. 2014, Sewart and Craske 2020 AR: Rescorla and Wagner 1972
- **3.** Provide psychoeducation regarding the role of safety seeking behaviors in reducing extinction learning

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012 • *AES*: Lovibond et al. 2009 • *ThP*: Craske et al. 2014, Sewart and Craske 2020 • *AR*: Rescorla 1969

- 4. Assess and increase motivation to engage in exposure therapy
   Evidence: *RCT:* Buckner and Schmidt 2009, Maltby and Tolin 2005 *CR:* Riccardi et al. 2010 *TM:* Miller and Rollnick 2012
- **5. Identify the principal unconditional stimulus US** Evidence: *ThP*: Craske et al. 2014
- 6. Identify the principal conditional stimulus (CS) -- that is, the ability to identify the stimulus that is the strongest predictor of the US

Evidence: *ThP*: Craske et al. 2014 • *AR*: Bouton et al. 2012, Holland 1989, Rescorla 1986

7. Identify relevant safety seeking behaviors/negative occasion setters/conditional inhibitors that reduce expectancy

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012 • *ThP*: Craske et al. 2014, Sewart and Craske 2020

8. Assess factors that increase expectancy of US (e.g., contextual variables)

• The expectancy of a US may only occur when the CS is presented for a particular period of time (e.g., illness is only expected if an individual touched a perceived contaminated surface for a specific period of time)

Evidence: ThP: Craske et al. 2014

- 9. Design in vivo exposures to maximally violate expectancy. This includes but is not limited to the following, ensuring that:
  - the principal conditional stimulus is selected for the exposure
  - the target unconditional stimulus is identified and operationalized in a manner that patient will be aware of its non-occurrence (e.g., harming one's infant may be specifically operationalized as drowning them while bathing)
  - any relevant contextual variables (e.g., duration of CS contact) that increase expectancy are present during the exposure
  - any safety behaviors/conditional inhibitors that reduce expectancy are removed during exposure

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012 • *ThP*: Craske et al. 2014, Sewart and Craske 2020 • *AR*: Rescorla and Wagner 1972

10. Assist patient in consolidating extinction learning following an exposure
This includes questions, in person or via a worksheet, such as "What did you expect would happen as a result of doing the exposure?", "What happened?", "You predicted that X the US) would

occur. Did it? How do you know"? This "mental rehearsal" of the non- contingent relationship between the CS and US may enhance consolidation of the extinction memory Evidence: *AES:* Joos 2012, Meeter and Murre 2004 • *ThP:* Craske et al. 2014

# 11. Flexibly employ various extinction enhancement strategies (e.g., deepened extinction, variability, trial spacing, attentional salience of the CS, removing of safety signals, occasional reinforced extinction, etc.) as appropriate

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012, Lipp et al. 2020 • *AES*: Culver et al. 2015, Lang and Craske 2000, Scheveneels et al. 2019, Struyf et al. 2018, Thompson et al. 2018, Vansteenwegen et al. 2007 • *ThP*: Craske et al. 2014 • *AR*, Bouton et al. 2004, Leung et al. 2012

12. Design exposures to continually enhance expectancy violation over the course of treatment. This includes the ability to add relevant contextual variables or stimuli (e.g., deepened extinction) that increase expectancy throughout treatment

Evidence: SR: Craske et al. 2008, Craske et al. 2012 • ThP: Craske et al. 2014

13. Incorporate variability in exposures, in order to increase generalization of learning, while simultaneously maintaining a focus on expectancy violation

Evidence: *SR*: Craske et al. 2008, Craske et al. 2012 • *AES*, Lang and Craske 2000, Scheveneels et al. 2019, Vansteenwegen et al. 2007 • *ThP*, Craske et al. 2014, Sewart and Craske 2020

14. Design imaginal exposures in a manner consistent with expectancy violation or stimulus discrimination. This includes the ability to identify a relevant US predicted to occur as result of imaginal exposure (e.g., inability to function as a result of the distress of conducting the imaginal exposure; having the thought/image of being ill increases likelihood of contracting illness) Evidence: SR: Tsodyks and Gilbert 2004 • ThP: Craske et al. 2014

**15. Handle continued avoidance or lack of compliance with exposure homework** Evidence: *CES*, Glenn et al. 2013, Simpson et al. 2011 • *TM*: Miller and Rollnick 2012

16. Structure additional treatment interventions (e.g., cognitive restructuring) so that they do not negatively impact extinction learning

Evidence: ThP: Craske et al. 2014

**17. Identify components of conditional reactions (e.g., evaluative responses such as disgust) that may be more resistant to extinction learning, and to effectively convey this information to clients** Evidence: *AES*, Baeyens et al. 1988, Engelhard et al. 2014, Kerkhof et al. 2011, Vansteenwegen et al. 2006

#### 3.6 Section name: Cognitive Therapy Part 1

#### Overview

This section describes the knowledge and competencies recommended to deliver specialty CBT for OCD using the model of Salkovskis (1985, 1999). There is abundant evidence that intrusive thoughts are common in the general population, but for most people they are not distressing and are easily dismissed. Central to this model is the idea that a threatening appraisal of the occurrence and/or content of intrusive thoughts drives a range of reactions including emotion, attention, safety-seeking behaviors (SSBs) and avoidance. These in turn serve to reinforce the credibility of the initial appraisal and increase the frequency of the intrusions. CBT using this model is based on gaining a shared understanding of the person's specific appraisals and maintaining factors in an individualized formulation. Detailed knowledge of the various forms of OCD and the range of overt and covert SSBs are required to deliver this model. Knowledge of obsessional beliefs that can be contributing to the problem including but not confined to responsibility is required. Key competencies focus on eliciting the details of an individual's intrusions and appraisals, mapping out the full range of their reactions and conveying how these serve to maintain the problem using formulation skills. Competence is required in eliciting intrusions and appraisals, particularly those associated with shame.

The next phase of CBT using this model is presenting and examining the problem as one of excessive fear rather than one of danger in terms of evidence, associated behaviors and implications for the future. The person moves to testing out these competing theories using behavioral experiments and then building on this new knowledge to reduce compulsions and avoidance. Relevant competencies here are the ability to use socratic questioning to help the person understand that their thoughts are normal and the ability to increase motivation to drop counter- productive SSBs. The ability to design behavioral experiments that clearly test the theories is key. Competencies also include motivating the person to engage in these experiments using discussion techniques and therapist modelling, detecting blocks during experiments such as subtle avoidance and SSBs, and helping the person take responsibility for their progress. In specialty CBT using this model, particular attention is placed on the meaning of experiments and exposure tasks in terms of change in appraisals and beliefs.

#### Description of Key Terms

*Safety-seeking behavior*: behaviors designed to avert a feared outcome or reduce anxiety, that reinforce and/or prevent disconfirmation of the threat appraisal.

*Vicious flower:* The diagrammatic representation of the idiosyncratic OCD formulation including trigger, appraisal and a series of 'petals' representing each process that reinforces the threat appraisal.

#### Level of Evidence

There is published evidence in support for this specific model in a small number of case series and RCTs, but only against waitlist control groups. There is good support for the central tenets of the model from experimental and clinical literature.

#### Recommendations for Further Research

Larger trials could elucidate whether this model is equally effective for all major types of OCD.

There is little longer term follow up data on people treated with this approach. Further research could also explore the relationship between this model and the limited use of safety-seeking behaviors given the emphasis on belief change rather than on exposure.

Specialty Knowledge         The ability to demonstrate knowledge of:         1. A wide range of presentations of OCD - e.g., concerns about contamination, checking, religion / blasphemy, relationships, harm to self or others         Evidence: CS: Halldorsson and Salkovskis 2017, Rector et al 2019 • ThP: Salkovskis 1999 • TM: Bream et al. 2017         2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms Evidence: ThP: Salkovskis 1991, Preeston et al. 1996 • TM: Bream et al. 2017         3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm         Evidence: CS: Purdon and Clark 1994 • CES: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wree et al. 2000 • ThP: Salkovskis 1985 • TM: Bream et al. 2017         4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and "not just right experiences' Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2008 • ThP: Coles et al. 2003 • CWG 1997 • TM: Bream et al. 2017         5. The specific role of responsibility Evidence: CS: Foreston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 1999         6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Foreston et al. 2019 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991         7. Formuluation of thoughts, negative appraisal, emo
<ul> <li>The ability to demonstrate knowledge of:</li> <li>1. A wide range of presentations of OCD - e.g., concerns about contamination, checking, religion / blasphemy, relationships, harm to self or others <ul> <li>Evidence: CS: Halldorsson and Salkovskis 2017, Rector et al 2019 • <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> </ul> </li> <li>2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms <ul> <li>Evidence: <i>ThP</i>: Salkovskis 1991, Freeston et al. 1996 • <i>TM</i>: Bream et al. 2017</li> </ul> </li> <li>3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm</li> <li>Evidence: <i>CS</i>: Purdon and Clark 1994 • <i>CES</i>: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2008 • <i>ThP</i>: Coles et al. 2003, OCCWG 1997 • <i>TM</i>: Bream et al. 2010 • <i>CBS</i>: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouceur et al. 1995. Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>CC</i>: Salkovskis 1991</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: <i>CS</i>: Nattrass et al. 2017 • <i>CES</i>: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower'</li> <li>7. Formuluation of dungts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower'</li> <li>8. Treatment planning based on</li></ul>
<ul> <li>blasphemy, relationships, harm to self or others <ul> <li>Evidence: CS: Halldorsson and Salkovskis 2017, Rector et al 2019 • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms <ul> <li>Evidence: ThP: Salkovskis 1991, Freeston et al. 1996 • TM: Bream et al. 2017</li> </ul> </li> <li>3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm <ul> <li>Evidence: CS: Purdon and Clark 1994 • CES: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • ThP: Salkovskis 1985 • TM: Bream et al. 2017</li> </ul> </li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' <ul> <li>Evidence: CS: Olatunji et al 2019 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000</li> <li>• CES: Ladouceur et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000</li> <li>• CES: Ladouceur et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis et al. 2003, Salkovskis et al. 2000</li> <li>• CES: Evidence: CS: Freeston et al. 2016 • CC: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> </ul> </li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' <ul> <li>Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>8. Treatment planning based on the cognitive conceptualization <ul> <li>Evidence: TM: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>9. Strategies for how</li></ul>
<ul> <li>Evidence: CS: Halldorsson and Salkovskis 2017, Rector et al 2019 • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms Evidence: ThP: Salkovskis 1991, Freeston et al. 1996 • TM: Bream et al. 2017</li> <li>3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm Evidence: CS: Purdon and Clark 1994 • CES: Forester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wree et al. 2000 • ThP: Salkovskis 1985 • TM: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2007, Wree and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wree et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 2000 • CES: Salkovskis et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 2000 • CES: Salkovskis et al. 2017 • CS: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Nattrass et al. 2019 • CS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therap</li></ul>
<ul> <li>2017</li> <li>2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms Evidence: <i>ThP</i>: Salkovskis 1991, Freeston et al. 1996 • <i>TM</i>: Bream et al. 2017</li> <li>3. The negative appraisal of intrusive thoughts – offen believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm Evidence: <i>CS</i>: Purdon and Clark 1994 • <i>CES</i>: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wree et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2008 • <i>ThP</i>: Coles et al. 2003, OCCWG 1997 • <i>TM</i>: Bream et al. 2017</li> <li>5. The specific role of responsibility Evidence: <i>CS</i>: Barrett et al. 2016 • <i>CC</i>: Cougle et al. 2007, Wroe and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2000</li> <li>• <i>CES</i>: Treeston et al. 1991 • <i>CES</i>: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>PP</i>: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: <i>CS</i>: Nattrass et al. 2015 • <i>CSS</i>: Zivor et al. 2013a, Zivor et al. 2013b • <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: <i>TM</i>: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse preven</li></ul>
<ul> <li>2. A wide range of safety seeking behaviors, including covert, overt, and very subtle forms Evidence: <i>ThP</i>: Salkovskis 1991, Freeston et al. 1996 • <i>TM</i>: Bream et al. 2017</li> <li>3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm Evidence: <i>CS</i>: Purdon and Clark 1994 • <i>CES</i>: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2007, Wroe and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouccur et al. 1995, Wroe et al. 2007, Loop and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouccur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>TP</i>: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: <i>CS</i>: Nattrass et al. 2015 • <i>CSS</i>: Zivor et al. 2013a, Zivor et al. 2013b • <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>Evidence: <i>ThP</i>: Salkovskis 1991, Freeston et al. 1996 • <i>TM</i>: Bream et al. 2017</li> <li>3. The negative appraisal of intrusive thoughts – often believing that they are responsible for preventing harm – leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm Evidence: <i>CS</i>: Purdon and Clark 1994 • <i>CES</i>: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2007, Wroe and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2009</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: <i>CS</i>: Preeston et al. 2019 • <i>TE</i>: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>TP</i>: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: <i>CS</i>: Nattrass et al. 2015 • <i>CSS</i>: Zivor et al. 2013a, Zivor et al. 2013b • <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: <i>TM</i>: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> </ul>
<ul> <li>harm leads to distress and generates the need to engage in compulsive behavior as protection, restitution or to prevent harm Evidence: CS: Purdon and Clark 1994 • CES: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • ThP: Salkovskis 1985 • TM: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2008 • ThP: Coles et al. 2003, OCCWG 1997 • TM: Bream et al. 2017</li> <li>5. The specific role of responsibility Evidence: CS: Barrett et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 2000 • CES: Ladouceur et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2017 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> </ul>
<ul> <li>restitution or to prevent harm Evidence: CS: Purdon and Clark 1994 • CES: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • ThP: Salkovskis 1985 • TM: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 2000 • CES: Ladouceur et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> </ul>
<ul> <li>Evidence: <i>CS</i>: Purdon and Clark 1994 • <i>CES</i>: Forrester et al. 2002, Salkovskis et al. 2003, Salkovskis et al. 1997, Wroe et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li><b>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2008 • <i>ThP</i>: Coles et al. 2003, OCCWG 1997 • <i>TM</i>: Bream et al. 2017</b></li> <li><b>5. The specific role of responsibility</b> Evidence: <i>CS</i>: Barrett et al. 2016 • <i>CC</i>: Cougle et al. 2007, Wroe and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>TP</i>: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>TP</i>: Salkovskis 1991</li> <li><b>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower'</b> Evidence: <i>CS</i>: Nattrass et al. 2015 • <i>CSS</i>: Zivor et al. 2013a, Zivor et al. 2013b • <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li><b>8. Treatment planning based on the cognitive conceptualization</b> Evidence: <i>TM</i>: Bream et al. 2017</li> <li><b>9. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress)</b> Evidence: <i>TM</i>: Bream et al. 2017</li> <li><b>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress)</b> Evidence: <i>TM</i>: Bream et al. 2017</li> </ul>
<ul> <li>Wroe et al. 2000 • <i>ThP</i>: Salkovskis 1985 • <i>TM</i>: Bream et al. 2017</li> <li>4. Relevant common OCD beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: <i>CS</i>: Olatunji et al 2019 • <i>CC</i>: Wahl et al. 2008 • <i>ThP</i>: Coles et al. 2003, OCCWG 1997 • <i>TM</i>: Bream et al. 2017</li> <li>5. The specific role of responsibility Evidence: <i>CS</i>: Barrett et al. 2016 • <i>CC</i>: Cougle et al. 2007, Wroe and Salkovskis 2000 • <i>PS</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouccur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • <i>ThP</i>: Salkovskis et al. 2000 • <i>CES</i>: Ladouccur et al. 1991 • <i>CES</i>: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • <i>TP</i>: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: <i>CS</i>: Nattrass et al. 2015 • <i>CSS</i>: Zivor et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: <i>TMP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> </ul>
<ul> <li>overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences' Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2008 • ThP: Coles et al. 2003, OCCWG 1997 • TM: Bream et al. 2017</li> <li>5. The specific role of responsibility Evidence: CS: Barrett et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouccur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 1999</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>Evidence: CS: Olatunji et al 2019 • CC: Wahl et al. 2008 • ThP: Coles et al. 2003, OCCWG 1997 • TM: Bream et al. 2017</li> <li>5. The specific role of responsibility Evidence: CS: Barrett et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 1999</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> </ul>
<ul> <li>al. 2017</li> <li>5. The specific role of responsibility Evidence: CS: Barrett et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 1999</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>Évidence: CS: Barrett et al. 2016 • CC: Cougle et al. 2007, Wroe and Salkovskis 2000 • PS: Salkovskis et al. 2000 • CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 1999</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>• CES: Ladouceur et al. 1995, Wroe et al. 2000, Leonhart and Radomsky, 2019 • ThP: Salkovskis et al. 1999</li> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>6. The counterproductive nature of safety seeking behaviors, including avoidance and attentional bias Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> </ul>
<ul> <li>Evidence: CS: Freeston et al. 1991 • CES: Salkovskis and Campbell 1994, Salkovskis et al. 2003, Salkovskis and Kobori 2015, Van den Hout et al. 2019 • TP: Salkovskis 1991</li> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' <ul> <li>Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>8. Treatment planning based on the cognitive conceptualization <ul> <li>Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change <ul> <li>Evidence: TM: Bream et al. 2017</li> </ul> </li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) <ul> <li>Evidence: TM: Bream et al. 2017</li> </ul> </li> </ul>
<ul> <li>7. Formuluation of thoughts, negative appraisal, emotion, and counterproductive strategies as a 'vicious flower' <ul> <li>Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 •</li> <li>TM: Bream et al. 2017</li> </ul> </li> <li>8. Treatment planning based on the cognitive conceptualization <ul> <li>Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> </ul> </li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change <ul> <li>Evidence: TM: Bream et al. 2017</li> </ul> </li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) <ul> <li>Evidence: TM: Bream et al. 2017</li> </ul> </li> <li>Specialty Competencies</li> </ul>
<ul> <li>flower' Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>Evidence: CS: Nattrass et al. 2015 • CSS: Zivor et al. 2013a, Zivor et al. 2013b • ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>8. Treatment planning based on the cognitive conceptualization Evidence: ThP: Salkovskis 1999 • TM: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: TM: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: TM: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<i>TM</i> : Bream et al. 2017         8. Treatment planning based on the cognitive conceptualization         Evidence: <i>ThP</i> : Salkovskis 1999 • <i>TM</i> : Bream et al. 2017         9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist'         in order to optimize generalization and maintenance of change         Evidence: <i>TM</i> : Bream et al. 2017         10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress)         Evidence: <i>TM</i> : Bream et al. 2017         Specialty Competencies
<ul> <li>Evidence: <i>ThP</i>: Salkovskis 1999 • <i>TM</i>: Bream et al. 2017</li> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
<ul> <li>9. Strategies for how to guide the person with OCD through treatment to 'becoming their own therapist' in order to optimize generalization and maintenance of change Evidence: <i>TM</i>: Bream et al. 2017</li> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
in order to optimize generalization and maintenance of change Evidence: <i>TM</i> : Bream et al. 2017 <b>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress)</b> Evidence: <i>TM</i> : Bream et al. 2017 <b>Specialty Competencies</b>
<ul> <li>10. Strategies to plan for effective relapse prevention (e.g., reinstitution of specific strategies under stress) Evidence: <i>TM</i>: Bream et al. 2017</li> <li>Specialty Competencies</li> </ul>
Evidence: <i>TM</i> : Bream et al. 2017 Specialty Competencies
The ability to:
1. Engagement
• Normalize intrusive thoughts – occurrence and content drawing on pertinent
examples for the specific problem
• Use Socratic questioning to establish that no thought is bad; OCD emerges due to the appraisal of the thought
• Describe and explain the rationale for specialty cognitive therapy and respond to queries

- Evidence: CS: Shepherd et al. 2009 TM: Bream et al. 2017
- 2. Motivation / barriers to change
  - Express understanding of and to address barriers to change in terms of motivation, distress, 30

chronicity of problem, perceived probability of the occurrence of feared outcome and its 'awfulness'

- Use metaphor and Socratic questioning to enhance willingness to change
- Develop a list of goals that represent reclaiming of the aspects of life that OCD has affected Evidence: *TM*: Bream et al. 2017

#### 3. Active intervention

- Collaboratively develop an idiosyncratic 'vicious flower' formulation that elucidates the counterproductive nature of all safety-seeking behaviors
- Identify and formulate OCD-relevant beliefs, including inflated responsibility, overimportance of thoughts, overestimation of threat, intolerance of uncertainty, perfectionism, and 'not just right experiences'
- Identify the influence of comorbid or complicating other problems on reported experience and formulate accordingly
- Collaboratively develop a credible alternative understanding of the problem (Theory A/B)
- Explore the person's current and past experiences to build up evidence for each alternative (Theory A/B) and the implications of acting according to each belief collaboratively devise behavioral experiments that are approachable and useful in building up evidence for theory B and against theory A to test their beliefs
- Facilitate approach toward distressing situations and to increase tolerance of high distress without engaging in overt or covert avoidance, neutralizing, or other compulsive behaviors
- Undertake therapist modeling be prepared to do and exceed any behavioral experiment (within normal limits) including 'anti-OCD' e.g., putting hands in the toilet to challenge contamination fears, wishing death on own loved ones to challenge magical thinking
- Collaboratively agree upon appropriately challenging cognitive therapy homework for each stage of treatment and to follow up on the homework in each session
- Facilitate patient responsibility for planning further behavioral experiments
- Detect and challenge any covert shifting of responsibility and other dysfunctional beliefs and related feelings
- Detect and challenge other covert safety seeking behaviors and avoidance in behavioral experiments
- Manage complications that might arise, such as extreme reluctance to engage in behavioral experiments

Evidence: *RCT*: Bolton et al. 2011, Challacombe et al. 2017, Williams et al. 2010 • *OCT*: Oldfield et al. 2011 • *CSS*: Zivor et al. 2013a, Zivor et al. 2013b • *CR*: Challacombe and Salkovskis 2011 • *TM*: Bream et al. 2017

#### 4. Relapse prevention

- Work with the person with OCD to identify times of heightened responsibility (e.g., becoming a parent, leaving home, taking a promotion / responsible job, when the likelihood of relapse may increase)
- Plan what steps would be necessary to regain progress in the event of a relapse, including doing 'anti-OCD' behavioral experiments and reviewing key sessions
- Set trajectory of progress with person with OCD to work on their longer- term goals Evidence: *TM*: Bream et al. 2017

#### 3.7 Section Name: Cognitive Therapy Part 2

#### Overview

Contemporary cognitive treatment for OCD originates with Salkovskis, 1985 (see cognitive therapy part I, this paper) and was based on the understanding that ego dystonic intrusions are experienced

by a substantial portion of the population. As such, it is not the intrusion that is the problem but the meaning that is attributed to the intrusion, that is, the appraisal. Additionally, the interest in cognitive treatments arose out of attention to the drop out rates associated with treatments that relied on exposure and response prevention (ERP). It was hoped that cognitive treatments would be more easily tolerated and improve upon the established efficacy rates.

Theorists associated with the appraisal model focused on different aspects of appraisal and belief in developing areas for study and treatment strategies. For example, Salkovskis and colleagues targeted inflated responsibility (e.g., Salkovskis, 1985) whereas others worked on the overestimation of danger (e.g., Jones and Menzies, 1998). Rachman (2002) focused on appraisals associated with the overimportance of thoughts (e.g., "mad, bad, dangerous"). Relatedly, Purdon and Clark (2002) focused on the need to control thoughts. Other researchers targeted perfectionism and the intolerance of uncertainty (e.g., Frost et al. 2002). Early treatment trials incorporating a cognitive component (e.g., Emmelkamp and Beens, 1991) showed promise and were further refined following the seminal Salkovskis (1985) paper in addition to the collaborative effort of the Obsessive Compulsive Cognitions Working Group (OCCWG 1997, 2001, 2005). Freeston (e.g., Freeston et al. 1996), van Oppen et al. (1995b) and others published early theoretical papers and case studies elucidating treatment strategies that were subsequently combined into treatment packages and tested in later randomized trials (e.g., van Oppen and Arntz, 1994; McLean et al. 2001).

#### Definition of Key Terms

*Thought action fusion* (Shafran et al. 1996) – This is a process whereby a thought is seen to be more likely because it occurred. Likelihood thought action fusion can be directed toward others (e.g., the thought of loved ones dying in an accident increases the probability of it occurring) or the self (e.g., a thought of becoming ill increases the probability that it will occur). Moral thought action fusion is the equating of thought and action morally (e.g., the thought of harming a loved one is estimated to be as morally bad as doing it).

*Paradox of thought control* – This is based upon the thought suppression work of Dan Wegner (i.e., the white bear suppression effect). If a thought is appraised in a negative personally relevant way, a common strategy to neutralize it would be efforts at suppressing the thought. The work of Wegner and others highlights that thought suppression can result in a rebound effect such that it increases attention to the thoughts, which results in experiencing an increased frequency of unwanted intrusions.

*Responsibility Pie* – To address the black and white thinking associated with responsibility (e.g., 'it will be all my fault'), responsibility pies are used to identify all possible sources/people with whom the person can share the responsibility (responsibility is not absolute, it is a shared phenomenon). Subjective responsibility is initially established, and then other factors are identified and the estimated responsibility associated with each factor should the fear consequence occur is put into the pie. Once other factors are considered, the responsibility associated with the individual with OCD is placed into the remainder of the pie.

*Overestimating threat* – To assist with jumping to conclusions (e.g., 'if I leave the stove on I will start a fire and burn the house down) and making logical estimations of threat/danger, a table is used where all factors prior to the final feared consequence are listed and the probabilities associated with each of these steps are identified. In a behavioral experiment the subjective probability which is established prior is compared to the logical probability with the aim of disconfirmatory learning.

*Intolerance of uncertainty* – This refers to the subjective negative emotions experienced in response to the unknown aspects of a given situation (Dugas et al, 1997; Freeston et al. 2020). Thus, for some individuals, it is not the threat of feared consequences but not knowing. This may be "aleatory" uncertainty that we cannot know in advance (rather than epistemic uncertainty, where some facts are known, but there is ambiguity). It is not the valence of what happens; simply the unknowingness. This may lead to trying to obtain further information or checking, but this is usually doubtful or contradictory and leads to further doubts and intolerance of uncertainty.

#### Level of Evidence

There is an established base of evidence for this cognitive treatment package which has been tested in numerous randomized controlled trials (e.g., van Oppen et al. (1995b); McLean et al (2001); Whittal et al. 2005 and 2008). Although there are subtle differences between research groups, cognitively focused treatments are associated with strong effect sizes that are durable. van Oppen and colleagues published data from a 5-year follow-up study (van Oppen et al. 2005), and Whittal et al (2008) reported a 2-year follow-up study from their group and individual RCTs. Treatment effects were generally maintained over time. Research suggests that cognitively focused treatments may be better tolerated for some cases compared with behavioral interventions (Whittal et al. 2008), and improve treatment response when combined with ERP compared with ERP alone (Rector et al, 2019).

#### Recommendations for Further Research

An important research question is to what extent and for whom combined treatment including cognitive and behavioral treatment strategies would be optimal. Combination interventions are likely needed for many adults in order to address the complexity of symptom presentations. There are several evidence-based cognitive therapy models and interventions that may be differentially helpful contingent on the heterogeneity of OCD presentations. The evidence-based competencies outlined in this section may not be helpful for some patients and symptom subtypes. For example, dysfunctional beliefs characteristic of some subtypes are not characteristic of others for which metacognitive and other interventions may be helpful (Taylor et al. 2006; Solem et al. 2009). Further research is indicated on promising conceptual and treatment approaches to consider broader developmental learning experience that may maintain intransigent current patterms (Beck, 1996; Beck and Haigh, 2014). These include schema-based approaches, and imagery rescripting of distressing past memories, developed specifically for OCD (Sookman et al. 1994, 2003; Salkovskis et al. 1999; Rachman et al. 2014; Veale et al. 2015). An aim of these approaches is to improve patients' collaboration with evidence based behavioral interventions. Importantly, adaptive strategies for identification, tolerance, modulation, and reappraisal of emotions appear critical to ameliorate varied OCD experience and distress (e.g., disgust, incompleteness) and require further study (Sookman, 2016; Wei et al. 2020). An inference-based approach (IBA, O'Connor et al. 2005a; Visser et al. 2015) may be helpful for some patients who present with pervading doubt and poor insight. Given the heterogenous nature of OCD, ongoing development and refinement of specialty treatment protocols are strongly advocated for specific subtype presentations elaborated in this paper.

#### **COGNITIVE THERAPY PART 2**

#### **Specialty Knowledge**

#### The ability to demonstrate knowledge of:

#### 1. Preparation of a case conceptualization including<sup>1</sup>

- **Predisposing factors** (e.g., unpredictable childhood secondary to parental instability, peer bullying, and/or early illness of patient)
- **Precipitating factors** (e.g., current interpersonal stressor such as illness in self or family member, accident in the home, hearing about a catastrophic event such as a fire that happened to someone else)

#### • Maintaining factors including compulsions, neutralizations, and/or avoidance

Evidence: *RCT*: Emmelkamp and Beens 1991, van Oppen et al. 1995b, 2005, McLean et al. 2001, O'Connor et al. 2005a, Whittal et al. 2008, Visser et al. 2015, Rector et al. 2018 • *CR*: van Oppen 2004, Jassi et al. 2018, Radomsky et al. 2020a • *ThP*: Salkovskis 1985,1999, van Oppen and Arntz 1994, Julien et al. 2016

## 2. Psychoeducation regarding at least one cognitive model of OCD (connection between thoughts/intrusions/doubts, mental compulsions, emotions, and behavior)

Evidence: *OR*: Julien et al. 2007 • *RCT*: Whittal et al. 2010a • *CC*: O'Connor and Robillard 1995 • *CSS*: Salkovskis and Kobori 2015 • *CR*: van Oppen 2004 • *CES*: Forrester et al. 2002, Barrera and Norton 2011 • *AES*: Freeston et al. 1991, Ladouceur et al. 1995, Cougle et al. 2007 • *TM*: Salkovskis 1985,1999, van Oppen and Arntz 1994, Purdon and Clark 1994, Salkovskis and Campbell 1994, Salkovskis et al. 1997, Salkovskis et al. 2000

#### 3. OCD-specific cognitive therapy for the appraisal/beliefs model

- Psychoeducation to the model emphasizing differences between intrusions, mental compulsions, and negative automatic thoughts/appraisals/meaning of the intrusion and connection to overt or covert compulsions (compulsion/neutralization)
- Normalizing intrusions
- Downward arrow to identify worst case and/or core fears
- Cognitive reappraisal using Socratic method
- In-session behavioral experiments (e.g., demonstration of the paradox of thought control, the white bear suppression effect)

Evidence: *OR*: Julien et al. 2016 • *RCT*: Emmelkamp and Beens 1991, van Oppen et al. 1995b, 2005, McLean et al. 2001, Whittal et al. 2008 • *CES*: Forrester et al. 2002 • *AES*: Rachman and de Silva 1978, Salkovskis and Harrison 1984, Freeston et al. 1991, Purdon and Clark 1994, Salkovskis and Campbell 1994, Ladouceur et al. 1995, Cougle et al. 2007 • *ThP*: Whittal et al. 2010a • *TM*: Salkovskis 1985,1999, van Oppen and Arntz 1994, Rachman 2002

#### Overestimation of threat and inflated responsibility

- Responsibility piecharting
- Transfers of responsibility experiments
- Threat experiments
- Probability estimations
- Surveys

#### Overimportance and need to control thoughts

- Paradox of thought control
- Behavioral experiments (e.g., difference between desire and fear of desire)
- Letting thoughts come and go
- Surveys (e.g., list of nonclinical obsessions experienced by others and attributions of meanings)
- Use of continuums (e.g., good person/bad person)
- Thought action fusion disconfirmatory experiments

#### Perfectionism and certainty

- Multidimensional reappraisal (e.g., broadening patients' definition of what it means to be a good mother)
- Normalizing uncertainty (e.g., certainty is not possible and comparison to 'risk' taking in other areas of life, such as riding/driving a car, flying)
- Use of metaphor
- Use of surveys (e.g., how common is it for people who don't have OCD to be certain that their door is locked)

Evidence: *CC*: Grisham and Williams 2013 • *CSS*: Salkovskis and Kobori 2015 • *AES*: Wegner et al. 1987, Salkovskis et al. 1997, 2000 • *TM*: Whittal et al. 2002, Yule and Whittal 2007, in press, Whittal and Robichaud 2012

#### **Specialty Competencies**

Ability to:

- 1. Collaborate with the patient in "guided discovery" and to structure the session (relevant to other CBT interventions)
   Set agenda
  - Review homework with assessment of adherence
  - Practice in-session cognitive therapy techniques
  - Collaborate on homework

Evidence: *CR*: van Oppen and Arntz 1994, van Oppen 2004 • *CQS*: Shepherd et al. 2009 • *ThP*: Salkovskis 1985, Zivor et al. 2013a, Zivor et al. 2013b • *TM*: O'Connor and Aardema 2011, O'Connor et al. 2014

- 2. Identify and explain current symptoms including predisposing, precipitating, and maintaining factors, and to communicate case conceptualization relevant to cognitive therapy planning Evidence: *ThP*: Salkovskis 1985, van Oppen and Arntz 1994
- 3. Orient the patient to at least one cognitive model for OCD and to explain the relationship between intrusions, appraisals, emotion, and behavior

Evidence: ThP: Whittal et al. 2010a • TM: O'Connor and Aardema 2011, Julien et al. 2016

4. Provide psychoeducation specifically to the cognitive model for OCD, including the ubiquity of unwanted thoughts

Evidence: AES: Rachman and de Silva 1978, Salkovskis and Harrison 1984 • ThP: Whittal et al. 2010a

- 5. Identify the cognitive domains relevant for each patient and their relationship to appraisals and beliefs
   Evidence: *PS*: Obsessive Compulsive Cognitions Working Group 1997, 2003 *ThP*: Whittal and McLean 1999 •
   *TM*: Frost et al. 2002, Purdon and Clark 2002, Salkovskis and Forrester 2002, Sookman and Pinard 2002,
   Thordarson and Shafran 2002
- 6. Use the formulation as a guide for decision making regarding which cognitive domains to target during treatment

Evidence: *EO*: Persons et al. 1996

7. Advise and provide feedback to patients as they identify triggers, appraisals, and compulsive behaviors with reference to the cognitive therapy conceptual model

Evidence: *RCT*: Van Oppen et al. 1995b, McLean et al. 2001, Whittal et al. 2008, Whittal et al. 2010a • *ThP*: Freeston et al. 1996, Whittal and McLean, 1999

8. Design and use surveys to collect personally relevant information with the goal of normalizing intrusions and appraisals

Evidence: ThP: Whittal and McLean 1999 • TM: Whittal and Robichaud 2012, Rachman et al. 2014

9. Design and implement behavioral experiments to provide corrective information with the goal of developing adaptive appraisals

Evidence: ThP: Salkovskis 1985, Salkovskis et al. 1999 • TrPN: van Oppen and Arntz 1994, Freeston et al. 1996

10. Use cognitive behavioral strategies to modify appraisals so that the meaning of intrusions no longer engenders distress and the need to engage in compulsions

#### Evidence: ThP: Whittal and McLean 1999, Whittal and Robichaud 2012

<sup>1</sup>Relevant to treatment planning for specialty cognitive therapy and other interventions for OCD described in this paper

#### 3.8 Section Name: Family-Based Interventions for OCD

#### Overview

Family responses to OCD, such as Family Accommodation (FA) and Expressed Emotion (EE), have gained prominence in the literature as mediators in the course and treatment of OCD. Given their impact on the course of the disorder and treatment outcome, there is impetus to develop effective family-based treatments for OCD.

Though there are reports of family-based interventions in the treatment of adults dating back four decades, more recent investigations have focused on pediatric samples. The American Psychiatric Association OCD practice guideline indicates the importance of family factors in OCD treatment outcomes (APA, 2007). The NICE Clinical Guidelines (2005) state: "When family members or carers of people with OCD or BDD have become involved in compulsive behaviors, avoidance or reassurance seeking, treatment plans should help them reduce their involvement in these behaviors in a sensitive and supportive manner." Shimshoni et al. (2019) searched for available, peerreviewed, English language papers, published between September 2015 and March 2018, cross-referencing psychiatric disorders with accommodation and other family-related terms (Shimshoni et al. 2019). Ninety-one papers were identified and reviewed, of which 69 were included in this review. In OCD, family accommodation has been repeatedly linked to greater OCD symptom severity, personal and family functional impairment, caregiver burden, and poorer treatment outcomes. Several randomized controlled trials explored the efficacy of different family-based treatments aimed at reducing family accommodation and OCD symptom severity (Baruah et al. 2018).

#### Description of Key Terms

Family accommodation in OCD specifically refers to providing reassurance, participating in compulsions, modifying personal and family routines, facilitating avoidance, and taking on the patient's responsibilities (Calvocoressi et al. 1995). Intrusiveness, poor role definition, and a lack of boundaries are characteristic in families with a high degree of accommodation (Calvocoressi et al. 1995). Calvocoressi and colleagues (1999) reported that family accommodation was present for 88% of spouses or parents and correlated significantly with patient symptom severity and global functioning, family dysfunction, and relatives' reported distress. Although accommodation to OCD symptoms may seem benevolent, relatives' excessive accommodation to compulsions contradicts exposure-based therapy, may perpetuate and reinforce symptoms, and may increase relatives' feelings of distress (Steketee et al. 1998). Family accommodation has been a reliable and replicated predictor of poorer treatment outcome (as reviewed by Shimshoni et al. [2019]). The concept of Family Accommodation was first published in the clinical literature in 1990 (Livingston-Van Noppen et al.). Three validated versions of the Family Accommodation Scale are in the public domain: FAS- Interview Rated (Calvocoressi et al. 1995), FAS- Self Rated (Pinto et al. 2013) and FAS- Patient Version (Wu et al. 2016). These three versions of the FAS have been translated in over 15 languages and are available at: https://publichealth.yale.edu/familyaccommodationocd/

*Expressed emotion* (criticism, hostility, and emotional overinvolvement) is recognized as a robust factor for reliably mediating course or relapse in psychiatric illnesses (for a historical review on

expressed emotion see; Brown and Rutter, 1966; Barrowclough et al. 1994; Hooley and Licht, 1997). Expressed emotion reflects the emotional quality of interactions that occur between relatives and a psychiatric patient, linking family reactions to patient functioning (for a review relevant to OCD, see Steketee et al. 1998). De Berardis et al. [2008]) explored the relationship between insight and expressed emotion as this potentially relates to treatment outcome.

#### Level of Evidence

Amir et al. (2000) noted the relationship of family accommodation with treatment outcome. OCD patients with relatives who accommodated and modified their schedules more had lower response rates to behavioral therapy. In a path-analytic model, Van Noppen and Steketee (2009) found that of all the family variables examined, family accommodation made the largest contribution to predicting OCD symptom severity. Family accommodation has been consistently shown to correlate with OCD symptom severity.

The importance of family in the course of the disorder and treatment has been prominent but not well developed in controlled studies (for a review see Van Noppen and Steketee (2009). Bressi and Guggeri (1996) suggested that interventions specifically aimed at improving strategies of families dealing with an adult with OCD should target relatives' perceptions of patient behavior and their emotional and behavioral responses to the behavior. A family-based approach to treatment underscores the fact that OCD is embedded in a family context, highlighting the important dynamic between relative responses and the patient's distress level and functioning. The findings from studies on family accommodation and expressed emotion indicate that these family responses have gained attention as a fundamental predictor of OCD treatment outcome and should be targeted foci of family-based treatment (Van Noppen, et al. (1997a), Van Noppen et al. (1997b), Remmerswaal et al. (2016), Baruah et al. (2018).

#### Recommendations for Further Research

Specialized CBT including ERP is a robust and effective treatment for OCD with or without medication. It may be necessary to consider combined treatment with medication, or the use of techniques to enhance the efficacy of CBT-ERP, to speed treatment response or for treatment resistant patients. Family accommodation and expressed emotion are important topics for the clinician to be aware of, and evidence suggests that attention to these topics results in improvement of OCD symptoms. We are in need of randomized, controlled studies to further understand the motivation behind family accommodation, the relationship to symptom subtypes, how family accommodation interferes with ERP, and cultural influences on family accommodation. Further, controlled treatment trials are needed to develop an efficacious, standardized family-based OCD intervention to target different foci of family accommodation. Some patients report distressing relationship obsessions, including pathological jealousy, that merit further interventional study (Doron and Derby, 2017; Melli et al. 2018; Brandes et al., 2020).

