

**A Comparative Review of Evidence-Based Treatments for Adults with Obsessive-
Compulsive Disorder (OCD)**

By

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Abstract

Obsessive compulsive disorder (OCD) is a highly distressing psychiatric disorder that has significant impact on quality of life and increased risk for suicide. Presentations of this disorder include repetitive obsessive thoughts and images of personally distressing content, and mental or behavioural compulsions. This disorder is estimated to affect up to 4% of the general population. Current treatment guidelines advise the use of Exposure and Response Prevention (ERP) as the first line treatment, with more severe OCD cases recommended for inpatient administration of behavioural therapies. However, there exists people with OCD who do not benefit solely from behavioural therapies due to several factors including accessibility, tolerability and poor treatment response. This paper provides a comparative analysis of evidenced-based interventions for adults with OCD, with a focus on ERP, Metacognitive Therapy (MCT) and Acceptance and Commitment Therapy (ACT). This analysis synthesizes results from randomized controlled trials exploring treatment effectiveness within evidence-based psychotherapies and discusses mechanisms of change within each modality. The findings support that MCT and ACT may offer viable alternatives to ERP and emphasize future research directions to determine which client characteristics may be moderating treatment response.

Keywords: Obsessive compulsive disorder, Exposure and response prevention, Metacognitive therapy, Acceptance and commitment therapy, Cognitive therapy, evidence-based practice, treatment failure, treatment outcome

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Chapter 1

Introduction, OCD, impact, and purpose statements

What if I pushed that baby stroller into oncoming traffic? Random, spontaneous, sometimes disturbing thoughts occur in our minds thousands of times a day. Indeed, research recruiting non-clinical participants across thirteen countries and six continents reported 94% of their sample experienced intrusive thoughts, images or urges (Radomsky et al., 2013). However, when these thoughts, or images, are experienced as incredibly distressing, unacceptable, personally significant or important, our attention is subconsciously shifted to monitor for the (re)occurrence of these internal experiences, becoming what's known as an "*obsession*". To control the distress and perceived threat of the obsession, people often "neutralize" the experience with a different thought or behaviour, called a "*compulsion*" (American Psychiatric Association, 2013). Compulsions might be observable such as handwashing, or mental such as counting or tracking, and all compulsions are not pleasurable but do offer reduced distress in the short-term moment (Starcevic et al., 2011). However, over time the obsessions repeat, and the compulsions are performed in an ongoing cycle. This process describes the experience of living with Obsessive Compulsive Disorder (OCD), with individuals suffering from this disorder losing a minimum of one hour a day within this cycle of distress and neutralization (Abramowitz & Jacoby, 2014) and often sacrificing time and effort in social, religious, physical, and occupational areas of their life (Stengler-Wenzke et al., 2006). OCD has a lifetime prevalence rate of about 1.5–4% (Ahmari & Rauch, 2022), and onset occurs between early childhood and early adulthood (Stengler-Wenzke et al., 2006).

Furthermore, individuals with a principal diagnosis of OCD face a substantial increase of risk of suicide during their lifetime compared to both the general population and other clinical

populations (Albert et al., 2019). When investigating non-fatal health outcomes related to OCD, people with this diagnosis often suffer for years with poor health outcomes related to lost income and decreased quality of life (Subramaniam et al., 2013). Just over 30 years ago, OCD was ranked as the 5th most impairing disability across all disorders (including physical) according to the World Health Organization (World Health Organization, n.d.). Thankfully, due to increased understanding and research on this disorder, clinical treatment has advanced to a point that recovery from this disorder is often possible, and it no longer qualifies in the previous list of top ten disorders.

Purpose statements

The overall purpose of this capstone is to outline problems related to the gold standard evidence-based treatment for OCD, Exposure and Response Prevention (ERP), and evaluate peer-reviewed research comparing ERP to other promising evidence-based interventions to determine if superior treatment outcomes exist. The research questions include: What is the impact of living with OCD? How do current evidence-based approaches work to treat OCD? What challenges exist in the application of these approaches? What does the evidence support with reference to treatment modality, and what does this mean for treatment recommendations? The results of these questions are expanded upon to direct where research should prioritize exploring.

Purpose 1

This capstone first investigates the nature of OCD and the impact of living with OCD. As mentioned above, OCD is very debilitating without the right treatment. Indeed, OCD is often misdiagnosed, and people who suffer from this disorder often live with their symptoms for an

average of 7.5 years before deciding to pursue treatment (Stahnke, 2021), leading to financial consequences, and other difficulties related to their symptoms taking over their life. Part of the reason OCD goes undiagnosed or misdiagnosed for so long is due to the lack of clinical training on this disorder across training programs in health disciplines (Senter et al., 2021). Not only is this disorder hard to spot without the right training, but patients with OCD may also experience symptoms on and off for years before deciding to pursue treatment. Studies in the USA have estimated that between 38% and 89% of individuals with OCD neither ask for nor receive treatment (Senter et al., 2021).

Ultimately, what can happen over time and what makes it so important for people with OCD to have specialized treatment, is the movement of OCD symptoms. Over time, OCD can “hop themes”, where the underlying mechanisms of the disorder are still present, but the theme of the obsessions and compulsions shift to new content (Bakhshinejad et al, 2024). For example, someone with a fear of sickness related to germs, getting contaminated and spreading contamination to vulnerable populations and who performs compulsions like excessive cleaning and washing hands may eventually shift themes to fear of accidentally running over a pedestrian and killing them, and now perform compulsions related to excessive tracking and repetitive checking while driving excessively slowly. Knowledge of how this disorder tends to behave and maintain itself over time is extremely important, as novice clinicians may preemptively conclude treatment, leading the client to experience a new theme of OCD. The client may then have to return to treatment and clinicians may erroneously conclude the client is “untreatable” or treatment resistant, with resulting increase in suffering. This type of trajectory is also an important example of why OCD as a primary diagnosis tends to occur with other comorbid disorders such as depression and generalized anxiety, and eating disorders (Sharma et al., 2021).

Also, enforcing the reasons why specialized treatment specific to OCD is necessary for the most beneficial treatment outcomes, the current gold standard psychotherapy intervention is a specialized form of CBT called ERP. Indeed, “standard” CBT is not recommended as the typical intervention as techniques of cognitive disputation and thought control can backfire and accidentally reinforce OCD thought impairments, unfortunately making the disorder worse over time (McKay et al., 2021).

Purpose 2

The second purpose statement is to review the three types of evidence-based treatment models that exist for OCD.

CBT for OCD. The current gold standard, evidence-based psychotherapy treatment for OCD is a specialized form of cognitive behavioural therapy called exposure and response prevention (ERP). ERP works by promoting fear extinction, through preventing avoidance and allowing distress to naturally decrease over time, a process referred to as habituation (Foa, Yadin & Lichner, 2012). With repetition, the person with OCD learns that they can tolerate their distress, and that their fears related to the obsessions have an extremely low probability of coming true. The client also realizes their efforts to reduce or eliminate the fear have a rebound effect of maintaining the OCD cycle by increasing awareness of OCD thoughts which increases the frequency of them (Rachman et al., 1976; Rachman 1998). ERP begins with establishing the obsession(s), the compulsions and any other functional impairment occurring due to these symptoms. Typically, this information gathering stage also includes psychoeducation about OCD, how thoughts and emotions and behaviours are connected, and introduces the client to self-monitor these cycles to build self-awareness. The next steps involve identifying and organizing a “fear hierarchy”, a stepped ladder of exposures to the feared obsessions and

associated compulsions, from lowest to highest level of fear using a measurement called “subjective units of distress” (SUDS) (Foa et al., 2012). This hierarchy is used to help the client face their fears, through a mix of real life exposure scenarios, imaginal scenarios, without compulsions in order to learn that these compulsions are not only unnecessary to prevent feared consequences, but also reinforce the unwanted maintenance of the OCD cycle.