FAMILY-BASED	<b>INTERVENTIONS</b>	FOR OCD
	IIII DICE DICE TOTIO	1011002

#### **Specialty Knowledge**

#### The ability to demonstrate knowledge of:

1. Basic background on systems, structural, strategic, family theories Evidence: *SR and TrPN*: Boss et al. 2004 • *TM*: Mueser and Glynn 1999 • *TrPN*: Madanes, 1991, Titelman, 2013

2. OCD, and impact of family accommodation (FA) on the course and treatment outcome of OCD Evidence: *MA*: Thompson-Hollands et al. 2014 • *SR*: Lebowitz et al. 2012, Lebowitz et al. 2016, Shimshoni et al. 2019 • *SR and TrPN*: Sassano et al. 2015 • *RCT*: Baruah et al. 2018 • *CES*: Abramowitz et al. 2013, Amir et al. 2000, Gomes et al. 2014, Remmerswaal et al. 2016

#### 3. Expressed Emotion (EE) concepts and impact on course and treatment of OCD

Evidence: *SR*: Steketee et al. 1998 • *RCT*: Chambless and Steketee 1999 • *CES*: general psychiatry, Barrowclough et al. 1994, Brown and Rutter, 1966, Hooley and Licht, 1997, OCD specific, Bressi and Guggeri, 1996, De Berardis et al. 2008, Emmelkamp et al. 1992

### **4. Family behavioral contracting** Evidence: *CES, TM:* Van Noppen, 2002, Van Noppen, 2015, Van Noppen, and Steketee, 2001, Van Noppen et al. 1997b, Van Noppen et al. 1997a

#### **Specialty Competencies**

#### Ability to:

Provide assessment and treatment planning to: identify which family members to include in treatment, assess family structure and relationships, and administer family accommodation assessments
 Evidence: OR: Livingston-Van Noppen et al. 1990, Steketee and Van Noppen 2003, Van Noppen and Steketee
 2003 • PS: Calvocoressi et al. 1999, Pinto et al. 2013, Wu et al. 2016 • CES: Van Noppen et al. 1997a • TM: Van

Noppen, 2002, Van Noppen, 2015, Van Noppen, and Steketee, 2001

### 2. Provide psychoeducation to explain family accommodation and expressed emotion and the impact on the course of OCD/ERP

Evidence: **OR**: Livingston-Van Noppen et al. 1990, Steketee and Van Noppen, 2003, Van Noppen and Steketee 2003 • **CES**: Van Noppen et al. 1997a • **TM**: Van Noppen, 2002, Van Noppen, 2015, Van Noppen, and Steketee, 2001

### 3. Administer family-based intervention: create a family-based hierarchy, administer in-vivo contracting, devise homework ERP contracts, execute problem solving, modify family contracts

Evidence: **OR**: Livingston-Van Noppen et al. 1990, Steketee and Van Noppen 2003, Van Noppen, and Steketee 2003 • **CES**: Van Noppen et al. 1997a • **TM**: Van Noppen, 2002, Van Noppen, 2015, Van Noppen and Steketee 2001

# 4. Identify and intervene on barriers: how to work with a family when the patient refuses to engage in treatment, how to offer family-based treatment with the patient alone when family refuses to engage or is hostile toward the patient

Evidence: *TrPn*: VanDyke et al. 2015

#### 3.9 Section Name: Homework

Overview

Treatment-related homework is an essential component in the acquisition of new learning and skills (via behavioral and cognitive techniques), generalization of new learning to existing and novel situations, and maintenance of learning after formal treatment has ceased. Although data regarding the impact of homework compliance on outcomes in OCD specifically is limited, there is

nevertheless support for the benefits of homework in outcomes with CBT more generally. This section outlines the knowledge and competencies of OCD homework.

#### Description of Key Terms

*Homework:* Therapy work completed by the patient independently outside of the formal therapy setting, designed to aid in new learning and skill acquisition, generalization of new learning to existing and novel situations, and maintenance of gains after formal treatment has ended.

*Homework types*: OCD Homework can take many forms including behavioral (e.g., exposure and response prevention [ERP], behavioral experiments) cognitive techniques (e.g., reappraising maladaptive thoughts and responses, imaginal exposure, mindfulness), strategies for emotional distress, and symptom monitoring/assessment.

*Homework adherence*: Adherence is the extent to which patients implement the recommended homework (Abramowitz et al. 2002b; Anand et al, 2011), time spent (i.e., quantity), quality of homework (e.g., completing ERP trials as prescribed (Kazantzis et al. 2016), and success with response prevention (Wheaton et al. 2016b).

#### Level of Evidence

Few studies have assessed the role of homework in OCD. Simpson et al. (2011) assessed the role of homework adherence on treatment outcome using the Patient EX/RP Adherence Scale (PEAS; Simpson et al. 2010b). Wheaton et al. (2016b) and Kazantzis et al. (2016) explored the attributes (i.e., quantity, quality, response prevention) of homework on treatment outcomes whereas Abramowitz et al. (2002b) focused on how factors such as response prevention, self-monitoring of compulsions, understanding the treatment rationale, and homework compliance relate to posttreatment symptom severity. Reviews and book chapters (Franklin, 2005; Clark, 2007) are sources for understanding the clinical application of homework including discussions of common barriers to homework compliance (Huppert et al. 2006). Farrell et al. (2013) used an experimental design comparing two groups of clinicians to explore how therapist factors, and more specifically therapist perceptions of the safety, tolerability, ethicality of exposure work, may influence how ERP is delivered and communicated to patients. A recent treatment outcome study assessed the role of therapist and non- therapist coaches vs no coach on a web-based treatment intervention (Kobak et al. [2015]). Other technological interventions have been evaluated to enhance homework compliance and treatment outcome (Vogel et al. (2012); Whiteside et al. (2014)). Lastly, family factors such as symptom accommodation (Morgan et al. 2013) and treatment expectations (Lewin et al. 2011) can impact treatment compliance.

#### Recommendations for Further Research

A limited number of empirical studies have assessed the role of homework in OCD. The use of homework appears to be of value in enhancing treatment outcome, although some types of homework may be better tolerated than others. Research focusing on the attributes and differential impact of homework types (e.g., ERP, imaginal exposure, mindfulness, thought reappraisal, behavioral experiments, distress tolerance strategies) on homework compliance is needed. Understanding barriers to treatment (e.g., time, energy, motivation, understanding, etc.) at the outset might lead to improved homework fidelity. Further, the use of technology in the form of web-based treatment protocols, monitoring applications (i.e., apps), or phone support may help to improve homework adherence.

Efforts to clarify the specific characteristics of homework such as "dose", quality, and compliance with response prevention would help provide prescriptive guidelines for how homework is assigned. For example, there is currently no accepted daily or weekly "dose" of homework prescribed by clinicians. Therapist factors may have a significant influence on how ERP and homework is explained and delivered. Future research assessing the impact that therapist anxiety and perceptions of the safety, tolerability, and ethicality of ERP would be of value. Lastly, family factors such as symptom accommodation, perceptions of ERP, parental anxiety, etc., may impact motivation, homework adherence, and ultimately outcomes. Understanding how family factors impact homework compliance, especially in children and teens, could help to inform efforts to educate and prepare families at the outset of treatment.

HOMEWORK	
Specialty Knowledge	
The ability to demonstrate knowledge of:	
1. The role that homework plays in the treatment of OCD (e.g., definition of homework, outcomes,	
benefits)	
Evidence: <i>RCT</i> : Marks et al. 1988, Park et al. 2014, Simpson et al. 2011, Wheaton et al. 2016b • <i>RCS</i> : De A et al. 1996, Kenwright et al. 2005, Simpson et al. 2011 • <i>CS</i> : Abramowitz et al. 2002b, Anand et al. 2011, Le et al. 2013, Woods et al. 2002 • <i>CS</i> , <i>CR</i> : Vogel et al. 2012	
2. The different types of homework (e.g., ERP, imaginal exposure, cognitive restructuring, monitorin	ισ
behavioral experiments)	-8,
Evidence: <i>TM</i> : Clark 2007, Franklin 2005, Sookman and Steketee 2010 • <i>TrPN</i> , <i>CR</i> : Hudson and Kendall 20 Huppert et al. 2006	002,
3. The elements (e.g., quantity, quality, compulsion prevention) of homework for OCD	
Evidence: <i>MA</i> : Kazantzis et al. 2016 • <i>RCT</i> : Wheaton et al. 2016b • <i>RCS</i> : Simpson et al. 2011 • <i>CS</i> : Woods 2002 • <i>PS</i> : Simpson et al. 2010b • <i>EO</i> : Foa and Kozak 1986	et al.
4. How to assess homework compliance (e.g., PEAS, monitoring)	
Evidence: <i>RCT</i> : Lewin et al. 2011, Park et al. 2014, Wheaton et al. 2016b • <i>RCS</i> : Olatunji et al. 2015, Simps al. 2011 • <i>CS</i> : LeBeau et al. 2013, Woods et al. 2002 • <i>PS</i> : Simpson et al. 2010b	son et
5. The barriers to homework compliance (e.g., safety behaviors, time, energy, motivation, ASI,	
anticipatory anxiety, expectations) Evidence: <i>CR</i> : Weidle and Skarphedinsson 2016 • <i>TrPN</i> : Huppert et al. 2006	
6. How to overcome barriers or create modifications to homework (e.g., tech aids, phone support, gos	al
setting, contingencies)	
Evidence: <b>SR</b> : Lind et al. 2013 • <i>RCT</i> : Marks et al. 1988 • <i>RCS</i> : Kenwright et al. 2005, Kobak et al. 2015 • ( Vogel et al. 2012 • <i>CR</i> : Whiteside et al. 2014 • <i>TrPN</i> : Huppert et al. 2006	C <b>S</b> :
7. The role of family, caregivers, and school personnel in homework compliance implementation and	L
maintenance	
Evidence: RCT: Lewin et al. 2011, Morgan et al. 2013 • CR: Weidle and Skarphedinsson 2016	
8. Patient and therapist perceptions of homework and ERP homework (e.g., therapist anxiety, beliefs	5
about ERP	
Evidence: <i>RCS</i> : Farrell et al. 2016 • <i>CES</i> : Farrell et al. 2013	
9. Homework in relapse prevention (i.e., long term benefits of homework compliance)	
Evidence: <i>RCT</i> : Marks et al. 1988 • <i>CS</i> : Anand et al. 2011 • <i>CR</i> : Farrell et al. 2016	
10. Reappraisal of meanings assignments (e.g., behavioral experiments) as component of homework Evidence: CR: McKay 2016 • TM: Sookman and Steketee 2010	
Specialty Competencies	
Ability to:	
1. Communicate the role/rationale/benefits of homework as part of treatment	
Evidence: <i>MA</i> : Kazantzis et al. 2004 • <i>RCS</i> : De Araujo et al. 1996 • <i>CS</i> : LeBeau et al. 2013 • <i>PS</i> : Anand et a 2011, Simpson et al. 2010b • <i>TrPN</i> , <i>CR</i> : Hudson and Kendall 2002, Huppert et al. 2006	al.
2. Identify and assign the different types of homework using individualized collaborative process	
(monitoring, ERP, imaginal exposure, behavioral experiments, bibliotherapy)	

Evidence: *RCS*: De Araujo et al. 1996 • *CS*: Anand et al. 2011 • *TrPN*: Huppert et al. 2006

## 3. Communicate the expectations for homework in terms of quantity, quality, and compulsion prevention Evidence: *MA*: Kazantzis et al. 2016 • *RCT*: Marks et al. 1988, Wheaton et al. 2016b • *RCS*: De Araujo et al. 1996, Simpson et al. 2011 • *CS*: Woods et al. 2002 • *TrPN*: Huppert et al. 2006 • *TrPN*, *CR*: Hudson and Kendall

2002 • <i>EO</i> : Foa and Kozak 1986		
4. Utilize strategies to assist with patient monitoring and recording of homework		
Evidence: <i>CS</i> : Abramowitz et al. 2002b, Woods et al. 2002 • <i>TrPN, CR</i> : Hudson and Kendall 2002		
5. Inform patient regarding the potential benefits of using a homework coach		
Evidence: RCT: Marks et al. 1988 • RCS: Kenwright et al. 2005, Kobak et al. 2015 • CS: Anand et al. 2011		
6. Identify and collaboratively address patient barriers to homework compliance/adherence (e.g.,		
motivation, time, energy, lack of understanding, resistance) and therapist barriers (e.g., therapist		
anxiety, therapist beliefs about ERP)		
Evidence: RCS: Farrell et al. 2016 • CR: Weidle and Skarphedinsson 2016 • CES: Farrell et al. 2013		
7. Communicate the benefits of homework for successful treatment outcome and maintenance of		
treatment gains		
Evidence: RCT: Marks et al. 1988, Park et al. 2014 • CS: Abramowitz et al. 2002b, Anand et al. 2011, LeBeau et		
al. 2013, Woods et al. 2002 • <i>TrPN</i> : Huppert et al. 2006		
8. Identify and address possible patient misperceptions of homework that could impede adherence Evidence: <i>RCS</i> : Simpson et al. 2011 • <i>TrPN</i> , <i>CR</i> : Hudson and Kendall 2002		
9. Administer strategies to enhance compliance, including therapist modelling, goal setting, and use of		
rewards		
Evidence: CR: Weidle and Skarphedinsson 2016 • ThP: Huppert et al. 2006		
10. Maximize the generalizability of exposure work to include completing homework in a variety of		
settings		
Evidence: CR: Weidle and Skarphedinsson 2016 • TrPN: Huppert et al. (2006		
11. Determine the expectations for time spent on homework each day (e.g., two hours per day, seven days		
per week) and/or number of exposure trials (e.g., 5 trials of 5 exposures)		
Evidence: RCT: Marks et al. 1988 • RCS: De Araujo et al. 1996		
12. Communicate how a homework assignment is to be completed		
Evidence: RCT: Marks et al. 1988 • CS: Abramowitz et al. 2002b, Woods et al. 2002 • TrPN: Huppert et al. 2006		
13. Assign developmentally adapted homework		
Evidence: RCT: Park et al. 2014 • CR: Weidle and Skarphedinsson 2016 • TrPN, CR: Hudson and Kendall 2002		
14. Communicate the basic elements of ERP trials (e.g., gradual, repetitive, prolonged)		
Evidence: <i>RCT</i> : Marks et al. 1988, Simpson et al. 2011, Wheaton et al. 2016b		
15. Inform patients on the role of safety behaviors/compulsion prevention during homework and their		
impact on treatment outcome		
Evidence: <b>RCS</b> : Simpson et al. 2011		
16. Demonstrate how exposure homework is to be completed via therapist modeling		
Evidence: <i>RCT</i> : Marks et al. 1988 • <i>RCS</i> : Farrell et al. 2016 • <i>CES</i> : Farrell et al. 2013 • <i>TrPN</i> : Huppert et al. 2006		
17. Educate family members on the role of homework in treatment		
Evidence: <i>RCT</i> : Park et al. 2014 • <i>CS</i> : Anand et al. 2011 • <i>CR</i> : Farrell et al. 2016, Weidle and Skarphedinsson		
2016 • <i>TrPN, CR</i> : Hudson and Kendall 2002		
18. Identify and administer strategies for homework noncompliance, including incomplete homework		
assignments, doing more homework than was assigned, doing exposure without compulsion prevention,		
suboptimal habituation and/or inhibitory learning, engaging in safety behaviors		
Evidence: <i>ThP</i> : Huppert et al. 2006, Craske at al. 2014 • <i>TM</i> : Franklin 2005		
19. Utilize collaboration of family members and others to promote homework compliance		
Evidence: <i>RCT</i> : Marks et al. 1988 • <i>CS</i> : Anand et al. 2011 • <i>CR</i> : Farrell et al. 2016, Weidle and Skarphedinsson 2016 • <i>TuBN_CP</i> : Hudson and Kondoll 2002		
2016 • <i>TrPN, CR</i> : Hudson and Kendall 2002		
20. Identify and administer strategies for family accommodation behaviors that interfere with motivation		
to complete homework Evidence: <i>CR</i> : Weidle and Skarphedinsson 2016 • <i>TrPN</i> , <i>CR</i> : Hudson and Kendall 2002		
21. Assess homework compliance using established measures		
<b>21.</b> Assess nomework comphance using established measures		

Evidence: *RCT*: Wheaton et al. 2016b • *RCS*: Simpson et al. 2011 • *CS*: Anand et al. 2011 • *PS*: Simpson et al. 2010b

# 22. Identify and address the impact of co-morbid conditions such as depression, ADHD, autism spectrum disorder, anxiety disorders, substance use, etc., on patients' ability to understand, implement, complete, and/or benefit from homework

Evidence: RCT: Park et al. 2014

23. Identify and address barriers to homework completion, including lack of time, low energy, motivation, anxiety sensitivity, anticipatory anxiety, beliefs about exposure, dysfunctional beliefs, intolerance of distress

Evidence: RCT: Lewin et al. 2011 • TrPN: Huppert et al. 2006

24. Assign cognitive restructuring and distress tolerance homework (e.g., related to perceived threat, need for certainty, importance and control of thoughts, behavioral experiments) Evidence: *CS*: Anand et al. 2011 • *TM*: Sookman and Steketee 2010

25. Assign homework to maintain treatment gains/manage relapse

Evidence: *RCT*: Simpson et al. 2011 • *TrPN*: Huppert et al. 2006

#### Knowledge and Competency Standards for Specialized CBT for Adult OCD: Part II

#### 3.10 Section Name: Contamination (Including Mental Contamination)

Overview

One of the most common forms of OCD is compulsive cleaning and washing, driven by a fear of contamination (Veale and Roberts, 2014). This section outlines the key knowledge and competencies required for working with patients with OCD-related contamination fears.

#### Description of Key Terms

*Contact contamination:* Feelings of dirtiness, pollution, or disgust that arise following direct physical contact with a tangible stimulus. These feelings are predominately experienced externally on the skin and are responsive to washing.

*Mental contamination:* Feelings of dirtiness, pollution, or disgust that arise without physical contact with a tangible stimulus. The source of contamination is human, rather than inanimate, and the feelings of dirtiness and pollution are predominately internal and consequently may be less responsive to washing.

*Morphing:* Also known as 'transformation obsessions.' The fear of taking on the undesirable characteristics of an unsavoury person(s) and, in extreme cases, transforming into them. The type of

person classed as undesirable is both personally and culturally defined but may include personal enemies or people who are considered "weird," dirty, or of low status.

*Contamination following violations or betrayals:* Feelings of contamination can be caused by psychological or emotional violations, without any physical contact. This may include degradation, humiliation, and betrayals (Rachman, 2010).

*Contamination arising from intrusive thoughts, images and impulses:* Intense feelings of internal contamination can be caused by the occurrence of unwanted, intrusive, repugnant thoughts or impulses, or by one's unacceptable actions. The intrusive thoughts that give rise to self-contamination resemble obsessions (Rachman, 2003), and the two can overlap.

*Visual contamination:* Contamination feelings can occur following the sight of something or someone viewed as immoral, disreputable, or bizarre.

#### Level of evidence

The majority of evidence for contamination in OCD is based on key theoretical papers (e.g., Rachman, 2004; Rachman, 2006; Rachman et al. 2014), which have been substantiated by experimental research (including the induction of mental contamination) using mainly analogue or samples with subclinical OCD (e.g. Elliott and Radomsky, 2009, 2012; Radomsky and Elliott, 2009; Rachman et al. 2012; Ishikawa et al. 2014). There are also a number of clinical papers reporting on contamination and its treatment (including questionnaire or qualitative data) in patients with OCD (e.g. Coughtrey et al. 2012a; Coughtrey et al. 2012b). In terms of treatment, there are a number of large randomised controlled trials of both exposure and response prevention and cognitive behavioral therapy for OCD which have included patients with contamination fears (e.g. Ponniah et al. 2013). More recently there has been a case series of cognitive behavioral therapy for mental contamination specifically (Coughtrey et al. 2013a). There is evidence that the experience of disgust is less responsive to ERP and more resistant to extinction compared with other contamination related experience, and is characterized by differential physiological responses compared with fear (e.g., Mason and Richardson, 2012; Duncko and Veale, 2016; for review see Mancusi et al., 2017).

Recommendations for Further Research

Further experimental and clinical evidence for the cognitive theory of contamination is required, including the classification of the different forms of contamination fears. It is likely that patients with mental contamination fears are less responsive to exposure and response prevention for OCD, as the source of the contamination is internal and often intangible. Future research will benefit from sub-analyses of the effectiveness and acceptability of ERP for patients with contamination fears and further investigation of the effectiveness of cognitive-behavioral therapy for mental contamination through randomised controlled trials. Further research is needed on treatment approaches that have been proposed specifically for disgust, such as counter conditioning, inhibitory learning models of ERP, and cognitive reappraisal strategies (Craske et al., 2014; Engelhard et al. 2014; Wong et al. 2021).

#### CONTAMINATION (INCLUDING MENTAL CONTAMINATION)

Specialty Knowledge Ability to demonstrate knowledge of:

1. The theoretical background to the acquisition of contamination according to different theoretical			
models e.g., habituation, inhibitory fear learning, three pathways to fear, and appraisal-based			
learning			
Evidence: ThP: Foa and Kozak 1986, Watts 1979, Craske et al. 2014, Craske et al. 2008, Jacoby and			
Abramowitz 2016, Rachman, 1977, Clark 2004, Frost and Steketee 2002, Salkovskis 1985			
2. Define, and recognise, (a) contact contamination and (b) mental contamination			
Evidence: ThP: Rachman 1994, Rachman 2006, Rachman et al. 2014, Rachman and Hodgson 1980			
3. The different forms of (a) contact contamination e.g., radiation, asbestos, AIDS; and (b) mental			
contamination e.g. following betrayals, morphing, visual contamination, and contamination arising			
from intrusive thoughts, images, and impulses			
Evidence: <b>PS</b> : Radomsky et al. 2014a • <b>CES</b> : Badour et al. 2013, Fairbrother and Rachman 2004, Ishikawa et al.			
2015 • CQS: Coughtrey et al. 2012b, Zysk et al. 2018 • ThP: Rachman 1994, 2006, Rachman et al. 2014,			
Rachman and Hodgson 1980			
4. And recognise the key features of, (a) contact and (b) mental contamination			
Evidence: <b>PS</b> : Radomsky et al. 2014a • <b>CES</b> : Badour et al. 2013, Fairbrother and Rachman 2004, Ishikawa et al.			
2015 • AES: Coughtrey et al. 2012a, Elliott and Radomsky 2009, 2012, Fairbrother et al. 2005, Herba and			
Rachman 2007, Ishikawa et al. 2014, Millar et al. 2016, Rachman et al. 2012, Radomsky and Elliott 2009,			
Waller and Boschen 2015 • COS: Coughtrey et al. 2012b • ThP:, Rachman 1994, 2006, Rachman et al. 2014,			
Rachman and Hodgson 1980			
5. The relationship between contact and mental contamination			
Evidence: CES: Coughtrey et al. 2012a, Mathes et al. 2019a • ThP: Rachman 2006, Rachman et al. 2014			
6. Psychometric measures of contamination e.g., washing subscale of the Obsessive Compulsive			
Inventory, the Mental Contamination subscale of the Vancouver Obsessive Compulsive Inventory,			
the Contamination Thought-Action Fusion Scale, Sensitivity to Contamination Scale, and the			
the Contamination Thought-Action Fusion Scale, Sensitivity to Contamination Scale, and the Morphing Fear Ouestionnaire			
Morphing Fear Questionnaire			
Morphing Fear Questionnaire Evidence: <i>PS</i> : Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 •			
Morphing Fear Questionnaire Evidence: <i>PS</i> : Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i> : Rachman et al. 2014			
<ul> <li>Morphing Fear Questionnaire         <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007,</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • ThP: Rachman et al. 2014 </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017 </li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 •</li> <li>ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: CR: Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey et al. 2015 • ThP: Rachman</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 •</li> <li>ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: CR: Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey et al. 2015 • ThP: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: AES: Rachman et al. 2011 • ThP: Rachman et al. 2014</li> </ul> </li> <li>10. The role of memory biases in contamination fears</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 •</li> <li>ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: CR: Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey et al. 2015 • ThP: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: AES: Rachman et al. 2011 • ThP: Rachman et al. 2014</li> </ul> </li> <li>10. The role of memory biases in contamination fears <ul> <li>Evidence: AES: Radomsky et al. 2014b</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> <li>7. The role of disgust in contamination and differences in trajectories in habituation Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> <li>8. The role of mental imagery in contamination fears Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> <li>10. The role of memory biases in contamination fears Evidence: <i>AES</i>: Radomsky et al. 2014b</li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015</li> <li>ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: CR: Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey et al. 2015 • ThP: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: AES: Rachman et al. 2011 • ThP: Rachman et al. 2014</li> </ul> </li> <li>10. The role of memory biases in contamination fears <ul> <li>Evidence: AES: Rachman et al. 2014b</li> </ul> </li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears <ul> <li>Evidence: ThP: Rachman et al. 2014</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> <li>7. The role of disgust in contamination and differences in trajectories in habituation Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> <li>8. The role of mental imagery in contamination fears Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> <li>10. The role of memory biases in contamination fears Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears Evidence: <i>ThP</i>: Rachman et al. 2014</li> <li>12. The role of concealment in maintaining appraisals</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>10. The role of memory biases in contamination fears <ul> <li>Evidence: <i>AES</i>: Rachman et al. 2014 • <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears <ul> <li>Evidence: <i>ThP</i>: Rachman et al. 2014</li> </ul> </li> <li>12. The role of concealment in maintaining appraisals <ul> <li>Evidence: <i>SR</i>: repugnant obsessions, Moulding et al. 2014 • <i>ThP</i>: Newth and Rachman 2001</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> <li>7. The role of disgust in contamination and differences in trajectories in habituation Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> <li>8. The role of mental imagery in contamination fears Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> <li>10. The role of memory biases in contamination fears Evidence: <i>AES</i>: Radomsky et al. 2014b</li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears Evidence: <i>ThP</i>: Rachman et al. 2014</li> <li>12. The role of concealment in maintaining appraisals Evidence: <i>SR</i>: repugnant obsessions, Moulding et al. 2014 • <i>ThP</i>: Newth and Rachman 2001</li> <li>13. Morality, perpetrators, and betrayal in mental contamination</li> </ul>			
<ul> <li>Morphing Fear Questionnaire <ul> <li>Evidence: PS: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015</li> <li>ThP: Rachman et al. 2014</li> </ul> </li> <li>7. The role of disgust in contamination and differences in trajectories in habituation <ul> <li>Evidence: SR: Ludvik et al. 2015 • CES: Melli et al. 2014, Poli et al. 2019 • AES: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • ThP: Mancusi et al. 2017</li> </ul> </li> <li>8. The role of mental imagery in contamination fears <ul> <li>Evidence: CR: Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey et al. 2015 • ThP: Rachman 2007</li> </ul> </li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing <ul> <li>Evidence: AES: Rachman et al. 2011 • ThP: Rachman et al. 2014</li> </ul> </li> <li>10. The role of memory biases in contamination fears <ul> <li>Evidence: AES: Radomsky et al. 2014b</li> </ul> </li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears <ul> <li>Evidence: ThP: Rachman et al. 2014</li> </ul> </li> <li>12. The role of concealment in maintaining appraisals <ul> <li>Evidence: SR: repugnant obsessions, Moulding et al. 2014 • ThP: Newth and Rachman 2001</li> </ul> </li> <li>13. Morality, perpetrators, and betrayal in mental contamination <ul> <li>Evidence: AES: Elliott and Radomsky 2009, Rachman et al. 2012</li> </ul> </li> </ul>			
<ul> <li>Morphing Fear Questionnaire Evidence: <i>PS</i>: Foa et al. 2002a, Foa et al. 1998b, Melli et al. 2015, Radomsky et al. 2014a, Zysk et al. 2015 • <i>ThP</i>: Rachman et al. 2014</li> <li>7. The role of disgust in contamination and differences in trajectories in habituation Evidence: <i>SR</i>: Ludvik et al. 2015 • <i>CES</i>: Melli et al. 2014, Poli et al. 2019 • <i>AES</i>: Deacon and Olatunji 2007, Olatunji et al. 2004, Wolitzky-Taylor et al. 2009 • <i>ThP</i>: Mancusi et al. 2017</li> <li>8. The role of mental imagery in contamination fears Evidence: <i>CR</i>: Veale et al. 2015 • <i>CES</i>: Coughtrey et al. 2013b • <i>CQS</i>: Coughtrey et al. 2015 • <i>ThP</i>: Rachman 2007</li> <li>9. The role of counterproductive behavior in contamination fears, including avoidance and repeated washing Evidence: <i>AES</i>: Rachman et al. 2011 • <i>ThP</i>: Rachman et al. 2014</li> <li>10. The role of memory biases in contamination fears Evidence: <i>AES</i>: Radomsky et al. 2014b</li> <li>11. The role of mislabelling mood states in the maintenance of contamination fears Evidence: <i>ThP</i>: Rachman et al. 2014</li> <li>12. The role of concealment in maintaining appraisals Evidence: <i>SR</i>: repugnant obsessions, Moulding et al. 2014 • <i>ThP</i>: Newth and Rachman 2001</li> <li>13. Morality, perpetrators, and betrayal in mental contamination</li> </ul>			

15. The spread of contamination fears and their decay over time
Evidence: CES: Rachman et al. 1976, Tolin et al. 2004b • AES: Coughtrey et al. 2014a, 2014b • ThP: Riskind
et al. 2012
<ul> <li>16. Different specialty CBT approaches to the treatment of contamination fears         Evidence: SR: Ponniah et al. 2013 • RCT: Jones and Menzies 1998 • CS: Coughtrey et al. 2013a • ThP:         Rachman et al. 2014     </li> </ul>
Specialty Competencies
Ability to:
1. Assess the current problem and its impact in detail, including asking for a specific and recent
example of contamination fear
Evidence: CS: Coughtrey et al. 2013a • ThP: Rachman 2006, Rachman et al. 2014
2. Gather information about the source(s) of contamination, in particular human sources and
hypervigilance to these sources
Evidence: CS: Coughtrey et al. 2013a • ThP: Rachman 2006, Rachman et al. 2014
3. Take a detailed history of the development of contamination, including questions about when the
problem started, speed of onset, how the patient makes sense of the problem and personal
vulnerability
Evidence: CS: Coughtrey et al. 2013a • ThP: Rachman 2006, Rachman et al. 2014
4. Assess previous or current physical and psychological violations and betrayals
Evidence: <i>CS</i> : Coughtrey et al. 2013a • <i>AES</i> : Elliott and Radomsky 2009, Rachman et al. 2012 • <i>ThP</i> : Rachman 2006, Rachman 2010, Rachman et al. 2014
5. Obtain information about the perceived nature of the spread of contamination
Evidence: CES: Rachman et al. 1976, Tolin et al. 2004b • AES: Coughtrey et al. 2014a, Coughtrey et al. 2014b •
<i>ThP</i> : Looming vulnerability model, Riskind et al. 2012
6. Include assessment of mental imagery, including the presence and nature of any protective imagery
Evidence: CR: imagery rescripting in OCD, Veale et al. 2015 • CES: Coughtrey et al. 2013b • CQS: Coughtrey
et al. 2015 • <i>ThP</i> : Rachman 2007, Rachman et al. 2014
7. Provide psychoeducation about the nature and origins of contact, mental contamination, and the

7. Provide psychoeducation about the nature and origins of contact, mental contamination, and the mislabelling of mood states

Evidence: CS: Coughtrey et al. 2013a • AES: Rees et al. 2014 • ThP: Rachman 2006, Rachman et al. 2014

8. Support patients to monitor and record contaminating triggers, the intensity of perceived contamination, location of perceived contamination within themselves, and subsequent behavior -- e.g., avoidance, washing, forming a protective image

Evidence: CS: Coughtrey et al. 2013a • ThP: Rachman 2006, Rachman et al. 2014

9. Use surveys to collect personally relevant information -- e.g., to normalise fears or to gather information

Evidence: *RCT*: CBT for OCD, Whittal et al. 2010b • *CS*: Coughtrey et al. 2013a • *ThP*: Rachman 2006, Rachman et al. 2014

10. Use behavioral experiments to test beliefs about contamination, to provide the patient with direct personal evidence about maladaptive cognitions and behaviors, and to reduce maintaining behaviors Evidence: *RCT*: CBT for OCD, Whittal et al. 2010b • *CS*: Coughtrey et al. 2013a • *ThP*: Rachman 2006, Rachman et al. 2014

**11.** Use ERP in conjunction with cognitive behavioral techniques to address contact contamination fears Evidence: *AES*: Rachman et al. 2011 • *ThP*: Craske et al. 2014, Rachman et al. 2014

12. Use cognitive behavioral techniques to change the meaning of the source of contamination, modify self-generating contamination fears by reinterpreting the significance of the feelings of mental contamination, and address the meaning of dirtiness and link this to issues of self-esteem and self-identity

Evidence: CS: Coughtrey et al. 2013a • ThP: Rachman 2006, Rachman et al. 2014

#### 3.11 Section name: Compulsive Checking and Pathological Doubting

#### Overview

First, this section provides an overview of the theoretical and practical knowledge associated with the understanding and treatment of compulsive checking and pathological doubting from a cognitivebehavioral perspective. Specifically, cognitive (e.g., Salkovskis, 1985; Rachman, 2002) and behavioral (e.g., Mowrer, 1939, 1953, 1960) models explaining the development and maintenance of checking and doubting are presented, along with resources to better identify and measure key features of these symptoms. This section further highlights the role of a number of dysfunctional

beliefs (e.g., inflated responsibility) thought to be involved in the aetiology of checking and doubting (e.g., Radomsky et al. 2010). Second, specialty competencies relevant to the treatment of these symptoms are presented. These include the ability to assess compulsive checking, provide psychoeducation, and use cognitive (e.g., behavioral experiments) and behavioral (e.g., exposure and response prevention) treatment strategies to target symptoms and challenge maladaptive cognitions.

#### Definition of Key Terms

To properly understand this section, specific concepts should be defined and/or clarified: a) in research, *urges to check* are assessed using self-report measures, whereas *checking* is assessed by quantifying actual checking behavior; b) *inflated responsibility* is the belief that one has influence over a real or imagined negative outcome and is therefore responsible to prevent it (Clark, 2004); c) *threat overestimation* is the belief that a given negative consequence is catastrophic (i.e., harm severity) and likely to occur (i.e., harm probability; Clark, 2004); d) *beliefs about memory* refer to one's perception of their retrospective and/or prospective memory confidence, vividness, and/or detail (e.g., Rachman, 2002; van den Hout and Kindt, 2003a); e) *reassurance seeking* (i.e., checking by proxy) is the repetitive seeking of safety-related information, despite having already received the information previously (Parrish and Radomsky, 2010).

#### Level of Evidence

Randomized controlled trials, meta-analyses, and systematic reviews have supported the efficacy and effectiveness of exposure and response prevention (e.g., Foa et al. 2005), cognitive-behavior therapy (e.g., Abramowitz et al. 2002c; Olatunji et al. 2013), and cognitive therapy (e.g., Whittal et al. 2010b) for compulsive checking. Psychometric, experimental, and intervention studies have also provided evidence for cognitive models of compulsive checking and pathological doubting, by showing that maladaptive beliefs lead to and maintain urges to check and checking behavior (see Radomsky et al. 2010). However, the evidence supporting the use of inference-based therapy for checking is limited to a small-scale randomized controlled trial (O'Connor et al. 2005a), and the evidence supporting behavioral strategies for reassurance seeking is limited to case studies (Halldorsson, 2015).

#### Recommendations for Further Research

Although exposure and response prevention has been shown to be effective and efficacious in treating compulsive checking, a number of individuals are left unwell post-treatment and/or drop out due to the difficulty of facing anxiety-provoking situations and stimuli (e.g., Foa et al. 2005). As a result, future research should emphasize 1) the development of more acceptable treatment strategies (especially cognitive interventions) and 2) the identification of other maladaptive beliefs involved in the aetiology and maintenance of checking and doubting as a way to improve treatment (e.g., Gagné and Radomsky, 2017). Importantly, research supporting the efficacy of behavioral, cognitive, and/or other related therapies for reassurance seeking is also warranted.

#### **COMPULSIVE CHECKING AND PATHOLOGICAL DOUBTING Specialty Knowledge** Ability to demonstrate knowledge of: 1. The theoretical background relevant to the development and maintenance of compulsive checking according to different theoretical models Evidence: OR: Gagné et al. 2018 • ThP: Mowrer 1939, 1953, 1960, Rachman 1976b, 1977, 2002, Radomsky et al. 2010, Röper et al. 1973, Röper and Rachman 1976, Salkovskis 1985, Steketee 1993 2. And define/recognize (key features of) compulsive checking Evidence: ThP: Rachman 2002 • TM: Bream et al. 2017, Clark 2004, Foa et al. 2012 • TrPN: Radomsky et al. 2010 3. Psychometric measures of compulsive checking Evidence: OR: Antony 2001, Maudsley Obsessional Compulsive Inventory (MOCI) • PS: Emmelkamp et al. 1999, Obsessive-Compulsive Inventory (OCI), Foa et al. 1998b, Simonds et al. 2000, Obsessive-Compulsive Inventory-Revised (OCI-R)], Abramowitz and Deacon 2006, Foa et al. 2002a, Gönner et al. 2008, Zermatten et al. 2006, Padua Inventory (PI), Kyrios et al. 1996, Macdonald and de Silva 1999, Sanavio 1988, Sternberger and Burns 1990, van Oppen 1992, van Oppen et al. 1995a, Williams et al. 2005, Padua Inventory-Washington State University Revision (PI-WSUR), Burns et al. 1996, Vancouver Obsessional Compulsive Inventory (VOCI), Radomsky et al. 2006a, Thordarson et al. 2004 4. The role of inflated responsibility in compulsive checking Evidence: PS: Obsessive Compulsive Cognitions Working Group [OCCWG] 1997, 2001, 2003, 2005 • CES: Arntz et al. 2007, Lopatka and Rachman 1995, Radomsky et al. 2001, Shafran 1997 • AES: Haring 2005, Ladouceur et al. 1997, Leonhart and Radomsky 2019, van den Hout and Kindt 2004 • ThP: Rachman 2002, Salkovskis 1985 • TrPN: Radomsky et al. 2010 5. The role of threat overestimation (i.e., harm probability and harm severity) in compulsive checking Evidence: PS: OCCWG 1997, 2001, 2003, 2005 • CES: Arntz et al. 2007 • AES: Haring 2005 • ThP: Rachman 2002 • *TrPN*: Radomsky et al. 2010 6. The role of memory confidence, vividness, and detail, and of negative beliefs about (retrospective and prospective) memory in compulsive checking and doubting Evidence: OR: Rachman and Shafran 1998 • RCS: Alcolado and Radomsky 2016 • CES: Boschen and Vuksanovic 2007, Radomsky and Alcolado 2010, Radomsky et al. 2014c • AES: Alcolado and Radomsky 2011, Coles et al. 2006, Cuttler et al. 2013, Radomsky et al. 2006b, Toffolo et al. 2016, van den Hout and Kindt 2003a, 2003b • CS: MacDonald et al. 1997, McNally and Kohlbeck 1993 • ThP: Rachman 2002 • *TrPN*: Radomsky et al. 2010 7. The role of counterproductive behavior (repetition, mental checking, staring) in compulsive checking and doubting Evidence: CES: Boschen and Vuksanovic 2007, Radomsky et al. 2014c • AES: Coles et al. 2006, Radomsky and Alcolado 2010, Radomsky et al. 2006b, Toffolo et al. 2016, van den Hout et al. 2008, van den Hout et al. 2009, van den Hout and Kindt 2003a, 2003b • ThP: Rachman 2002 8. The role of negative beliefs about losing control over one's thoughts and behavior in compulsive checking Evidence: AES: Gagné and Radomsky 2017 • PS: Radomsky and Gagné 2019 9. Reassurance seeking and demonstrate knowledge of the links and differences between reassurance seeking and checking behavior Evidence: OR: Rachman and Shafran 1998 • CS: Halldorsson 2015, Parrish and Radomsky 2010, Starcevic et al. 2012 • PS: Cougle et al. 2012, Joiner and Metalsky 2001, Kobori and Salkovskis 2013, Rector et al. 2011 • AES: Neal and Radomsky 2015, Parrish and Radomsky 2006, 2011 • CQS: Kobori et al. 2012 • ThP: Rachman 2002, Rachman and Hodgson 1980, Salkovskis 1985 **10.** Different specialty CBT approaches (including predictors of change) to the treatment of compulsive checking

Evidence: *MA*: Abramowitz et al. 2002c, Olatunji et al. 2013 • *SR*: Ponniah et al. 2013 • *RCT*: Foa et al. 2005, O'Connor et al. 2005a, Whittal et al. 2010b • *RCS*: Alcolado and Radomsky 2016 • *OCT*: Radomsky et al. 2020b • *CR*: O'Connor et al. 2005b, O'Connor et al. 2009, Radomsky et al. 2020a • *TM*: Bream et al. 2017, Clark 2004, Foa et al. 2012, Wilhelm and Steketee 2006 • *TrPN*: Radomsky et al. 2010

#### **Specialty Competencies**

Ability to:

1. Identify, formulate, and assess the current problem and its impact (including semi-structured interviews, self-report measures, specific and recent examples of checking, and a detailed history of the development of checking)

Evidence: **RCS**: Alcolado and Radomsky 2016 • **ThP**: Rachman 2002 • **TM**: Bream et al. 2017, Clark 2004, Foa et al. 2012, Wilhelm and Steketee 2006 • **TrPN**: Radomsky et al. 2010.

2. Provide psychoeducation on the treatment rationale and the nature and origins of compulsive checking and doubting (including the interactions with memory confidence)

Evidence: **RCS**: Alcolado and Radomsky 2016 • **AES**: Rees et al. 2014 • **ThP**: Rachman 2002 • **TM**: Bream et al. 2017, Clark 2004, Foa et al. 2012, Rachman 2003, Wilhelm and Steketee 2006 • **TrPN**: Radomsky et al. 2010

- **3.** Support patients to monitor and record checking behavior and urges to check in treatment Evidence: *TM*: Bream et al. 2017, Clark 2004, Foa et al. 2012, Wilhelm and Steketee 2006 • *TrPN*: Radomsky et al. 2010
- **4.** Use surveys to collect personally relevant information (e.g., information on others' checking habits) Evidence: *TM*: Bream et al. 2017, Clark 2004, Rachman 2003, Rachman et al. 2014, Wilhelm and Steketee 2006
- 5. Use behavioral experiments to target a) beliefs about responsibility, b) harm probability, c) harm severity, d) negative beliefs about memory, e) the impact of repetition on doubting and memory confidence, vividness, and detail, and f) beliefs about losing control

Evidence: **OR**: Gagné et al. 2018 • **RCS**: Alcolado and Radomsky 2016 • **TM**: Bennett-Levy et al. 2004, Bream et al. 2017, Clark 2004, Rachman 2003, Wilhelm and Steketee 2006 • **TrPN**: Radomsky et al. 2010

6. Use cognitive-behavioral techniques to challenge the meaning attributed to doubt Evidence: *ThP*: Rachman 1997, 1998 • *TM*: Rachman 2003

7. Assess reassurance seeking and apply strategies that can reduce it
 Evidence: PS: Cougle et al. 2012, Joiner and Metalsky 2001, Kobori and Salkovskis 2013, Rector et al. 2011 •

 AES: Neal and Radomsky 2019a, 2019b • TM: Bream et al. 2017, Clark 2004, Foa et al. 2012

#### 3.12 Section Name: Incompleteness/Not Just Right Experiences

Overview

There is increased interest in the significance of fundamental affective experiences that underlie and motivate the diverse overt symptoms seen in OCD. Prevailing conceptualizations of OCD (including for psychological treatment) have focused on an anxious/harm-avoidant profile. However recent years have seen recognition of "incompleteness" as another core affective feature. Like harm-avoidance, incompleteness has been proposed to cut across overt OCD symptom expressions/dimensions but to be associated with some (e.g., symmetry and ordering) more than others. This form of OCD presents many considerations and challenges for treatment. Existing evidence indicates that although symptoms and features most associated with incompleteness are also often those identified as being the least responsive to specialty cognitive-behavioral therapy (CBT), CBT with an emphasis on ERP can be adapted effectively. Systematic clinical research on incompleteness in OCD is needed.

#### Definition of Key Terms

*Incompleteness:* A distressing sense of dissatisfaction or discomfort with one's current state, connected with the perception that actions or intentions have been incompletely achieved

(Rasmussen and Eisen, 1992; Summerfeldt, 2004) – widely known as a "not just right experience" (NJRE; Coles et al. 2003). This is often experienced as a sensory-affective disturbance. Incompleteness is distributed throughout the population, with higher levels associated with obsessive-compulsive behaviors and symptoms. It seems to represent the extreme end of a continuum of obsessive-compulsive perfectionistic personality traits and have parallels in such obsessive-compulsive "spectrum" conditions as tic disorders and perhaps some aspects of body dysmorphic disorder.

#### Levels of Evidence

Evidence of the phenomenology and correlates of incompleteness comes from many theoretical papers, case studies and series, and research with clinical and nonclinical samples using correlational and less commonly quasi-experimental designs. To date, only a small body of research has directly examined treatment implications, such as for CBT design, delivery, and outcomes. Published evidence derives from a few case studies and discussion papers (e.g., Summerfeldt, 2004, 2007; Schubert et al. 2016) and two pilot open trials of ERP for incompleteness/not just right experiences (Coles and Ravid, 2016; Mathes et al. 2019b), and a meta-analysis using published and unpublished data from controlled and uncontrolled treatment studies (Schwartz, 2018). Indirect evidence also comes from clinical research on the OCD symptoms most associated with incompleteness -- symmetry and ordering -- although they are also under-represented in treatment studies.

#### Recommendations for Further Research

Further experimental and clinical evidence for causal factors in incompleteness is needed, in order to inform models of treatment. For example, traditional cognitive-appraisal etiological models of OCD may not apply, as in incompleteness the core sensory-affective disturbance may precede, rather than result from, faulty appraisals. Key cognitive factors may rather include problematic appraisals of incompleteness/not just right experiences (e.g., as intolerable or escalating) as well as post-facto beliefs, with both mediating associated distress and symptom severity. This has direct implications for CBT approaches. With regard to treatment, systematic research at all levels is required. To date, incompleteness has not been incorporated into any controlled trials of ERP or CBT for OCD. Several ERP adaptations noted in this section are consistent with treatment principles based on inhibitory learning theory, warranting further research. Direct and indirect evidence suggests that incompletenessrelated clinical features are associated with less CBT entry, adherence, and completion. Research is therefore indicated on therapy components which enhance treatment readiness and acceptability for these individuals. Given the unique challenges noted in this section, augmentation with cognitive therapy, data on therapy components and process variables, and optimization of long-term treatment benefits will also be of particular interest. Further research is additionally needed on the shared versus distinct phenomenology (mutually as well as with incompleteness) and effective treatment of distressing sensory phenomena in OCD such as misophonia (sensitivity to sounds), "need for energy release", and sensory intolerance, hypersensitivity, or over-responsivity (e.g., Shavitt et al. 2014; Grimaldi and Stern, 2017; Eng et al., 2020; Houghton et al. 2020).

	ialty Knowledge
Abili	y to demonstrate knowledge of:
<b>1. Ph</b>	enomenology of incompleteness
	Evidence: $SR$ : da Silva Prado et al. 2008 • $OR$ : Rasmussen and Eisen 1992 • $CSS$ : Belloch et al. 2016, Coles et al. 2003, Ecker and Gönner 2008, Ferrão et al. 2012, Ghisi et al. 2010, Miguel et al. 2000, Sibrava et al. 2016 • $CR$ : Summerfeldt 2004, 2007 • $AES$ : Summers et al. 2014 • $ThP$ : Pietrefesa and Coles 2008 • $TrPN$ : Hood and Antony 2016
2. Ex	<ul> <li>tant models of the role of incompleteness in OCD</li> <li>Evidence: OR: Rasmussen and Eisen 1992 • CSS: Taylor et al. 2014a • PS: Summerfeldt et al. 2014 • CR: Summerfeldt 2004, 2007 • AES: Pietrefesa and Coles 2009 • ThP: Pietrefesa and Coles 2008</li> </ul>
3 M	anifest OCD symptom correlates of incompleteness
J. 111	Evidence: <b>OR</b> : Rasmussen and Eisen 1992 • <b>OCT</b> : Coles and Ravid 2016 • <b>CSS</b> : Belloch et al. 2016, Coles et al. 2003, Ecker and Gönner 2008, Sibrava et al. 2016, Taylor, McKay et al. 2014a • <b>CR</b> : Summerfeldt 2004, 2007
4. Di	fferential diagnoses and common comorbidities and demonstrate knowledge that they may
	nplicate/impede treatment
	Evidence: <b>OR</b> : Fineberg et al. 2014 • <b>CC</b> : Sica et al. 2015 • <b>CSS</b> : Coles et al. 2008, Ecker et al. 2014a, 2014b, Leckman et al. 1994, Sibrava et al. 2016, Taylor et al. 2014b
<b>5.</b> Cl	nical features of incompleteness-related OCD that may complicate/impede treatment
	Evidence: <i>SR</i> : da Silva Prado et al. 2008, Prada et al. 2008 • <i>OR</i> : Coles and Pietrefesa 2007, Rasmussen and Eisen 1992 • <i>CS</i> : Mancebo et al. 2011 • <i>CC</i> : Rosario-Campos et al. 2001 • <i>CSS</i> : Belloch et al. 2016, Kichuk et al. 2013,
	Sibrava et al. 2016 • CR: Summerfeldt 2004 • AES: Radomsky and Rachman 2004 • CQS: Rachman 1974
	completeness-related clinical features and demonstrate knowledge that they are associated with lower
ra	tes of CBT entry, adherence, and completion
	Evidence: <i>SR</i> : Ball et al. 1996, McKay et al. 2015 • <i>RCT</i> : Mataix-Cols et al. 2002 • <i>CR</i> : Tallis 1996 • <i>CES</i> :
<b>7</b> F-	Abramowitz et al. 2003b • <i>ThP</i> : Pietrefesa and Coles 2008
/ <b>.</b> E1	<ul> <li>apirically supported methods of incompleteness assessment</li> <li>Evidence: Not-Just-Right-Experiences Questionnaire (Revised) (NJRE-Q-R), CSS: Coles et al. 2003, Ghisi et al. 2010 • AES: Coles et al. 2005, Obsessive-Compulsive Core Dimensions Questionnaire (OC-CDQ) and Interview (OC-CDI), Pietrefesa and Coles 2009, Brown Incompleteness Scale (BINCS) • PS: Pietrefesa and Coles 2008, Summerfeldt et al. 2014, Taylor et al. 2014b, Boisseau et al. 2018, Picture-Based Measure of NJREs (PIC-NR10), Davine et al. 2019, Yale-Brown Obsessive-Compulsive Scale (second edition) (Y-BOCS-II) Symptom Checklist, Storch et al. 2010a, Wu et al. 2016</li> </ul>
8. Ex	isting evidence indicates ERP as first line treatment
	Evidence: <i>MA</i> : Schwartz 2018 • <i>RCT</i> : Mataix-Cols et al. 2002 • <i>OCT</i> : Coles and Ravid 2016, Mathes et al. 2019b • <i>CR</i> : Summerfeldt 2004, 2007, Tallis 1996 • <i>ThP</i> : Pietrefesa and Coles 2008 • <i>TM</i> : Sookman 2016 • <i>TrPN</i> : Schubert et al. 2016
9 Ex	idence for, and limitations of, cognitive components of the standard cognitive-behavioral model of
	CD with regard to incompleteness
Ū	Evidence: <i>RCT</i> : Su et al. 2016 • <i>CSS</i> : Belloch et al. 2016, Bragdon and Coles 2017, Chik et al. 2010, Taylor et al. 2006 • <i>CR</i> : Summerfeldt 2004, 2007, Tallis 1996 • <i>ThP</i> : Cougle and Lee 2014 • <i>TrPN</i> : Schubert et al. 2016
Snoo	
	ialty Competencies
ADIII	y to:

Evidence: <i>CSS</i> : Coles et al. 2003 • <i>PS</i> : Boisseau et al. 2018, Storch et al. 2010b, Summerfeldt et al. 2014 • <i>CR</i> : Summerfeldt 2004, 2007 • <i>TrPN</i> : Hood and Antony 2016, Schubert et al. 2016
2. Formulate maintenance of incompleteness-related emotion and counter-productive strategies
(compulsions, compulsions, avoidance) from a cognitive-behavioral perspective
Evidence: <i>MA</i> : Schwartz 2018 • <i>OCT</i> : Coles and Ravid 2016, Mathes et al. 2019b • <i>CR</i> : Summerfeldt 2004, 2007 •
TM: Sookman 2016 • TrPN: Hood and Antony 2016, Schubert et al. 2016, Sookman and Steketee 2007
3. Recognize the breadth and pervasiveness of incompleteness-related behaviors and their impact on
psychosocial functioning
Evidence: CSS: Sibrava et al. 2016 • CR: Summerfeldt 2004, 2007
4. Plan treatment based on the formulation, with emphasis upon ERP
Evidence: <i>MA</i> : Schwartz 2018 • <i>OCT</i> : Coles and Ravid 2016, Mathes et al. 2019b • <i>CR</i> : Summerfeldt 2004, 2007 • <i>TM</i> : Schwartz 1996, Sookman 2016 • <i>TrPN</i> : Sookman and Steketee 2007
5. Enable self-monitoring in order to identify and generate collaboratively a detailed list of internal and
external cues that provoke incompleteness, and to address any reluctance to discuss these
Evidence: <i>OCT</i> : Coles and Ravid 2016 • <i>CR</i> : Summerfeldt 2004, 2007 • <i>TrPN</i> : Hood and Antony 2016
6. Extend "SUDS" concept to incompleteness-relevant affect (e.g., not just right experiences, tension,
discomfort)
Evidence: <i>MA</i> : Schwartz 2018 • <i>OCT</i> : Coles and Ravid 2016, Mathes et al. 2019b • <i>CR</i> : Summerfeldt 2004, 2007 • <i>TM</i> : Sookman 2016 • <i>TrPN</i> : Schubert et al. 2016
7. Identify collaboratively all behavioral and cognitive compulsions and avoidance used to reduce
incompleteness-related discomfort
Evidence: OCT: Coles and Ravid 2016 • CR: Summerfeldt 2004, 2007 • TrPN: Schubert et al. 2016
8. Collate information from assessment to determine the nature and context for in vivo exposures and to
design (potentially multiple) variable "hierarchies"
Evidence: <b>OCT</b> : Coles and Ravid 2016 • <b>CR</b> : Summerfeldt 2004, 2007 • <b>ThP</b> : Craske et al. 2014 • <b>TM</b> : Sookman
2016 • TrPN: Hood and Antony 2016
9. Demonstrate competency in general elements of engaging the patient with CBT for OCD, given likely incompleteness-related treatment ambivalence and lower treatment adherence and/or response
Evidence: <b>OCT</b> : Coles and Ravid 2016 • <b>CR</b> : Summerfeldt 2004, 2007 • <b>TrPN</b> : Schubert et al. 2016
10. Provide a general explanation of the phenomenology, etiology and maintenance of incompleteness
symptoms, to apply this in a case formulation, and to explain the rationale for CBT
Evidence: OCT: Coles and Ravid 2016 • CR: Summerfeldt 2004, 2007 • TM: Sookman 2016 • TrPN: Schubert et
al. 2016
11. Appraise motivation to engage in ERP, and to discuss this using standardized and customized methods
both before and during CBT
Evidence: <b>RCS</b> : Meyer et al. 2010 • <b>OCT</b> : Simpson et al. 2008b • <b>CR</b> : Timpani et al. 2016
12. Work with the patient to develop multiple or multi-themed graded and/or variable exposures
Evidence: <b>OCT</b> : Coles and Ravid 2016 • <b>CR</b> : Summerfeldt 2004, 2007 • <b>ThP</b> : Craske et al. 2014 • <b>TrPN</b> : Hood and
Antony 2016
13. Revise the variable "hierarchy" creatively and collaboratively in relation to the patient's response and as new information about incompleteness discomfort arises during treatment
Evidence: <i>OCT</i> : Coles and Ravid 2016 • <i>CR</i> : Summerfeldt 2004, 2007 • <i>TM</i> : Sookman 2016 • <i>ThP</i> : Craske et al.
2014
14. Gauge and adjust the nature and duration of exposures, given possible value of "lifestyle change"
approach to ERP for incompleteness Evidence: CP: Summerfoldt 2004, 2007 • TM: Seekmen 2016 • TrPN: Sekukert et al. 2016
Evidence: <i>CR</i> : Summerfeldt 2004, 2007 • <i>TM</i> : Sookman 2016 • <i>TrPN</i> : Schubert et al. 2016 15. Build a plan for response prevention, preferably by eliminating compulsions, and modifying this as
clinically indicated; for incompleteness ERP may target duration as well as inflexible forms and
sequences of compulsive behavior
Evidence: <b>OCT</b> : Coles and Ravid 2016 • <b>CR</b> : Summerfeldt 2004, 2007 • <b>TrPN</b> : Hood and Antony 2016
52

**16.** Adapt SUDS plotting strategies creatively and collaboratively, in order to monitor progress Evidence: *OCT*: Coles and Ravid 2016 • *CR*: Summerfeldt 2004, 2007

17. Detect and manage complications which arise during ERP, such as shifting of compulsionizing form and/or foci (including to exposure activities) or shifting of compulsionizing to avoidance Evidence: *CR*: Summerfeldt 2004, 2007

**18.** Demonstrate competency in all elements of relapse prevention for OCD, given typical duration, pervasiveness, and entrenchment of incompleteness and related behaviors Evidence: *CSS*: Sibrava et al. 2016 • *CR*: Summerfeldt 2004, 2007

19. Tailor and utilize cognitive therapy as augment to ERP for incompleteness, with a focus on reappraisal of sensory-emotional experience/not just right experiences

Evidence: MA: Schwartz 2018 • TM: Sookman 2016 • TrPN: Sookman and Steketee 2007

20. Incorporate mindfulness-based therapy methods, both to reinforce cognitive therapy, and boost acceptability of, and aid relapse prevention post, ERP

Evidence: SR: Hale et al. 2013 • CQS: Sguazzin et al. 2017 • TM: Schwartz 1996 • TrPN: Twohig et al. 2015

#### 3.13 Section Name: Overvalued Ideation

#### Overview

Overvalued ideation refers to a system of beliefs that, although dysfunctional, are held strongly and have a strong affective component when contradictory information is presented (Neziroglu et al. 2004). Veale, (2002) argues that over-valued ideas are derived from idealised values, which have developed into such an over-riding importance, that they totally define the 'self' or identity of the individual. Idealised values are also characterised by the rigidity with which they are held. Such patients are unable to adapt to different circumstances and ignore the consequences of acting on their value.

The term overvalued ideation is roughly equivalent to the terms "poor insight" and "absent insight (delusional beliefs)," which are often used in the OCD literature, although the insight terms do not as strongly emphasize the affective component of the belief. Overvalued ideations tend to be fixed but can be modified if challenged, especially by pragmatism (for example the conflict in their values) rather than empiricism or logic. The presence of overvalued ideation in patients with OCD has been theoretically linked to poorer treatment outcome. OCD sufferers with high overvalued ideation may seem to have delusional beliefs, but these present differently compared with schizophrenia, primarily in that the positive and negative symptoms of psychotic illness are not present. Some OCD patients lack insight into their irrationality (Lelliott et al. 1988; Başoğlu et al. 1988), however, unlike schizophrenia OCD-related beliefs are only rarely held with complete conviction, tend to have reduced variation in strength over time, and are not associated with other psychotic symptoms (Kozak and Foa, 1994; Eisen et al. 2004; Phillips et al. 2012). The affect activation when challenging main beliefs may narrow and restrict attention, making it difficult for the patient to shift attentional sets. This leads to an overall impairment in judgement which may ultimately interfere with treatment outcome (Neziroglu et al. 1999b).

#### Levels of Evidence

The levels of evidence provided in this section are from a variety of sources including systematic reviews and meta-analyses, clinical trials, treatment outcome studies, exploratory studies; theoretical papers and books; as well as expert opinion.

Recommendations for Further Research

Future research should test the concept stability of overvalued ideation and investigate impacts on dropout rate and treatment compliance. Additionally, techniques for self-identification and measurement of the beliefs and idealized valued are needed. Further research on the development of OVI in pediatric OCD could also pave the way for forthcoming treatment advancements.

#### **OVERVALUED IDEATION Specialty Knowledge** Ability to demonstrate knowledge of: 1. Phenomenology of overvalued ideas and to define and recognize overvalued ideation (poor or absent insight) Evidence: MA: Neziroglu 2008 • CSS: Eisen et al. 2004, Phillips et al. 2012 • ThP: Yaryura-Tobias 2004, Veale 2002 • *TrPN*: McKay et al. 2015 2. The theoretical background of the development of overvalued ideas Evidence: MA: McKenna 1984 • RCS: Neziroglu et al. 2001 • ThP: Jaspers 1913, Yaryura-Tobias 2004, Veale 2002 • TrPN: Kozak and Foa 1994 3. The different types of OCD symptom correlates of overvalued ideation Evidence: CSS: Eisen et al. 2004, Phillips et al. 2012 • ThP: Yaryura-Tobias 2004 • TrPN: Kozak and Foa 1994 4. Overvalued ideation assessment methods Evidence: RCT: Goodman et al. 1989a, b • RCS: Neziroglu et al. 1999a • PS: Eisen et al. 1998 • CR: Neziroglu and Khemlani 2003 5. Overvalued ideation-related clinical features that are associated with poorer adherence and CBT treatment outcome Evidence: *RCS*: Neziroglu et al. 2001 • *CQS*: Kozak and Foa 1994 6. Different specialty CBT approaches to the treatment of overvalued ideation in OCD and what approaches yield the best outcome Evidence: RCS: Main-Wegielnik 2010, Twohig et al. 2006 • CQS: Neziroglu et al. 2010, Pinto et al. 2007 7. Appropriate and helpful use of "naturalistic" CBT (i.e., outside office in feared situations) for OCD associated with overvalued ideation Evidence: **RCS**: McKay et al. 1996 8. When intensive outpatient or residential treatment is needed for OCD associated with overvalued ideation Evidence: SR and MA: Veale et al. 2016 • CQS: Wilson et al. 2014 9. How overvalued ideation may lead to noncompliance, excessive reassurance seeking, or avoidance Evidence: *TM*: Neziroglu et al. 2009 10. Clinical features of overvalued ideation-related OCD that may complicate/impede treatment Evidence: *RCS*: Neziroglu et al. 1999c 11. Criteria for assessment of degree of change in overvalued ideation Evidence: PS: Neziroglu et al. 1999a, Mataix-Cols et al. 2016 • TM: Sookman and Steketee, 2010 **Specialty Competencies** Ability to: 1. Help the patient to identify overvalued ideation and the internal and external cues that provoke these, and to enable the patient to overcome reluctance to disclose and discuss these (e.g., due to shame) Evidence: RCS: Neziroglu et al. 2001 • TrPN: Neziroglu, and Stevens 2002 2. Assess symptoms of overvalued ideation using different standardized measures Evidence: RCT: Goodman et al. 1989a, b • PS: Eisen et al. 1998, Neziroglu et al. 1999a 3. Create and maintain a positive therapeutic relationship as the patient with overvalued ideation may feel that his/her cognitions and feelings are being challenged, leading to reluctance to engage in

treatment

Evidence: *RCS*: Neziroglu et al. 1999c, Vogel et al. 2006

4. Provide an explanation of the phenomenology, etiology and maintenance of overvalued ideation symptoms, to apply this in a case formulation, and to explain the rationale for specific CBT interventions to address these ideas and related symptoms to the patient Evidence: *RCS*: Neziroglu et al. 2001 • *ThP*: Veale 2002

### 5. Help the patient to identify all behavioral and cognitive compulsions and avoidance used to reduce overvalued ideation- related discomfort Evidence: PCS: Neziroglu et al. 2001 • ThP: Versure Tobias 2004 • TM: Neziroglu et al. 2013 • TrPN: McKay

Evidence: **RCS**: Neziroglu et al. 2001 • **ThP**: Yaryura-Tobias 2004 • **TM**: Neziroglu et al. 2013 • **TrPN**: McKay et al. 2015

6. Develop a case conceptualization and treatment plan for overvalued ideation that is progressive and individualized with the patient, and to collaborate on the plan with other clinicians

Evidence: *SR and MA*: Veale et al. 2016 • *RCS*: Neziroglu et al. 2001 • *TM*: Neziroglu et al. 2013
7. Identify when to make changes to the treatment plan and rationale for overvalued ideation Evidence: *SR and MA*: Veale et al. 2016 • *TM*: Neziroglu et al. 2013 • *TrPN*: Neziroglu et al. 2006

8. Develop behavioral experiments that target specific overvalued ideas to optimize disconfirmatory learning both in session and as homework

Evidence: *RCS*: Neziroglu et al. 1999b Neziroglu et al. 2001 • *TM*: Neziroglu et al. 2013, Veale 2007

9. Identify how cognitive therapy can be utilized to reduce overvalued ideation

Evidence: **RCS**: Neziroglu et al. 2001 • **CQS**: Wilson et al. 2014 • **TM**: Neziroglu et al. 2013

 10. Use ERP to address overvalued ideation including "overpractice" Evidence: *RCS*: Neziroglu et al. 2001, Neziroglu et al. 1999b • *CQS*: Wilson et al. 2014 • *TrPN*: McKay et al. 2015

11. Teach, model and assist the patient in adaptive coping with high overvalued ideation situations within and between sessions

Evidence: *RCS*: Neziroglu et al. 1999b • *CQS*: Röper et al. 1975 • *TM*: Didonna 2009, Hayes 2016, Troth et al. 2014

12. Engage in multi-disciplinary collaboration (specialty CBT and psycho- pharmacotherapy) for overvalued ideation

Evidence: RCS: Neziroglu et al. 2001 • CQS: Neziroglu et al. 2004 • TrPN: McKay et al. 2015

### **13.** Utilize motivational interviewing in conjunction with cognitive therapy for some cases of overvalued ideation

Evidence: *RCS*: Neziroglu et al. 2001 • *OCT*: Simpson and Zuckoff 2011 • *CQS*: Pinto et al. 2007, Wilson et al. 2014 • *TM*: Corbett 2016

### 14. Assess family interactions, provide family intervention including psychoeducation and coping strategies, and to identify when family therapy is indicated (see family-based interventions in this paper)

Evidence: SR and MA: Veale et al. 2016 • RCS: Grunes et al. 2001 • CQS: Gomes et al. 2014

15. Assess on an ongoing basis treatment outcome using overvalued ideation measurements as well as measurements of OCD, depression, and anxiety

Evidence: PS: Eisen et al. 1998, Neziroglu et al. 1999a

16. Set up a relapse prevention program for overvalued ideation after treatment termination Evidence: SR and MA: Veale et al. 2016 • RCS: Neziroglu et al. 1999b • PS: McKay et al. 1996 • CQS: Wilson et al. 2014

#### 3.14 Section Name: Management of Treatment-Interfering Behavior

Overview

During the implementation of specialized treatment for OCD, it is common for patients to engage in one form or another of treatment-interfering behavior. Although the portion of OCD treatment

failures due specifically to treatment-interfering behavior is currently unknown, existing research indicates that it represents a major obstacle to successful OCD treatment. Evidence suggests that 25-30% of individuals with OCD who have appropriate access to CBT are likely to refuse therapy, and a comparable percentage of individuals drop out of therapy prematurely (Foa et al. 1983; Kozak et al. 2000). For those who complete CBT, nonadherence is a significant predictor of poor outcome (Simpson et al. 2012). Some treatment-interfering behavior can either be prevented or managed adequately by the clinician without significantly disrupting treatment of the OCD. However, in the event of severe and pervasive treatment-interfering behavior, specific attention devoted to modifying this behavior may be necessary before OCD treatment can be conducted effectively. This section outlines the knowledge and competencies necessary to address treatment-interfering behavior to facilitate successful OCD treatment outcomes. In assessing reasons for treatment resistance both patient and intervention factors should be considered, including insufficient or inadequate application of evidence-based disorder specific interventions for OCD.

#### Description of Key Terms

*Treatment-Interfering Behavior:* Any behavior incompatible with effective participation in specialized treatment for OCD. Common examples include refusing treatment, failing to complete homework assignments, missing appointments, reporting inaccurate information, engaging in aggressive or argumentative behavior, dropping out of treatment prematurely, and repeatedly switching the focus of therapy. The term is often used to describe behavior that emerges during the context of psychotherapy. However, treatment-interfering behavior can also occur during the administration of other treatments such as pharmacotherapy.

*Therapy-Interfering Behavior:* Largely synonymous with the term treatment-interfering behavior, but typically used solely in reference to behavior that occurs within the context of psychotherapy.

#### Level of Evidence

Treatment ambivalence and resistance, terms typically thought to be associated with treatmentinterfering behavior, have been discussed extensively in the psychotherapy literature. However, these concepts are sometimes linked to psychodynamic or other theoretical models which may be of limited use to practitioners adhering to the evidence-based cognitive and behavioral approaches for OCD. In contrast, the treatment-interfering behavior concept refers to observable behavior, is defined largely by the behavior's disruptive impact on treatment, and is not tied to a specific theoretical model. Because of these features, this concept can be used by clinicians from various theoretical orientations and is particularly compatible with cognitive and behavioral approaches.

Relatively little controlled outcome research has been conducted on interventions for treatmentinterfering behavior in individuals with OCD. With few exceptions, the relevant literature consists largely of theoretical papers, clinical recommendations, case reports, and uncontrolled outcome studies. Some of the literature focuses on prevention or early intervention (e.g., Maltby and Tolin, 2003; Simpson et al. 2008b), while other reports describe interventions designed to address treatment-interfering behavior that emerges during the course of therapy (e.g., Sookman and Pinard, 1999; VanDyke and Pollard, 2005; Sookman and Pinard, 2007; Sookman, 2016).

#### Recommendations for Further Research

Additional research designed to elucidate the prevalence and impact of treatment-interfering behavior in individuals with OCD is clearly needed. Future efforts should include refinements in the models that guide clinicians in developing interventions to address various factors that potentially influence treatment-interfering behavior. Finally, controlled outcome studies will need to examine the efficacy and effectiveness of those interventions.

#### MANAGEMENT OF TREATMENT-INTERFERING BEHAVIOR

#### Specialty Knowledge

Ability to demonstrate knowledge of:

- The role of motivation and readiness for change in determining treatment outcome Evidence: *CC*: De Araujo et al. 1996, de Haan et al. 1997, Keijsers et al. 1994, Monaghan et al. 2015, Pinto et al. 2007 • *ThP*: Norcross et al. 2011
- 2. Strategies that can be implemented early in therapy to help prevent/discourage treatment-interfering behavior (e.g., policies regarding missed sessions, late arrivals, emergency calls, requests for a change of therapist)

Evidence: **RCS**: Swensen and Pekarik 1988 • **CQS**: Molfenter 2013 • **TM**: Allen 1997 • **EO**: Ben-Porath 2014, Welch et al. 2010

**3.** The factors a therapist should consider when determining if treatment ineffectiveness is due to inadequate OCD treatment or treatment-interfering behavior

Evidence: SR: Neziroglu and Mancusi 2014 • RCT: Vandyke and Pollard 2005

- **4.** The various treatment-interfering behaviors that commonly emerge when treating OCD Evidence: *SR*: Pollard 2007 *CQS*: Davis et al. 2020 *TM*: Chapman and Rosenthal 2016
- 5. The negative effects of continuing to administer CBT for OCD without sufficiently addressing treatment-interfering behavior

Evidence: *SR*: Pollard 2007 • *CC*: Foa et al. 1983, Simpson et al. 2012 • *CQS*: Davis et al. 2020 • *ThP*: Sookman and Pinard 2007, Sookman 2016

6. At least one theoretical model of treatment-interfering behavior that includes one or more factors (e.g., inadequate motivation, skill deficits, treatment-incompatible beliefs, family accommodation) proposed to contribute to treatment-interfering behavior

Evidence: *SR*: Pollard 2007, Sookman and Steketee 2007 • *RCS*: Simpson et al. 2010a • *TM*: Allen 1997 • *EO*: Welch et al. 2010

7. Criteria for selecting interventions that can be used to address various factors that influence treatmentinterfering behavior

Evidence: *SR*: Sookman and Steketee 2007, 2010 • *CR*: Simpson and Zuckoff 2011, VanDyke and Pollard 2005 • *CES*: Twohig et al. 2006

#### **Specialty Competencies**

Ability to:

1. Identify treatment-interfering behavior in individuals with OCD Evidence: *SR*: Pollard 2007 • *TM*: Chapman and Rosenthal 2016

2. Communicate and implement interventions designed to help prevent or manage treatment-interfering behavior

Evidence: *CES*: Kluger and Karrass 1983 • *CQS*: Molfenter 2013 • *TM*: Allen 1997, Chapman and Rosenthal 2016 • *EO*: Ben-Porath 2014

**3. Manage treatment-interfering behavior in a non-judgmental, problem- solving manner** Evidence: *SR*: Pollard 2007 • *TM*: Allen 1997, Chapman and Rosenthal 2016 • *EO*: Abramowitz et al. 2003c

4. Determine the conditions under which it is advantageous to discontinue specialty CBT for OCD symptoms and focus treatment primarily on modification of treatment-interfering behavior Evidence: SR: Pollard 2007 • ThP: Sookman and Pinard 2007

5. Help individuals with OCD to identify and acknowledge their treatment- interfering behavior and understand its negative impact on their treatment

Evidence: SR: Pollard 2007 • TM: Allen 1997, Chapman and Rosenthal 2016	
6. Shift, when indicated, the primary focus of treatment from OCD symptoms to	o treatment-interfering
behavior	C C
Evidence: SR: Pollard 2007 • RCS: Simpson et al. 2010a • TM Chapman and Rosent	hal 2016
7. Educate individuals with OCD about the factors that may be contributing to t	their treatment-interfering
behavior	
Evidence: SR: Pollard 2007, Sookman and Steketee 2007, 2010 • RCS: Simpson et al	l. 2010a
8. Develop, administer, and assess the efficacy of cognitive interventions when tr	reatment-incompatible
beliefs contribute to treatment-interfering behavior	
Evidence: SR: Sookman and Steetee 2007, 2010 • CR: Krochmalik et al. 2001 • ThP:	: Veale 2007 • <i>EO</i> : Ellis 1985,
Leahy 2001	
9. Develop, administer, and assess the efficacy of strategies designed to enhance	
motivational interviewing, values clarification) when motivational deficits con	tribute to treatment-
interfering behavior	
Evidence: SR: Tolin and Maltby 2008 • OCT: Simpson et al. 2008b • CC: Simps	t al. 2012 • <i>CES</i> : Maltby and
Tolin 2005, Twohig et al. 2006	
10. Develop, administer, and assess the efficacy of contingency management who	en contingencies contribute
to treatment-interfering behavior	
Evidence: OCT: Worden et al. 2017 • CR: Bensen et al. 2016 • EO: Welch et al. 2010	
11. Develop, administer, and assess the efficacy of skills training (e.g., time mana	agement, emotion
regulation) when a skill deficit contributes to treatment- interfering behavior	
Evidence: RCT: Neacsiu et al. 2014 • CR: McKay and Neziroglu 1996 • AES: Hafne	r et al. 2014 • <i>EO</i> : Welch et al.
2010	
12. Develop, administer, and assess the efficacy of family-focused interventions	
accommodation or other family factors contribute to treatment-interfering be	
Evidence: <i>SR</i> : Lebowitz et al. 2012 • <i>RCT</i> : Gomes et al. 2016, Vandyke et al. 2015, 7	Thompson-Hollands et al. 2015
• CR: Lebowitz 2013	
13. Assess when treatment-interfering behavior has been sufficiently modified to	o warrant resuming OCD
specialty treatment	1.0.1.4. 2010
Exidences CR: Sectionen and Dinard LUUU Van Dillo and Dollard 2005 • ED Sections	n and Stakataa 2010

Evidence: CR: Sookman and Pinard 1999, VanDyke and Pollard 2005 • EO: Sookman and Steketee 2010

#### 3.15 Section name: Cultural Knowledge and Competencies

Overview

This section is intended to review the basic competencies recommended to work effectively with patients across cultural differences. This includes providing treatment to individuals who are of a different race or ethnicity than the therapist. These guidelines emanate from a primarily Western, Eurocentric perspective -- that is, the theoretical framework, explanatory models, and research procedures undertaken to gain the knowledge provided follow from this frame of reference. It is important to understand that other cultures may have different standards for cleanliness and/or explanatory models for OCD-related behaviors and may not completely accept a CBT conceptualization for difficulties.

Patients may be members of communities that are marginalized and stigmatized due to race or ethnicity. This means they experience discrimination, reduced opportunities, and reduced access to a society's resources, including medical care. This may pose additional difficulties that need to be addressed in treatment. Such persons may need more time to develop trust and rapport with a therapist and may have additional fears about being stereotyped due to their unwanted OCD thoughts and behaviors.

Many individuals utilize traditional healers to address mental health symptoms, and usually this includes a spicompulsion or religious component. It is not uncommon for patients with OCD to enlist priests, rabbis, and other religious leaders for help. If the therapist believes that religious beliefs are causing or worsening the OCD, the therapist may incorrectly try to control or suppress the person's beliefs to facilitate treatment. This will undermine trust and empathy, leading to conflict and drop out. Therefore, it is recommended that therapists work respectfully within the confines of the patient's religious rules and traditions, which will ultimately facilitate treatment adherence. A patient's religious values can be recruited into the service of treatment, as often the OCD has interfered with carrying out proper religious duties (e.g., prayer, attendance at services, normal compulsions) rather than improving religious life.

Other than mainstream religious practices, there are additional alternative healing practices that are connected to mental health, as many ethnic groups have introduced their approaches to health and wellbeing into the Western culture through immigration and globalization. Often referred to as of complementary and alternative medicine, this may include Ayurveda, yoga, herbal medicine, acupuncture, Voodoo, astrology, Santeria, and new age therapies. Clinicians should be prepared to discuss the role of traditional medicine and complementary and alternative medicine in the patient's treatment. It is important to show respect for these systems and acknowledge that indigenous, cultural, and traditional healing practices are time-honored methods that many people have historically used to alleviate both physical and psychological problems for generations. Given a conflict between a therapist and a traditional healer, it is helpful to collaborate with the healer if possible. Consultation with professionals familiar with the specific culture is indicated should ethical dilemmas arise, for example, if there is reason to believe a patient may be harmed by a practice that has no scientific evidence.

#### Description of Key Terms

*Explanatory Models*: Individuals and groups can have vastly different notions about the causes for health and disease. Explanatory models are beliefs about an episode of sickness and its treatment that are employed by those engaged in the clinical process.

*Traditional Healers*: Traditional healers, including religious healers, folk healers, and shamans, promote wellness through a variety of techniques, including prayer, spicompulsion ceremony, plant medicines, energetic therapies, and physical/hands on techniques. Ideally, traditional healers recognize but do not compete with Western medical practice. Use of traditional healers is widespread globally, and the World Health Organization supports the practice of traditional medicine to complement modern medicine.

*Complementary and Alternative Medicine*: These are alternative therapies that reside outside traditional medical science and may be based on theories that contradict science or have supernatural or spicompulsion explanations for their effect. Traditional practices become alternative when used outside their original settings and without established scientific explanation and evidence. They are complementary when used alongside established medical therapies.

*Racialization*: Racialization is the process of ascribing racial or ethnic identities to a group that did not originally identify itself as such. Racialization is typically imposed by a dominant group and ascribes an identity for the purpose of continued domination. The racialized group often gradually identifies with and may even embrace the ascribed identity and thus it can become self-ascribed.

*Mental Health Literacy*: Mental health literacy is the ability to recognize specific disorders, knowing how to acquire mental health information, understanding risk factors and causes, knowing types of help available, and attitudes that facilitate recognition of disorders and appropriate help-seeking.

#### Level of Evidence

There is ample evidence from both the larger mental health literature and the OCD literature specifically that the competencies described herein are important for understanding cultural issues and treatment outcomes. A few findings presented here are based on the larger mental health literature, whereas less work has been done specifically on OCD and culture. Relevant research conducted in other cultures that is not available in English is not represented here.

#### Recommendations for Further Research

More research is needed to understand symptoms differences, cultural attitudes, and treatment approaches in non-White and non-Western populations.

#### CULTURAL KNOWLEDGE AND COMPETENCIES

#### **Specialty Knowledge**

#### Ability to demonstrate knowledge of:

1. Clinician's own biases and gaps in cultural knowledge and how this could potentially impact treatment

Evidence: TG: Miller et al. 2015 • CSS: Williams et al. 2015 • ThP: Sue et al. 2007

2. The greater stigma surrounding mental health care and OCD, and differences in mental health literacy in various ethnic communities

Evidence: OR: Turner et al. 2016, Williams et al. 2017a • CSS: Chong et al. 2016 • PS: Williams et al. 2012a

3. Common cultural variations in OCD symptom expression

Evidence: **OR**: Williams et al. 2017b • **CSS**: Williams and Ching 2017, Williams et al. 2012b

4. Stigma and oppression in marginalized ethnic groups (including sociocultural hierarchies, minority experience, racialization, White privilege, caste systems, etc.), and how these may be embedded into obsessional concerns

Evidence: CSS: Williams et al. 2012b • AES: Olatunji et al. 2014, Williams and Turkheimer 2007

- **5.** The connection between discrimination and OCD Evidence: *OR*: Williams et al. 2017a • *CSS*: Williams et al. 2017c
- 6. Validated OCD measures that may be inadequate for diverse populations Evidence: *CSS*: Wheaton et al. 2013 • *PS*: Williams et al. 2013b, Chasson et al. 2017, Thomas et al. 2000

#### **Specialty Competencies**

Ability to:

1. Utilize culturally informed outreach practices to reach various ethnic and cultural groups for treatment and/or research

Evidence: **OR**: Turner et al. 2016 • **CSS**: Williams et al. 2012a • **CQS**: Williams et al. 2013c • **EO**: Williams et al. 2013d

- 2. Demonstrate respect toward diverse patient groups and appreciation of differing worldviews Evidence: *TM*: Sue et al. 2019 • *EO*: Hays 2009
- **3.** Distinguish OCD symptoms and comorbidities from normative cultural and religious practices in patients

Evidence: CR: Ninan 1993 • EO: Huppert et al. 2007

- **4.** Express understanding of patients' culturally predicated explanatory model for OCD symptoms Evidence: *CSS*: Grover et al. 2014 *CES*: Pirutinsky et al. 2009
- 5. Demonstrate flexibility surrounding time, scheduling, and location, to offset barriers to treatment and competing priorities, and to create a comfortable environment for treatment Evidence: CSS: Williams et al. 2012a CQS: Williams et al. 2013c ThP: Williams and Jahn 2017
- 6. Identify and communicate the role of the family (including extended family) within the context of collectivism/interdependence, and ability to help family members to understand and appreciate treatment to support the patient (e.g., importance of treatment, family accommodations, family-based therapy; see family-based section in this paper)

Evidence: SR: Wetterneck et al. 2012 • OR: Williams et al. 2017d • RCS: Mehta 1990 • CSS: Himle et al. 2018

#### 7. Translate clinical information into a framework that is compatible with the patient's worldview for understanding and treating OCD, and to communicate that OCD symptoms reflect psychopathology rather than individual differences

Evidence: CSS: Williams et al. 2012a • EO: Rathod and Kingdon 2009

# 8. Identify and communicate understanding of the role of spicompulsion, traditional, and folk healers in the patient's treatment; to demonstrate respect and appreciation of these modalities; and to collaborate with them as necessary and appropriate

Evidence: *EO*: Huppert et al. 2007, Leins and Williams 2018, Moodley and Sutherland 2010, Pouchly 2012

9. Devise effective ERP that does not violate a patient's religious faith or core cultural beliefs Evidence: *CR*: Arip et al. 2018 • *EO*: Keshavarzi et al. 2018, Hays 2009, Huppert et al. 2007, Leins and Williams 2018

#### 3.16 Section name: Relapse prevention

#### Overview

Although the treatment of OCD has improved over the last decades, with specific effectiveness demonstrated by specialty CBT and serotonin reuptake inhibitors (SRIs), a large proportion of OCD patients show varying degrees of relapse. This section outlines the key knowledge and competencies required for understanding predictors of relapse and for working with patients with OCD with a view towards reducing the likelihood of relapse.