Over time, empirical evidence supporting why ERP works has shifted between two theories, emotional processing theory (Foa & Kozak, 1986) and inhibitory learning theory (Craske et al., 2008). Emotional processing theory posits that what indicates a patient’s progress in ERP treatment are clear indicators of habituation (reduced feeling of fear over time) within the ERP session. Through this theory, ERP is paced by monitoring the occurrence of fear habituation within the ERP session, meaning the client does not progress up the fear hierarchy until a reduction of fear is experienced. However, Craske et al. (2008) provided evidence that pointed to a new mechanism surpassing habituation as the main mechanism for fear extinction, referred to as “inhibitory learning”. This mechanism describes the patient's ability to recall new “safety learning” (i.e. learning no feared consequences occur if the compulsion is not performed, or the fear experienced is able to be tolerated). This safety learning is successfully recalled through practice and reflection to repeated ERP scenarios, and ERP progression is not tied to habituation of fear. Treatment ends with relapse prevention, progress review and clients’ demonstrated ability to apply the ERP model on their own. The National Institute for Health and Care Excellence recommends clinical practice guidelines to include ERP as the first line of psychological intervention for OCD, with or without cognitive therapy (National Institute for Health and Care Excellence, 2005).

Next, I discuss two alternative models that have demonstrated empirical evidence for the treatment of OCD.

MCT for OCD. The first model is a type of cognitive therapy called Metacognitive Therapy (MCT) (Fisher & Wells, 2008), which focuses on the person's relationship to their thoughts rather than the content of the thoughts. In standard cognitive therapy not specialized to OCD (Whittal et al., 2002), the structure and focus of treatment relies on disputing the content of a patient's unrealistic thinking patterns through methods like cognitive disputation (McKay et al., 2021). In MCT, the theory exclusively targets higher order thinking patterns, how a patient *relates* to their thoughts, (i.e. thinking about thinking), how seriously they take their thoughts and obsessions, and how necessary completing compulsions is considered. The aim of MCT is for clients to practice "detached mindfulness", which encourages thought acceptance (notice without engaging) rather than thought control. This distinction is designed to help clients understand that thoughts, even OCD thoughts, are merely mental events and do not require emotional or behavioural responses. MCT begins with introducing the model to clients, identifying dysfunctional metacognitive beliefs, practicing detached mindfulness and attention training. Clients then conduct behavioural experiments testing the importance of reacting versus non-reacting to obsessions and thought control strategies. These experiments usually begin by encouraging the client to react to their obsessions using compulsions, a technique known as response commission, in order to prompt the clients realization that acting on compulsions is a choice. The next stages include behavioural experiments testing the necessity of acting on compulsions. Treatment ends with relapse prevention and ensuring the client can apply the MCT model independently.

ACT for OCD. The third model reviewed in this paper references Acceptance and Commitment therapy (ACT) for OCD (Twohig et al., 2010, 2015). The main psychological mechanism targeted in ACT is described as “psychological flexibility”, the ability to behave according to one’s values despite internal events such as distressing thoughts or feelings. ACT does not tend to be delivered in structured, manualized steps such as ERP or MCT, and instead is a process therapy that is flexible and may include exposure-based exercises to increase values-based behaviours. From this modality, no hierarchy determined by SUDs is created, but sometimes a hierarchy of exposures determined by willingness to experience is used. Progress in exposure exercises is measured using willingness to experience distress, rather than habituation of fear using SUDS such as in ERP. Another difference is ACT heavily utilizes metaphors and experiential exercises as opposed to behavioural experiments and testing or modifying thinking styles as in MCT.

Purpose 3

The third purpose of this capstone is to review the empirical evidence in comparing MCT or ACT to ERP published in the last seven years.

Purpose 4

The fourth purpose of this capstone is to outline trends and future directions of the field, review best practices based on the current literature, and provide clinicians with questions to reflect on as they assess client readiness for ERP and troubleshooting ERP.

Theoretical framework

The theoretical framework and epistemological view of this capstone is based on empiricism. Specifically, I am investigating empirical treatment outcome studies and scientifically based evidence in the literature to further understand the field of OCD treatment. In this perspective, knowledge is created from what we can see, measure and test using scientific methods. Such knowledge is also subject to verification and falsifiability, that is, it must be verified through experience and is always subject to revision to accommodate any new data that is obtained through experience (Moorey, 2023). Applied to psychotherapy, this means that models of psychotherapy must be validated with evidence collected and evaluated through scientific methods, and models that do not have empirical support do not have authority in clinical practice.

Reflexivity and positionality statement

My introduction to clinical psychology topics began in a research lab during my undergraduate degree. I worked as a research coordinator, lab manager and diagnostic assessor on a large, multi-site randomized clinical trial for almost ten years which provided me with a deeper understanding of empirical methodology. During the past three years I have worked directly with individuals experiencing OCD, which prompted my interest in how to navigate the nuanced realities of psychotherapy between what exists in the scientific literature and what occurs in treatment settings. Through my experience working with complex OCD clients, I have witnessed the challenges these clients face when receiving gold standard psychological interventions such as ERP. I have realized how heterogeneous OCD presentations often are, and the clinical challenges of individualizing behavioural treatments within the limits of what

outpatient therapy can provide using predominantly behavioural therapies. These realizations have motivated my interest in exploring how alternative evidence-based treatments might compare to gold standard approaches like ERP. Questions I often find myself asking include: Why are some individuals unresponsive to ERP even when delivered well? Which mechanisms account for change in treatment outcomes and why are there conflicting research findings?

My research paradigm is empirical as I have a commitment to evidence-based practice, and value quantitative outcome data to inform clinical decisions and theoretical development. In terms of bias, I acknowledge a growing skepticism about ERP as a monotherapy for the treatment of complex OCD clients. I accept and respect the efficacy of this approach, however my clinical experience requires my theoretical approach to reflect the experiences of my clients, and ERP does not meet the needs of all my clients. I am aware these clinical experiences may incline me to be more receptive to alternative approaches, potentially biasing me towards attending to shortcomings in ERP. To manage this bias, I committed to ensuring I evaluate all the evidence discovered in the literature review with equal scrutiny. I aim to highlight trends in the evidence, and what gaps or inconsistencies need more immediate attention. My motivation is to deepen my understanding of what works, for whom and why, as a clinician who intends to specialize in the treatment of OCD. I hope to contribute to a broader and more inclusive conversation about the future of OCD treatment, to understand and advocate for treatments that reflect both scientific evidence and clinical relevance.

Definition of Terms

To clarify the abundance of different key terminology used in this paper, the following definitions are provided below:

Behavioural experiments

A technique and strategy used in cognitive therapy and cognitive behavioural therapy that uses behavioural elements to test the accuracy of a client's beliefs through real life experience. Behavioural experiments may utilize exposure methods, however the focus of the exercise is not on experiencing a reduction of distress, but to determine if specific thoughts or assumptions occurred according to the client's expectations (Rouf, 2004).

Cognitive restructuring

A technique used in cognitive behavioural therapy that involves directing the client to identify, question, challenge and modify unhelpful or irrational thoughts and thought patterns (Clark, 2013). Clients are typically instructed to replace their irrational thoughts at the content level with rational alternatives, and thus cognitive restructuring is considered a thought control strategy to change thinking, leading to changes in behaviour and finally changes in emotional experiences.

Detached mindfulness

A technique used in metacognitive therapy that instructs the client to pay attention to their thought content without trying to suppress, control or change it. This technique also encourages clients to not analyze, make meaning from or react to the thought content. The goal of this technique is for clients to realize that thoughts do not have special importance and recognize the futility of trying to suppress or control thoughts (Wells, 2011).