#### Description of Key Terms

*Treatment response:* The international expert consensus criteria (Mataix-Cols et al. 2016) for treatment response requires a  $\geq$ 35% reduction of the individual patient's pre-treatment (C)YBOCS score, plus a Clinical Global Impression – Improvement (CGI-I rating of 1 ('very much improved') or 2 ('much improved'), lasting for at least one week.

*Remission*: Persons are categorized as in remission when they no longer meet diagnostic criteria for OCD, according to a structured diagnostic interview. If such an interview is not feasible, a score of 12 or less on the (C) YBOCS plus a Clinical Global Impression – Severity (CGI-S) rating of 1 ('normal, not at all ill') or 2 ('borderline mentally ill'), lasting for at least 1 week, is required (Mataix-Cols et al. 2016).

*Recovery*: The operational definition by this group for recovery is the same as remission, but lasting at least one year (Mataix-Cols et al. 2016). However, as pointed out by Sookman (2018), a YBOCS score of 12 constitutes wellness (Farris et al. 2013) but not full recovery from illness (YBOCS  $\leq 7$ ), and the psychometric and interview criteria for this response category appear to be inconsistent.

*Relapse*: After response, remission, or recovery is achieved, the patient experiences a return to symptoms. The person's symptoms (a) no longer meet definition of response, remission, or recovery and (b) has a CGI-I rating of 6 ('much worse') or higher for at least one month (or needs to be withdrawn prematurely from a trial before one month has elapsed due to a severe worsening of OCD symptoms (Mataix-Cols et al. 2016)

#### Level of Evidence

Several studies have investigated predictors of relapse of OCD. These studies include epidemiological studies (e.g., Eisen et al. 2013), meta-analyses (Sharma et al. 2014), medication trials (e.g., Catapano et al. 2006; Hollander et al. 2010; Bloch et al. 2013), and psychotherapy outcome trials (Braga et al. 2010).

These studies suggest that relapse is more likely for patients with comorbid psychiatric conditions

(Jakubovski et al. 2013), longer illness duration (Jakubovski et al. 2013), lower doses of treatment (e.g., less time spent in CBT), and lower levels of homework compliance (O'Sullivan et al. 1991). Discontinuation of SRIs monotherapy without CBT is associated with high rate of relapse. Further, some studies suggest that a range of post-treatment characteristics predict relapse (reviewed in Fineberg et al. 2013). For example, some studies suggest that OCD patients are more likely to relapse if they respond poorly to treatment in the first place (O'Sullivan et al. 1991; Braga et al. 2010) or if they remain functionally impaired or symptomatic or have specific types of symptom profiles at the end of treatment (Hollander et al. 2010; Cherian et al. 2014; Peselow et al. 2015; Nissen and Parner, 2018).

There are a few clinical studies reporting on treatment methods to reduce relapse rates; however, most of these studies are single-arm open or pilot trials (e.g, Thiel et al. 2016; Hansen et al. 2019) or case analyses (e.g., Abramowitz and Arch, 2014; Pascual-Vera et al. 2018). A limited number of randomized controlled trials (RCTs) are available showing that different types of treatment (e.g., SRIs, CBT) may be associated with different rates of relapse following treatment (Fineberg et al. 2018; Strayhorn, 2019). Some RCTs have supported the efficacy of combined or augmenting interventions (e.g., administering CBT in addition to medication), using booster sessions, or reintroducing medication following the acute phase of treatment to reduce relapse (e.g., Hiss et al.1994; Fineberg et al. 2007a; Andersson et al. 2014).

#### Recommendations for Further Research

Despite attempts to explain reasons for relapse (Abramowitz and Arch, 2014), a comprehensive model of relapse in OCD is yet to be developed. Currently, little is known about relapse signatures (risk factors for relapse for an individual) and hence, research on relapse prevention lacks coordination, does not test the efficacy of tailored treatments, and focuses on a wide range of relapse risk factors and prevention methods. Hence, even though some studies have suggested that specific interventions or treatment programs may improve medium- to long-term outcomes (e.g., use of cognitive therapy as well as behavioral interventions that are subtype specific, longer-term specialty CBT) further research is needed to elucidate the mechanisms of such effects. Furthermore, despite the proposal that researchers adopt a common criterion for defining relapse, a number of operational definitions remain in the literature. Further research on relapse prevention should aim to elucidate the contributing factors and what interventions would best reduce this outcome.

RELAPSE PREVENTION
Specialty Knowledge
Ability to demonstrate knowledge of:
1. Treatment continuation and relapse rates
Evidence: <i>MA</i> : Sharma et al. 2014 • <i>CS</i> : Cherian et al. 2014, Eisen et al. 2013, Højgaard et al. 2017
2. The various ways in which lapses and relapse in OCD are defined and operationalized
Evidence: MA: Fineberg et al. 2007b • EO: Mataix-Cols et al. 2016, Burchi et al. 2018
3. The implications of different definitions of relapse on conclusions about the superiority of one
<b>treatment over another in preventing relapse</b> Evidence: <i>MA</i> : Fineberg et al. 2007b
4. Factors that can reduce likelihood of relapse in OCD
Evidence: <i>MA</i> : Sharma et al. 2014 • <i>RCT</i> : Jakubovski et al. 2013 • <i>CS</i> : Braga et al. 2010, Feusner et al. 2015 •
CC: O'Sullivan et al. 1991, Peselow et al. 2015
5. Methods during and following acute treatment that can result in longer-term maintenance of treatment gains
Evidence: <i>RCT</i> : Andersson et al. 2014, Fineberg et al. 2007a • <i>OCT</i> : Thiel et al. 2016
Specialty Competencies
Ability to:
1 Identify valence enjoydee that is when valence has accounted using evidence has a definitions
1. Identify relapse episodes that is, when relapse has occurred - using evidence- based definitions and measurement of relapse
Evidence: <i>RCT</i> : Andersson et al. 2014 • <i>OCT</i> : Hansen et al. 2019, Thiel et al. 2016 • <i>TM</i> : Miller and Rollnick
2013 • <i>TrPN</i> : Larimer et al. 1999
2. Distinguish between lapse and relapse
Evidence: <b>RCT</b> : Andersson et al. 2014, Hiss et al. 1994 • <b>OCT</b> : Thiel et al. 2016 • <b>CR</b> : Abramowitz and Arch
2014, Abramowitz et al. 2013 • <i>TM</i> : Miller and Rollnick 2013 • <i>TrPN</i> : Larimer et al. 1999
3. Assist patient to identify relapse signatures and road maps – that is, factors that signal a high
likelihood of an impending relapse episode
Evidence: <b>CS</b> : Tibi et al. 2019 • <b>OCT</b> : Thiel et al. 2016 • <b>CR</b> : Sunde et al. 2019, Velikić et al. 2019 • <b>TM</b> :
Miller and Rollnick 2013 • <i>TrPN</i> : Larimer et al. 1999
<b>4.</b> Assist the patient to cope with and manage lapses Evidence: <i>RCT</i> : Andersson et al. 2014, Hiss et al. 1994 • <i>OCT</i> : Thiel et al. 2016 • <i>CR</i> : Abramowitz and Arch
2014, Abramowitz et al. 2013 • <i>TM</i> : Miller and Rollnick 2013 •
TrPN: Larimer et al. 1999
5. Reduce "ambivalence" towards change and to motivate patients to consider relapse as a learning
opportunity and to return to action-oriented change processes
Evidence: <b>RCT</b> : Andersson et al. 2014, Hiss et al. 1994 • <b>OCT</b> : Thiel et al. 2016 • <b>CR</b> : Abramowitz and Arch
2014, Abramowitz et al. 2013 • <i>TM</i> : Miller and Rollnick 2013 • <i>TrPN</i> : Larimer et al. 1999 6. Assist patients to plan for and manage high-risk situations
Evidence: <b><i>RCT</i></b> : Andersson et al. 2014, Hiss et al. 1994 • <b><i>OCT</i></b> : Thiel et al. 2016 • <b><i>CR</i></b> : Abramowitz and Arch
2014 • <i>TM</i> : Miller and Rollnick 2013 • <i>TrPN</i> : Larimer et al. 1999
7. Pre-empt and reduce chances of relapse by offering relapse prevention programs
Evidence: <b>RCT</b> : Andersson et al. 2014, Hiss et al. 1994 • <b>OCT</b> : Thiel et al. 2016 • <b>CR</b> : Abramowitz and Arch
2014, Abramowitz et al. 2013 • <i>TM</i> : Miller and Rollnick 2013 • <i>TrPN</i> : Larimer et al. 1999
8. Assist patients to modify self-percept/esteem and psychosocial functioning in the context of the
absence of compulsions

Evidence: *RCT*: Andersson et al. 2014, Hiss et al. 1994 • *OCT*: Thiel et al. 2016 • *CR*: Abramowitz and Arch 2014, Abramowitz et al. 2013 • *TM*: Miller and Rollnick 2013 • *TrPN*: Larimer et al. 1999

#### 3.17 Comment on Co-morbidity in OCD

OCD is characterized by diverse symptom presentations and often is comorbid with other disorders. It is recommended that OCD be treated directly with specialized CBT as soon as possible following emergence of symptoms, with consideration of evidence-based indications for comorbid disorders. As discussed above, delayed or suboptimally treated OCD exacerbates co-occurring symptoms, such as depression, and can have a catastrophic impact on quality of life (Fineberg et al. 2019). Secondary depression and other symptoms generally remit following effective treatment of primary OCD (e.g., sleep disturbance, Nordahl et al. 2018). Treatment of related disorders, anxiety disorders, and unipolar mood disorders, which most frequently co-occur with OCD (Denys et al. 2004), can usually be treated concurrently (e.g., Remmerswaal et al. 2019; Wheaton and Gallina, 2019; Valderrama et al. 2020). Complex or serious co-morbid disorders such as body dysmorphic disorder, PTSD, eating disorder, or borderline personality disorder may require dual focused interventions, with primacy and seriousness of symptoms influencing sequencing of interventions (e.g., Thamby and Khanna, 2019; Castle et al. 2020; Fletcher et al. 2020; Mandelli et al. 2020). Neurodevelopmental comorbid disorders such as Tourette's syndrome, chronic tic disorder, and ADHD necessitate adaptations in approach based on the specific available evidence (e.g., Flygare et al. 2020; Mersin et al. 2020). Disorders that interfere with learning during CBT, such as substance abuse, need concurrent or prior treatment. Situations of risk related to OCD and/or comorbid disorders may require crisis intervention followed by disorder-specific interventions (e.g., acute suicidality; life-threatening eating disorder; uncontrolled substance abuse, bipolar disorder, or psychotic disorders) (Veale et al. 2009; Albert et al. 2019; Dell'Osso et al. 2020; Mawn et al. 2020; Palombini et al. 2020). Attempts to classify comorbidity in OCD to reduce heterogeneity require further research and replication (e.g., van Oudheusden et al. 2020). Development of algorithms for treatment of comorbidity in OCD is beyond the scope of this paper.

#### 4 Discussion

Current research underlines the importance of direct and timely access to specialized treatment for OCD following emergence of symptoms in order to prevent commonly occurring progression of illness, however, as a field we are falling vastly short of this goal. It has long been widely recognized that, consistent with available guidelines for the treatment of OCD (NICE, 2005; Koran et al, 2007;

Koran and Simpson, 2013), clinicians and sites treating this prevalent and disabling disorder should include provision of CBT. Despite these guidelines, and reiteration by professional groups ranging from international (e.g., Menchón et al. 2016) to provincial (e.g., Ontario Health Quality, 2020), accessibility and quality of timely evidence-based CBT for OCD remains very limited across many global regions. A well-documented major cause of this devastating situation is that there are an insufficient number of clinicians and sites qualified to deliver specialized CBT for OCD. The ATF was created to address the urgent need to develop measurable knowledge and competency standards for specialized treatments for OCD deemed by experts to be foundational to transformative change in this field. The knowledge and competency standards presented in this paper, although these are not all inclusive, have been developed to inform, advance, and offer a model for clinical practice and training of specialized cognitive behavior therapy for OCD. These standards will require periodic review and updating commensurate with advances in clinical research.

The concept of recovery, widely addressed for other mental disorders such as depression, is underexamined in the OCD literature and requires concurrent attention (Sookman and Steketee, 2010, Sookman 2016; Mataix-Cols, et al. 2016; Burchi et al. 2018). It has been demonstrated that in response to treatments involving CBT alone and/or in combination with pharmacotherapy OCD is curable in some cases using criterion for recovery of score of  $\leq$  7 on the Yale-Brown Obsessive Compulsive Scale (YBOCS) plus psychosocial criteria (e.g., Sookman and Pinard, 1999; Sookman et al. 2003; Simpson, et al. 2006; Belloch et al. 2008; Rachman et al. 2014, Nakajima, 2018). Furthermore, achieving wellness at post treatment predicts stability of improvement (Elsner et al. 2020). Specialized cognitive behavior therapy for adult OCD of longer duration and complexity generally results in greater recovery rates. It should be noted that research treatment trials even at expert sites are generally time-limited and manualized. An optimal trial of CBT for adult OCD often requires longer duration and complexity of specialty interventions. Standardized criteria across treatment sites that include assessment of symptoms, psychosocial functioning, quality of life, and distinction between wellness and full recovery status would be important for clinical and research purposes (Simpson et al. 2006; Farris et al. 2013; Mataix-Cols et al. 2016). Further research to validate and refine promising treatment approaches and randomized controlled trials should examine the intervention and individual characteristics of patients who achieve recovery, compared with those who do not, as well as mediators/mechanisms of change. Given the disabling sequelae of OCD, treatment should include interventions to ameliorate multi-dimensional skills deficits and other obstacles to developmental growth and accommodation with the aim of improving

resilience, flexibility, and self-efficacy (Sookman, 2016). As was advised many years ago (Rachman, 1983), a crucial distinction should be made between technical treatment failure, when an individual does not improve due to the inadequacy of treatment, and serious treatment failure, when an individual does not respond to adequately delivered treatment.

The ATF knowledge and competency standards have been developed to inform, advance, and offer a model for clinical practice and training in this field. These are foundational to upcoming phases three and four of the ATF initiative: development and implementation of criteria and processes for training to the level of certification (individual clinicians) and accreditation (clinical sites), based on the established ATF standards. The upcoming phases are deemed by experts to be needed because training in general psychiatry, psychology. and/or cognitive behavior therapy (CBT) may often be insufficient to acquire the clinical skills required for specialized CBT for varied OCD symptoms subtypes and related difficulties. Excellent programs that provide training in CBT for OCD have been developed at specific expert sites with promising results (e.g., Jacoby et al. 2019). However, current widely used training models such as educational and training workshops, while helpful to communicate diagnostic issues and basic treatment interventions, generally cannot cover the complex skills required for effective specialized practice. There are an insufficient number of academic training programs that offer treatment of OCD as a training elective to our next generation. Improvement of existing models of training, including reliable evaluative methods to examine their efficacy, are required to disseminate advanced specialty clinical skills needed to optimize illness recovery for as many patients as possible, which ATF phases three and four will address.

More specifically, during the upcoming phases the ATF will develop criteria to assess clinician knowledge and competencies with OCD, including minimal recommended training, supervision, and evaluative processes. Multi-site creation and validation of a standardized scale to assess clinician knowledge and competencies for OCD is planned. A distinction will be made between certification levels, that is, between competency and expert levels. Establishment of criteria for accreditation of sites (i.e., more than one certified clinician working together) will build upon and require prior establishment of certification for individual clinicians.

Many OCD patients are labelled as treatment-resistant or refractory as a result of technical treatment failures after prolonged waiting to access treatment that is not evidence based. Ineffective and/or

delayed treatments worsen intransigence of illness, progression to disability, suffering of patients and their families, unsuccessful health care utilization, feelings of hopelessness, and secondary depression that may be associated with suicidality. While research is ongoing to increase the clinical armamentarium of OCD experts, operationalization and dissemination of specialized knowledge and competencies available at expert sites is urgently needed to achieve transformative change in this field. We hope that the ATF phase two establishment of speciality knowledge and competency standards recommended for specialized treatments for OCD – as presented in this paper and the others in this special series -- will constitute a significant step forward.

#### Acknowledgements

Thank you to Dr. Penny Bee for her contribution of information regarding low intensity treatments for OCD provided through IAPT in UK; and to Dr. Mike Kryrios for his contribution to an earlier draft of the conceptualization section in this paper. Appreciation to Ms. Danielle Rice for her dedicated collaboration as research assistant for the ATF phase two papers, and thanks to research assistants Amber-Lee Di Paolo and Victoria Orha.

#### References

- Abbey, R. D., Clopton, J. R., Humphreys, J. D., 2007. Obsessive–compulsive disorder and romantic functioning. J. Clin. Psychol. 63(12), 1181-1192.
- Abramowitz, J.S., 1996. Variants of exposure and response prevention in the treatment of obsessive-compulsive disorder: A meta-analysis. Behav. Ther. 27, 583-600.
- Abramowitz, J.S., 2004. Treatment of obsessive-compulsive disorder in patients who have comorbid depression. J. Clin. Psychol. 20(11), 1133-1141.
- Abramowitz, J. S., 2006a. Understanding and treating obsessive-compulsive disorder: A cognitive behavioral approach. Routledge.
- Abramowitz, J.S., 2006b. The psychological treatment of obsessive-compulsive disorder. Can. J. Psych. 51, 407-416.
- Abramowitz, J.S., Arch, J.J., 2014. Strategies for improving long-term outcomes in cognitive behavioral therapy for obsessive-compulsive disorder: insights from learning theory. Cogn. Behav. Prac. 21, 20-31.
- Abramowitz, J.S., Baucom, D.H., Wheaton, M.G., Boeding, S., Fabricant, L.E.,
  Paprocki, C., Fischer, M.S., 2013. Enhancing Exposure and Response Prevention
  for OCD: A Couple-Based Approach. Behav. Modif. 37(2). 189-210.
  doi:10.1177/0145445512444596
- Abramowitz, J.S., Blakey, S.M., Reuman, L., Buchholz, J.L., 2018. New directions in the cognitive-behavioral treatment of OCD: Theory, research, and practice. Behav. Ther. 49(3), 311-322.
- Abramowitz, J.S., Deacon, B.J., 2006. Psychometric properties and construct validity of the Obsessive-Compulsive Inventory—Revised: Replication and extension with a clinical sample. J. Anxiety. Disord. 20, 1016-1035.

- Abramowitz, J.S., Foa, E.B., 2000. Does comorbid major depressive disorder influence outcome of exposure and response prevention for OCD? Behav. Ther. 31(4), 795-800.
- Abramowitz, J.S., Foa, E.B., Franklin, M.E., 2003a. Exposure and ritual prevention for obsessive-compulsive disorder: Effects of intensive versus twice-weekly sessions. J. Consult. Clin. Psychol. 71(2), 394-398.
- Abramowitz, J.S., Franklin, M.E., Cahill, S.P., 2003c. Approaches to common obstacles in the exposure-based treatment of obsessive–compulsive disorder. Cogn. Behav. Prac. 10, 14–22.
- Abramowitz, J.S., Franklin, M.E., Foa, E.B., 2002c. Empirical status of cognitivebehavioral therapy for obsessive-compulsive disorder: A meta-analytic review. J. Cogn. Behav. Psychother. 2, 89-104.
- Abramowitz, J.S., Franklin, M.E., Schwartz, S.A., Furr, J.M., 2003b. Symptom presentation and outcome of cognitive-behavioral therapy for obsessivecompulsive disorder. J. Consult. Clin. Psychol. 71(6), 1049-1056.
- Abramowitz, J.S., Franklin, M.E., Street, G.P., Kozak, M.J., Foa, E.B., 2000. Effects of comorbid depression on response to treatment for obsessive-compulsive disorder. Behav. Ther. 31(3), 517-528.
- Abramowitz, J.S., Franklin, M.E., Zoellner, L.A., Dibernardo, C.L., 2002b. Treatment compliance and outcome in obsessive-compulsive disorder. Behav. Modif. 26(4), 447-463.
- Abramowitz, J.S., Huppert, J.D., Cohen, A.B., Tolin, D.F., Cahill, S.P., 2002a. Religious obsessions and compulsions in a non-clinical sample: the Penn Inventory of Scrupulosity (PIOS). Behav. Res. Ther. 40(7), 825-838.

Ahern, C., Kyrios, M., 2016. Self processes in obsessive-compulsive disorder, in: The

self in understanding and treating psychological disorders. Cambridge University Press, Cambridge.

- Ahern, C., Kyrios, M., Meyer, D., 2015. Exposure to unwanted intrusions, neutralizing and their effects on self-worth and obsessive-compulsive phenomena. J. Behav. Ther. Exp. Psychiatry. 49, 216-222.
- Albert, U., De Ronchi, D., Maina, G., Pompili, M., 2019. Suicide risk in obsessivecompulsive disorder and exploration of risk factors: a systematic review. Curr. Neuropharmacol. 17(8), 681-696. doi.org/10.2174/1570159X16666180620155941
- Alcolado, G.M., Radomsky, A.S., 2011. Believe in yourself: Manipulating beliefs about memory causes checking. Behav. Res. Ther. 49, 42-49.
- Alcolado, G.M., Radomsky, A.S., 2016. A novel cognitive intervention for compulsive checking: Targeting maladaptive beliefs about memory. J. Behav. Ther. Exp. Psychiatry. 53, 75-83.
- Allen, D.M., 1997. Techniques for reducing therapy-interfering behavior in patients with Borderline Personality: Similarities in four diverse treatment paradigms. J. Psychother. Pract. Res. 6, 25-35.
- Altis, K.L., Elwood, L.S., Olatunji, B.O., 2014. Ethical issues and ethical therapy associated with anxiety disorders, in: Ethical issues in behavioral neuroscience. Springer, Berlin Heidelberg, pp. 265-278.
- American Psychiatric Association, Koran, L.M., Hanna, G.L., Hollander, E., Nestadt,
   G., Simpson, H.B., 2007. Practice guideline for the treatment of patients with
   obsessive-compulsive disorder. Am. J. Psychiatry. 164, 1–56.
- American Psychiatric Association., 2016. The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults, 3<sup>rd</sup> edition. American Psychiatric Publishing, Arlington.
- Amir, N., Freshman M., Foa E.B., 2000. Family distress and involvement in relatives

of obsessive-compulsive disorder patients. J. Anxiety. Disord. 14, 209-217.

- Anand, N., Sudhir, P.M., Math, S.B., Thennarasu, K., Reddy, Y. C., 2011. Cognitive behavior therapy in medication non responders with obsessive compulsive disorder: A prospective 1-year follow-up study. J. Anxiety. Disord. 25, 939-945.
- Andersson, E., Steneby, S., Karlsson, K., Ljótsson, B., Hedman, E., Enander, J., Kaldo,
  V., Andersson, G., Lindefors, N., Rück, C., 2014. Long-term efficacy of Internetbased cognitive behavior therapy for obsessive-compulsive disorder with or without booster: A randomized controlled trial. Psychol. Med. 44(13), 2877-2887. doi:10.1017/S0033291714000543
- Anholt, G.E., Aderka, I.M., van Balkom, A.J., Smit, J.H., Shruers, K., van der Wee, N.J., Eikelenboom, M., Luca, V.D., van Oppen, P., 2014. Age of onset in obsessivecompulsive disorder: admixture analysis with a large sample. Psychol. Med. 44(1), 185-194.
- Anholt, G.A., van Oppen, P., Cath, D.C., Emmelkamp, P.M., Smit, J.H., van Balkmo, A.J.,
  2010. Sensitivity to change of the obsessive beliefs questionnaire. Clin. Psychol.
  Psychother. 17(2), 154-159.
- Anholt, G. E., van Oppen, P., Emmelkamp, P. M., Cath, D. C., Smit, J. H., van Dyck, R., van Balkom, A. J., 2009. Measuring obsessive-compulsive symptoms: Padua Inventory-Revised vs. Yale-Brown Obsessive Compulsive Scale. J. Anxiety. Disord. 23(6), 830-835.
- Antony, M.M., 2001. Assessment of anxiety and the anxiety disorders: An overview, in: Antony, M. M., Orsillo, S. M., Roemer, L. (Eds.), Practitioner's guide to empirically based measures of anxiety. Kluwer Academic/Plenum, New York, pp. 7–17.
- Arch, J.J., Abramowitz, J.S., 2015. Exposure therapy for obsessive–compulsive disorder: An optimizing inhibitory learning approach. J. Obsessive. Compuls.

Relat. Disord. 6, 174-182.

- 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. Ment. Health. Relig. Cult. 21(2), 210-218.
  10.1080/13674676.2018.1436047.
- Arntz, A., Voncken, M., Goosen, A.C., 2007. Responsibility and obsessive-compulsive disorder: An experimental test. Behav. Res. Ther. 45, 425-435.
- Badour, C.L., Feldner, M.T., Babson, K.A., Blumenthal, H., Dutton, C. E., 2013.Disgust, mental contamination, and posttraumatic stress: Unique relations following sexual versus non-sexual assault. J. Anxiety. Disord. 27(1), 155-162.
- Baeyens, F., Crombez, G., Van den Bergh, O., Eelen, P., 1988. Once in contact always in contact: Evaluative conditioning is resistant to extinction. Adv. Behav. Res. Ther. 10(4), 179-199.
- Ball, S.G., Baer, L., Otto, M.W., 1996. Symptom subtypes of obsessive-compulsive disorder in behavioral treatment studies: A quantitative review. Behav. Res. Ther. 34, 47-51.
- Bandura, A., 1977. Self-efficacy: Toward a unifying theory of behavioral change. Psychol. Rev. 84, 191-215.
- Barrera, T.L., Norton, P.J., 2011. The appraisal of intrusive thoughts in relation to obsessional compulsive symptoms. Cogn Behav Ther. 40, 98-110.
  doi:10.1080/16506073.2010.545072
- Barrett, R., Wroe, A.L., Challacombe, F.L., 2016. Context is everything: an investigation of responsibility beliefs and interpretations and the relationship with obsessive-compulsive symptomatology across the perinatal period. Behav. Cogn. Psychother. 44(3), 318.
- <sup>75</sup> Barrowclough, C., Johnston, M., Tarrier, N., 1994. Attributions, Expressed emotion,

and patient relapse: An attributional model of relatives' response to schizophrenic illness. Behav. Ther. 25, 67-88.

- Baruah, U., Pandian, R.D., Narayanaswamy, J.C., Bada Math, M., Kandavel, T. Reddy,
  Y.C., 2018. A randomized controlled study of brief family-based intervention in
  Obsessive Compulsive Disorder. J. Affect. Disord. 225, 137-146.
- Başoğlu, M., Lax, T., Kasvikis, Y., Marks, I.M., 1988. Predictors of improvement in obsessive-compulsive disorder. J. Anxiety. Disord. 2(4), pp.299-317.
- Beck, A.T., 1996. Beyond belief: A theory of modes, personality, and psychopathology, in: Salkovskis, P.M. (Ed.), Frontiers of cognitive therapy. The Guilford Press, pp. 1–25.
- Beck, A.T., Haigh, E.A.P., 2014. Advances in cognitive theory and therapy: The generic cognitive model. Annu. Rev. Clin. Psychol. 10, 1-24.
- Beck, A. T., Kovacs, M., Weissman, A., 1979. Assessment of suicidal intention: the Scale for Suicide Ideation. J. Consult. Clin. Psychol., 47(2), 343-352.
- Bejerot, S., 2007. An autistic dimension: A proposed subtype of obsessive-compulsive disorder. Autism. 11(2), 101-110.
- Belloch, A., Cabedo, E., Carrio, C., 2008. Cognitive versus behaviour therapy in the individual treatment of obsessive-compulsive disorder: changes in cognitions and clinically significant outcomes at post-treatment and follow-up. Behav. Cogn.
  Psychother. 36, 521–540.
- Belloch, A., Fornés, G., Carrasco, A., López-Solá, C., Alonso, P., Menchón, J.M.,
  2016. Incompleteness and not just right experiences in the explanation of
  Obsessive-Compulsive disorder. Psychiatry. Res. 236, 1-8.
- Benito, K.G., Walther, M., 2015. Therapeutic process during exposure: Habituation model. J. Obsessive. Compuls. Relat. Disord. 6, 147-157.

- Bennett-Levy, J., Butler, G., Fennell, M.J.V., Hackmann, A., Mueller, M., Westbrook,D., 2004. Oxford guide to behavioural experiments in cognitive therapy. OxfordUniversity Press, New York.
- Ben-Porath, D.D., 2014. Orienting clients to telephone coaching in Dialectical Behavior Therapy. Cogn. Behav. Pract. 22, 407-414.
- Bensen, R., Stickney, L., Smetter, J., Steglitz, J., 2016. Modified exposure and response prevention in the treatment of co-morbid OCD-like repetitive behavior and developmental disability. Clin. Case. Stud. 15, 484-500.
- Benzina, N., Mallet, L., Burguière, E., N'diaye, K., Pelissolo, A., 2016. Cognitive dysfunction in obsessive-compulsive disorder. Curr. Psychiatry. Rep. 18(9), 80. https://doi.org/10.1007/s11920-016-0720-3
- Berman, N.C., Weingarden, H., Wilhelm, S., 2019. Symptom-Specific Threat Perception Mediates the Relationship Between Obsessive Beliefs and OCD Symptoms. Cognit. Ther. Res. 43(4), 705-712.
- Beshai, S., Kuyken, W., Kidney, R., 2019. Collaborative Case Conceptualization, in: Dimidjian, S. (Ed.), Evidence-Based Practice in Action: Bridging Clinical Science and Intervention. Guilford Press, New York, pp. 201-215.
- Blakey, S.M., Abramowitz, J. S., 2016. The effects of safety during exposure therapy for anxiety: Critical analysis from an inhibitory learning perspective. Clin.Psychol. Rev. 49, 1-15.
- Bloch, M.H., Green, C., Kichuk, S.A., Dombrowski, P.A., Wasylink, S., Billingslea,
  E., Landeros-Weisenberger, A., Kelmendi, B., Goodman, W.K., Leckman, J.L.,
  Coric, V., Pittenger, C., 2013. Long-term outcome in adults with obsessivecompulsive disorder. Depress. Anxiety. 30, 716–722.

Boisseau, C.L., Sibrava, N.J., Garnaat, S.L., Mancebo, M.C., Eisen, J.L., Rasmussen,

S.A., 2018. The Brown incompleteness scale (BINCS): Measure development

and initial evaluation. J. Obsessive. Compuls. Relat. Disord. 16, 66-71.

- Bolton, D., 1996. Developmental issues in obsessive-compulsive disorder. J. Child. Psychol. Psychiatry. 37, 131-137.
- Bolton, D., Perrin, S., 2008. Evaluation of exposure with response-prevention for obsessive compulsive disorder in childhood and adolescence. J. Behav. Ther. Exp. Psychiatry. 39(1), 11-22.
- Bolton, D., Williams, T., Perrin, S., Atkinson, L., Gallop, C., Waite, P., Salkovskis, P.,
  2011. Randomized controlled trial of full and brief cognitive-behaviour therapy and wait-list for paediatric obsessive-compulsive disorder. J. Child. Psychol.
  Psychiatry. 52(12), 1269-1278. doi:http://dx.doi.org/10.1111/j.1469-7610.2011.02419.x
- Bordin E.S., 1979. The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy. (Chic.). 16, 252–260.
- Boschen, M.J., Vuksanovic, D., 2007. Deteriorating memory confidence, responsibility perceptions and repeated checking: Comparisons in OCD and control samples.Behav. Res. Ther. 45, 2098-2109.
- Boss, P., Doherty, W., LaRossa, R., Schumm, W., Steinmetz, S., 2004. Sourcebook of Family Theories and Methods: A contextual approach. Springer, New York.
- Bouton, M.E., 2004. Context and behavioral processes in extinction. Learn. Mem. 11(5), 485-494.
- Bouton, M.E., Doyle-Burr, C., Vurbic, D., 2012. Asymmetrical generalization of conditioning and extinction from compound to element and element to compound. J. Exp. Psychol. Anim. Behav. Process. 38(4), 381.
- Bouton, M.E., Woods, A.M., Pineño, O., 2004. Occasional reinforced trials during extinction can slow the rate of rapid reacquisition. Learn. Mem. 35(4), 371-390.
- Braga, D.T., Manfro, G.G., Niederauer, K., Cordioli, A.V., 2010. Full remission and

relapse of obsessive-compulsive symptoms after cognitive-behavioral group therapy: A two-year follow-up. Braz. J. Psychiatry. 32(2), 164-168. doi:10.1590/S1516-44462010000200012

- Bragdon, L.B., Coles, M.E., 2017. Examining heterogeneity of obsessive-compulsive disorder: Evidence for subgroups based on motivations. J. Anxiety. Disord. 45, 64-71.
- Brakoulias, V., Starcevic, V., Beloch, A., Brown, C., Ferrao, Y. A., Fontenelle, L. F., Lochner, C., Marazziti, D., Matsunaga, H., Miguel, E., Reddy, Y.C.J., do Rosario, M.C., Shavitt, R.G., Shyam Sundar, A., Stein, D.J., Torres, A.R. Viswasam, K., 2017. Comorbidity, age of onset and suicidality in obsessive-compulsive disorder (OCD): An international collaboration. Compr. Psychiatry. 76, 79-86.
- Brakoulias, V., Starcevic, V., Albert, U., Arumugham, SS., Bailey, B.E., Belloch, A.,
  Borda, T., Dell'Osso, L., Elias, J.A., Falkenstein, M.J., Ferrao, Y.A., Fontenelle,
  L.F., Jelinek, L., Kalogeraki, L., Kay, B., Laurito, L.D., Lochner, C., Maina, G.,
  Marazziti, D., Martin, A., Matsunaga, H., Miguel, E.C., Morgado, P., Mourikis, I.,
  Pasquini, M., Perez Rivera, R., Potluri, S., Reddy, J.Y.C., Riemann, B.C., do
  Rosario, M.C., Shavitt, R.G., Stein, D.J., Viswasam, K., Wang, Z., Fineberg, N.A.,
  2019. Treatments used for obsessive-compulsive disorder-An international
  perspective. Hum Psychopharmacol. 34(1), e2686. doi: 10.1002/hup.2686.
- Brander, G., Perez-Vigil, A., Larsson, H., Mataix-Cols, D., 2016. Systematic review of environmental risk factors for Obsessive-compulsive Disorder: A proposed roadmap from association to causation. Neurosci. Biobehav. Rev. 65, 36-62.
- Brandes, O., Stern, A., Doron, G., 2020. "I just can't trust my partner": evaluating associations between untrustworthiness obsessions, relationship obsessions and couples violence. J. Obsess-Compuls. Rel. 24, 100500.
- Bream, V., Challacombe, F.L., Palmer, A., Salkovskis, P.M., 2017. Cognitive-

behaviour therapy for obsessive-compulsive disorder. Oxford University Press, New York.

- Bressi, C., Guggeri, G., 1996. Obsessive-compulsive disorder and the family emotional environment. New. Trends. Exp. Clin. Psychiat. 12 (4), 265-269.
- Brown, G.W., Rutter, M., 1966. The measurement of family activities and relationships: A methodological study. Hum. Relat. 19, 241-263.
- Brown, L.A., LeBeau, R.T., Chat, K.Y., Craske, M.G., 2017. Associative learning versus fear habituation as predictors of long-term extinction retention. Cognition and emotion, 31(4), 687-698.
- Buckner, J.D., Schmidt, N.B., 2009. A randomized pilot study of motivation enhancement therapy to increase utilization of cognitive–behavioral therapy for social anxiety. Behav. Res. Ther. 47(8), 710-715.
- Burchi, E., Hollander, E., Pallanti, S., 2018. From Treatment Response to Recovery: A Realistic Goal in OCD. Int. J. Neuropsychopharmacol. 21(11), 1007-1013. doi:10.1093/ijnp/pyy079
- Burns, G.L., Keortge, S.G., Formea, G.M., Sternberger, L.G., 1996. Revision of the Padua Inventory of obsessive compulsive disorder symptoms: distinctions between worry, obsessions, and compulsions. Behav. Res. Ther. 34, 163-173.
- Butler, G., 1998. Clinical formulation, in: Bellack, A.S., Herson, M. (Eds.), Comprehensive clinical psychology (Vol. 6). Elsevier, Oxford, pp. 1–24.
- Bystritsky, A., Liberman, R., Hwang, S., Wallace, C.J., Vapnik, T., Maindment, K., Saxena, S., 2001. Social functioning and quality of life comparisons between obsessive-compulsive and schizophrenic disorders. Depress. Anxiety. 14, 214– 218.

Calvocoressi, L., Lewis, B., Harris, M., Trufan, B.S., Goodman, W.K., McDougle,

80

C.J., Price, L.H., 1995. Family accommodation in obsessive compulsive disorder.

Am. J. Psychiatry. 152, 441-443.

- Calvocoressi, L., Mazure, C., Kasl, S., Skolnick, J., Fisk, D., Vegso, S., Van Noppen,
  B., Price, L., 1999. Family Accommodation of Obsessive-Compulsive
  Symptoms: Instrument development and assessment of family behavior. J. Nerv.
  Ment. Dis. 187 (10), 636-642.
- Canadian Psychological Association, 2017. Code of Ethics for Psychologists, Fourth Edition. Ottawa, Canada.

Castle, D., Beilharz, F., Phillips, K. A., Brakoulias, V., Drummond, L. M., Hollander,
E., Ioannidis, K., Pallanti, S., Chamberlain, S.R., Rossell, S.L., Veale, D.,
Wilhelm, S., Van Ameringen, M., Dell'Osso, B., Menchon, J.M., Fineberg, N.
A., 2020. [In Press] Body dysmorphic disorder: a treatment synthesis and
consensus on behalf of the International College of Obsessive-Compulsive
Spectrum Disorders and the Obsessive Compulsive and Related Disorders
Network of the European College of Neuropsychopharmacology. Int. Clin.
Psychopharmacol.

Catapano, F., Perris, F., Fabrazzo, M., Cioffi, V., Giacco, D., De Santis, V., Maj, M., 2010.
Obsessive-compulsive disorder with poor insight: a three-year prospective study. Prog.
Neuropsychopharmacol. Biol. Psychiatry. 34(2), 323-330.

Catapano, F., Perris, F., Masella, M., Rossano, F., Cigliano, M., Magliano, L., Maj, M., 2006. Obsessive–compulsive disorder: a 3-year prospective follow-up study of patients treated with serotonin reuptake inhibitors: OCD follow-up study. J. Psychiatr. Res. 40, 502-510.

Challacombe, F., Oldfield, V.B., Salkovskis, P.M., 2011. Break free from OC: Overcoming obsessive compulsive disorder with CBT. Vermilion, London.