Effect size

In psychotherapy research, effect sizes are a statistical measurement of strength of change which provides an objective understanding of how impactful a treatment is. Effect sizes are essential for comparing the practical effectiveness of different psychotherapies in treatment outcome research (Hoyt & Del Re, 2018).

Expectancy violation

The process and mechanisms specific to the inhibitory learning model of exposure and response prevention. Expectancy violation is the mismatch between expected outcomes and actual outcomes when performing exposures and seeks to enhance memory retrieval of safety learning (obsessional thoughts and fears are manageable) instead of fear associations (obsessional thoughts are dangerous and bad) (Craske et al., 2014).

Habituation

Within the context of emotional processing theory, habituation refers to the passive process of emotions decreasing over time. Habituation is considered to be the mechanism by which fear extinction learning occurs during ERP dictated by emotional processing theory (Foa et al., 1983).

Mediation analysis

This type of research design can use statistical methods to determine how or why a treatment has a relationship (positive correlation) with outcome measures (Kazdin, 2007). Mediators often confirm mechanisms of change in psychotherapy treatments and the models they are based on.

Mental contamination

A type of OCD that involves feeling an internal dirtiness that manifests without a physical contaminant and is not as responsive to cleansing rituals used in contact contamination. Triggers to feeling this internal contamination include memories, visual stimuli, thoughts. The source of contamination is typically related to another person or oneself rather than inanimate objects and has been demonstrated to be prompted by interpersonally and/or morally unacceptable events (Rachman et al., 2014).

Metacognitive restructuring

Similar to cognitive restructuring, metacognitive restructuring involves challenging and changing beliefs using Socratic questioning and pragmatic evaluation perspectives. Restructuring is aimed to help clients modify their relationship to their thought patterns rather than the patterns themselves. For example, believing worrying is helpful is a metacognitive belief commonly targeted in metacognitive therapy (Wells, 2011).

Moderator analysis

This research design uses statistical methods to investigate variables that control the direction and strength of a correlation between variables. In psychotherapy outcome research, moderators explain what groups and what conditions might affect the impact of a psychological intervention (Spielmanns & Flückiger, 2018).

Psychological flexibility

The proposed mechanism of change in Acceptance and Commitment Therapy. It refers to the process of increasing openness and willingness to experience unwanted internal events such as distress or anxiety (Twohig et al., 2015).

Randomized controlled trial

The preferred scientific method of study design that is used to test the effectiveness or efficacy of a psychological treatment. Participants are randomly assigned to one or more groups to ensure bias is controlled and other external factors are usually also controlled in order to determine if changes in treatment outcome can be reliably attributed to the independent variable (usually treatment groups). This type of study design is considered the gold standard in evidence-based practice (Shean, 2014).

Scrupulosity

A theme of OCD that includes obsessional content related to moral, ethical or religious fears (Greenberg & Huppert, 2010). This theme of OCD often co-occurs with belief domains such as inflated responsibility and over importance of thoughts (Nelson et al., 2006). Individuals with scrupulosity OCD often present with intense fear as well as disgust and guilt.

Treatment outcome

In empirical research, treatment outcome is the measurable change of a client's psychological symptoms, well-being, and psychosocial functioning as a result of receiving a psychological intervention. These outcomes are typically calculated using standardized measures before, during and after an intervention has been administered in order to determine the efficacy

or effectiveness of a psychological intervention, by comparing these outcomes to baseline symptoms or control groups (Shean, 2014).

Outline of the Capstone Project Chapters

The remainder of the capstone is organized as such: Chapter 2 reviews, summarizes research findings and provides research directions. In Chapter 3, recommendations for clinicians with reference as to how to assess for lack of treatment response to ERP, and what directions might be necessary to improve outcomes for clients depending on the barrier(s) to treatment response is explored in detail.