Challacombe, F.L., Salkovskis, P.M., 2011. Intensive cognitive-behavioural treatment

81

for women with postnatal obsessive-compulsive disorder: A consecutive case

series. Behav. Res. Ther. 49(6-7), 422-426.

doi:http://dx.doi.org/10.1016/j.brat.2011.03.006

- Challacombe, F.L., Salkovskis, P.M., Woolgar, M., Wilkinson, E.L., Read, J., Acheson, R.,
  2016. Parenting and mother-infant interactions in the context of maternal postpartum obsessive-compulsive disorder: Effects of obsessional symptoms and mood. Infant.
  Behav. Dev. 44, 11-20.
- Challacombe, F.L., Salkovskis, P.M., Woolgar, M., Wilkinson, E.L., Read, J.,
  Acheson, R., 2017. A pilot randomized controlled trial of time-intensive
  cognitive-behaviour therapy for postpartum obsessive-compulsive disorder:
  effects on maternal symptoms, mother-infant interactions and attachment.
  Psychol. Med. 47(8), 1478-1488. doi:10.1017/s0033291716003573
- Chamberlain, S.R., Menzies, L., Hampshire, A., Suckling, J., Fineberg, N.A., del
  Campo, N., Aitken, M., Craig, K., Owen, A.M., Bullmore, E.T., Robbins, T.W.,
  Sahakian, B.J., 2008. Orbitofrontal dysfunction in patients with obsessivecompulsive disorder and their unaffected relatives. Science. 321, 421-422.
- Chambless, D., Steketee, G., 1999. Expressed emotion and behavior therapy outcome:A prospective study with obsessive-compulsive and agoraphobic outpatients. J.Consult. Clin. Psychol. 67, 658-665.
- Chapman, A.L., Rosenthal, Z., 2016. Managing therapy-interfering behavior: Strategies from dialectical behavior therapy. APA, Washington D.C.
- Chase, T., Wetterneck, C. T., Bartsch, R. A., Leonard, R. C., Riemann, B. C., 2015. Investigating treatment outcomes across OCD symptom dimensions in a clinical sample of OCD patients. Cogn. Behav. Ther. 44(5), 365-376.
- Chasson, G., Williams, M. T. Davis, D.M., Combs, J.Y., 2017. Missed diagnoses in African Americans with obsessive-compulsive disorder: The Structured Clinical Interview for the DSM-IV Axis I Disorders (SCID-I). BMC. Psychiatry. 17, 258.

doi: 10.1186/s12888-017-1422-z

- Cherian, A.V., Math, S. B., Kandavel, T., Reddy, Y.C.J., 2014. A 5-year prospective follow-up study of patients with obsessive-compulsive disorder treated with serotonin reuptake inhibitors. J. Affect. Disord. 152-154(1), 387-394. doi:10.1016/j.jad.2013.09.042
- Chik, H.M., Calamari, J.E., Rector, N.A., Riemann, B.C., 2010. What do lowdysfunctional beliefs obsessive–compulsive disorder subgroups believe? J. Anxiety. Disord. 24(8), 837-846.
- Chong, S.A., Abdin, E., Picco, L., Pang, S., Jeyagurunathan, A., Vaingankar, J.A., Kwok, K.W., Subramaniam, M., 2016. Recognition of mental disorders among a multiracial population in Southeast Asia. BMC. Psychiatry. 16, 121. doi:10.1186/s12888-016-0837-2
- Clark, D.A., 2004. Cognitive-behavioural therapy for OCD. Guilford Press, New York.
- Clark, D.A, 2007. Obsessions and Compulsions, in: Kazantzis, N., L'Abate, L. (Eds.), Handbook of homework assignments in psychotherapy: Research, practice, prevention. Springer Science, New York.
- Clark, D.A., 2019. Cognitive-behavioral Therapy for OCD and Its Subtypes. Guilford Publications, New York.
- Coles, M.E., Frost, R.O., Heimberg, R.G., Rheaume, J., 2003. 'Not just right experiences': Perfectionism, obsessive-compulsive features and general psychopathology. Behav. Res. Ther. 41, 681-700.
- Coles, M. E., Heimberg, R. G., Frost, R. O., Steketee, G., 2005. Not just right experiences and obsessive-compulsive features: experimental and self-monitoring perspectives. Behav. Res. Ther. 43(2), 153–167.

Coles, M.E., Pietrefesa, A. S., 2007. Symmetry, ordering, and arranging, in:

Abramowitz, J.S., McKay, D., Taylor, S. (Eds.), Obsessive-compulsive disorder: Subtypes and spectrum conditions. Elsevier, New York, pp. 36–52.

- Coles, M.E., Pinto, A., Mancebo, M.C., Rasmussen, S.A., Eisen, J.L., 2008. OCD with comorbid OCPD: A subtype of OCD? J. Psychiatr. Res. 42(4), 289-296.
- Coles, M.E., Radomsky, A.S., Horng, B., 2006. Exploring the boundaries of memory distrust from repeated checking: Increasing external validity and examining thresholds. Behav. Res. Ther. 44, 995-1006.
- Coles, M., Ravid, A., 2016. Clinical presentation of not-just right experiences (NJREs) in individuals with OCD: Characteristics and response to treatment. Behav. Res. Ther. 87, 182-187.
- Constantino, M.J., Vîslă, A., Coyne, A.E., Boswell, J.F., 2018. A meta-analysis of the association between patients' early treatment outcome expectation and their posttreatment outcomes. Psychother. 55, 473.
- Corbett, G., 2016. Motivational interviewing, in: Marini, I., Stebnicki, M.A. (Eds.), The professional counselor's desk reference, 2nd ed. Springer Publishing Co., New York, pp. 235-239.
- Cottraux, J., Note, I., Yao, S.N., Lafont, S., Note, B., Mollard, E., Bouvard, M.,
  Bourgeois, M., Dartigues, J. F., 2001. A randomized controlled trial of cognitive therapy versus intensive behavior therapy in obsessive compulsive disorder.
  Psychother. Psychosom. 70(6), 288-297.
- Coughtrey, A.E., Shafran, R., Lee, M., Rachman, S.J., 2012b. It's the feeling inside my head: a qualitative analysis of mental contamination in obsessivecompulsive disorder. Behav. Cogn. Psychother. 40(02), 163-173.
- Coughtrey, A.E., Shafran, R., Lee, M., Rachman, S., 2013a. The treatment of mental contamination: A case series. Cogn. Behav. Prac. 20(2), 221-231.
- Coughtrey, A.E., Shafran, R., Knibbs, D., Rachman, S.J., 2012a. Mental

contamination in obsessive–compulsive disorder. J. Obsessive. Compuls. Relat. Disord. 1(4), 244-250.

- Coughtrey, A.E., Shafran, R., Rachman, S.J., 2013b. Imagery in mental contamination: a questionnaire study. J. Obsessive. Compuls. Relat. Disord. 2(4), 385-390.
- Coughtrey, A.E., Shafran, R., Rachman, S.J., 2014a. The spontaneous decay and persistence of mental contamination: an experimental analysis. J. Behav. Ther. Exp. Psychiatry. 45(1), 90-96.
- Coughtrey, A.E., Shafran, R., Rachman, S.J., 2014b. The spread of mental contamination. J. Behav. Ther. Exp. Psychiatry. 45(1), 33-38.Coughtrey, A.E., Shafran, R., Rachman, S.J., 2015. Imagery in Mental Contamination. Behav. Cogn. Psychother. 43(03), 257-269.
- Cougle, J.R., Fitch, K. E., Fincham, F.D., Riccardi, C.J., Keough, M.E., Timpano, K. R., 2012. Excessive reassurance seeking and anxiety pathology: tests of incremental associations and directionality. J. Anxiety. Disord. 26, 117-125.
- Cougle, J.R., Lee, H.J., Salkovskis, P.M., 2007. Are responsibility beliefs inflated in non-checking OCD patients? J. Anxiety. Disord. 21, 153-159. https://doi.org/10.1016/j.janxdis.2006.03.012
- Cougle, J. R., Lee, H. J., 2014. Pathological and non-pathological features of obsessive-compulsive disorder: Revisiting basic assumptions of cognitive models. Journal of Obsessive-Compulsive and Related Disorders, 3(1), 12-20
- Craske, M.G., Kircanski, K., Zelikowsky, M., Mystkowski, J., Chowdhury, N., Baker, A., 2008. Optimizing inhibitory learning during exposure therapy. Behav. Res. Ther. 46(1), 5-27.
- Craske, M., Liao, B., Brown, L., Vervliet, B., 2012. The role of inhibition in exposure therapy. J. Exp. Psychopathol. 3(3), 322-345.
- Craske, M.G., Treanor, M., Conway, C.C., Zbozinek, T., Vervliet, B., 2014.
- Maximizing exposure therapy: an inhibitory learning approach. Behav. Res.

Ther. 58, 10-23.

- Culver, N.C., Vervliet, B., Craske, M.G., 2015. Compound extinction using the Rescorla–Wagner model to maximize exposure therapy effects for Anxiety disorders. Clin. Psychol. Sci. 3(3), 335-348.
- Cuttler, C., Sirois-Delisle, V., Alcolado, G.M., Radomsky, A.S., Taylor, S., 2013.Diminished confidence in prospective memory causes doubts and urges to check.J. Behav. Ther. Exp. Psychiatry. 44, 329-334.
- Dar, K.A., Iqbal, N., 2015. Worry and Rumination in Generalized Anxiety Disorder and Obsessive Compulsive Disorder. J Psychol.149(8), 866-880. doi:10.1080/00223980.2014.986430
- da Silva Prado, H., do Rosário, M.C., Lee, J., Hounie, A.G., Shavitt, R.G., Miguel, E.C., 2008. Sensory phenomena in obsessive-compulsive disorder and tic disorders:A review of the literature. CNS. Spectr. 13, 425-432.
- Davine, T., Snorrason, I., Berlin, G., Harvey, A. M., Lotfi, S., Lee, H., 2019.
  Development of a picture-based measure for "not just right" experiences associated with compulsive sorting, ordering, and arranging. Cognit. Ther. Res. 43(2), 481-497.
- Davis, M.L., Fletcher, T., McIngvale, E., Cepeda, S.L., Schneider, S.C., Ariza, V.B., Egberts, J., Goodman, W., Storch, E.A., 2020. Clinicians' perspectives of interfering behaviors in the treatment of anxiety and obsessive-compulsive disorders in adults and children. Cogn. Behav. Ther. 49, 81-96.
- De Araujo, L. A., Ito, L. M., Marks, I. M., 1996. Early compliance and other factors predicting outcome of exposure for obsessive-compulsive disorder. Br. J. Psychiatry. 169(6), 747-752.
- Deacon, B. J., Abramowitz, J. S., 2005. The Yale-Brown Obsessive-Compulsive Scale: factor analysis, Construct validity, and suggestions for refinement. J. Anxiety.

Disord. 19(5), 573-585.

- Deacon, B., Kemp, J. J., Dixon, L. J., Sy, J. T., Farrell, N. R., Zhang, A. R., 2013. Maximizing the efficacy of interoceptive exposure by optimizing inhibitory learning: A randomized controlled trial. Behav. Res. Ther. 51(9), 588-596.
- Deacon, B., Olatunji, B. O., 2007. Specificity of disgust sensitivity in the prediction of behavioral avoidance in contamination fear. Behav. Res. Ther. 45(9), 2110-2120.
- De Berardis, D., Campanella, D., Serront, N., Gambi, F., Carano, A., La Rovere, R., Nardella, E., Pizzorno, A.M., Cotellassa, C., Salerno, R.M., Ferro, F.M., 2008. Insight and perceived expressed emotion among adult outpatients with obsessive-compulsive diorder. J. Psychiatr. Pract. 14(3), 154-159.
- de Haan, E., van Oppen, P., van Balkom, A.J., Spnhven, P., Hoogduin, K.A., Van Dyck, R., 1997. Prediction of outcome and early vs late improvement in OCD patients treated with cognitive behavior therapy and pharmacotherapy. Acta. Psychiatr. Scand. 96, 354-361.
- Dell'Osso, B.B., Buoli, M.M., Hollander, E. E., Altamura, A.C., 2010. Duration of untreated illness as a predictor of treatment response and remission in obsessivecompulsive disorder. World. J. Biol. Psychiatry. 11, 59–65.
- Dell'Osso, B., Vismara, M., Benatti, B., Cirnigliaro, G., Grancini, B., Fineberg, N. A., ... Zohar, J., 2020. Lifetime bipolar disorder comorbidity and related clinical characteristics in patients with primary obsessive compulsive disorder: a report from the international college of obsessive-compulsive spectrum disorders (icocs). Cns Spectr. 25(3), 419–425.
- Denys, D., Tenney, N., van Megen, H. M., de Geus, F., Westenberg, H. M., 2004.
  Axis I and II comorbidity in a large sample of patients with obsessive–
  compulsive disorder. J. Affect. Disord. 80, 155–162.
- <sup>87</sup> Didonna, F., 2009. Mindfulness and obsessive-compulsive disorder: Developing a way

to trust and validate one's internal experience, in: Didonna, F. (Ed.), Clinical handbook of mindfulness. Springer Science + Business Media, New York, pp. 189-219.

- Doron, G., Derby, D.S., Szepsenwol, O., Talmor, D., 2012. Tainted love: Exploring relationship-centered obsessive compulsive symptoms in two non-clinical cohorts. J. Obsessive. Compuls. Relat. Disord. 1(1), 16-24. doi: http://dx.doi.org/10.1016/j.jocrd.2011.11.002
- Doron, G., and Derby, D., 2017. Assessment and treatment of relationship-related OCD symptoms (ROCD): A modular approach, in: The Wiley Handbook of Obsessive Compulsive Disorders (Edited by J.S., Abramowitz, D. McKay, E.A., Storch). 547.
- Dougherty, D.D., Brennan, B.P., Stewart, S.E., Wilhelm, S., Widge, A.S., Rauch, S.L.,
  2018. Neuroscientifically informed formulation and treatment planning for
  patients with obsessive-compulsive disorder: a review. JAMA. Psychiatry.
  75(10), 1081-1087.
- Drummond, L. M., Fineberg, N. A., Heyman, I., Veale, D., Jessop, E., 2013. Use of specialist services for obsessive–compulsive and body dysmorphic disorders across England. Psychiatrist. 37, 135–140.
- Dugas, M.J., Freeston, M.H., Ladouceur, R., 1997. Intolerance of uncertainty and problem orientation in worry. Cognit. Ther. Res. 21, 593-606.
- Duncko, R., Veale, D., 2016. Changes in disgust and heart rate during exposure for obsessive compulsive disorder: a case series. J. Behav. Ther. Exp. Psychiatry. 51, 92-99.
- Easden, M.H., Fletcher, R.B., 2020. Therapist competence in case conceptualization and outcome in cbt for depression. Psychother. Res. 30(2), 151-169.
- Ecker, W., Gönner, S., 2008. Incompleteness and harm avoidance in OCD symptom dimensions. Behav. Res. Ther. 46(8), 895-904.

- Ecker, W., Kupfer, J., Gönner, S., 2014a. Incompleteness and harm avoidance in OCD, anxiety and depressive disorders, and non-clinical controls. J. Obsessive.Compuls. Relat. Disord. 3(1), 46-51.
- Ecker, W., Kupfer, J., Gönner, S., 2014b. Incompleteness as a link between obsessive– compulsive personality traits and specific symptom dimensions of obsessive– compulsive disorder. Clin. Psychol. Psychother. 21(5), 394-402.
- Edwards, H., Higham, L., 2020. ASD, OCD and violence–a forensic case study. J. Intellect. Disabil. Offending. Behav.
- Eelen, P., Van den Bergh, O., 2018. The broken achilles heel of behavior therapy: A couple of reflections on the function analysis. Psychol. Belg. 58(1), 166-171.
- Eisen, J. L., Phillips, K. A., Baer, L., Beer, D. A., Atala, K. D., Rasmussen, S. A.,1998. The Brown Assessment of Beliefs Scale: Reliability and validity. Am. J.Psychiatry. 155(1), 102-108.
- Eisen, J. L., Sibrava, N. J., Boisseau, C. L., Mancebo, M. C., Stout, R. L., Pinto, A., Rasmussen, S. A., 2013. Five-year course of obsessive-compulsive disorder: predictors of remission and relapse. J. Clin. Psychiatry. 74, 233–239.
- Eisen, J.L., Phillips, K.A., Coles, M.E., Rasmussen, S.A., 2004. Insight in obsessive compulsive disorder and body dysmorphic disorder. Compr. Psychiatry. 45, 10-15.
- Elliott, C.M., Radomsky, A.S., 2009. Analyses of mental contamination: Part I, experimental manipulations of morality. Behav. Res. Ther. 47(12), 995-1003.
- Elliott, C.M., Radomsky, A.S., 2012. Mental contamination: The effects of imagined physical dirt and immoral behaviour. Behav. Res. Ther. 50(6), 422-427.
- Ellis, A., 1985. Overcoming resistance: Rational-emotive therapy with difficult clients. Springer Publishing Company, New York.
- <sup>89</sup> Elsner, B., Wolfsberger, F., Srp, J., Windsheimer, A., Becker, L., Jacobi, T., Kathmann, N.,

Reuter, B., 2020. Long-Term Stability of Benefits of Cognitive Behavioral Therapy for Obsessive Compulsive Disorder Depends on Symptom Remission During Treatment. Clin. Psychol. Europe. 2(1), 1-18.

- Emmelkamp, P.M.G., Beens, H., 1991. Cognitive therapy with obsessive-compulsive disorder: a comparative evaluation. Behav. Res. Ther. 29, 293-300. https://doi.org/10.1016/0005-7967(91)90120-R
- Emmelkamp, P.M.G., De Lange, I., 1983. Spouse involvement in the treatment of obsessive-compulsive patients. Behav. Res. Ther. 21(4), 341-346.
- Emmelkamp, P. M., De Haan, E., Hoogduin, C.A., 1990. Marital adjustment and obsessive-compulsive disorder. Br. J. Psychiatry. 156(1), 55-60.
- Emmelkamp, P.M.G., Kloek, J., Blaauw, E., 1992. Obsessive-compulsive disorders, in:Wilson, P.H. (Ed.), Principles and Practice of Relapse Prevention. Guilford Press,New York, pp. 213-234.
- Emmelkamp, P.M.G., Kraaijkamp, H.J.M., van den Hout, M. A., 1999. Assessment of obsessive-compulsive disorder. Behav. Modif. 23, 269-279.
- Eng, G. K., Collins, K. A., Brown, C., Ludlow, M., Tobe, R. H., Iosifescu, D. V., Stern, E. R., 2020. Dimensions of interoception in obsessive-compulsive disorder. J. Obses-Compuls. Rel. 27, 10058.
- Engelhard, I.M., Leer, A., Lange, E., Olatunji, B.O., 2014. Shaking that icky feeling: effects of extinction and counterconditioning on disgust-related evaluative learning. Behav. Ther. 45(5), 708-719.
- Evans, D.R., 2004. Informed consent, in: Evans, D.R. (Ed.), The law, standards, and ethics in the practice of psychology (2<sup>nd</sup> ed.). Edmond Montgomery, Toronto, pp. 147-160.
- Fairbrother, N., Newth, S.J., Rachman, S., 2005. Mental pollution: Feelings of dirtiness without physical contact. Behav. Res. Ther. 43(1), 121-130.

- Fairbrother, N., Rachman, S., 2004. Feelings of mental pollution subsequent to sexual assault. Behav. Res. Ther. 42(2), 173-189.
- Falkenstein, M.J., Schreck, M., Potluri, S., Nota, J.A., Kelley, K.N., Beard, C., Elias, J.A.,
  2020. Longitudinal Relations of Obsessive Beliefs, Obsessions, and Compulsions
  During Treatment for Obsessive Compulsive Disorder. Cognit. Ther. Res. 1-12.
- Fals-Stewart, W., Marks, A.P., Schafer, J., 1993. A comparison of behavioral group therapy and individual behavior therapy in treating obsessive-compulsive disorder. J. Nerv. Ment. Dis. 181(3), 189-193.
- Farrell, L.J., Sluis, R., Waters, A.L., 2016. Intensive treatment of pediatric OCD: The case of Sarah. J. Clin. Psychol. 72, 1174-1190.
- Farrell, N.R., Deacon, B.J., Kemp, J.J., Dixon, L.J., Sy, J.T., 2013. Do negative beliefs about exposure therapy cause its suboptimal delivery? An experimental investigation. J. Anxiety. Disord. 27, 763-771
- Farrell, N.R., Kemp, J.J., Blakey, S.M., Meyer, J.M., Deacon, B.J., 2016. Targeting clinician concerns about exposure therapy: A pilot study comparing standard versus enhanced training. Behav. Res. Ther. 85, 53-59.
- Farris, S.G., McLean, C.P., Van Meter, P.E., Simpson, H., Foa, E. B., 2013. Treatment response, symptom remission, and wellness in obsessive-compulsive disorder. J. Clin. Psychiatry. 74, 685–690.
- Fatori, D., Costa, D.L., Asbahr, F.R., Ferrão, Y.A., Rosário, M.C., Miguel, E.C., Shavitt, R.G., Batistuzzo, M.C., 2020. Is it time to change the gold standard of obsessive-compulsive disorder severity assessment? Factor structure of the Yale-Brown Obsessive-Compulsive Scale. Aust. Nz. J. Psychiat. p.0004867420924113.

Felmingham, K. L., Dobson-Stone, C., Schofield, P. R., Quirk, G. J., Bryant, R. A., 2013. The brain-derived neurotrophic factor Val66Met polymorphism predicts response to exposure therapy in posttraumatic stress disorder. Biol. Psychiatry. 73(11), 1059-1063.

- Fergus, T.A., Latendresse, S.J., Wu, K.D., 2019. Factor Structure and Further Validation of the 20-Item Short Form of the Obsessive Beliefs Questionnaire. Assessment. 26, 984-1000.
- Fernandez de la Cruz, L.F., Llorens, M., Jassi, A., Krebs, G., Vidal-Ribas, P., Radua, J., Hatch, S.L., Bhugra, D., Heyman, I., Clark, B., Mataix-Cols, D., 2015. Ethnic inequalities in the use of secondary and tertiary mental health services among patients with obsessive-compulsive disorder. Br. J. Psychiatry. 207(6), 530–535.
- Ferrão, Y.A., Shavitt, R.G., Prado, H., Fontenelle, L.F., Malavazzi, D.M., de Mathis, M.A., Hounie, A.G., Miguel, E.C., do Rosário, M.C., 2012. Sensory phenomena associated with repetitive behaviors in obsessive-compulsive disorder: An exploratory study of 1001 patients. Psychiatry. Res. 197(3), 253-258.
- Feusner, J.D., Moody, T., Lai, T.M., Sheen, C., Khalsa, S., Brown, J., Levitt, J., Alger, J., O'Neill, J., 2015. Brain connectivity and prediction of relapse after cognitivebehavioral therapy in obsessive-compulsive disorder. Front. Psychiatry. 6, 74. doi:10.3389/fpsyt.2015.00074
- Fineberg, N.A., Apergis-Schoute, A.M., Vaghi, M.M., Banca, P., Gillan, C.M., Voon,
  V., Chamberlain, S.R., Cinosi, E., Reid, J., Shahper, S., Bullmore, E.T., 2018.
  Mapping compulsivity in the DSM-5 obsessive compulsive and related disorders:
  cognitive domains, neural circuitry, and treatment. Int. J. Neuropsychopharmacol.
  21, 42-58.
- Fineberg, N.A., Dell'Osso, B., Albert, U., Maina, G., Geller, D., Carmi, L., Sireau, N.,
  Walitza, S., Grassi, G., Pallanti, S., Hollander, E., Vrakoulias, V., Menchon,
  J.M., Marazziti, D., Ionnidis, K., Apergis-Schoute, A., Stein, D.J., Cath, D.C.,
  Veltman, D.J., . . . Hollander, E., 2019. Early intervention for obsessive
  compulsive disorder: an expert consensus statement. Eur. Neuropsychopharm.

29(4), 549-565.

- Fineberg, N.A., Pampaloni, I., Pallanti, S., Ipser, J., Stein, D. J., 2007b. Sustained response versus relapse: The pharmacotherapeutic goal for obsessive-compulsive disorder. Int. Clin. Psychopharmacol. 22(6), 313-322. doi:10.1097/YIC.0b013e32825ea312
- Fineberg, N.A., Reghunandanan, S., Brown, A., Pampaloni, I., 2013. Pharmacotherapy of obsessive-compulsive disorder: evidence-based treatment and beyond. Aust.N. Z. J. Psychiatry. 47(2), 121-141.
- Fineberg, N.A., Reghunandanan, S., Kolli, S., Atmaca, M., 2014. Obsessivecompulsive (anankastic) personality disorder: toward the ICD-11 classification.Braz. J. Psychiatry. 36 (Suppl. 1), 40-50
- Fineberg, N.A., Tonnoir, B., Lemming, O., Stein, D. J., 2007a. Escitalopram prevents relapse of obsessive-compulsive disorder. Eur. Neuropsychopharmacol. 17(6-7), 430-439. doi:10.1016/j.euroneuro.2006.11.005
- Fineberg, N. A., Van Ameringen, M., Drummond, L., Hollander, E., Stein, D. J.,
  Geller, S., Walitza, S., Pallanti, S., Pellegrini, L., Zohar, J., Rodriguez, C.I.,
  Menchon, J.M., Morgadom, P., Mpavaenda, D., Fontenelle, L.F., Feusner, J.D.,
  Grassi, G., Lochner, C., Veltman, D.J., . . . Dell'Osso, B., 2020. How to manage
  obsessive-compulsive disorder (OCD) under COVID-19: A clinician's guide
  from the international college of obsessive-compulsive spectrum disorders
  (ICOCS) and the obsessive-compulsive and related disorders research network
  (OCRN) of the European college of neuropsychopharmacology. Comp. Psychiat.
  100, 152174.
- First, M.B., Williams, J.B.W., Karg, R.S., Spitzer, R.L., 2015. Structured clinical interview for DSM-5—Research version (SCID-5 for DSM-5, research version; SCID-5-RV). American Psychiatric Association, Arlington, pp. 1-94.
- <sup>93</sup> Fletcher, T. L., Van Kirk, N., Hundt, N., 2020. Obsessive-compulsive disorder

and comorbid posttraumatic stress disorder, in: Storch, E.A., McKay, D., Abramowitz, J.S., Advanced Casebook of Obsessive-Compulsive and Related Disorders. Academic Press. Pp. 105-121.

- Flygare, A.L., Engström, I., Hasselgren, M., Jansson-Fröjmark, M., Frejgrim, R., Andersson, G., Holländare, F., 2020. Internet-based CBT for patients with depressive disorders in primary and psychiatric care: Is it effective and does comorbidity affect outcome? Internet. Interv. 19, 100303.
- Foa, E.B., 2010. Cognitive behavioral therapy of obsessive-compulsive disorder. Dialogues. Clin. Neurosci. 12(2), p.199.
- Foa, E.B., 1979. Failure in treating obsessive-compulsives. Behav. Res. Ther. 17(3), 169-176.
- Foa, E.B., Abramowitz, J.S., Franklin, M.E., Kozak, M.J., 1999. Feared consequences, fixity of belief, and treatment outcome in patients with obsessive-compulsive disorder. Behav. Ther. 30, 717-724.
- Foa, E.B., Grayson, J.B., Steketee, G.S., Doppelt, H.G., Turner, R.M., Latimer, P.R., 1983. Success and failure in the behavioral treatment of obsessive-compulsives.J. Consult. Clin. Psychol. 51(2), 287.
- Foa, E.B., Kozak, M.J., 1986. Emotional processing of fear: exposure to corrective information. Psychol. Bull. 99(1), 20.
- Foa, E.B., McLean, C.P., 2016. The efficacy of exposure therapy for anxiety-related disorders and its underlying mechanisms: The case of OCD and PTSD. Annu. Rev. Clin. Psychol. 12, 1-28.
- Foa, E.B., Steketee, G., Turner, RM., Fisher, SC., 1980. Effects of imaginal exposure to feared disasters in obsessive-compulsive checkers. Behav. Res. Ther. 18, 449-455.

- Foa, E.B., Franklin, M. E., Kozak, M. J., 1998a. Psychosocial treatments for obsessive– compulsive disorder: Literature review, in: Swinson, R.P., Antony, M.M., Rachman, S., Richter, M.A. (Eds.), Obsessive-Compulsive Disorder: Theory, Research, and Treatment. Guilford Press, New York, pp. 258-276.
- Foa, E.B., Kozak, M.J., Salkovskis, P.M., Coles, M. E., Amir, N., 1998b. The validation of a new obsessive–compulsive disorder scale: The Obsessive–Compulsive Inventory. Psychol. Assess. 10 (3), 206.
- Foa, E.B., Franklin, M.E., Moser, J., 2002b. Context in the clinic: how well do cognitive-behavioral therapies and medications work in combination? Biol. Psychiatry. 52(10), 987-997.
- Foa, E.B., Huppert, J.D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., Salkovskis, P.M., 2002a. The Obsessive-Compulsive Inventory: development and validation of a short version. Psychol. Assess. 14, 485-496.
- Foa, E.B., Liebowitz, M.R., Kozak, M.J., Davies, S., Campeas, R., Franklin, M.E.,
  Huppert, J.D., Kjernisted, K., Rowan, V., Schmidt, A.B., Simpson, H.B., Tu, X.,
  2005. Randomized, placebo-controlled trial of exposure and ritual prevention,
  clomipramine, and their combination in the treatment of obsessive-compulsive
  disorder. Am. J. Psychiatry. 162(1), 151-161.
- Foa, E.B., Simpson, B.H., Liebowitz, M.R., Powers, M.B., Rosenfield, D., Cahill, S. P., Campeas, R., Franklin, M., Hahn, C.G., Hembree, E.A., Huppert, J.A., Schmidt, A.B., Vermes, D., Williams, M. T., 2013. Six-month follow-up of a randomized controlled trial augmenting serotonin reuptake inhibitor treatment with exposure and ritual prevention for obsessive-compulsive disorder. J. Clin. Psychiatry. 74(5), 64-469.
- Foa, E.B., Steketee, G., Grayson, J.B., 1985. Imaginal and in vivo exposure: A comparison with obsessive-compulsive checkers. Behav. Ther. 16(3), p292-302.

- Foa, E.B., Steketee, G., Grayson, J.B., Turner, R.M., Latimer, P.R., 1984. Deliberate exposure and blocking of obsessive-compulsive rituals: Immediate and long-term effects. Behav. Ther. 15(5), 450-472. doi:10.1016/S0005-7894(84)80049-0
- Foa, E., Wilson, R., 2012. Stop obsessing: How to overcome your obsessions and compulsion (2<sup>nd</sup> Ed.). Bantam Books, New York.
- Foa, E.B., Yadin, E., Lichner, T.K., 2012. Exposure and response (ritual) prevention for obsessive compulsive disorder: Therapist guide (Treatments that work) 2nd edition. Oxford University Press, New York.
- Forrester, E., Wilson, C., Salkovskis, P.M., 2002. The occurrence of intrusive thoughts transforms meaning in ambiguous situations: An experimental study. Behav.
  Cogn. Psychother. 30, 143-152. http://dx.doi.org/10.1017/S1352465802002023
- Franklin, M.E., Abramowitz, J.S., Bux Jr., D.A., Zoellner, L.A., Feeny, N. C., 2002. Cognitive-behavioral therapy with and without medication in the treatment of obsessive-compulsive disorder. Prof. Psychol. Res. Pr. 33(2), 162-168.
- Franklin, M.E., Abramowitz, J.S., Kozak, M.J., Levitt, J.T., Foa, E. B.,2000. Effectiveness of exposure and ritual prevention for obsessive-compulsive disorder: Randomized compared with nonrandomized samples. J. Consult. Clin. Psychol. 68(4), 594-602.
- Franklin, M., Huppert, J.D., Ledley, D.R., 2005. Obsessions and Compulsions, in: Kazantzis, N., Deane, F.P., Ronan, K.R., L'Abate, L. (Eds.), Using homework assignments in cognitive behavior therapy. Routledge/Taylor, New York.
- Franklin, M.E., Tolin, D.F., March, J. S., Foa, E.B., 2001. Treatment of pediatric obsessive-compulsive disorder: A case example of intensive cognitive-behavioral therapy involving exposure and ritual prevention. Cogn. Behav. Pract. 8(4), 297-304.
- <sup>6</sup> Freeston, M.H., Ladouceur, R., Thibodeau, N., Gagnon, F., 1991. Cognitive intrusions

in a non-clinical population: I. Response style, subjective experience, and appraisal. Behav. Res. Ther. 29, 585-597. http://dx.doi.org/10.1016/0005-7967%2891%2990008-Q

- Freeston, M.H., Rheaume, J., Ladouceur S., 1996. Correcting faulty appraisals of obsessional thoughts. Behav. Res. Ther. 34, 433-446. https://doi.org/10.1016/0005-7967(95)00076-3
- Freeston, M., Tiplady, A., Mawn, L., Bottesi, G., Thwaites, S., 2020. Towards a model of uncertainty distress in the context of Coronavirus (COVID-19). Cogn. Behav. Therap. doi: 10.1017/S1754470X2000029X
- Friedman, S., Smith, L.C., Halpern, B., Levine, C., Paradis, C., Viswanathan, R., Trappler, B., Ackerman, R., 2003. Obsessive-compulsive disorder in a multiethnic urban outpatient clinic: Initial presentation and treatment outcome with exposure and ritual prevention. Behav. Ther. 34(3), 397-410.
- Frost, R.O., Novara, C., Rheaume, J., 2002. Perfectionism in obsessive compulsive disorder, in: Frost, R., Steketee, G. (Eds.), Cognitive Approaches to Obsessions and Compulsions: Theory, Assessment and Treatment. Elsevier, pp. 91-106.
- Frost, R.O., Steketee, G., 2002. Cognitive approaches to obsessions and compulsions: Theory, assessment and treatment. Elsevier Science, Amsterdam.
- Fullana, M. A., Alonso, P., Gratacos, M., Jaurrieta, N., Jimenez-Murcia, S., Segalas,
  C., Real, E., Estivill, X., Menchon, J. M., 2012. Variation in the BDNF Val66Met
  polymorphism and response to cognitive-behavior therapy in obsessivecompulsive disorder. Eur. Psychiatry. 27(5), 386-390.
- Fullana, M.A., Mataix-Cols, D., Caspi, A., Harrington, H., Grisham, J.R., Moffitt, T.E., Poulton, R., 2009. Obsessions and compulsions in the community: prevalence, interference, help-seeking, developmental stability, and co-occurring psychiatric

conditions. Am. J. Psychiatry. 166(3), 329-336.

- Gagné, J. P., Kelly-Turner, K., Radomsky, A. S., 2018. From the laboratory to the clinic (and back again): How experiments have informed cognitive-behavior therapy for obsessive–compulsive disorder. J. Exp. Psychopathol. 9(4), p.2043808718810030.
- Gagné, J. P., Radomsky, A. S., 2017. Manipulating beliefs about losing control causes checking behaviour. J. Obsessive. Compuls. Relat. Disord. 15, 34-42.
- Geller, D. A., McGuire, J. F., Orr, S. P., Pine, D. S., Britton, J. C., Small, B. J., Murphy, T.K., Wilhelm, S., Storch, E. A., 2017. Fear conditioning and extinction in pediatric obsessive-compulsive disorder. Ann. Clin. Psychiatry. 29(1), 17-26.
- Ghisi, M., Chiri, L.R., Marchetti, I. Sanavio, E., Sica, C., 2010. In search of specificity:"not just right experiences" and obsessive-compulsive symptoms in non-clinical and clinical Italian individuals. J. Anxiety. Disord. 24, 879-886.
- Gilbert, P., Leahy, R.L., 2007. The therapeutic relationship in the cognitive behavioural psychotherapies. Routledge/Taylor & Francis Group, New York.
- Gillihan, S. J., Williams, M. T., Malcoun, E., Yadin, E., Foa, E. B., 2012. Common pitfalls in exposure and response prevention (EX/RP) for OCD. J. Obsessive. Compuls. Relat. Disord. 1(4), 251-257.
- Glenn, D., Golinelli, D., Rose, R. D., Roy-Byrne, P., Stein, M. B., Sullivan, G.,
  Bystritsky, A., Sherbourne, C., Craske, M. G., 2013. Who gets the most out of cognitive behavioral therapy for anxiety disorders? The role of treatment dose and patient engagement. J. Consult. Clin. Psychol. 81(4), 639.
- Gomes, J.B., Cordioli, A.V., Bortoncello, C.F., Braga, D.T., Goncalves, F., Heldt, E.,
  2016. Impact of cognitive-behavioral group therapy for obsessive-compulsive
  disorder on family accommodation: a randomized clinical trial. Psychiatry. Res.
  246, 70-76.

- Gomes, J.B., Van Noppen, B., Pato, M., Braga, D.T., Meyer, E., Bortoncello, C.F., Cordioli, A.V., 2014. Patient and family factors associated with family accommodation in obsessive–compulsive disorder. Psychiatry. Clin. Neurosci. 68(8), 621-630.
- Gönner, S., Leonhart, R., Ecker, W., 2008. The Obsessive-Compulsive Inventory— Revised (OCI-R): Validation of the German version in a sample of patients with OCD, anxiety disorders, and depressive disorders. J. Anxiety. Disord. 22, 734-749.
- Goodman, W.K., Price, L.H., Rasmussen, S.A., Mazure, C., Delgado, P., Heninger, G.R., Charney, D.S., 1989a. The Yale-Brown Obsessive Compulsive Scale. II. Validity. Arch. Gen. Psychiatry. 46(11), 1012-1016.
- Goodman, W.K., Price, L.H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill,
  C. L., Heninger, G.R., Charney, D.S., 1989b. The Yale-Brown Obsessive
  Compulsive Scale: I. Development, use, and reliability. Arch. Gen. Psychiatry.
  46(11), 1006-1011.
- Greist, J.H., Bandelow, B., Hollander, E., Marazziti, D., Montgomery, S.A., Nutt, D.J., Okasha, A., Swinson, R.P., Zohar, J., 2003. WCA recommendations for the longterm treatment of obsessive-compulsive disorder in adults. CNS. Spectr. 8(S1), 7-16.
- Grimaldi, S., Stern, E., 2017. Sensory Processing and Intolerance in OCD, in C.
   Pittenger (Ed.), *Obsessive-compulsive disorder: Phenomenology, pathophysiology, and treatment*. Oxford, UK: Oxford University Press.
- Griffiths, D.L., Farrell, L.J., Waters, A.M., White, S.W., 2017. ASD traits among youth with obsessive–compulsive disorder. Child. Psychiatry. Hum. Dev. 48(6), 911-921.

Grisham J.R., Williams A.D., 2013. Responding to intrusions in obsessive-compulsive disorder: the roles of neuropsychological functioning and beliefs about thoughts.

J. Behav. Ther. Exp. Psychiatry. 44, 343-50. doi:10.1016/j.jbtep.2013.01.005.

- Grover, S., Patra, B.N., Aggarwal, M., Avasthi, A., Chakrabarti, S., Malhotra, S., 2014.
  Relationship of supernatural beliefs and first treatment contact in patients with obsessive compulsive disorder: An exploratory study from India. Int. J. Soc.
  Psychiatry. 60(8), 818-827. doi:10.1177/0020764014527266
- Grunes, M.S., Neziroglu, F., McKay, D., 2001. Family involvement in the behavioral treatment of obsessive-compulsive disorder: A preliminary investigation. Behav. Ther. 32(4), 803-820.
- Hafner, A., Oberst, V., Stock, A., 2014. Avoiding procrastination through time management: an experimental intervention study. J. Educ. Stud. 40, 352-360.
- Hagen, K., Solem, S., Opstad, H.B., Vogel, P.A., Kennair, L.E.O., Kvale, G., Hansen, B., 2016. Therapist variability in the task/goal dimension of the early working alliance predicts outcome in exposure and response prevention treatment for obsessivecompulsive disorder. Clin. Neuropsychiatry. 13, 6, 94-99.
- Hale, L., Strauss, C., Taylor, B. L., 2013. The effectiveness and acceptability of mindfulness-based therapy for obsessive compulsive disorder: A review of the literature. Mindfulness. 4(4), 375-382.
- Halldorsson, B., 2015. "Please help me": Excessive reassurance seeking as an interpersonal process in obsessive compulsive disorder and health anxiety (PhD thesis). University of Bath, Bath, United Kingdom.
- Halldorsson, B., Salkovskis, P. M., 2017. Why do people with OCD and health anxiety seek reassurance excessively? An investigation of differences and similarities in function. Cognit. Ther. Res. 41(4), 619-631.

Hannigan, L. J., Walaker, N., Waszczuk, M.A., McAdams, T.A., Eley, T.C., 2017.
Aetiological influences on stability and change in emotional and behavioural problems across development: a systematic review. Psychopathol. Rev. 4(1), 52-108.

- Hansen, B., Kvale, G., Hagen, K., Havnen, A., Öst, L. G., 2019. The Bergen 4-day treatment for OCD: four years follow-up of concentrated ERP in a clinical mental health setting. Cogn. Behav. Ther. 48(2), 89-105.
- Haring, M.L., 2005. To check or not to check: A test of a cognitive theory of compulsive checking. Diss. Abstr. Int. 66, 6922.
- Harned, M.S., Dimeff, L.A., Woodcock, E.A., Kelly, T., Zavertnik, J., Contreras, I.,
  Danner, S.M., 2014. Exposing clinicians to exposure: A randomized controlled
  dissemination trial of exposure therapy for anxiety disorders. Behav. Ther. 45(6),
  731-744.
- Harvey, J.E., McCabe, P.C., 2018. A critical review of PANDAS research in the context of obsessive compulsive disorder. Health. Psychol. Rep. 6(1), 1-9.
- Hauschildt, M., Dar, R., Schröder, J., Moritz, S., 2019. Congruence and discrepancy between self-rated and clinician-rated symptom severity on the Yale–Brown Obsessive-Compulsive Scale (Y-BOCS) before and after a low-intensity intervention. Psychiatry. Res. 273, 595-602.
- Hayes, S.C., 2016. Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies, in: Hayes, S.C. (Ed.), The act in context: The canonical papers of Steven C. Hayes. Routledge/Taylor & Francis Group, New York, pp. 210-238.
- Hays, P.A., 2009. Integrating evidence-based practice, cognitive-behavior therapy, and multicultural therapy: Ten steps for culturally competent practice. Prof. Psychol.
  Res. Pr. 40(4), 354-360. https://doi.org/10.1037/a0016250
- Helpman, L., Marin, M.F., Papini, S., Zhu, X., Sullivan, G.M., Schneier, F., Neria, M.,
  Shvil, E., Aragon, M.J.M., Markowitz, J.C., Lindquist, M.A., Wager, R., Milad,
  M., Neria, Y., 2016. Neural changes in extinction recall following prolonged
  exposure treatment for PTSD: A longitudinal fMRI study. Neuroimage. Clin. 12,

715-723.