Chapter 2

Treatment resistance relating to ERP

Although ERP is the gold standard treatment option for people living with OCD, there exists quite a few interruptions to either the delivery of the ERP “dose” or the frequency of the ERP. Put simply, the “dose” of ERP needs to be delivered effectively (expectancy violation and/or habituation needs to occur) and the frequency needs to be matched to severity of symptoms in order for safety learning to generalize and symptom reduction to occur. This section of the paper divides these difficulties into two sections: treatment failure due to incomplete treatment course, and treatment failure despite a full course and adherence to protocol.

Treatment failure due to incomplete treatment

Firstly, several reasons are believed to exist for treatment failure due to incomplete treatment, namely, adherence to treatment, premature dropout, and availability of treatment. As with any manualized psychotherapy treatment, adherence to protocol and the clinical judgment to know how to tailor the protocol to each specific client is essential for a successful treatment outcome. From the patient’s side, poor adherence may look like poor attendance or not completing between-session homework ERPs. More specifically, Reuter et al. (2024) theorize that extra-therapeutic factors such as secondary gains/losses from the disorder, patient characteristics such as symptom severity, lack of social support to encourage ERP gains, inability to tolerate distress, and poor expectancy violation during ERPs are likely to mediate poor treatment outcome to ERP and explain poor client adherence to treatment. As a result of finding treatment ineffective and distressing, clients may drop out of ERP treatment before

treatment gains are realized (Spencer et al., 2023). Due to the mechanism of fear extinction, thorough expectancy violation should occur before graduation from treatment is recommended, so drop-out leads to a higher chance of spontaneous recovery of the disorder. However, clients are not the only ones who may be incorrectly adhering to ERP treatment. Clinicians who provide ERP treatment may also be at fault. For instance, survey results indicate up to 70% of clinicians hold negative beliefs about ERP treatment such as unwillingness to evoke and witness client distress (Moritz et al., 2019). For some ERP clinicians, fidelity to ERP theory is insufficient. For example, in a German sample of ERP clinicians, only a minority left their office to conduct ERP with clients, or allowed longer session times (i.e. more than two hours) (Moritz et al., 2019). All of these factors can impact treatment outcome by preventing making direct contact with all themes of OCD that are present, enough time for expectancy violation to occur, and psychological flexibility processes from occurring, such as enough safety learning and generalization of treatment success.

Lastly, frequency of sessions is a reason for incomplete ERP treatment. For clients with moderate to severe OCD symptoms, ERP is recommended in clinical guidelines to be administered in a “higher dose”, meaning longer and more frequent sessions (National Institute for Health and Care Excellence, 2005). For example, residential care programs designed to treat severe OCD usually implement ERP from a team of mental health professionals in individual and group settings for about 8-10 hours a day, with programs ranging between 4 days and several months and in a controlled environment where they receive more support to resist performing compulsions (Hansen et al., 2018; Veale et al., 2016). This creates a ratio of treatment to symptoms that can help clients stabilize to either go into remission or have residual symptoms that can be addressed in outpatient settings. Private outpatient settings typically see clients once a

week for a 50 minute session, which is a big contrast to the “dose” of treatment experienced in inpatient treatment. In outpatient settings, clients suitable for these settings are expected to be able to self-administer their ERP “doses” between sessions. Even if private outpatient clinicians replicated a program similar to the Bergen 4 day intensive ERP (Launes et al., 2019), being able to schedule 8-10 hours of ERP for one client is virtually impossible to balance within a typical caseload. Scheduling difficulties aside, it would also be unethical for the clinician to cancel weekly sessions with other clients to prioritize an intensive ERP delivery for one client. Lastly, the cost for these services in private outpatient settings are often paid for out of pocket, and are vastly expensive to afford. Unfortunately, there are extremely few resources for clients with OCD through public funding in Canada (Whittal, personal communication, February 2025), and only a small number of specialized private outpatient centers can provide evidenced-based treatment for this disorder.

ERP and treatment resistance

This next section discusses proposed reasons for ERP failing despite client and clinician adherence to ERP clinical guidelines. Reasons include ERP mechanisms are insufficient for complex OCD presentations due to interrupting comorbid disorders such as generalized anxiety disorder, or the subtype of OCD was not responsive to how the ERP was designed.

Complex presentations of OCD can include varying levels of comorbid disorders, notably mood disorders, psychosis, generalized anxiety disorder, PTSD, and eating disorders (Sharma et al., 2021). ERP is a treatment designed specifically for OCD, and although it can be blended with other CBT interventions, it is not sufficient alone to treat a multitude of disorders. For example, co-occurring MDD, GAD, social phobia and panic disorder were identified as predictors of low progress during ERP treatment, more so than severity of OCD symptoms (Kim et al., 2023), and

the complexity of presentations such as these require several evidence-based interventions to be implemented for improved symptom reduction (Eda, Gorbis & Jajoo, 2024). At this point in time, there is a large dearth of research that supports clinical decision-making models which advise clinicians how to organize evidence-based treatments in such complex presentations. As a result, treatment options for clients with complex presentations are scarce.

Additionally, there has been a more outspoken need for research to assist clinical decision making in determining which OCD presentations would benefit from ERP (Steketee et al., 2019). Part of how ERP works is by creating enough expectancy violations for clients to begin experiencing generalization of safety learning across all themes of their OCD. However, sometimes the theme of OCD may change before sufficient ERP progress occurs (Behnaz et al., 2024), leading the client and clinician to begin creating extensive lists of ERPs that are unrealistic to complete.

Regarding the rigidity of beliefs, not all presentations of OCD have demonstrated the same responsiveness to ERP, such as OCD presentations that feature strong belief rigidity or scrupulosity (religious or moral obsessions), which is a predictor of treatment resistance to ERP in OCD. This has been theorized due to scrupulosity increasing the fixedness of beliefs related to OCD content (Siev et al., 2020). Personal significance or feelings of guilt, responsibility or shame may also distort efforts to use reality testing and habituation in ERP. Additionally, the emotional experience of disgust is another difficult target to address through ERP, as this emotion has been demonstrated to take far longer for habituation and tolerance to create an extinction response and therefore alleviate symptoms (Bhikram et al., 2017). Although disgust has been successfully treated through ERP (McKay, 2006), it can be a clinical challenge for both

the therapist and the client to evaluate progress and maintain consistency and treatment engagement when completing repetitive exposure with response prevention.

Lastly, even with well-implemented ERP, treatment resistance may occur due to a variety of unintentional interfering behaviours from the client. For example, sometimes clients experience fewer overt compulsions and instead engage in many mental compulsions that are experienced as automatic and very difficult to create response prevention, unlike overt compulsions such as handwashing or showering. Mental checking, reviewing memories, “figuring out” the chances of the obsessions happening and imagining performing physical compulsions (i.e. imagining washing hands during an exposure) are all examples of forms of mental compulsions that can prevent effective ERP outcomes as they all avoid being fully present and confronting risk in the moment during the exposure. Some clients have a difficult time not resisting anxiety and end up “white knuckling” through exposures (Herren & Brannan, 2018) and are unable to let themselves fully confront the risk of their fears coming true. Other times, there is a concurrent increase in other compulsive behaviours such as tics or somatic symptoms including pain and dissociation, that prevent full expectancy violation from occurring (Middleton et al., 2019). In these cases, these are markers that ERP may be progressing too quickly beyond a client’s window of tolerance and capacity for emotional regulation and either the pacing of ERP needs to slow down, or alternative psychotherapies should be explored.

MCT and ACT as answers to these problems in ERP

This next section describes how MCT and ACT may address these problems related to ERP and therefore justify why alternatives to ERP from these theoretical approaches may be effective in improving treatment options for people with OCD.