- Herba, J.K., Rachman, S., 2007. Vulnerability to mental contamination. Behav. Res. Ther. 45(11), 2804-2812.
- Hezel, D.M., McNally, R.J., 2016. A theoretical review of cognitive biases and deficits in obsessive–compulsive disorder. Biol. Psychol. 121, 221-232.
- Himle, M.B., Wellen, B.C., Hayes, L.P., 2018. Family issues associated with tics,in: The clinician's guide to treatment and management of youth with Tourettesyndrome and tic disorders. Academic Press, pp. 301-325.
- Hipol, L. J., Deacon, B.J., 2013. Dissemination of evidence-based practices for anxiety disorders in Wyoming: A survey of practicing psychotherapists. Behav. Modif. 37(2), 170–188.
- Hiss, H., Foa, E.B., Kozak, M.J., 1994. Relapse prevention program for treatment of obsessive-compulsive disorder. J. Consult. Clin. Psychol. 62(4), 801-808. doi:10.1037/0022-006X.62.4.801
- Hodgson, R., Rachman, S., Marks, I.M., 1972. The treatment of chronic obsessivecompulsive neurosis: Follow-up and further findings. Behav. Res. Ther. 10(2), 181-189.
- Hofmann, S.G., Smits, J.A., 2008. Cognitive-behavioral therapy for adult anxiety disorders: a meta-analysis of randomized placebo-controlled trials. J. Clin.
  Psychiatry. 69(4), 621-632.
- Højgaard, D.R.M.A., Hybel, K.A., Ivarsson, T., Skarphedinsson, G., Becker Nissen, J.,
  Weidle, B., Melin, K., Torp, N.C., Valderhaug, R., Dahl, K., Mortensen, E.L.,
  Compton, S., Jensen, S., Lenhard, F., Thomson, P.H., 2017. One-Year Outcome
  for Responders of Cognitive-Behavioral Therapy for Pediatric ObsessiveCompulsive Disorder. J. Am. Acad. Child. Adolesc. Psychiatry. 56(11), 940947.e941. doi:10.1016/j.jaac.2017.09.002

- Holland, P.C., 1989. Feature extinction enhances transfer of occasion setting. Learn. Behav. 17(3), 269-279.
- Hollander, E., Stein, D., Fineberg, N.A., Legault, M., 2010. Quality of life outcomes in patients with obsessive-compulsive disorder: relationship to treatment response and symptom relapse. J. Clin. Psychiatry. 71, 784–792.
- Hood, H.K., Antony, M.M., 2016. Treatment of perfectionism-related obsessivecompulsive disorder, in: Storch, E.A., Lewin, A.B. (Eds.), Clinical handbook of obsessive-compulsive and related disorders: A case-based approach to treating pediatric and adult populations. Springer, New York, pp. 85-97.
- Hooley, J. M., Licht, D. M., 1997. Expressed emotion and causal attributions in the spouses of depressed patients. J. Abnorm. Psychol. 106 (2), 298-306.
- Houghton, D. C., Stein, D. J., Cortese, B. M., 2020. Exteroceptive sensory
  abnormalities in childhood and adolescent anxiety and obsessive-compulsive
  disorder: a critical review. J. Am. Acad. Child. Adoles. Psychiatry. 59(1), 78-87.
- Hudson, J.L., Kendall, P.C., 2002. Showing you can do it: Homework in therapy for children and adolescents with anxiety disorders. J. Clin. Psychol. 58, 525-534.
- Huisman, P., Kangas, M., 2018. Evidence-based practices in cognitive behaviour therapy (CBT) case formulation: What do practitioners believe is important, and what do they do? Behav. Change. 35(1), 1-21.
- Huppert, J.D., Fradkin, I., 2016. Validation of the Penn Inventory of Scrupulosity (PIOS) in scrupulous and nonscrupulous patients: Revision of factor structure and psychometrics. Psychol. Assess. 28(6), 639.
- Huppert, J.D., Ledley, D.R., Foa, E. B., 2006. The use of homework in behavior therapy for anxiety disorders. J. Psychother. Integr. 2, 128-139.
- <sup>103</sup> Huppert, J.D., Siev, J., Kushner, E.S., 2007. When religion and obsessive-compulsive

disorder collide: Treating scrupulosity in Ultra-Orthodox Jews. J. Clin. Psychol. 63(10), 925-941. doi: 10.1002/jclp.20404

- Huppert, J. D., Simpson, H. B., Nissenson, K. J., Liebowitz, M. R., Foa, E. B., 2009.Quality of life and functional impairment in obsessive-compulsive disorder: a comparison of patients with and without comorbidity, patients in remission, and healthy controls. Depress. Anxiety. 26(1), 39-45.
- Huppert, J.D., Zlotnick, E., 2012. Core fears, values, and obsessive-compulsive disorder: A preliminary clinical-theoretical outlook. Psicoter. Cogn. e Comportamentale. 18(1), 91-102.
- Ishikawa, R., Kobori, O., Komuro, H., Shimizu, E., 2014. Comparing the roles of washing and non-washing behaviour in the reduction of mental contamination. J. Obsessive. Compuls. Relat. Disord. 3(1), 60-64.
- Ishikawa, R., Kobori, O., Shimizu, E., 2015. Unwanted sexual experiences and cognitive appraisals that evoke mental contamination. Behav. Cogn. Psychother. 43(01), 74-88.
- Isomura, K., Nordsletten, A. E., Rück, C., Ljung, R., Ivarsson, T., Larsson, H., Mataix-Cols, D., 2016. Pharmacoepidemiology of obsessive–compulsive disorder: A Swedish nationwide cohort study. Eur. Neuropsychopharmacol. 26(4), 693–704.
- Ito, L.M., Marks, I.M., De Araujo, L.A., Hemsley, D., 1995. Does imagined exposure to the consequences of not ritualising enhance live exposure for OCD? A controlled study. II. Effect on behavioural v. subjective concordance of improvement. Br. J. Psychiatry. 167(1), 71-75.
- Jacoby, R.J., Abramowitz, J.S., 2016. Inhibitory learning approaches to exposure therapy: A critical review and translation to obsessive-compulsive disorder. Clin Psychol. Rev. 49, 28-40.

- Jacoby, R.J., Berman, N.C., Reese, H.E., Shin, J., Sprich, S., Szymanski, J., Pollard,
  C.A., Wilhelm, S., 2019. Disseminating Cognitive-Behavioral Therapy for
  obsessive compulsive disorder: Comparing in person vs. online training
  modalities. J. Obsessive. Compuls. Relat. Disord. 23, 100485.
- Jacqueline, B.P., Lisa, S.T., 2015. Developing and using a case formulation to guide cognitive-behavior therapy. J. Psychol. Psychother. 5(3), p.1.
- Jakubovski, E., Diniz, J.B., Valerio, C., Fossaluza, V., Belotto-Silva, C., Gorenstein,
  C., Miguel, E., Shavitt, R. G., 2013. Clinical predictors of long-term outcome in obsessive-compulsive disorder. Depress. Anxiety. 30(8), 763-772.
  doi:10.1002/da.22013
- Jaspers, K., 1913. Psicopathologia general (Allegmeine psychopatologie) (R. O Suaubidet, Trans.) Beta, Buenos Aires.
- Jassi, A.D., Krebs, G., Lewis, A., Stobie, B., 2018. Treatment of OCD in a young person: Using the C in CBT. Bull. Menninger. Clin. 82, Special Issue: Novel Approaches to the Treatment of Obsessive Compulsive Disorder. 326-343. https://doi.org/10.1521/bumc.2018.82.4.326
- John, S., Segal, D. L., 2014. Case conceptualization, in: Cautin, R.L., Lilienfeld, S.O. (Eds.), The encyclopedia of clinical psychology. Wiley-Blackwell Hoboken, NJ. https://doi.org/10.1002/9781118625392.wbecp106
- Joiner, T. E., Metalsky, G. I., 2001. Excessive reassurance seeking: Delineating a risk factor involved in the development of depressive symptoms. Psychol. Sci. 12, 371-378.
- Jones, M. K., Menzies, R. G., 1998. The relevance of associative learning pathways in the development of obsessive–compulsive washing. Behav. Res. Ther. 36(3), 273-283.
- <sup>105</sup> Joos, E., 2012. Repetitive thought in human (fear) conditioning: Strengthening the

acquisition and extinction memory.

- Julien D., O'Connor K.P., Aardema F., 2007. Intrusive thoughts, obsessions, and appraisals in obsessive-compulsive disorder: a critical review. Clin Psychol. Rev. 27, 366-83. https://doi.org/10.1016/j.cpr.2006.12.004
- Julien, D., O'Connor, K., Aardema, F., 2016. The inference-based approach to obsessive-compulsive disorder: A comprehensive review of its etiological model, treatment efficacy, and model of change. J. Affect. Disord. 202, 187-96. https://doi.org/10.1016/j.jad.2016.05.060
- Kamath, P., Reddy, Y. C., Kandavel, T., 2007. Suicidal behaviour in obsessivecompulsive disorder. J. Clin. Psychiatry. 68, 1741–1750.
- Kampman, M., Keijsers, G.P.J., Hoogduin, C.A.L., Verbraak, M.J.P.M., 2002. Addition of cognitivebehaviour therapy for obsessive-compulsive disorder patients non-responding to fluoxetine. Acta. Psychiatr. Scand. 106(4), 314-319.
- Kazantzis, N., Dattilio, F.M., Dobson, K., 2017. The Therapeutic Relationship in CBT: A clinician's guide. Guilford, New York.
- Kazantzis, N., Deane, F.P., Ronan, K.R., 2004. Assessing compliance with homework assignments: Review and recommendations for clinical practice. J. Clin. Psychol. 60, 6, 627-641.
- Kazantzis, N., Whittington, C., Zelencich, L., Kyrios, M., Norton, P. J., Hofman, S.G.,
  2016. Quantity and quality of homework compliance: A meta-analysis of
  relations with outcome in cognitive behavior therapy. Behav. Ther. 47, 755-772.
- Kazdin, A. E., 2007. Mediators and mechanisms of change in psychotherapy research. Annu. Rev. Clin. Psychol. 3, 1-27.
- Keijsers, G.P., Hoogduin, C.A., Schaap, C.P., 1994. Predictors of treatment outcome in the behavioural treatment of obsessive-compulsive disorder. Br. J. Psychiatry.

165, 781-786.

- Kendjelic, E.M., Eells, T.D., 2007. Generic psychotherapy case formulation training improves formulation quality. Psychotherapy. (Chic). 44(1), 66.
- Kenwright, M., Marks, I., Graham, C., Franses, A., Mataix-Cols, D., 2005. Brief scheduled phone support from a clinician to enhance computer-aided self-help for obsessive-compulsive disorders: Randomized controlled trial. J. Clin. Psychol. 61, 1499-1508.
- Kerkhof, I., Vansteenwegen, D., Baeyens, F., Hermans, D., 2011. Counterconditioning: An effective technique for changing conditioned preferences. Exp. Psychol. 58(1), 31–38. https://doi.org/10.1027/1618-3169/a000063
- Keshavarzi, H., Khan, F., Syed, B., 2018. Islamically Integrated Treatment of Obsessive-Compulsive Disorder Scrupulosity (Waswasa) in Muslim Patients.
  Second International Congress on Religious & Spiritual Counselling & Care, Istanbul, Turkey.
- Kichuk, S.A., Torres, A.R., Fontenelle, L.F., Conceicão Rosário, M., Shavitt, R.G.,
  Miguel, E.C. Pittenger, C., Bloch, M.H., 2013. Symptom dimensions are
  associated with age of onset and clinical course of obsessive-compulsive
  disorder. Prog. Neuropsychopharmacol. Biol. Psychiatry. 44, 233-239.
- Kim, E.H., Hollon, S.D., Olatunji, B.O., 2016. Clinical errors in cognitive-behavior therapy.Psychotherapy. (Chic). 53(3), 325-330.
- Kircher, T., Arolt, V., Jansen, A., Pyka, M., Reinhardt, I., Kellermann, T., Konrad, C., Lueken, U., Gloster, A.T., Gerlach, A.L., Ströhle, A., Wittman, A., Pfeiderer, B., Wittchen, H.U., Straube, B., 2013. Effect of cognitive-behavioral therapy on neural correlates of fear conditioning in panic disorder. Biol. Psychiatry. 73(1), 93-101.
- <sup>107</sup> Kluger, M.P., Karrass, A., 1983. Strategies for reducing missed initial appointments in

a community mental health center. Community. Ment. Health J. 19, 137-143.

- Kobak, K., Greist, R., Jacobi, D.M., Levy-Mack, H., Greist, J.H., 2015. Computerassisted cognitive behavior therapy for obsessive-compulsive disorder: A randomized trial on the impact of lay vs. professional coaching. Ann. Gen. Psychiatry. 14 (10), 1-8.
- Kobori, O., Salkovskis, P. M., 2013. Patterns of reassurance seeking and reassurancerelated behaviours in OCD and anxiety disorders. Behav. Cogn. Psychother. 41, 1-23.
- Kobori, O., Salkovskis, P.M., Read, J., Lounes, N., Wong, V., 2012. A qualitative study of the investigation of reassurance seeking in obsessive-compulsive disorder. J. Obsessive. Compuls. Relat. Disord. 1, 25-32.
- Koran, L.M., Hanna, G.L., Hollander, E., Nestadt, G., Simpson, H.B., 2007. Practice guideline for the treatment of patients with obsessive-compulsive disorder. Am. J. Psychiatry. 164(7 suppl):5-53.
- Koran, L. M., Simpson, H.B., 2013. Guideline watch (March 2013): practice guideline for the treatment of patients with obsessive-compulsive disorder. American Psychiatric Association, Arlington.
- Koran, L.M., Thienemann, M.L., Davenport, R., 1996. Quality of life for patients with obsessive–compulsive disorder. Am. J. Psychiatry. 153, 783–788.
- Kozak, M. J., Foa, E. B., 1994. Obsessions, overvalued ideas, and delusions in obsessive-compulsive disorder. Behav. Res. Ther. 32(3), 343-353.
- Kozak, M.J., Liebowitz, M.R., Foa, E.B., 2000. Cognitive behavior therapy and pharmacotherapy for obsessive-compulsive disorder: The NIMH-sponsored collaborative study, in: Goodman, W.K., Ruderfer, M.V., Maser, J.D. (Eds.), Obsessive-Compulsive Disorder: Contemporary Issues in Treatment. Lawrence Erlbaum Associates, London, pp. 501-530.
- 108

- Krebs, G., Murray, K., Jassi, A., 2016. Modified cognitive behavior therapy for severe, treatment resistant obsessive-compulsive disorder in an adolescent with autism spectrum disorder. J. Clin. Psychol. 72(11), 1162-1173.
- Krochmalik, A., Jones, M.K., Menzies, R.G., 2001. Danger ideation reduction therapy (DIRT) for treatment resistant compulsive washing. Behav. Res. Ther. 39, 897– 912.
- Kushner, M. G., Kim, S.W., Donahue, C., Thuras, P., Adson, D., Kotlyar, M., McCabe, J., Peterson, J., Foa, E.B., 2007. D-cycloserine augmented exposure therapy for obsessive-compulsive disorder. Biol. Psychiatry. 62(8), 835-838.
- Kuyken, W., Padesky, C. A., Dudley, R., 2008. The science and practice of case conceptualization. Behav. Cogn. Psychother. 36(6), 757.
- Kuyken, W., Padesky, C., Dudley, R., 2009. Collaborative Case Conceptualization. Guilford Press, New York.
- Kyrios, M., Bhar, S., Wade, D., 1996. The assessment of obsessive-compulsive phenomena: Psychometric and normative data on the Padua Inventory from an Australian non-clinical student sample. Behav. Res. Ther. 34, 85-95.
- Ladouceur, R., Rhéaume, J., Aublet, F., 1997. Excessive responsibility in obsessional concerns: A fine-grained experimental analysis. Behav. Res. Ther. 35, 423-427.

Ladouceur, R., Rheaume, J., Freeston, M.H., Aublet, F., Jean, K., Lachance, S.,
Langlois, F., de Pokomandy-Morin, K., 1995. Experimental manipulations of responsibility: An analogue test for models of obsessive-compulsive disorder.
Behav. Res. Ther. 33, 937-946. http://dx.doi.org/10.1016/0005-7967%2895%2900024-R

- Lang, A. J., Craske, M.G., 2000. Manipulations of exposure-based therapy to reduce return of fear: A replication. Behav. Res. Ther. 38(1), 1-12.
- Lange, I., Goossens, L., Michielse, S., Bakker, J., Vervliet, B., Marcelis, M., Os, J.V.,

van Amelsvoort, T., Schruers, K., 2020. Neural responses during extinction learning predict exposure therapy outcome in phobia: results from a randomizedcontrolled trial. Neuropsychopharmacol. 45(3), 534-541.

- Langlois, F., Freeston, M. H., Ladoucer, R., 2000. Differences and similarities between obsessive intrusive thoughts and worry in a non-clinical population: study 1.Behav. Res. Ther. 38(2), 157-173.
- Larimer, M.E., Palmer, R.S., Marlatt, G.A., 1999. Relapse prevention: An overview of Marlatt's cognitive-behavioral model. Alcohol. Res. Health. 23(2), 151-160.
- LeBeau, R.T., Davies, C.D., Culver, N.C., Craske, N.G., 2013. Homework compliance counts in cognitive behavioral therapy. Cogn. Behav. Ther. 42, 171-179.
- Leahy, R., 2001. Overcoming resistance in cognitive therapy. Guilford Press, New York.
- Lebowitz, E.R., Panza, K.E., Bloch, M.H., 2016. Family accommodation in obsessivecompulsive and anxiety disorders: a five-year update. Expert. Rev. Neurother. 16(1), 45-53.
- Lebowitz, E.R., 2013. Parent-based treatment for childhood and adolescent OCD. J. Obsessive. Compuls. Relat. Disord. 2, 425-431
- Lebowitz, E., Panza, K., Su, J., Bloch, M., 2012. Family Accommodation in OCD. Expert. Rev. Neurother. 12(2), 229-238.
- Leckman, J. F., Walker, D. E., Goodman, W. K., Pauls, D. L., Cohen, D. J., 1994. "Just right" perceptions associated with compulsive behavior in Tourette's syndrome.Am. J. Psychiatry. 151, 675-680.
- Ledley, D.R., Marx, B.P., Heimberg, R. G., 2018. Making cognitive-behavioral therapy work – Third Edition. Clinical Process for new practitioner. Guilford, New York.

Leins, C., Williams, M. T., 2018. Using the Bible to facilitate treatment of religious

obsessions in obsessive-compulsive disorder. J. Psychol. Christ. 37(2), 112-124.

- Lelliott, P.T., Noshirvani, H.F., Başoğlu, M., Marks, I.M. and Monteiro, W.O., 1988. Obsessive-compulsive beliefs and treatment outcome. Psychol. Med. 18(3), 697-702.
- Lenhard, F., Andersson, E., Mataix-Cols, D., Rück, C., Aspvall, K., Serlachius, E.,
  2020. Long-term outcomes of therapist-guided Internet-delivered cognitive
  behavior therapy for pediatric obsessive-compulsive disorder: A naturalistic oneyear follow-up.
- Leonhart, M.W., Radomsky, A.S., 2019. Responsibility causes reassurance seeking, too: An experimental investigation. J. Obsessive. Compuls. Relat. Disord. 20, 66-74.
- Leung, H. T., Reeks, L. M., Westbrook, R. F., 2012. Two ways to deepen extinction and the difference between them. J. Exp. Psychol. Anim. Behav. Process. 38(4), 394.
- Lewin, A.B., Peris, T.S., Bergmann, R.L., McCracken, J.T., Piacentini, J., 2011. The role of treatment expectancy in youth receiving exposure-based CBT for obsessive compulsive disorder. Behav. Res. Ther. 49, 536-543.
- Lewis, A., Stokes, C., Heyman, I., Turner, C., Krebs, G., 2020. Conceptualizing and managing risk in pediatric OCD: Case examples. Bull. Menninger. Clin. 84(1), 3-20.
- Lind, C., Boschen, M.J., Morrissey, S., 2013. Technological advancement in psychotherapy: implications for the assessment and treatment of obsessivecompulsive disorder. J. Anxiety. Disord. 27, 47-55.
- Lindsay, M., Crino, R., Andrews, G., 1997. Controlled trial of exposure and response prevention in obsessive-compulsive disorder. Br. J. Psychiatry. 171(2), 135-139.
- <sup>111</sup> Lipp, O. V., Waters, A. M., Luck, C. C., Ryan, K. M., Craske, M. G., 2020. Novel

approaches for strengthening human fear extinction: The roles of novelty, additional USs, and additional GSs. Behav. Res. Ther. 124, 103529.

- Lissek, S., Rabin, S., Heller, R.E., Lukenbaugh, D., Geraci, M., Pine, D.S., Grillon, C., 2009. Overgeneralization of conditioned fear as a pathogenic marker of panic disorder. Am. J. Psychiatry. 167(1), 47-55.
- Livingston-Van Noppen, B., Rasmussen, S.A., McCartney, L., Eisen, J.L., 1990.Family Function and Treatment in Obsessive Compulsive Disorder, in: Jenike,M., Baer, L., Minichiello, W. (Eds.), Obsessive Compulsive Disorder: Theoryand Management. Year Book Medical Publishers, Inc., Chicago, pp. 325-341.
- Lobbestael, J., Leurgans, M., Arntz, A., 2011. Inter-rater reliability of the structured clinical intyerview for DSM-IV axis I disorders (SCID I) and axis II disorders (SCID II). Clin. Psychol. Psychother. 18(1), 75-79.
- Lommen, M.J., Engelhard, I.M., Sijbrandij, M., van den Hout, M.A., Hermans, D., 2013. Pre-trauma individual differences in extinction learning predict posttraumatic stress. Behav. Res. Ther. 51(2), 63-67.
- Lopatka, C., Rachman, S., 1995. Perceived responsibility and compulsive checking: An experimental analysis. Behav. Res. Ther. 33, 673-684.
- Lorenzo-Luaces, L., Keefe, J.R., DeRubeis, R.J., 2016. Cognitive-behavioral therapy: management in obsessive–compulsive disorder. Adv. Psychiatr. Treat. 15, 332-343.
- Lovell, K., Bee, P., 2008. Implementing the NICE OCD/BDD guidelines. Psychol Psychother. 81(Pt 4), 365-76. doi: 10.1348/147608308X320107.
- Lovell, K., Bower, P., Gellatly, J., Byford, S., Bee, P., McMillan, D., Arundel, C.,
  Gilbody, S., Gega, L., Hardy, G., Reynolds, S., 2017. Low-intensity cognitivebehaviour therapy interventions for obsessive-compulsive disorder compared to waiting list for therapist-led cognitive-behaviour therapy: 3-arm randomised controlled trial of clinical effectiveness. PLoS. Med. 14(6), e1002337.

- Lovibond, P.F., Mitchell, C.J., Minard, E., Brady, A., Menzies, R.G., 2009. Safety behaviours preserve threat beliefs: protection from extinction of human fear conditioning by an avoidance response. Behav. Res. Ther. 47(8), 716-720.
- Ludvik, D., Boschen, M.J., Neumann, D.L., 2015. Effective behavioural strategies for reducing disgust in contamination-related OCD: a review. Clin Psychol. Rev. 42, 116-129.
- Lueken, U., Straube, B., Konrad, C., Wittchen, H.U., Ströhle, A., Wittmann, A., Pfleiderer, B., Uhlmann, C., Arolt, V., Jansen, A., Kircher, T., 2013. Neural substrates of treatment response to cognitive-behavioral therapy in panic disorder with agoraphobia. Am. J. Psychiatry. 170(11), 1345-1355.
- Macdonald, P.A., Antony, M.M., Macleod, C. M., Richter, M.A., 1997. Memory and confidence in memory judgments among individuals with obsessive compulsive disorder and non-clinical controls. Behav. Res. Ther. 35, 497-505.
- Macdonald, A. M., de Silva, P., 1999. The assessment of obsessionality using the
  Padua Inventory: Its validity in a British non-clinical sample. Pers. Individ. Dif.
  27, 1027-1046.
- Madanes, C., 1991. Handbook of family therapy, Vol. 2. Brunner/Mazel, Philadelphia.
- Main-Wegielnik, S.C., 2010. The impact of Acceptance and Commitment Therapy on high overvalued ideation in obsessive compulsive disorder. Diss. Abstr. Int. 71, 2691.
- Maloney, G., Koh, G., Roberts, S., Pittenger, C., 2019. Imagery rescripting as an adjunct clinical intervention for obsessive compulsive disorder. J. Anxiety. Disord. 66, 102110.
- Maltby, N., Tolin, D.F., 2003. Overview of Treatments for Obsessive-Compulsive Disorder and Spectrum Conditions: Conceptualization, Theory, and Practice.

Brief. Treat. Crisis. Interv. 3(2).

<sup>113</sup> 

- Maltby, N., Tolin, D. F., 2005. A brief motivational intervention for treatment-refusing OCD patients. Cogn. Behav. Ther. 34, 176–184.
- Mancebo, M.C., Eisen, J.L., Sibrava, N.J., Dyck, I.R., Rasmussen, S. A., 2011. Patient utilization of cognitive-behavioral therapy for OCD. Behav. Ther. 42(3), 399-412.
- Mancusi, L., McKay, D., & Olatunji, B., 2017. Disgust and OCD, in: C. Pittenger (Ed.), Obsessive-compulsive Disorder: Phenomenology, Pathophysiology, and Treatment. Oxford, UK: Oxford University Press.
- Mandelli, L., Draghetti, S., Albert, U., De, R. D., Atti, A.R., 2020. Rates of comorbid obsessive-compulsive disorder in eating disorders: a meta-analysis of the literature. J. Affect. Disord. 277, 927–939.
- Marks, I. M., 1981. Review of behavioral psychotherapy, I: Obsessive-compulsive disorders. Am. J. Psychiatry. 138, 584-592.
- Marks, I.M., Lelliott, P., Basoglu, M., Noshirvani, H., Monteiro, W., Cohen, D., Kasvikis, Y., 1988. Clomipramine, Self-exposure and therapist-aided exposure for obsessive compulsive rituals. Br. J. Psychiatry. 152, 522-534.
- Marks, I.M., Stern, R.S., Mawson, D., Cobb, J., McDonald, R., 1980. Clomipramine and exposure for obsessive-compulsive rituals: 1. Br. J. Psychiatry. 136(1), 1-25.
- Mason, E. C., Richardson, R., 2012. Treating disgust in anxiety disorders. Clin. Psychol. 19, 180–194.
- Mataix-Cols, D., Fernández de la Cruz, L., Nordsletten, A.E., Lenhard, F., Isomura, K., Simpson, H.B., 2016. Towards an international expert consensus for defining treatment response, remission, recovery and relapse in obsessive-compulsive disorder. World Psychiatry. 15(1), 80–81.

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. Psychother. Psychosom. 71(5), 255-262.

- Mataix-Cols, D., van den Heuvel, O.A., 2012. Neuroanatomy of obsessive-compulsive disorders, in: Steketee, G. (Ed.), Oxford handbook of obsessive compulsive and spectrum disorders. Oxford University Press, Oxford, pp. 126-145.
- Mathes, B.M., Kennedy, G.A., Wilver, N.L., Carlton, C.N., Cougle, J.R., 2019b.A multi-method analysis of incompleteness in behavioral treatment of contamination-based OCD. Behav. Res. Ther. 114, 1.
- Mathes, B.M., McDermott, K.A., Okey, S.A., Vazquez, A., Harvey, A.M., Cougle,
  J.R., 2019a. Mental contamination in obsessive-compulsive disorder:
  Associations with contamination symptoms and treatment response. Behav. Ther.
  50(1), 15–24. https://doi.org/10.1016/j.beth.2018.03.005
- Mawn, L., Campbell, T., Aynsworth, C., Beckwith, H., Luce, A., Barclay, N., Dodgson, G.,
  Freeston, M. H., 2020. Comorbidity of Obsessive-Compulsive and Psychotic
  Experiences: A systematic review and meta-analysis. J. Obsess-Compuls. Rel.
  100539.
- McKay, D., 2016. Cognitive-behavioral treatment of hoarding in youth: A case illustration. J. Clin. Psychol. 72, 1209-1218.
- McKay, D., Neziroglu, F., 1996. Social skills training in a case of Obsessive-Compulsive Disorder with Schizotypal Personality Disorder. J. Behav. Ther. Exp. Psychiatry. 27, 189-194.
- McKay, D., Sookman, D., Neziroglu, F., Wilhelm, S., Stein, D. J., Kyrios, M.,
  Matthews, K., Veale, D., 2015. Efficacy of cognitive-behavioral therapy for obsessive–compulsive disorder. Psychiatry. Res. 227(1), 104-113.

McKay, D., Todaro, J.F., Neziroglu, F.A., Yaryura-Tobias, J.A., 1996. Evaluation of a

115 naturalistic maintenance program in the treatment of obsessive-compulsive

disorder: A preliminary investigation. J. Anxiety. Disord. 10(3), 211-217.

- McKenna, P.J., 1984. Disorders with overvalued ideas. Br. J. Psychiatry. 145, 579 585.
- McLean, P.D., Whittal, M.L., Thordarson, D.S., Taylor, S., Sochting, I., Koch, W. J., Paterson, Anderson, K.W., 2001. Cognitive versus behavior therapy in the group treatment of obsessive-compulsive disorder. J. Consult. Clin. Psychol. 69(2), 205-214.
- McLean, C.P., Zandberg, L.J., Van Meter, P.E., Carpenter, J.K., Simpson, H.B., Foa,
  E.B., 2015. Exposure and response prevention helps adults with obsessive
  compulsive disorder who do not respond to pharmacological augmentation
  strategies. J. Clin. Psychiatry. 76(12), 1653.
- McNally, R.J., Kohlbeck, P.A., 1993. Reality monitoring in obsessive-compulsive disorder. Behav. Res. Ther. 31, 249-253.
- Meeter, M., Murre, J. M., 2004. Consolidation of long-term memory: evidence and alternatives. Psychol. Bull. 130(6), 843.
- Mehta, M., 1990. A comparative study of family-based and patient-based behavioural management in obsessive-compulsive disorder. Br. J. Psychiatry. 157(1), 133-135.
- Melli, G., Bulli, F., Carraresi, C., Stopani, E., 2014. Disgust propensity and contamination-related OCD symptoms: The mediating role of mental contamination. J. Obsessive. Compuls. Relat. Disord. 3(2), 77-82.
- Melli, G., Carraresi, C., Stopani, E., Radomsky, A.S., Bulli, F., 2015. Factor structure and temporal stability of the Vancouver Obsessional Compulsive Inventory–
  Mental Contamination Scale (VOCI-MC) and psychometric properties of its Italian version. Compr. Psychiatry. 58, 198-204.
- <sup>116</sup> Melli, G., Bulli, F., Doron, G., Carraresi, C., 2018. Maladaptive beliefs in

relationship obsessive compulsive disorder (ROCD): Replication and extension in a clinical sample. J. Obsess-Compuls. Rel. 18, 47-53.

- Menchón, J. M., van Ameringen, M., Dell'Osso, B., Denys, D., Figee, M., Grant, J. E.,
  Hollander, E., Mazarriti, D., Nicolini, H., Pallanti, S., Ruch, C., Shavitt, R., Stein,
  D.J., Andersson, E., Bipeta, R., Cath, D.C., Drummond, L., Feusner, J., Geller, D.A.,
  ...Fineberg, N., 2016. Standards of care for obsessive–compulsive disorder
  centres. Int. J. Psychiat. Clin. 20(3), 204-208.
- Mersin, K. S., Dondu, A., Memis, C. O., Ozdemiroglu, F., Sevincok, L., 2020.
  The clinical characteristics of adhd and obsessive-compulsive disorder comorbidity. J. Atten. Disord. 24(12), 1757–1763.
- Meyer, V., Levy, R., Schnurer, A., 1974. The behavioural treatment of obsessivecompulsive disorders, in: H. R. Beech (Ed.), Obsessional states. Methuen & Co.
- Meyer, E., Souza, F., Heldt, E., Knapp, P., Cordioli, A., Shavitt, R. G., Leukefeld, C., 2010. A randomized clinical trial to examine enhancing cognitive-behavioral group therapy for obsessive-compulsive disorder with motivational interviewing and thought mapping. Behav. Cogn. Psychother. 38(3), 319-336.
- Miguel, E. C., do Rosário-Campos, M. C., da, S. P., do Valle, R., Rauch, S. L., Coffey,
  B. J., Savage, C.R., O'Sullivan, R.L., Jenike, M.A., Leckman, J. F., 2000.
  Sensory phenomena in obsessive-compulsive disorder and Tourette's disorder. J.
  Clin. Psychiatry. 61(2), 150-156.
- Milad, M. R., Furtak, S. C., Greenberg, J. L., Keshaviah, A., Im, J. J., Falkenstein, M. J., Jenike, M., Rauch, S.L., Wilhelm, S., 2013. Deficits in conditioned fear extinction in obsessive-compulsive disorder and neurobiological changes in the fear circuit. JAMA Psychiatry. 70(6), 608-618.
- Millar, J. F., Salkovskis, P. M., Brown, C., 2016. Mental contamination in the "dirty kiss": Imaginal betrayal or bodily fluids? J. Obsessive. Compuls. Relat. Disord.

8, 70-74.

- Miller, W. R., Rollnick, S., 2012. Motivational interviewing: Helping people change. Guilford Press, New York
- Miller, W. R., Rollnick, S., 2013. Motivational interviewing; helping people change (3rd edition ed.). Guilford Press, New York.
- Miller, A., Williams, M. T., Wetterneck, C. T., Kanter, J., Tsai, M., 2015. Using Functional Analytic Psychotherapy to Improve Awareness and Connection in Racially Diverse Client-Therapist Dyads. Behav. Ther. (N Y N Y). 38(6), 150-156.
- Molfenter, T., 2013. Reducing appointment no-shows: going from theory to practice. Subst. Use. Misuse. 48, 743-749.
- Monaghan, S.C., Cattie, J.E., Mathes, B.M., Shorser-Gentile, L.I., Crosby, J.M., Elias, J.A., 2015. Stages of change and the treatment of OCD. J. Obsessive. Compuls. Relat. Disord. 5, 1-7.
- Moodley, R., Sutherland, P., 2010. Psychic retreats in other places: Clients who seek healing with traditional healers and psychotherapists. Couns. Psychol. Q. 23(3), 267-282. doi:10.1080/09515070.2010.505748
- Morgan, J., Caporino, N. E., De Nadai, A. S., Truax, T., Lewin, A. B., Jung, L., Park, J.M., Khan, Y.A., Murphy, T.K., Storch, E.A., 2013. Preliminary predictors of within-session adherence to exposure and response prevention in pediatric obsessive-compulsive disorder. Child Youth Care Forum. 42, 181-191.
- Moritz, S., Fink, J., Miegel, F., Nitsche, K., Kraft, V., Tonn, P., Jelinek, L., 2018. Obsessive–compulsive disorder is characterized by a lack of adaptive coping rather than an excess of maladaptive coping. Cognit. Ther. Res. 42(5), 650-660.

Moulding, R., Aardema, F., O'Connor, K. P., 2014. Repugnant obsessions: A review of

the phenomenology, theoretical models, and treatment of sexual and aggressive

obsessional themes in OCD. J. Obsessive. Compuls. Relat. Disord. 3(2), 161-168. doi: http://dx.doi.org/10.1016/j.jocrd.2013.11.006

- Moulding, R., Anglim, J., Nedeljkovic, M., Doron, G., Kyrios, M., Ayalon, A., 2011. The Obsessive Beliefs Questionnaire (OBQ): examination in nonclinical samples and development of a short version. Assessment. 18, 357-374.
- Mowrer, O. H., 1939. A stimulus-response analysis of anxiety and its role as a reinforcing agent. Psychol. Rev. 46, 553–565.
- Mowrer, O. H., 1953. Neurosis, psychotherapy, and two-factor learning theory, in: Mowrer, O.H. (Ed.), Psychotherapy theory and research. Ronald Press, New York. pp140-149.
- Mowrer, O. H., 1960. Learning theory and behavior. Wiley, New York.
- Mueser K.T., Glynn S.M. Behavioral Family Therapy for Psychiatric Disorders. Oakland, CA: New Harbinger; 1999.
- Mundt, J.C., Marks, I.M., Shear, M.K., Greist, J.M., 2002. The Work and Social Adjustment Scale: A simple measure of impairment in functioning. Br. J. Psychiatry.180(5), 461–464. https://doi.org/10.1192/bjp.180.5.461
- Nakajima, A., Matsuura, N., Mukai, K., Yamanishi, K., Yamada, H., Maebayashi, K., Hayashida, K., Matsunaga, H., 2018. Ten-year follow-up study of Japanese patients with obsessive–compulsive disorder. Psychiat. Clin. Neuros, 72(7), 502-512.
- National Institute for Health and Clinical Excellence, 2005. Obsessive compulsive disorder. Clinical Guideline 31. Retrieved from www.nice.org.uk/CG031.
- Nattrass, A., Kellett, S., Hardy, G. E., Ricketts, T., 2015. The content, quality and impact of cognitive behavioural case formulation during treatment of obsessive compulsive disorder. Behav. Cogn. Psychother. 43(5), 590.

- Neacsiu, A.D., Eberle, J.W., Kramer, R., Wiesmann, T., Linehan, M.M., 2014. Dialectical behavior therapy skills for transdiagnostic emotion dysregulation: a pilot randomized control trial. Behav. Res. Ther. 59, 40-51.
- Neal, R. L., Radomsky, A. S., 2015. An experimental investigation of contaminationrelated reassurance seeking: Familiar versus unfamiliar others. J. Behav. Ther. Exp. Psychiatry. 49, 188-194.
- Neal, R. L., Radomsky, A. S., 2019a. How do I say this? An experimental comparison of the effects of partner feedback styles on reassurance seeking behaviour. Cognit. Ther. Res. 43, 748-758.
- Neal, R. L., Radomsky, A. S., 2019b. What do you really need? Self- and partnerreported intervention preferences within cognitive behavioural therapy for reassurance seeking behaviour. Behav. Cogn. Psychother.
- Newth, S., Rachman, S., 2001. The concealment of obsessions. Behav. Res. Ther. 39(4), 457-464.
- Neziroglu, F., 2008. Body dysmorphic disorder: Causes, characteristics, and clinical treatments. Body Image. 5, 1-2.
- Neziroglu, F., Anderson, M.A., Yaryura-Tobias, J.A., 1999c. An in-depth review of obsessive-compulsive disorder, body dysmorphic disorder, hypochondriasis, and trichotillomania: Therapeutic issues and current research. Crisis. Interv. 5(1), 59-94.
- Neziroglu, F., Forhman, B., Khemlani-Patel, S., 2010. Exposure and Response
  Prevention Treatment for Obsessive Compulsive Disorder, in: Hudak, R.,
  Dougherty, D. (Eds.), Obsessive Compulsive Disorder and Related Disorders.
  Cambridge University Press.
- Neziroglu, F., Henricksen, J., Yaryura-Tobias, J. A., 2006. Psychotherapy of

Obsessive-Compulsive Disorder and Spectrum: Established Facts and Advances, 1995-2005. Psychiatr. Clin. North Am. 29(2), 585-604.

- Neziroglu, F., Khemlani-Patel, S., 2003. Therapeutic approaches to body dysmorphic disorder. Brief. Treat. Crisis. Interv. 3(3), 307-322.
- Neziroglu, F., Khemlani-Patel, S., Jacofsky, M., 2009. Body dysmorphic disorder: Symptoms, models and treatment interventions. Cognitive behavior therapy: A guide for the practicing clinician. 2, 94-112.
- Neziroglu, F., Mancusi, L., 2014. Treatment-resistant OCD: conceptualization and treatment. Curr. Psychiatry Rev. 10, 289-295.
- Neziroglu, F., McKay, D., Yaryura-Tobias, J. A., Stevens, K. P., Todaro, J., 1999a. The overvalued ideas scale: Development, reliability and validity in obsessivecompulsive disorder. Behav. Res. Ther. 37(9), 881-902.
- Neziroglu, F., Pinto, A., Yaryura-Tobias, J.A., McKay, D., 2004. Overvalued ideation as a predictor of fluvoxamine response in patients with obsessive-compulsive disorder. Psychiatry Res. 125(1), 53-60.
- Neziroglu, F., Slavin-Mashall, J., Mancusi, L., 2013. Assessment of thought disorder and overvalued ideation in obsessive-compulsive disorder, in: McKay, D.,
  Storch, E. (Eds.), Handbook of assessing variants and complexities in anxiety disorders. Springer-Verlag, Boston, MA.
- Neziroglu, F., Stevens, K. P., 2002. Insight: Its conceptualization and assessment, in: Frost, R.O., Steketee, G., Frost, R.O., Steketee, G. (Eds.), Cognitive approaches to obsessions and compulsions: Theory, assessment, and treatment Pergamon/Elsevier Science Inc, Amsterdam, Netherlands. pp. 183-193.
- Neziroglu, F., Stevens, K. P., Yaryura-Tobias, J. A., 1999b. Overvalued ideas and their impact on treatment outcome. Braz. J. Psychiatry. 21(4), 209-216.
- <sup>121</sup> Neziroglu, F., Stevens, K.P., Yaryura-Tobias, J.A., McKay, D., 2001. Predictive

validity of the overvalued ideas scale: outcome in obsessive-compulsive and body dysmorphic disorders. Behav. Res. Ther. 39(6), 745-756.

- Nicolini, H., Salin-Pascual, R., Cabrera, B., Lanzagorta. N., 2017. Influence of culture in obsessive-compulsive disorder and its treatment. Cur. Psych. Rev. 13(4), 285-292.
- Ninan, P. T., Shelton, S., 1993. Managing psychotic symptoms when the diagnosis is unclear. Hosp. Community Psychiatry. 44, 107–8. doi: 10.1176/ps.44.2.107
- Nissen, J.B., Parner, E., 2018. The importance of insight, avoidance behavior, not-justright perception and personality traits in pediatric obsessive-compulsive disorder (OCD): a naturalistic clinical study. Nord. J. Psychiat. 72,489-496.
- Norcross, J.C., Krebs, P.M., Prochaska, J.O., 2011. Stages of change. J. Clin. Psychol. 67, 143-154.
- Nordahl Håkon, Havnen, A., Hansen, B., Öst Lars-Göran, Kvale, G., 2018. Sleep disturbances in treatment-seeking ocd-patients: changes after concentrated exposure treatment. Scand. J. Psychol. 59(2), 186–191.
- O'Connor, K.P., Aardema, F., 2011. Clinician's Handbook for Obsessive Compulsive Disorder. John Wiley And Sons Ltd. ISBN 9780470684108. <u>https://doi.org/10.1080/16506070510041211</u>
- O'Connor, K. P., Aardema, F., Bouthillier, D., Fournier, S., Guay, S., Robillard, S., Pélissier, M.C., Landry, P., Todorov, C., Tremblay, M., Pitre, D., 2005a.
  Evaluation of an inference-based approach to treating obsessive-compulsive disorder. Cogn. Behav. Ther. 34(3), 148-163.
- O'Connor, K.P., Aardema, F., Pelissier, M., 2014. Beyond Reasonable Doubt. John Wiley and Sons Ltd. ISBN 9780470868768.
- O'Connor, K., Aardema, F., Pélissier, M.C., 2005b. Beyond reasonable doubt:
- Reasoning processes in obsessive-compulsive disorder and related disorders.

John Wiley & Sons, Ltd, Chichester.

- O'Connor, K., Koszegi, N., Aardema, F., van Niekerk, J., Taillon, A., 2009. An inference-based approach to treating obsessive-compulsive disorders. Cogn. Behav. Pract. 16, 420-429.
- O'Connell, K.S., McGregor, N.W., Lochner, C., Emsley, R., Warnich, L., 2018. The genetic architecture of schizophrenia, bipolar disorder, obsessive-compulsive disorder and autism spectrum disorder. Mol. Cell. Neurosci. 88, 300-307.
- O'Connor, K., Robillard, S., 1995. Inference processes in obsessivecompulsive disorder: some clinical observations. Behav. Res. Ther. 33, 887-96. https://doi.org/10.1016/0005-7967(95)00042-V
- O'Sullivan, G., Noshirvani, H., Marks, I., Monteiro, W., Lelliott, P., 1991. Six-year follow-up after exposure and clomipramine therapy for obsessive-compulsive disorder. J. Clin. Psychiatry. 52, 150-155.
- Obsessive Compulsive Cognitions Working Group., 1997. Cognitive assessment of obsessive-compulsive disorder. Behav. Res. Ther. 35, 667-681.
- Obsessive Compulsive Cognitions Working Group., 2001. Development and initial validation of the Obsessive Beliefs Questionnaire and the Interpretation of Intrusions Inventory. Behav. Res. Ther. 39, 987-1006.
- Obsessive Compulsive Cognitions Working Group., 2003. Psychometric validation of the Obsessive Beliefs Questionnaire and the Interpretation of Intrusions Inventory: Part I. Behav. Res. Ther. 41, 863-878.
- Obsessive Compulsive Cognitions Working Group., 2005. Psychometric validation of the Obsessive Belief Questionnaire and Interpretations of Intrusions Inventory—
  Part 2: Factor analyses and testing of a brief version. Behav. Res. Ther. 43, 1527-1542.
- <sup>123</sup> Olatunji, B. O., Christian, C., Brosof, L., Tolin, D. F., Levinson, C. A., 2019. What is

at the core of OCD? A network analysis of selected obsessive-compulsive symptoms and beliefs. J. Affect. Disord. 257, 45-54.

- 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. J. Psychiatr. Res. 47, 33-41.
- Olatunji, B. O., Deacon, B. J., Abramowitz, J. S., 2009. The cruelest cure? Ethical issues in the implementation of exposure-based treatments. Cogn. Behav. Pract. 16(2), 172-180.
- Olatunji, B. O., Rosenfield, D., Monzani, B., Krebs, G., Heyman, I. Turner, C., Isomura, K., Mataix-Cols, D., 2015. Effects of homework compliance on cognitive-behavioral therapy with D-cycloserine augmentation for children with obsessive-compulsive disorder. Depress. Anxiety. 32, 935-943.
- Olatunji, B. O., Sawchuk, C. N., Lohr, J. M., de Jong, P. J., 2004. Disgust domains in the prediction of contamination fear. Behav. Res. Ther. 42(1), 93-104.
- Olatunji, B. O., Tomarken, A., Zhao, M., 2014. Effects of exposure to stereotype cues on contamination aversion and avoidance in African Americans. J. Soc. Clin. Psychol. 33(3), 229-249.
- Olatunji, B. O., Wolitzky-Taylor, K. B., Willems, J., Lohr, J. M., Armstrong, T., 2009. Differential habituation of fear and disgust during repeated exposure to threat-relevant stimuli in contamination-based OCD: An analogue study. J. Anxiety Disord. 23(1), 118-123.
- Oldfield, V. B., Salkovskis, P. M., Taylor, T., 2011. Time-intensive cognitive behaviour therapy for obsessive-compulsive disorder: A case series and matched comparison group. Br. J. Clin. Psychol. 50(1), 7-18. doi:http://dx.doi.org/10.1348/014466510X490073
- <sup>124</sup> Ontario Health Quality., 2020. Obsessive–Compulsive Disorder. Care in All Settings.

Health Quality Ontario. Retrieved from:

https://www.hqontario.ca/Portals/0/documents/evidence/quality-standards/qsobsessive-compulsive-disorder-quality-standard-en.pdf

- Osório, F. L., Loureiro, S. R., Hallak, J. E. C., Machado-de-Sousa, J. P., Ushirohira, J. M., Baes, C. V., Apolinario, T.D., Donadon, M.F., Bolsoni, L.M., Guimaraes, T., Fracon, V.S., Silva-Rodrigues, A.P.C, Pizeta, F.A., Souza, R.M., Sanches, R.F., Dos Santos, R.G., Martin-Santos, R., Crippa, J. A. S., 2019. Clinical utility and intrarater and test-retest reliability of the Structured Clinical Interview for DSM-5 Clinician Version (SCID-5-CV). Psychiatry. Clin. Neurosci. 73(12), 754-760.
- Palombini, E., Richardson, J., McAllister, E., Veale, D., & Thomson, A. B., 2020.
  When self-harm is about preventing harm: emergency management of obsessive–compulsive disorder and associated self-harm. BJ. Psych. Bulletin. 1-6.
- Park, J. M., Small, B. J., Geller, D. A., Murphy, T. K., Lewin, A. B., Storch, E. A., 2014. Does D-cycloserine augmentation of CBT improve therapeutic homework compliance for pediatric obsessive-compulsive disorder. J. Consult. Clin. Psychol. 23, 863-871.
- Parrish, C. L., Radomsky, A. S., 2006. An experimental investigation of responsibility and reassurance: Relationships with compulsive checking. Int. J. Behav. Consult. Ther. 2, 174.
- Parrish, C. L., Radomsky, A. S., 2010. Why do people seek reassurance and check repeatedly? An investigation of factors involved in compulsive behavior in OCD and depression. J. Anxiety Disord. 24(2), 211-222.
- Parrish, C. L., Radomsky, A. S., 2011. An experimental investigation of factors involved in excessive reassurance seeking: The effects of perceived threat,

responsibility and ambiguity on compulsive urges and anxiety. J. Exp. Psychopathol. 2, 44-62.

- Pascual-Vera, B., Roncero, M., Doron, G., Belloch, A., 2018. Assisting relapse prevention in OCD using a novel mobile app–based intervention: A case report.
  Bull. Menninger Clin. 82(4), 390-406.
- Pence Jr, S. L., Sulkowski, M. L., Jordan, C., Storch, E. A., 2010. When exposures go wrong: Trouble-shooting guidelines for managing difficult scenarios that arise in exposure-based treatment for obsessive-compulsive disorder. Am. J. Psychother. 64(1), 39-53.
- Persons, J.B., Gross, J.J., Etkin, M.S., Madan, S.K., 1996. Psychodynamic Therapists' Reservations About Cognitive-Behavioral Therapy: Implications for Training and Practice. J. Psychother. Pract. Res. 5, 202–212.
- Peselow, E. D., Pizano, D. R., IsHak, W.W., 2015. Maintenance treatment for obsessive-compulsive disorder: Findings from a naturalistic setting. Ann. Clin. Psychiatry. 27(1), 25-32.
- Phillips K.A., Stein D.J., 2015. Handbook on Obsessive-Compulsive and Related Disorders. American Psychiatric Publishing, Washington, DC.
- Phillips, K.A., Pinto, A., Hart, A.S., Coles, M.E., Eisen, J.L., Menard, W., Rasmussen, S.A., 2012. A comparison of insight in body dysmorphic disorder and obsessive– compulsive disorder. J. Psychiatr. Res. 46(10), 1293-1299.
- Pietrefesa, A. S., Coles, M. E., 2008. Moving beyond an exclusive focus on harm avoidance in obsessive compulsive disorder: Considering the role of incompleteness. Behav. Ther. 39, 224-231.
- Pietrefesa, A.S., Coles, M.E., 2009. Moving beyond an exclusive focus on harm avoidance in obsessive-compulsive disorder: behavioral validation for the
- separability of harm avoidance and incompleteness. Behav. Ther. 40(3), 251-259.

- Pinto, A., Pinto, M. A., Neziroglu, F., Yaryura, J., 2007. Motivation to change as a predictor of treatment response in obsessive-compulsive disorder. Ann. Clin. Psychiatry. 19 (2), 83-87.
- Pinto, A., Van Noppen, B., Calvocoressi, L., 2013. Development and preliminary psychometric evaluation of a self-rated version of the Family Accommodation
  Scale for Obsessive-Compulsive Disorder. J. Obsessive. Compuls. Relat. Disord. 2. 457-465.
- Pirutinsky, S., Rosmarin, D. H., Pargament, K. I., 2009. Community attitudes towards culture-influenced mental illness: Scrupulosity vs. nonreligious OCD among Orthodox Jews. J. Community Psychol. 37(8), 949-958. doi:10.1002/jcop.20341
- Pollard, C.A., 2007. Treatment readinesss, ambivalence, and resistance, in: Antony,M.M, Purdon, C., Summerfeldt, L. (Eds.), Psychological Treatment of OCD:Fundamentals and beyond. APA Books, Washington D.C. pp. 61-75.
- Poli A., Melli G, Radomsky A.S., 2019. Different disgust domains specifically relate to mental and contact contamination fear in obsessive-compulsive disorder: Evidence from a path analytic model in an Italian clinical sample, Behav. Ther. 50 (2), 2019, 380–394.
- Ponniah, K., Magiati, I., Hollon, S. D., 2013. An update on the efficacy of psychological treatments for obsessive-compulsive disorder in adults. J. Obsessive. Compuls. Relat. Disord. 2, 207-218.
- Pouchly, C. A., 2012. A narrative review: arguments for a collaborative approach in mental health between traditional healers and clinicians regarding spiritual beliefs. Ment. Health Relig. Cult. 15(1), 65–85. https://doi.org/10.1080/13674676.2011.553716
- Pozza, A., Lochner, C., Ferreti, F., Cuomo, A., Coluccia, A., 2018. Does higher severity really correlate with a worse quality of life in obsessive-compulsive

disorder? A meta-regression. Neuropsychiatr. Dis. Treat. 14, 1013-1023.

- Prada, S. P., do Rosário, M. C., Lee, J., Hounie, A. G., Shavitt, R. G., Miguel, E.
  C., 2008. Sensory phenomena in obsessive-compulsive disorder and tic disorders: A review of the literature. CNS. Spectr. 13(5), 425-432.
- Price, M. C., Salsman, N. L., 2010. Exposure and response prevention for the treatment of late-onset obsessive-compulsive disorder in an 82-year-old man. Clin. Case Stud. 9(6), 426-441.
- Priebe, S., Conneely, M., McCabe, R., Bird, V., 2020. What can clinicians do to improve outcomes across psychiatric treatments: a conceptual review of nonspecific components. Epidemiol. Psych. Sci. 29, e48.
- Purdon, C., Clark, D.A., 1994. Obsessive intrusive thoughts in nonclinical subjects: II.
  Cognitive appraisal, emotional response and thought control strategies. Behav.
  Res. Ther. 32, 403-410. http://dx.doi.org/10.1016/0005-7967%2894%2990003-5
- Purdon, C., Clark, D.A., 2002. The need to control thoughts, in: Steketee, G., Frost, R. (Eds.), Cognitive Approaches to Obsessions and Compulsions.
- Rachman, S., 1974. Primary obsessional slowness. Behav. Res. Ther. 12(1), 9-22.
- Rachman, S., 1976b. Obsessional-compulsive checking. Behav. Res. Ther. 14, 269-277.
- Rachman, S., 1976a. The modification of obsessions: A new formulation. Behav. Res. Ther. 14(6), 437-443.
- Rachman, S., 1977. The conditioning theory of fear acquisition: A critical examination. Behav. Res. Ther. 15(5), 375-387.
- Rachman, S., 1983. Obstacles to the treatment of obsessions, in: E.B. Foa, E.B., Emmelkamp, P.M.G. (Eds.), Failures in Behavior Therapy. Wiley, New York, pp. 35-57.
- Rachman S., 1994. Pollution of the mind. Behav Res Ther. 32(3), 311-4. doi:

- Rachman S., 1997. A cognitive theory of obsessions. Behav. Res. Ther. 35(9), 793–802.
- Rachman, S., 1998. A cognitive theory of obsessions, in: Sanavio, E.E. (Ed.), Behavior and cognitive therapy today: Essays in honor of Hans J. Eysenck (pp. 209-222).Oxford University Press, Oxford.
- Rachman, S., 2002. A cognitive theory of compulsive checking. Behav. Res. Ther. 40(6), 625-639.
- Rachman, S., 2003. The treatment of obsessions. Oxford University Press, New York, NY.
- Rachman, S., 2004. Fear of contamination. Behav. Res. Ther. 42(11), 1227-1255.
- Rachman, S., 2006. The fear of contamination: Assessment and treatment. University Press, Oxford.
- Rachman, S., 2007. Unwanted intrusive images in obsessive-compulsive disorders. J. Behav. Ther. Exp. Psychiatry. 38, 402-410.
- Rachman, S., 2010. Betrayal: A psychological analysis. Behav. Res. Ther. 48(4), 304-311.
- Rachman, S., Coughtrey, A.E., Shafran, R., Radomsky, A., 2014. Oxford guide to the treatment of mental contamination. Oxford University Press, Oxford.
- Rachman, S. J., de Silva, P., 1978. Abnormal and normal obsessions. Behav. Res. Ther. 16, 233-248. doi: http://dx.doi.org/10.1016/0005-7967(78)90022-0
- Rachman, S., De Silva, P., Röper, G., 1976. The spontaneous decay of compulsive urges. Behav. Res. Ther. 14(6), 445-453.
- Rachman, S., Hodgson, R., 1980. Obsessions and compulsions. Prentice Hall, Englewood Cliffs, NJ.
- Rachman, S., Hodgson, R., Marks, I. M., 1971. The treatment of chronic obsessive-

compulsive neurosis. Behav. Res. Ther. 9(3), 237-247.

- Rachman, S., Radomsky, A. S., Elliott, C. M., Zysk, E., 2012. Mental contamination:The perpetrator effect. J. Behav. Ther. Exp. Psychiatry. 43(1), 587-593.
- Rachman, S., Shafran, R., 1998. Cognitive and behavioral features of obsessive-compulsive disorder, in: Swinson, R.P., Antony, M.M., Rachman, S., Richter, M. A. (Eds.), Obsessive-compulsive disorder: Theory, research, and treatment (pp. 51–78). Guilford Press, New York. pp. 51-78.
- Rachman, S., Shafran, R., Radomsky, A.S., Zysk, E., 2011. Reducing contamination by exposure plus safety behaviour. J. Behav. Ther. Exp. Psychiatry. 42(3), 397-404.
- Radomsky, A. S., Alcolado, G. M., 2010. Don't even think about checking: Mental checking causes memory distrust. J. Behav. Ther. Exp. Psychiatry. 41, 345-351.
- Radomsky, A. S., Elliott, C. M., 2009. Analyses of mental contamination: Part II, individual differences. Behav. Res. Ther. 47(12), 1004-1011.
- Radomsky, A. S., Dugas, M. J., Alcolado, G. M., Lavoie, S. L., 2014c. When more is less: Doubt, repetition, memory, metamemory, and compulsive checking in OCD. Behav. Res. Ther. 59, 30-39.
- Radomsky, A. S., Gagné, J. P., 2019. The development and validation of the Beliefs About Losing Control Inventory. Cogn. Behav. Ther. 49(2), 97-112.
- Radomsky, A. S., Gilchrist, P. T., Dussault, D., 2006b. Repeated checking really does cause memory distrust. Behav. Res. Ther. 44, 305-316.
- Radomsky, A. S., Giraldo-O'Meara, M., Wong, S. F., Dugas, M. J., Gelfand, L. A.,
  Rachman, S., Schell, S., Senn, J.M., Shafran, R., Whittal, M. L., 2020b.
  Cognitive therapy for compulsive checking in obsessive-compulsive disorder: a pilot trial. Psychiatry Res. 286. https://doi.org/10.1016/j.psychres.2020.112850.

Radomsky, A. S., Ouimet, A. J., Ashbaugh, A. R., Lavoie, S. L., Parrish, C. L.,

O'Connor, K. P., 2006a. Psychometric Properties of the French and English Versions of the Vancouver Obsessional-Compulsive Inventory and the Symmetry Ordering and Arranging Questionnaire. Cogn. Behav. Ther. 35, 164-173.

- Radomsky, A. S., Rachman, S., 2004. The importance of importance in OCD memory research. J. Behav. Ther. Exp. Psychiatry. 35(2), 137–151.
- Radomsky, A. S., Rachman, S. J., Hammond, D., 2001. Memory bias, confidence and responsibility in compulsive checking. Behav. Res. Ther. 39, 813-822.
- Radomsky, A. S., Rachman, S., Shafran, R., Coughtrey, A. E., Barber, K. C., 2014a.The nature and assessment of mental contamination: A psychometric analysis. J.Obsessive. Compuls. Relat. Disord. 3(2), 181-187.
- Radomsky, A. S., Senn, J. M., Lahoud, M., Gelfand, L. A., 2014b. An informational pathway to the development of a contamination-related memory bias. J. Behav. Ther. Exp. Psychiatry. 45(3), 339-342.
- Radomsky, A. S., Shafran, R., Coughtrey, A. E., Rachman, S., 2010. Cognitivebehavior therapy for compulsive checking in OCD. Cogn. Behav. Pract. 17, 119-131.
- Radomsky, A. S., Wong, S. F., Giraldo-O'Meara, M., Dugas, M. J., Gelfand, L. A.,
  Myhr, G., Schell, S., Senn, J.M., Shafran, R., Whittal, M. L., 2020a. When it's at:
  An examination of when cognitive change occurs during cognitive therapy for
  compulsive checking in obsessive-compulsive disorder. J. Behav. Ther. Exp.
  Psychiatry. 67, 101442.
- Rapp, A. M., Bergman, R. L., Piaventini, J., McGuire, J. F., 2016. Evidence-based assessment of obsessive-compulsive disorder. Journal of Central Nervous System Disease, 8, 13-29.

Rasmussen, S. A., Eisen, J. L., 1992. The epidemiology and clinical features of

obsessive compulsive disorder. Psychiatr. Clin. North Am. 15, 743-758.

- Rathod, S., Kingdon, D., 2009. Cognitive behaviour therapy across cultures. Psychiatry. 8(9), 370–371. doi: 10.1016/j.mppsy.2009.06.011
- Rector, N. A., Kamkar, K., Cassin, S. E., Ayearst, L. E., Laposa, J. M., 2011. Assessing excessive reassurance seeking in the anxiety disorders. J. Anxiety Disord. 25, 911-917.
- Rector, N.A., Richter, M.A., Katz, D., Leybman, M., 2018. Does the addition of cognitive therapy to exposure and response prevention for obsessive compulsive disorder enhance clinical efficacy? A randomized controlled trial in a community setting. Br. J. Clin. Psychol. 58, 1-18. https://doi.org/10.1111/bjc.12188
- Rector, N. A., Katz, D. E., Quilty, L. C., Laposa, J. M., Collimore, K., Kay, T., 2019. Reassurance seeking in the anxiety disorders and OCD: Construct validation, clinical correlates and CBT treatment response. J. Anxiety Disord. 67, 102109.
- Rees, C. S., Austen, T., Anderson, R. A., Egan, S. J., 2014. Can corrective information reduce negative appraisals of intrusive thoughts in a community sample? Behav. Cogn. Psychother. 42(04), 502-507.
- Reese H.E., Pollard C.A., Szymanski J., Berman N., Crowe K., Rosenfield E., Wilhelm S., 2016. The behavior therapy training institute for OCD: A preliminary report. Journal of Obsessive-Compulsive and Related Disorders, 8, 79-85.
- Remmerswaal, K. C., Batelaan, N. M., Hoogendoorn, A. W., van der Wee, N. J., van Oppen, P., van Balkom, A. J., 2019. Four-year course of quality of life and obsessive-compulsive disorder. Soc. Psychiatry. Psychiatr. Epidemiol. 55, 989-1000.
- Remmerswaal, K, Batelann, N, Smit, J, van Oppen, P, van Balkam, A., 2016. Feasibility and outcome of a brief cognitive behavior therapy family intervention
- 132 for patients with obsessive-compulsive disorder: A pilot study. Psychother.

Psychosom. 85, 185-186.

Rescorla, R. A., 1969. Pavlovian conditioned inhibition. Psychol. Bull. 72(2), 77.

- Rescorla, R. A., 1986. Extinction of facilitation. J. Exp. Psychol. Anim. Behav. Process. 12(1), 16.
- Rescorla, R. A., 2006. Deepened extinction from compound stimulus presentation. J. Exp. Psychol. Anim. Behav. Process. 32(2), 135.
- Rescorla, R. A., Wagner, A. R., 1972. A theory of Pavlovian conditioning: Variations in the effectiveness of reinforcement and nonreinforcement, in: Black, A.H., Prokasy, W.F. (Eds.), Classical conditioning II: Current research and theory, Appleton-Century-Crofts, New York, pp. 64–99.
- Riccardi, C. J., Timpano, K. R., Schmidt, N. B., 2010. A case study perspective on the importance of motivation in the treatment of obsessive compulsive disorder. Clin. Case Stud. 9(4), 273-284.
- Riskind, J. H., Rector, N. A., Taylor, S., 2012. Looming cognitive vulnerability to anxiety and its reduction in psychotherapy. J. Psychother. Integr. 22(2), 137.
- Röper, G., Rachman, S., 1976. Obsessional-compulsive checking: experimental replication and development. Behav. Res. Ther. 14, 25-32.
- Röper, G., Rachman, S., Hodgson, R., 1973. An experiment on obsessional checking. Behav. Res. Ther. 11, 271-277.
- Röper, G., Rachman, S., Marks, I., 1975. Passive and participant modelling in exposure treatment of obsessive-compulsive neurotics. Behav. Res. Ther. 13(4), 271-279.
- Rosario-Campos, M., Leckman, J. F., Mercadante, M. T., Shavitt, R. G., da, S. P., Sada, P., Zamignani, D., Miguel, E. C., 2001. Adults with early-onset obsessive– compulsive disorder. Am. J. Psychiatry. 158(11), 1899-1903.

Rosmarin, D. H., Pirutinsky, S., Siev, J., 2010. Recognition of scrupulosity and non-

religious OCD by Orthodox and non-Orthodox Jews. J. Soc. Clin. Psychol. 29(8), 930-944.

- Roth, A.D., Pilling, S., 2007. The competences required to deliver effective cognitive behavioural therapy for people with depression and anxiety disorders.Department of Health, London, UK.
- Roth, A.D., Pilling, S., 2008. Using an evidence-based methodology to identify the competences required to deliver effective cognitive and behavioural therapy for depression and anxiety disorders. Behav. Cogn. Psychother. 36(2), 129-147. Doi:http://dx.doi.org/10.1017/S1352465808004141
- Rothbaum, B. O., Shahar, F., 2000. Behavioral treatment of obsessive-compulsive disorder in a naturalistic setting. Cogn. Behav. Pract. 7(3), 262-270.
- Rowa, K., Antony, M. M., Swinson, R. P., 2007. Exposure and response prevention, in: Antony, M.M., Purdon, C., Summerfeldt, L.J. (Eds.), Psychological treatment of obsessive-compulsive disorder: Fundamentals and beyond. American Psychological Association, Washington DC. pp. 79-109.
- Rowa, K., Purdon, C., Summerfeldt, L., Antony, M.M., 2005. Why are some obsessions more upsetting than others?. Behav. Res. Ther. 43, 1453-1465. doi: http://dx.doi.org/10.1016/j.brat.2004.11.003
- Rufer, M., Fricke, S., Moritz, S., Kloss, M., Hand, I., 2006. Symptom dimensions in obsessive–compulsive disorder: prediction of cognitive-behavior therapy outcome. Acta Psychiatr. Scand. 113(5), 440-446.
- Ruscio, A., Stein, D., Chiu, W., Kessler, R., 2010. The epidemiology of obsessivecompulsive disorder in the National Comorbidity Survey Replication. Mol. Psychiatry. 15, 53–63.

Salkovskis, P., 1985. Obsessional-compulsive problems: A cognitive-behavioural

analysis. Behav. Res. Ther. 23, 571-583.

Salkovskis, P. M., 1991. The importance of behaviour in the maintenance of anxiety and panic: A cognitive account. Cogn. Behav. Therap. 19(1), 6-19.

Salkovskis, P.M., 1996. Frontiers of cognitive therapy. Guilford, New York.

- Salkovskis, P. M., 1999. Understanding and treating obsessive-compulsive disorder. Behav. Res. Ther. 37, S29-S52.
- Salkovskis, P. M., Campbell, P., 1994. Thought suppression induces intrusion in naturally occurring negative intrusive thoughts. Behav. Res. Ther. 32, 1-8. http://dx.doi.org/10.1016/0005-7967%2894%2990077-9
- Salkovskis, P., Forrester, E., 2002. Responsibility, in: Frost, R., Steketee, G. Cognitive Approaches to Obsessions and Compulsions: Theory, Assessment and Treatment. Elsevier, pp. 45-62.
- Salkovskis, P. M., Harrison., 1984. Normal and abnormal obsessions: A replication. Behav. Res. Ther. 22, 549-552. https://doi.org/10.1016/0005-7967(84)90057-3
- Salkovskis, P. M., Kobori, O., 2015. Reassuringly calm? Self-reported patterns of responses to reassurance seeking in obsessive compulsive disorder. J. Behav.
  Ther. Exp. Psychiatry. 49, 203-208. http://dx.doi.org/10.1016/j.jbtep.2015.09.002
- Salkovskis, P., Shafran, R., Rachman, S., Freeston, M. H., 1999. Multiple pathways to inflated responsibility beliefs in obsessional problems: Possible origins and implications for therapy and research. Behav. Res. Ther. 37(11), 1055-1072.
- Salkovskis, P., Thorpe, S., Wahl, K., Wroe, A., Forrester, E., 2003. Neutralizing Increases Discomfort Associated with Obsessional Thoughts: An Experimental Study with Obsessional Patients. J. Abnorm. Psychol. 112, 709-715. http://dx.doi.org/10.1037/0021-843X.112.4.709
- Salkovskis, P. M., Westbrook, D., Davis, J., Jeavons, A., Gledhill, A., 1997. Effects of neutralizing on intrusive thoughts: An experiment investigating the etiology of

obsessive-compulsive disorder. Behav. Res. Ther. 35(3), 211-219.

- 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. Behav. Res. Ther. 38, 347-372. https://doi.org/10.1016/S0005-7967(99)00071-6
- Sanavio, E., 1988. Obsessions and compulsions: The Padua Inventory. Behav. Res. Ther. 26, 169-177.
- Sassano, S., Sapp, F., Van Noppen, B., 2015. Cognitive Behavior Therapy for Obsessive Compulsive Disorder. Focus. 13 (2).
- Saxena, S.S., Gorbis, E.E., O'Neill, J.J., Baker, S.K., Mandelkern, M.A., Maidment,
- K.M., Chang, S., Salamon, A., Brody, L., Schwartz, J.M., London, E.D., 2009.Rapid effects of brief intensive cognitive-behavioral therapy on brain glucose metabolism in obsessive-compulsive disorder. Mol. Psychiatry. 14, 197-205.
- Scheveneels, S., Boddez, Y., Vervliet, B., Hermans, D., 2019. Modeling hierarchical versus random exposure schedules in Pavlovian fear extinction: No evidence for differential fear outcomes. Behav. Ther, 50(5), 967-977.
- Schubert, J., Ravid, A., Coles, M. E., 2016. Treatment of "not-just-right experiences" in childhood obsessive-compulsive disorder, in: Storch, E. A., Lewin, A. B. (Eds.),
  Clinical handbook of obsessive-compulsive and related disorders: A case-based approach to treating pediatric and adult populations. Springer, New York, pp. 197-210.
- Schultz, W., 2019. Biogenetic etiologies of OCD: Review and recommendations for clinicians. J. Obsessive. Compuls. Relat. Disord. 22, 100451.
- Schwartz, R. A., 2018. Treating incompleteness in obsessive-compulsive disorder: A meta-analytic review. J. Obsessive. Compuls. Relat. Disord. 19, 50-60.
- Schwartz, C., Hilbert, S., Schubert, C., Schlegl, S., Freyer, T., Loewe, B., Osen, B.,

Voderholzer, U., 2017. Change factors in the process of cognitive-behavioural therapy for obsessive-compulsive disorder. Clin. Psychol. Psychother. 24, 785-792.

- Sewart, A. R., Craske, M. G., 2020. Inhibitory learning, in: Abramowitz J.S., Blakey S.M., (Eds.), Clinical handbook of fear and anxiety: Maintenance processes and treatment mechanisms. American Psychological Association, pp. 265–285. https://doi.org/10.1037/0000150-015
- Sguazzin, C.M., Key, B.L., Rowa, K., Bieling, P.J., McCabe, R.E., 2017. Mindfulnessbased cognitive therapy for residual symptoms in obsessive-compulsive disorder: A qualitative analysis. Mindfulness. 8(1), 190-203.
- Shafran, R., 1997. The manipulation of responsibility in obsessive-compulsive disorder. Br. J. Clin. Psychol. 36, 397-407.
- Shafran, R., Clark, D., Fairburn, C., Arntz, A., Barlow, D., Ehlers, A., Freeston, M.,
  Garety, P.A., Hollon, S.D., Ost, L., Salkovskis, P.M., Williams, J.M.G., Wilson,
  G.T., 2009. Mind the gap: improving the dissemination of CBT. Behav. Res.
  Ther, 47, 902–909.
- Shafran, R., Radomsky, A.S., Coughtry, A.E., Rachman, S., 2013. Advances in the cognitive behavioural treatment of obsessive-compulsive disorder. Cogn. Behav. Ther. 42, 265-274.
- Shafran, R., Thordarson, D. S., Rachman, S., 1996. Thought-action fusion in obsessive compulsive disorder. J. Anxiety Disord. 10(5), 379-391. doi:10.1016/0887-6185(96)00018-7
- Sharma, E., Thennarasu, K., Reddy, Y. C. J., 2014. Long-term outcome of obsessivecompulsive disorder in adults: A meta-analysis. J. Clin. Psychiatry. 75(9), 1019-1027. doi:10.4088/JCP.13r08849

- Shavitt, R.G., de Mathis, M.A., Oki, F., Ferrao, Y.A., Fontenelle, L.F., Torres, A.R., Dinz,
  J.B., Costa, D.L.C., Conceicao do Rosario, M., Hoexter, M.Q., Miguel, E.C., Simpson,
  H.B., 2014. Phenomenology of OCD: lessons from a large multicenter study and
  implications for ICD-11. J. Psychiatr. Res. 57, 141-148.
- Sheehan, D.V., Lecrubier, Y., Harnett-Sheehan, K., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., Dunbar, G., 1998. The Mini International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic interview. J. Clin. Psychiatry. 59(suppl 20), 22-33.
- Shepherd, L., Salkovskis, P. M., Morris, M., 2009. Recording therapy sessions: An evaluation of patient and therapist reported behaviours, attitudes and preferences.
  Behav. Cogn. Psychother. 37, 141-150.
  http://dx.doi.org/10.1017/S1352465809005190
- Shimshoni, Y., Shrinivasa, B., Cherian, A., Lebowitz, E., 2019. Family accommodation in psychopathology: A synthesized review. Indian J. Psychiatry. 61 (1), S93-S103.
- Sibrava, N. J., Boisseau, C. L., Eisen, J. L., Mancebo, M. C., Rasmussen, S. A., 2016. An empirical investigation of incompleteness in a large clinical sample of obsessive compulsive disorder. J. Anxiety Disord, 42, 45-51.
- Sica, C., Bottesi, G., Orsucci, A., Pieraccioli, C., Sighinolfi, C., Ghisi, M., 2015. "Not just right experiences" are specific to obsessive–compulsive disorder: Further evidence from Italian clinical samples. J. Anxiety Disord. 31, 73-83.
- Simonds, L. M., Thorpe, S. J., Elliott, S. A., 2000. The Obsessive CompulsiveInventory: Psychometric properties in a nonclinical student sample. Behav. Cogn.Psychother. 28, 153-159.
- Simos, G., Ntouros, E., 2012. Unwanted intrusive thoughts: Self-report vs interview based assessment. 42th Congress of the European Association for Behavioural and Cognitive

Therapies, August 29th - September 1st, 2012, Geneva, Switzerland, ABSTRACTS, p.90.

- Simons, M., Schneider, S., Herpertz-Dahlmann, B., 2006. Metacognitive therapy versus exposure and response prevention for pediatric obsessive-compulsive disorder. Psychother. Psychosom. 75(4), 257-264.
- Simpson, H. B., Foa, E. B., Liebowitz, M. R., Huppert, J. D., Cahill, S., Maher, M. J.,
  McLean, C.P., Bender, J., Marcus, S.M., Williams, M.T., Weaver, J., Vermes, D.,
  Van Meter, P.E., Rodriguez, C.I., Powers, M., Pinto, A., Imms, P., Hahn, C.G.,
  Campeas, R., 2013. Cognitive-behavioral therapy vs risperidone for augmenting
  serotonin reuptake inhibitors in obsessive-compulsive disorder: A randomized
  clinical trial. JAMA Psychiatry. 70(11), 1190-1199.
- Simpson, H. B., Foa, E. B., Liebowitz, M. R., Ledley, D. R., Huppert, J. D., Cahill, S.,
- Vermes, D., Schmidt, A.B., Hembree, E., Franklin, M., Campeas, R., Hahn, C.G.,
  Petkova, E., 2008a. A randomized, controlled trial of cognitive-behavioral
  therapy for augmenting pharmacotherapy in obsessive-compulsive disorder. Am.
  J. Psychiatry. 165(5), 621-630.
- Simpson, H. B., Huppert, J. D., Petkova, E., Foa, E. B., Liebowitz, M. R., 2006.
  Response versus remission in obsessive- compulsive disorder. J. Clin. Psychiatry.
  67, 269–276.
- Simpson, H.B., Maher, M., Page, J. R., Gibbons, C. J., Franklin, M. E., Foa, E. B., 2010b. Development of a patient adherence scale for exposure and response prevention therapy. Behav. Ther. 41, 30-37.
- Simpson, A. B., Maher, M. J., Wang, Y., Bao, Y., Foa, E. B., Franklin, M., 2011. Patient adherence predicts outcome from cognitive-behavioral therapy in obsessive compulsive disorder. J. Consult. Clin. Psychol. 79, 247-252.
- Simpson H. B., Marcus, S. M., Zuckoff, A., Franklin, M. E., Foa, E. B., 2012. Patient

adherence to cognitive-behavioral therapy predicts long-term outcome in obsessive-compulsive disorder. J. Clin. Psychiatry. 73, 1265–1266.

- Simpson, H. B., Zuckoff, A., 2011. Using motivational interviewing to enhance treatment outcome in people with obsessive-compulsive disorder. Cogn. Behav. Pract. 18(1), 28-37.
- Simpson, H.B., Zuckoff, A., Page, J.R., Franklin, M.E., Foa, E.B., 2008b. Adding Motivational Interviewing to exposure and ritual prevention for obsessivecompulsive disorder. Cogn. Behav. Ther. 37, 38-49.
- Simpson, H. B., Zuckoff, A. M., Maher, M. J., Page, J. R., Franklin, M. E., Foa, E. B., Schmidt, A.B., Wang, Y., 2010a. Challenges using motivational interviewing as an adjunct to exposure therapy for obsessive-compulsive disorder. Behav. Res. Ther. 48(10), 941-948.
- Skoog, G., Skoog, I., 1999. A 40-year follow-up of patients with obsessive-compulsive disorder. Arch. Gen. Psychiatry. 56, 121–127.
- Smith, J.L., McBride, N.M., Storch, E.A., 2017. Outpatient Treatment Patterns of Pediatric Obsessive-Compulsive Disorder. J Child Adolesc Psychopharmacol. 27(6), 509-515. doi: 10.1089/cap.2017.0011.
- Smits, J. A., Rosenfield, D., Otto, M. W., Powers, M. B., Hofmann, S. G., Telch, M. J., Pollack, M.H., Tart, C. D., 2013. D-cycloserine enhancement of fear extinction is specific to successful exposure sessions: evidence from the treatment of height phobia. Biol. Psychiatry. 73(11), 1054-1058.
- Söchting, I., 2014. Group Cognitive Behavioral Therapy: Challenges and Opportunities. Wiley-Blackwell, Chichester, UK.

Solem, S., Håland, A.T., Vogel, P.A., Hansen, B., Wells, A., 2009. Change in metacognitions predicts outcome in obsessive-compulsive disorder patients

undergoing treatment with exposure and response prevention. Behav Res Ther.

47(4):30-7. doi: 10.1016/j.brat.2009.01.003

- Sookman, D., 2016. Specialized Cognitive Behavior Therapy for Obsessive Compulsive Disorder: An Expert Clinician Guidebook. Routledge, New York.
- Sookman, D., 2018. Specialized cognitive-behavioral therapy for obsessive- compulsive disorder, in: Leahy, R.L. (Ed.), Science and practice in cognitive therapy:
  Foundations, mechanisms, and applications. Guilford Press, pp. 335–357.
- Sookman, D., Dalfen, S., Annable, L., Pinard, G., 2003. Change in dysfunctional beliefs and symptoms during CBT for resistant OCD. Paper presented at the 23rd annual convention of the Anxiety Disorders Association of America, Toronto, Canada.
- Sookman, D., Fineberg, N. A., 2015. Specialized psychological and pharmacological treatments for obsessive-compulsive disorder throughout the lifespan: a special series by the Accreditation Task Force (ATF) of The Canadian Institute for Obsessive Compulsive Disorders (CIOCD, www.ciocd.ca). Psychiatry Res. 227(1), 74-77.
- Sookman, D., Phillips, K.A., Mataix-Cols, D., Veale, D., 2021. Introduction to knowledge and competency standards for specialized treatments for obsessive-compulsive disorder throughout the lifespan: phase two series by the International Accreditation Task Force of The Canadian Institute for Obsessive Compulsive Disorders (CIOCD, www.ciocd.ca). Psychiatry Res. 298. 113753.

https://doi.org/10.1016/j.psychres.2021.113753

- Sookman, D., Pinard, G., 1999. Integrative cognitive therapy for obsessive-compulsive disorder: a focus on multiple schemas. Cogn. Behav. Pract. 6, 351–362.
- Sookman, D., Pinard G., 2002. Overestimation of threat and intolerance of uncertainty in obsessive-compulsive disorder, in: Frost, R., Steketee, G. Cognitive Approaches to Obsessions and Compulsions: Theory, Assessment and Treatment.

Elsevier, pp. 63-90.

- Sookman, D., Pinard, G., 2007. Specialized cognitive behavior therapy for resistant obsessive-compulsive disorder: elaboration of a schema-based model, in: Riso, L. P., du Toit, P. L., Stein, D. J., Young, J. E. (Eds.), Cognitive schemas and core beliefs in psychological problems: A scientist-practitioner guide. American Psychological Association, Washington, DC, pp. 93–109.
- Sookman, D., Pinard, G., Beauchemin, N., 1994. Multidimensional schematic restructuring treatment for obsessions: Theory and practice. J. Cogn. Psychother. 8(3), 175-194.
- Sookman, D., Pinard, G., Beck, A.T., 2001. Vulnerability schemas in obsessivecompulsive disorder. J. Cogn. Psychother. 15(2), 109-130.
- Sookman, D., Steketee, G., 2007. Directions in specialized cognitive behavior therapy for resistant obsessive-compulsive disorder: Theory and practice of two approaches. Cogn. Behav. Pract. 14, 1-17.
- Sookman, D., Steketee, G., 2010. Specialized cognitive behavior therapy for treatment resistant obsessive-compulsive disorder, in: Sookman, D., Leahy, R. (Eds.),
  Treatment resistant anxiety disorders: resolving impasses to symptom remission.
  Routledge, New York, pp. 31-74.
- Starcevic, V., Berle, D., Brakoulias, V., Sammut, P., Moses, K., Milicevic, D., Hannan, A., 2012. Interpersonal reassurance seeking in obsessive-compulsive disorder and its relationship with checking compulsions. Psychiatry Res. 200, 560-567.
- Steketee, G. 1993. Treatment of obsessive compulsive disorder. Guilford Press, New York.
- Steketee, G., Van Noppen, B., 2003. Family approaches to treatment for obsessive compulsive disorder. J. Fam. Psychother. 14 (4), 55-71.
- Steketee, G. Van Noppen, B., Lam, J., Shapiro, L., 1998. Expressed emotion in

families and the treatment of obsessive compulsive disorder. In Session: Psychotherapy in Practice. 4(3),73-91.

- Sternberger, L. G., Burns, G. L., 1990. Obsessions and compulsions: Psychometric properties of the Padua Inventory with an American college population. Behav. Res. Ther. 28, 341-345.
- Stobie, B., Taylor, T., Quigley, A., Ewing, S., Salkovskis, P. M., 2007. "Contents may vary": a pilot study of treatment histories of OCD patients. Behav. Cogn.Psychother. 35, 273–282.
- Storch, E. A., Larson, M. J., Price, L. H., Rasmussen, S. A., Murphy, T. K., Goodman, W. K., 2010b. Psychometric analysis of the Yale-brown Obsessive–
  Compulsive scale second edition symptom checklist. J. Anxiety Disord. 24(6), 650-656.
- Storch, E.A., Rasmussen, S.A., Price, L.H., Larson, M.J., Murphy, T.K., Goodman, W.K., 2010a. Development and psychometric evaluation of the Yale-Brown Obsessive-Compulsive Scale-- second edition. Psychol. Assess. 22(2), 223-232.
- Strauss, A. Y., Huppert, J. D., Simpson, H. B., Foa, E. B., 2018. What matters more?
  Common or specific factors in cognitive behavioral therapy for OCD:
  Therapeutic alliance and expectations as predictors of treatment outcome. Behav.
  Res. Ther. 105, 43-51.
- Strayhorn Jr, J., 2019. Cognitive-behavioral therapy versus serotonin reuptake inhibitors for pediatric obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry. 59(2), 219-221.
- Struyf, D., Hermans, D., Vervliet, B., 2018. Maximizing the generalization of fear extinction: Exposures to a peak generalization stimulus. Behav. Res. Ther. 111, 1-8.

- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A., Nadal, K. L., Esquilin, M., 2007. Racial microaggressions in everyday life: Implications for clinical practice. Am. Psychol. 62(4), 271-286. https://doi.org/10.1037/0003-066X.62.4.271
- Sue, D. W., Sue, D., Neville, H. A., Smith, L., 2019. Counseling the culturally diverse: Theory and practice., 8th ed. John Wiley & Sons Inc, Hoboken, NJ, US.
- Sunde, T., Hummelen, B., Himle, J. A., Walseth, L. T., Vogel, P. A., Launes, G.,
  Haaland, V.O., Haaland, Å. T., 2019. Early maladaptive schemas impact on long-term outcome in patients treated with group behavioral therapy for obsessive-compulsive disorder. BMC. Psychiatry. 19(1). doi:10.1186/s12888-019-2285-2
- Swensen, T.R., Pekarik, G., 1988. Interventions for reducing missed initial appointments at a community mental health center. Community. Ment. Health J. 24(3), 205-18.
- Su, Y., Carpenter, J. K., Zandberg, L. J., Simpson, H. B., Foa, E. B., 2016. Cognitive mediation of symptom change in exposure and response prevention for obsessive-compulsive disorder. Behav. Ther. 47(4), 474-486.
- Summerfeldt, L. J., 2004. Understanding and treating incompleteness in obsessivecompulsive disorder. J. Clin. Psychol. 60(11), 1155-1168.
- Summerfeldt, L. J., 2007. Treating incompleteness, ordering, and arranging concerns, in: Antony, M.M., Purdon, C., Summerfeldt L. J. (Eds.), Psychological treatment of obsessive-compulsive disorder: Fundamentals and beyond. pp. 187-207.
- Summerfeldt, L. J., Kloosterman, P. H., Antony, M. M., Swinson, R. P., 2014.
  Examining an obsessive-compulsive core dimensions model: Structural validity of harm avoidance and incompleteness. J. Obsessive. Compuls. Relat. Disord. 3, 83-94.

144

Summers, B. J., Fitch, K. E., Cougle, J. R., 2014. Visual, tactile, and auditory "not just

right" experiences: Associations with obsessive-compulsive symptoms and perfectionism. Behav. Ther. 45(5), 678-689.

- Szymanski, J., 2012. Using direct-to-consumer marketing strategies with obsessivecompulsive disorder in the nonprofit sector. Behav. Ther. 43, 251–256.
- Tallis, F., 1996. Compulsive washing in the absence of phobic and illness anxiety. Behav. Res. Ther, 34, 361-362.
- Taylor, S., Abramowitz, J. S., McKay, D., Calamari, J. E., Sookman, D., Kyrios, M., Wilhelm, S., Carmin, C., 2006. Do dysfunctional beliefs play a role in all types of obsessive-compulsive disorder? J. Anxiety Disord. 20(1), 85-97.
- Taylor, S., Conelea, C. A., McKay, D., Crowe, K. B., Abramowitz, J. S., 2014b. Sensory intolerance: Latent structure and psychopathologic correlates. Compr. Psychiatry. 55(5), 1279-84.
- Taylor, S., McKay, D., Miguel, E. C., De Mathis, M. A., Andrade, C., Ahuja, N.,
  Sookman, D., Kwon, J.S., Huh, M.J., Reimann, B.C., Cottraux, J., O'Connor, K.,
  Hale, L.R, Abramowitz, J.S., Fontenelle, L.F., Storch, E. A., 2014a. Musical
  obsessions: a comprehensive review of neglected clinical phenomena. J. Anxiety
  Disord. 28, 580-589.
- Tenneij, N. H., van Megen, H. J., Denys, D. A., Westenberg, H. G., 2005. Behavior therapy arguments response of patients with obsessive-compulsive disorder responding to drug treatment. J Clin. Psychiatry. 66(9), 1169-1175.
- Tenore, K., Basile, B., Cosentino, T., De, S. B., Fadda, S., Femia, G., Gragnani,
  A., Luppino, O., Pellegrini, V., Perdighe, C., Romano, G., Saliani, A.M.,
  Mancini, F., 2020. Imagery rescripting on guilt-inducing memories in ocd: a single case series study. Front. Psychiatry. 11, 543806–543806.
- Thamby, A., Khanna, S., 2019. The role of personality disorders in obsessivecompulsive disorder. Indian. J. Psychiatry. 61(Suppl 1), S114.

- Thiel, N., Jacob, G. A., Tuschen-Caffier, B., Herbst, N., Külz, A. K., Hertenstein, E., Nissen, C., Voderholzer, U., 2016. Schema therapy augmented exposure and response prevention in patients with obsessive-compulsive disorder: Feasibility and efficacy of a pilot study. J. Behav. Ther. Exp. Psychiatry. 52, 59-67. doi:10.1016/j.jbtep.2016.03.006
- Thomas, J., Turkheimer, E., Oltmanns, T.F., 2000. Psychometric analysis of racial differences on the Maudsley Obsessional Compulsive Inventory. Assessment. 7(3), 247-258.
- Thompson, A., McEvoy, P.M., Lipp, O.V., 2018. Enhancing extinction learning:
  Occasional presentations of the unconditioned stimulus during extinction
  eliminate spontaneous recovery, but not necessarily reacquisition of fear.
  Behav Res Ther. 108, 29-39. doi: 10.1016/j.brat.2018.07.001.
- Thompson, E.M., Torres, A.R., Albertella, L., Ferrão, Y.A., Tiego, J., Shavitt, R.G., do Rosario, M.C., Miguel, E.C. and Fontenelle, L.F., 2020. The speed of progression towards obsessive-compulsive disorder. J. Affect. Disord. 264, 181-186.
- Thompson-Hollands, J., Abramowitz, J., Tompson, M.C., Barlow, D.H., 2015. A randomized clinical trial of brief family intervention to reduce accommodation in obsessive-compulsive disorder: a preliminary study. Behav. Ther. 46, 218-229.
- Thompson-Hollands, J., Edson, A., Thompson, M., Comer, J., 2014. Family involvement in the psychological treatment of obsessive-compulsive disorder: A meta-analysis. J. Fam. Psychother. 3, 287-298.
- Thordarson, D. S., Radomsky, A. S., Rachman, S., Shafran, R., Sawchuk, C. N., Hakstian, A. R., 2004. The Vancouver Obsessional Compulsive Inventory (VOCI). Behav. Res. Ther. 42, 1289-1314.

Thordarson, D.S., Shafran, R., 2002. The importance of thoughts, in: Steketee, G.,

146 Frost, R. (Eds.), Cognitive Approaches to Obsessions and Compulsions.

- Thwaites, R., Freeston, M.H., 2005. Safety-Seeking Behaviours: Fact or Function? How Can We Clinically Differentiate Between Safety Behaviours and Adaptive Coping Strategies Across Anxiety Disorders? Behavioural and Cognitive Psychotherapy, 33(2), 177–188. https://doi.org/10.1017/S1352465804001985
- Tibi, L., van Oppen, P., van Balkom, A. J. L. M., Eikelenboom, M., Emmelkamp, P.
  M. G., Anholt, G. E., 2019. Predictors of treatment outcome in OCD: An interpersonal perspective. J. Anxiety Disord. 68.
  doi:10.1016/j.janxdis.2019.102153
- Timpani, K.R., Carbonella, J. Y. Zukerman, S. E., Cek, D., 2016. Treatment of symmetry-obsessive-compulsive disorder, in: Storch, E.A., Lewin, A. B. (Eds.), Clinical handbook of obsessive-compulsive and related disorders: A case-based approach to treating pediatric and adult populations (pp. 69-83). Springer, New York.
- Titelman, P., 2013. Clinical Applications of Bowen Family Systems Therapy. Routledge, New York.
- Toffolo, M. B., van den Hout, M. A., Radomsky, A. S., Engelhard, I. M., 2016. Check, check, double check: Investigating memory deterioration within multiple sessions of repeated checking. J. Behav. Ther. Exp. Psychiatry. 53, 59-67.
- Tolin, D.F., Gilliam, C., Wooton, B.M., Bowe, W., Bragdon, L.B., Davis, E., Hannan, S.E., Steinman, S.A., Worden, B., Hallion, L.S., 2018. Psychometric properties of a structured diagnostic interview for DSM-5 anxiety, mood, and obsessive-compulsive and related disorders. Assessment. 25(1), 3-13.
- Tolin, D.F., Maltby, N., 2008. Motivating treatment-refusing patients with obsessivecompulsive disorder, in: Arkowitz, H., Westra, H.A., Miller, W.R., Rollnick, S.

147 (Eds.), Clinical applications of motivational interviewing. Guilford Press,

New York.

- Tolin, D. F., Maltby, N., Diefenbach, G. J., Hannan, S. E., Worhunsky, P., 2004a. Cognitive-behavioral therapy for medication nonresponders with obsessivecompulsive disorder: A wait-list-controlled open trial. J. Clin. Psychiatry. 65(7), 922-931.
- Tolin, D. F., Worhunsky, P., Maltby, N., 2004b. Sympathetic magic in contamination- related OCD. J. Behav. Ther. Exp. Psychiatry. 35(2), 193-205.
- Troth, A. C., Jordan, P. J., Westerlaken, K. M., 2014. Conflict, emotional intelligence and emotional regulation at work, in: Ayoko, O.B., Ashkanasy, N.M., Jehn, K.A., (Eds.), Handbook of conflict management research (pp. 254-269). Edward Elgar Publishing, Northampton, MA, US.
- Tsodyks, M., Gilbert, C., 2004. Neural networks and perceptual learning. Nature. 431(7010), 775-781.
- Turner, E.A., Cheng, H.L., Llamas, J.D., Tran, A. G., Hill, K. X., Fretts, J.M., Mercado, A., 2016. Factors impacting the current trends in the use of outpatient psychiatric treatment among diverse ethnic groups. Curr. Psychiatry Rev. 12(2), 199-220. doi: 10.2174/1573400512666160216234524
- 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. J. Obsessive.
  Compuls. Relat. Disord. 6, 167-173.
- Twohig, M. P., Hayes, S. C., Masuda, A., 2006. Increasing willingness to experience obsessions: acceptance and commitment therapy as a treatment for obsessive-compulsive disorder. Behav. Ther. 37(1), 3-13. Valderhaug, R., Larsson, B., Götestam, K. G., Piacentini, J., 2007. An open clinical trial of cognitive-

behaviour therapy in children and adolescents with obsessive- compulsive

disorder administered in regular outpatient clinics. Behav. Res. Ther. 45(3), 577-589.

- Valderrama, J., Hansen, S. K., Pato, C., Phillips, K., Knowles, J., Pato, M.T., 2020.Greater history of traumatic event exposure and ptsd associated with comorbid body dysmorphic disorder in a large ocd cohort. Psychiatry Res. 289, 112962.
- Van Ameringen, M., Simpson, W., Patterson, B., Dell'Osso, B., Fineberg, N.,
  Hollander, E., Hranov, L., Hranov, G., Lochner, C., Karamustafalioglu, O.,
  Marazziti, D., Menchon, J.M., Nicolini, H., Pallanti, S., Stein, D.J., Zohar, J.,
  2014. Pharmacological treatment strategies in obsessive compulsive disorder: A
  cross-sectional view in nine international OCD centers. J. Psychopharmacol.
  28(6), 596–602.
- van den Hout, M. A., Engelhard, I. M., de Boer, C., du Bois, A., Dek, E., 2008. Perseverative and compulsive-like staring causes uncertainty about perception. Behav. Res. Ther. 46, 1300-1304.
- van den Hout, M. A., Engelhard, I. M., Smeets, M., Dek, E. C., Turksma, K., Saric, R., 2009. Uncertainty about perception and dissociation after compulsive-like staring: Time course of effects. Behav. Res. Ther. 47(6), 535-539.
- van den Hout, M., Kindt, M., 2003a. Phenomenological validity of an OCD-memory model and the remember/know distinction. Behav. Res. Ther. 41, 369-378.
- van den Hout, M., Kindt, M., 2003b. Repeated checking causes memory distrust. Behav. Res. Ther. 41, 301-316.
- van den Hout, M., Kindt, M., 2004. Obsessive-compulsive disorder and the paradoxical effects of perseverative behaviour on experienced uncertainty. J. Behav. Ther. Exp. Psychiatry. 35, 165-181.

van den Hout, M. A., van Dis, E. A., van Woudenberg, C., van de Groep, I. H., 2019.

149

OCD-like checking in the lab: A meta-analysis and improvement of an

experimental paradigm. J. Obsessive. Compuls. Relat. Disord. 20, 39-49.

- VanDyke, M. M., Pollard, C. A., 2005. Treatment of refractory obsessive–compulsive disorder: the St. Louis Model. Cogn. Behav. Pract. 12, 30–39.
- VanDyke, M., Pollard, C.A., Harper, J., Conlon, K., 2015. Brief consultation to families of treatment refusers with symptoms of obsessive compulsive disorder: Does it impact family accommodation and quality of life? Psychology. 6 (12), 1553-1561.
- Van Grootheest, D.S., Cath, D.C., Beekman, A.T., Boomsma, D.I., 2005. Twin studies on obsessive-compulsive disorder: a review. Twin. Res. Hum. Genet. 5, 450-458.
- Van Noppen, B., 2002. Multifamily behavioral treatment (MFBT) for OCD: A step-bystep model. In Roberts and Greene (Eds.). Brief Treatment and Crisis Intervention, 2 (2), 107-122.
- Van Noppen, B., 2015. Multifamily behavioral treatment (MFBT) for OCD, in:
   Roberts and Greene, Social Workers' Desk Reference, Third Edition, Oxford
   University Press, New York.
- Van Noppen, B. L., Rasmussen, S. A., Eisen, J., McCartney, L., 1991. A multifamily group approach as an adjunct to treatment of obsessive compulsive disorder, in: Pato, M.T., Zohar, J. (Eds.), Current Treatments of Obsessive Compulsive Disorder. pp. 115–134.
- Van Noppen, B., Steketee, G., 2001. Multifamily behavioral treatment of obsessive compulsive disorder, in: McFarlane, W. (Ed.), Multiple Family Groups and Treatment of Severe Psychiatric Disorders, Oxford Press, New York, pp.291-314.
- Van Noppen, B., Steketee, G., 2003. Family responses and multifamily behavioral treatment of obsessive compulsive disorder. Brief. Treat. Crisis. Interv. 3 (2), 231-248.
- <sup>150</sup> Van Noppen, B., Steketee, G., 2009. Testing a conceptual model of patient and family

predictors of Obsessive Compulsive Disorder (OCD) symptoms. Behav. Res. Ther. 47, 18-25.

- Van Noppen, B., Steketee, G., McCorkle, B. H., Pato, M., 1997a. Group and Multifamily Behavioral Treatment for Obsessive-Compulsive Disorder: a pilot study. J. Anxiety Disord. 11, 431-436.
- Van Noppen, B., Steketee, G., Pato, M., 1997b. Group and Multifamily
  Behavioral Treatments for OCD, in: Hollander, E., Stein, D. (Eds.), OCD:
  Diagnosis, etiology, treatment. Marcel Dekker, New York, 331-366.
- van Oppen, P., 1992. Obsessions and compulsions: Dimensional structure, reliability, convergent and divergent validity of the Padua Inventory. Behav. Res. Ther. 30, 631-637.
- van Oppen, P., 2004. Cognitive therapy for obsessive-compulsive disorder. Clin. Case Stud. 3, 333-349. https://doi.org/10.1177/1534650103259647
- van Oppen, P., Arntz A., 1994. Cognitive therapy for obsessive compulsive disorder. Behav. Res. Ther. 32, 79-87. https://doi.org/10.1016/0005-7967(94)90086-8
- van Oppen, P., De Haan, E., Balkom, A.J.L.M., Van Spinhoven, P., Hoogduin, C.A.L., Van Dyck, R., 1995b. Cognitive therapy and exposure in vivo in the treatment of obsessive compulsive disorder. Behav. Res. Ther. 33, 379-390. https://doi.org/10.1016/0005-7967(94)00052-L
- van Oppen, P., Hoekstra, R. J., Emmelkamp, P. M., 1995a. The structure of obsessive- compulsive symptoms. Behav. Res. Ther. 33(1), 15-23.
- van Oppen, P., Van Balkom, A.J.L.M., 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. J. Clin. Psychiatry. 66, 1415-1422. DOI:10.4088/jcp.v66n1111
- <sup>151</sup> van Oudheusden, L.J.B., Eikelenboom, M., van Megen, H.J.G.M., Visser, H.A.D.,

Schruers, K., Hendriks, G.J., van der Wee, N., Hoogendoorn, A.W., van Oppen,
P., Van Balkom, A.J.L.M., 2018. Chronic obsessive-compulsive disorder:
Prognostic factors. Psychol. Med. 48(13), 2213-2222.
https://doi.org/10.1017/S0033291717003701

- Vansteenwegen, D., Francken, G., Vervliet, B., De Clercq, A., Eelen, P., 2006.Resistance to extinction in evaluative conditioning. J. Exp. Psychol. Anim.Behav. Process. 32(1), 71.
- Vansteenwegen, D., Vervliet, B., Iberico, C., Baeyens, F., Van den Bergh, O.,
  Hermans, D., 2007. The repeated confrontation with videotapes of spiders in
  multiple contexts attenuates renewal of fear in spider-anxious students. Behav.
  Res. Ther. 45(6), 1169-1179.
- van Oudheusden, L. J., van de Schoot, R., Hoogendoorn, A., van Oppen, P., Kaarsemaker, M., Meynen, G., van Balkom, A.J., 2020. Classification of comorbidity in obsessive–compulsive disorder: A latent class analysis. Brain. Behav. 10(7).
- Veale, D., 2002. Over-valued ideas: a conceptual analysis. Behav. Res. Ther. 40: 383-400 http://dx.doi.org/10.1016/S0005-7967(01)00016-X

Veale, D., 2007. Treating obsessive-compulsive disorder in people with poor insight and overvalued ideation, in: Antony, M.M., Purdon, C., Summerfeldt, L. (Eds.), Psychological Treatment of OCD: Fundamentals and beyond (pp. 61-75). APA Books, Washington D.C..Veale, D., Freeston, M, Krebs, G., Heyman, I., Salkovskis, P., 2009. Risk assessment and management in obsessive-compulsive disorder. Adv. Psychiatr. Treat. 15, 332-342.

- Veale, D., 2018. Choice of provider for out-patient treatment is not working. BJPsych Bull. 42(2), 82-85. doi: 10.1192/bjb.2017.25.
- <sup>32</sup> Veale, D., Roberts, A., 2014. Obsessive-compulsive disorder. Br Med J. 348, g2183.

- Veale, D., Naismith, I., Miles, S., Gledhill, L. J., Stewart, G., Hodsoll, J., 2016.
  Outcomes for residential or inpatient intensive treatment of obsessive–
  compulsive disorder: A systematic review and meta-analysis. J. Obsessive.
  Compuls. Relat. Disord. 838-49.
- Veale, D., Page, N., Woodward, E., Salkovskis, P., 2015. Imagery Rescripting for Obsessive Compulsive Disorder: A single case experimental design in 12 cases.J. Behav. Ther. Exp. Psychiatry. 49, 230-236.
- Veale, D., Willson, R., 2019. Overcoming obsessive compulsive disorder (2<sup>nd</sup> Ed.). Constable Robinson Publishing, London.
- Velikić, V., Wippel, A., Freidl, M., 2019. Relapse of obsessive–compulsive disorder after cerebral venous sinus thrombosis: a case report. Neuropsychiatr. doi:10.1007/s40211-019-00327-8
- Velloso, P., Piccinato, C., Ferrao, Y., Aliende Perin, E., Cesar, R., Fontenelle, L., Hounie, A.G., do Rosario, M. C., 2016. The suicidality continuum in a large sample of obsessive-compulsive disorder (OCD) patients. Eur. Psychiat. 38, 1-7.
- Vidal-Ribas, P., Janiri, D., Doucet, G. E., Pornpattananangkul, N., Nielson, D. M.,Frangou, S., Stringaris, A., 2020. Multimodal neuroimaging and suicidality in aUS population-based sample of school-aged children. medRxiv, 19013193.
- Visser H.A., van Megen H., van Oppen P., Eikelenboom M., Hoogendoorn A.W.,
  Kaarsemaker M., van Balkom A.J.L.M., 2015. Inference-Based Approach versus
  Cognitive Behavioral Therapy in the Treatment of Obsessive-Compulsive
  Disorder with Poor Insight: A 24-Session Randomized Controlled Trial,
  Psychother. Psychosom. 84, 284-293. https://doi.org/10.1159/000382131
- Visser, H., van Megen, H., van Oppen, P., Hoogendoorn, A., Glas, G., Neziroglu, F., van Balkom, A., 2017. The impact of poor insight on the course of obsessivecompulsive disorder in patients receiving naturalistic treatment. J. Obsess-

Compuls. Rel. 13, 42-48.

- Vogel, P. A., Hansen, B., Stiles, T. C., Götestam, K. G., 2006. Treatment motivation, treatment expectancy, and helping alliance as predictors of outcome in cognitive behavioral treatment of OCD. J. Behav. Ther. Exp. Psychiatry. 37(3), 247-255.
- Vogel, P. A., Launes, G., Moen, E. M., Solem, S., Hansen, B., Haland, A. T., Himle, J.A., 2012. Video conference and cell phone- based cognitive behavioral therapy of obsessive-compulsive disorder: A case series. J. Anxiety Disord. 26, 158-164.
- Wade, J.E., 1993. SF-36 Health Survey: Manual and Interpretation Guide. Nimrod Press, Boston.
- Wahl, K., Salkovskis, P.M. and Cotter, I., 2008. 'I wash until it feels right': The phenomenology of stopping criteria in obsessive–compulsive washing. J. Anxiety Disord. 22(2), 143-161.
- Waller, K., Boschen, M. J., 2015. Evoking and reducing mental contamination in female perpetrators of an imagined non-consensual kiss. J. Behav. Ther. Exp. Psychiatry. 49, 195-202.
- Warren, R., Thomas, J. C., 2001. Cognitive–behavior therapy of obsessive–compulsive disorder in private practice: An effectiveness study. J. Anxiety Disord. 15(4), 277-285.
- Watts, F. N., 1979. Habituation model of systematic desensitization. Psychol. Bull. 86(3), 627.
- Wegner, D.M., Schneider, D.J., Carter, S.R., White, T.L., 1987. Paradoxical effects of thought supression. J. Pers. Soc. Psychol. 53, 5-13. http://dx.doi.org/10.1037/0022-3514.53.1.5
- Wei, M. A., Van Kirk, N., Reid, A. M., Garner, L. E., Krompinger, J. W., Crosby, J.M., Elias, J.R., Weisz, J. R., 2020. Emotion regulation strategy use and symptom change during intensive treatment of transitional age youth patients

with obsessive compulsive disorder. J Behav Cogn Ther. 30(2), 95-102.

- Weidle, B., Jozefiak, T., Ivarsson, T., Thomsen, P. H., 2014. Quality of life in children with and without comorbidity. Health. Qual. Life. Outcomes. 12, 152.
- Weidle, B., Skarphedinsson, G., 2016. Treatment of a child with obsessive-compulsive disorder with limited motivation: Course and outcome of cognitive-behavior therapy. J. Clin. Psychol. 72, 1139-1151.
- Welch, S.S., Osborne, T.L., Pryzgoda, J., 2010. Augmenting exposure-based treatment for anxiety disorders with dialectical behavior therapy, in: Sookman, D., Leahy, R.L. (Eds.), Treatment resistant anxiety disorders: Resolving impasses to symptom remission. Routledge, New York.
- Wetterneck, C., Little, T., Rinehart, K., Cervantes, M. E., Hyde, E., Williams, M. T.,
  2012. Latinos with Obsessive-Compulsive Disorder: Mental Healthcare
  Utilization and Inclusion in Clinical Trials. J. Obsessive Compuls. Relat. Disord.
  1(2), 85-97. doi: 10.1016/j.jocrd.2011.12.001
- Wheaton, M. G., Berman, N. C., Fabricant, L. E., Abramowitz, J. S., 2013. Differences in obsessive–compulsive symptoms and obsessive beliefs: A comparison between African Americans, Asian Americans, Latino Americans, and European Americans. Cogn. Behav. Ther. 42(1), 9-20. doi:10.1080/16506073.2012.701663
- Wheaton, M. G., Galfalvy, H., Steinman, S. A., Wall, M. M., Foa, E. B., Simpson, H.B., 2016b. Patient adherence and treatment outcome with exposure and response
  - prevention for OCD: Which components of adherence matter and who becomes well? Behav. Res. Ther. 856-12. doi:10.1016/j.brat.2016.07.010
- Wheaton, M. G., Gallina, E. R., 2019. Using cognitive-behavioral therapy to treat obsessive-compulsive disorder with co-occurring depression. J. Cogn.

Psychother. 33(3), 228-241.

- Wheaton, M. G., Huppert, J. D., Foa, E. B., Simpson, H. B., 2016a. How important is the therapeutic alliance in treating obsessive-compulsive disorder with exposure and response prevention? An empirical report. Clin. Neuropsychiatry. (6), 88-93.
- Wheaton, M.G., Patel, S.R., Andersson, E., Rück, C., Simpson, H.B., 2020. Predicting Treatment Outcomes from Internet-Based Cognitive Behavior Therapy for Obsessive–Compulsive Disorder. Behav. Ther. In Press.
- Whiteside, S. P., Ale, C. M., Douglas, K. V., Tiede, M. S., Dammann, J. E., 2014. Case examples of enhancing pediatric OCD treatment with a smartphone application. Clin. Case Stud. 13 (1), 80-94.
- Whittal, M.L, McLean, P.D., 1999. CBT for OCD: The rational, protocol, and challenges. Cogn. Behav. Pract. 6, 383-396. https://doi.org/10.1016/S1077-7229(99)80057-1
- Whittal, M.L., Rachman, S., McLean, P.D., 2002. Psychosocial treatment for OCD:Combining cognitive and behavioral treatment, in: Simos, G. (Ed.), CBT:Aguide for the practicing clinician (pp. 125-149). Pacific Press.
- Whittal, M.L., Robichaud, M., 2012. Cognitive treatment for OCD, in: G. Steketee (Ed.), Handbook of Obsessive Compulsive and Spectrum Disorders. Oxford University Press, New York, pp. 345-364
- Whittal, M. L., Robichaud, M., Woody, S. R., 2010a. Cognitive treatment of obsessions: Enhancing dissemination with video components. Cogn. Behav.
  Pract. 17, 1-8. doi: http://dx.doi.org/10.1016/j.cbpra.2009.07.001
- Wilhelm, S., Steketee, G. S., 2006. Cognitive therapy for obsessive compulsive disorder: A guide for professionals. New Harbinger Publications, Oakland.
- Whittal, M.L., Robichaud, M., Thordarson, D.S., McLean, P.D., 2008. Group and

156

individual treatment of OCD using cognitive therapy and exposure plus response

prevention: A two-year follow-up of 2 randomized trials. J. Consult. Clin. Psychol. 76, 1003-1014. https://doi.org/10.1037/a0013076.

- Whittal, M. L., Thordarson, D.S., McLean, P.D., 2005. Treatment of obsessive– compulsive disorder: Cognitive behavior therapy vs. exposure and response prevention. Behav. Res. Ther. 43(12), 1559-1576.
- Whittal, M. L., Woody, S. R., McLean, P. D., Rachman, S. J., Robichaud, M., 2010b. Treatment of obsessions: A randomized controlled trial. Behav. Res. Ther. 48, 295-303.
- Wilhelm, S., Steketee, G., Fama, J. M., Buhlmann, U., Teachman, B. A., Golan, E., 2009. Modular cognitive therapy for obsessive-compulsive disorder: a wait-list controlled trial. J. Cogn. Psychother. 23(4), 294-305.
- Williams, M. T., Beckmann-Mendez, D., Turkheimer, E., 2013c. Cultural Barriers to African American Participation in Anxiety Disorders Research. J. Natl. Med. Assoc. 105(1), 33-41. doi: 10.1016/s0027-9684(15)30083-3
- Williams, M. T., Chapman, L. K., Simms, J. V., Tellawi, G., 2017b. Cross-cultural phenomenology of obsessive-compulsive disorder, in: Abramowitz, J., McKay, D., Storch, E. (Eds.), The Wiley Handbook of Obsessive-Compulsive Disorders (p. 56-74). Wiley. ISBN: 978-1-118-88964-0
- Williams, M. T., Ching, T., 2017. Obsessive-compulsive disorder in ethnoracial minorities: Symptoms, barriers to care, and cultural considerations for treatment, in: Pittenger, C. (Ed.), Obsessive-compulsive Disorder: Phenomenology, Pathophysiology, and Treatment (pp. 703-714). Oxford University Press. ISBN: 9780190228163
- Williams, M. T., Davis, D., Thibodeau, M., Bach, N., 2013b. Psychometric Properties of the Obsessive-Compulsive Inventory Revised in African Americans with and without Obsessive-Compulsive Disorder. J. Obsessive Compuls. Relat. Disord.

2(4), 399-405. doi: 10.1016/j.jocrd.2013.07.003

- Williams, M. T., Domanico, J., Marques, L., Leblanc, N., Turkheimer, E., 2012a.
  Barriers to Treatment Among African Americans with OCD. J. Anxiety Disord.
  26(1), 555-563. doi: 10.1016/j.janxdis.2012.02.009
- Williams, M. T., Elstein, J., Buckner, E., Abelson, J., Himle, J., 2012b. Symptom
  Dimensions in Two Samples of African Americans with Obsessive-Compulsive
  Disorder. J. Obsessive Compuls. Relat. Disord. 1(3), 145-152. doi:
  10.1016/j.jocrd.2012.03.004
- Williams, M. T., Farris, S. G., Turkheimer, E. N., Franklin, M. E., Simpson, H. B., Liebowitz, M., Foa, E. B., 2014. The impact of symptom dimensions on outcome for exposure and ritual prevention therapy in obsessive-compulsive disorder. J. Anxiety Disord. 28(6), 553-558.
- Williams, M. T., Farris, S. G., Turkheimer, E., Pinto, A., Ozanick, K., Franklin, M. E., Liebowitz, M., Simpson, H. B., Foa, E. B., 2011. Myth of the pure obsessional type in obsessive-compulsive disorder. Depress. Anxiety. 28, 495-500. doi: http://dx.doi.org/10.1002/da.20820
- Williams, M. T., Jahn, M. E., 2017. Obsessive-compulsive disorder in African
  American children and adolescents: Risks, resiliency, and barriers to treatment.
  Am. J. Orthopsychiat. 87 (3), 291-303. doi: 10.1037/ort0000188
- Williams, M. T., Mugno, B., Franklin, M., Faber, S., 2013a. Symptom dimensions in obsessive-compulsive disorder: phenomenology and treatment outcomes with exposure and ritual prevention. Psychopathology. 46(6), 365-376.
- Williams, M. T., Sawyer, B., Ellsworth, M., Singh, R., Tellawi, G., 2017a. Obsessivecompulsive and related disorders in ethnoracial minorities: Attitudes, stigma, and barriers to treatment, in: Abramowitz, J., McKay, D., Storch, E. (Eds.), The
- <sup>158</sup> Wiley Handbook of Obsessive-Compulsive Disorders (p. 847-872). Wiley.

ISBN: 978-1-118-88964-0.

- Williams, M. T., Sawyer, B., Leonard, R. C., Ellsworth, M., Simms, J., Riemann, B. C., 2015. Minority participation in a major residential and intensive outpatient program for obsessive-compulsive disorder. J. Obsessive. Compuls. Relat. Disord. 5, 67-75.
- Williams, M. T., Taylor, R., Chatters, L. M., Himle, J., 2017d. Demographic and health-related correlates of obsessive-compulsive symptoms among African Americans.
  J. Obsessive. Compuls. Relat. Disord. 14, 119-126. doi: 10.1016/j.jocrd.2017.07.001
- Williams, M. T., Taylor, R. J., Mouzon, D. M., Oshin, L., Himle, J. A., Chatters, L. M., 2017c. Discrimination and symptoms of obsessive-compulsive disorder among African Americans. Am. J. Orthopsychiat. 87(6), 636-645. doi: 10.1037/ort0000285
- Williams, M. T., Tellawi, G., Wetterneck, C. T., Chapman, L. K., 2013d. Recruitment of Ethnoracial Minorities for Mental Health Research. Behav. Ther. (N Y N Y). 36(6), 151-156.
- Williams, M. T., Turkheimer, E., Schmidt, K. M., Oltmanns, T. F., 2005. Ethnic identification biases responses to the Padua Inventory for obsessive-compulsive disorder. Assessment. 12, 174-185.
- Williams, M. T., Turkheimer, E., 2007. Identification and Explanation of Racial Differences in Contamination Anxiety. Behav. Res. Ther. 45, 3041-3050.
- Williams, T. I., Salkovskis, P. M., Forrester, L., Turner, S., White, H., Allsopp, M. A., 2010. A randomised controlled trial of cognitive behavioural treatment for obsessive compulsive disorder in children and adolescents. Eur. Child Adolesc. Psychiatry. 19(5), 449-456. doi:http://dx.doi.org/10.1007/s00787-009-0077-9
- <sup>159</sup> Williams, M. T., Wetterneck, C. T., 2019. Sexual Obsessions in Obsessive-Compulsive

Disorder: A Step-by-Step, Definitive Guide to Understanding, Diagnosis, and Treatment. Oxford University Press. ISBN: 9780190624798. doi: 10.1093/medpsych/9780190624798.001.0001

- Wilson, R., Neziroglu, F., Feinstein, B., Ginsberg, R., 2014. A new model for the initiation of treatment for obsessive-compulsive disorder: An exploratory study.J. Obsessive. Compuls. Relat. Disord. 3(4), 332-337.
- Wolitzky-Taylor, K. B., Viar-Paxton, M. A., Olatunji, B. O., 2012. Ethical issues when considering exposure, in: Intensive one-session treatment of specific phobias. Springer, New York. pp. 195-208.
- Wong, S. F., Krause, S., Marishel, D., Grisham, J. R., 2021. Reappraisal of disgust: Self-report and behavioural assessment of individuals with moderate to high contamination fears. J. Anxiety. Disorder. 78, 102346.
- Woods, C. M., Chambless, D. L., Steketee, G., 2002. Homework compliance and behavior therapy outcome for panic with agoraphobia and obsessive-compulsive disorder. Cogn. Behav. Ther. 13 (2), 88-95.
- Woody, S. R., Steketee, G., Chambless, D. L., 1995. Reliability and validity of the Yale-Brown Obsessive-Compulsive Scale. Behav. Res. Ther. 33(5), 597-605.
- Worden, B.L., Bowe, W.M., Tolin, D.F., 2017. An open trial of cognitive behavior therapy with contingency management for hoarding disorder. J. Obsessive.Compuls. Relat. Disord. 12, 78-86.
- World Health Organization, 2008. The global burden of disease: 2004 update. Retrieved from:

http://www.who.int/healthinfo/global\_burden\_disease/2004\_report\_update/en/

- Wroe, A. L., Salkovskis, P. M., 2000. Causing harm and allowing harm: A study of beliefs in obsessional problems. Behav. Res. Ther. 38(12), 1141-1162.
- 160 doi:http://dx.doi.org/10.1016/S0005-7967%2899%2900145-X

- Wroe, A. L., Salkovskis, P. M., Richards, H., 2000. "Now I know it could happen, I have to prevent it": A clinical study of the specificity of intrusive thoughts and the decision to prevent harm. Behav. Cogn. Psychother. 28(1), 63-70.
- Wu, M. S., Pinto, A., Horng, B., Phares, V., McGuire, J. F., Dedrick, R. F., Van Noppen, B., Calvocoressi, L., Storch, E. A., 2016. Psychometric properties of the Family Accommodation Scale for Obsessive-Compulsive Disorder – Patient Version. Psychol. Assess. 28(3), 251-262.
- Wu, M. S., Rudy, B.M., Storch, E.A., 2014. Obsessions, compulsions, and repetitive behaviour: Autism and/or OCD, in: Handbook of autism and anxiety. Springer, Cham, pp. 107-120.
- Yaryura-Tobias, J. A., 2004. An Overview on Delusions, Obsessions and OvervaluedIdeas: An Intimate Cluster of Thought Pathology. Clin. Neuropsychiatry. 1(1), 5-12.
- Yule, M., Whittal, M.L., 2007. Cognitive therapy for Obsessive Compulsive Disorder, in: Pittenger, C., (Ed), Obsessive Compulsive Disorder: Theory and Application. Oxford University Press. pp 121-130.
- Zandt, F., Prior, M., Kyrios, M., 2007. Repetitive behaviour in children with high functioning autism and obsessive compulsive disorder. J. Autism. Dev. Disord. 37(2), 251-259.
- Zermatten, A., Van der Linden, M., Jermann, F., Ceschi, G., 2006. Validation of a French version of the Obsessive–Compulsive Inventory-Revised in a non-clinical sample. Euro. Rev. Appl. Psychol. 56, 151-155.
- Zbozinek, T. D., Craske, M. G., 2018. Pavlovian extinction of fear with the original conditional stimulus, a generalization stimulus, or multiple generalization stimuli. Behav. Res. Ther. 107, 64-75.
- <sup>161</sup> Zivor, M., Salkovskis, P. M., Oldfield, V. B., 2013b. If formulation is the heart of

cognitive behavioural therapy, does this heart rule the head of CBT therapists? the Cognitive Behaviour Therapist, 6, ArtID e6, 6. http://dx.doi.org/10.1017/S1754470X1300010X

- Zivor, M., Salkovskis, P. M., Oldfield, V. B., Kushnir, J., 2013a. Formulation in cognitive behavior therapy for obsessive-compulsive disorder: Aligning therapists, perceptions and practice. Clinical Psychology: Science and Practice. 20(2), 143-151. doi:http://dx.doi.org/10.1111/cpsp.12030
- Zysk, E., Shafran, R., Williams, T.I., 2018. The origins of mental contamination. J. Obsessive. Compuls. Relat. Disord. 17, 3-8.
- Zysk, E., Shafran, R., Williams, T. I., Melli, G., 2015. Development and Validation of the Morphing Fear Questionnaire (MFQ). Clinical Psychology & Psychotherapy.