From a delivery standpoint, both ACT and MCT have demonstrated efficacious results (Normann & Morina, 2018; Soondrum et al., 2022) and noninferiority compared to ERP for treating OCD in several RCT trials (Exner et al., 2024; Nielsen et al., 2025). Due to using different proposed mechanisms to ERP, session length tends to be shorter than the 90 minutes recommended in the Foa manual (Wells & Fisher, 2008) and does not require specific locations such as having to leave the office in ERP to locations that would produce the strongest expectancy violation. Additionally, MCT and ACT sessions are not typically implemented more than once a week, therefore becoming more accessible both in scheduling and financially for clients.

To address the problems associated with treatment resistance in ERP, both MCT and ACT do not utilize cognitive disputation on a level that engages with content of thoughts but instead prioritize broader psychological processes such as cognitive reappraisal of metacognitive beliefs and psychological flexibility. This shift effectively eliminates the problem of accidentally reinforcing OCD obsessional content through disapproval. Furthermore, by prioritizing a metacognitive level of awareness, the problem of OCD themes changing prior to treatment gains during ERP is also nullified, as the target of these interventions is aimed at psychological and cognitive processes that are theorized to maintain OCD regardless of theme (Exner et al., 2024). Such processes are also thought to potentially explain comorbidity between OCD and other disorders such as GAD, depression, and PTSD, as they are maintenance factors in these disorders as well.

Lastly, by focusing on acceptability of internal states, certain presentations of OCD that do not respond well to reality testing in standard ERP, such as distress associated with emotional states of disgust, guilt, shame or untestable outcomes, have a different way of engaging in ERP

by looking at higher order thought processes (such as acceptability of internal states, futility of trying to control thoughts, engagement in life-enhancing activities) rather than trying to force habituation to these emotions through repeated, ongoing, long-term ERP.

Review of empirical evidence

Study criteria and description of search design

As the previous subchapter detailed reasons why MCT or ACT may solve problems associated with ERP, the next subchapter will examine the available evidence for any clinical effectiveness (excluding non-inferiority) trials comparing MCT versus ERP, and ACT versus ERP, to evaluate if there are any superior interventions based on treatment outcome. Next, I will review any clinical trials comparing hybrid MCT/ERP or ACT/ERP (to target residual symptoms) compared to ERP as usual to determine if there is research evidence that indicates a superior protocol. A detailed critique of each study's complete methodology is outside the scope of this paper, so the review will focus on reported treatment outcomes for OCD, with particular attention to the treatment intervention protocols used, therapy adherence, and how these findings may be clinically relevant.

Criteria for included studies must contain treatment delivered by a clinician, primarily treating OCD populations as the principal diagnosis and as diagnosed by gold standard tools. Such tools include the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), and the Yale-Brown Obsessive Compulsive Scale (YBOCs; Goodman et al., 1989). Additional criteria included adult participants, published in English and published in the past 7 years (2018 - 2025).

Treatment effectiveness of MCT vs ERP

There were two studies that met the criteria. Melchior et al. (2023) used a randomized clinical trial to compare the effectiveness of MCT against ERP for outpatient OCD clients. The treatments were delivered in a minimum of 8 weekly individual sessions of 45 minute duration, with the maximum number of sessions being 15. The treatment protocol for MCT followed the manual of Wells and Fisher (2008), and the treatment protocol for ERP included maximizing expectancy violation in different contexts, without relying on a hierarchy to determine progression, and without using other safety behaviours (Craske et al., 2014 as cited in Melchior et al., 2023). The focus on expectancy violation also included identifying expected feared consequences prior to exposures and then examining violations in expected frequency or intensity of feared outcome. Specific sessions in each treatment condition were recorded and coded for treatment adherence by blind to treatment condition raters, which were scored above 85 percent. Their results showed no clinically or statistically significant differences between groups on treatment outcome related to OCD symptoms, with both groups reaching clinically significant improvement on their OCD symptoms that was maintained at a six month follow-up.

Rajezi et al. (2024) implemented a randomized clinical trial comparing MCT to CBT for OCD via 10 sessions of individual treatment, delivered in 60 minute duration over a period of five months. The treatment protocols are not provided or summarized, with no citation or reference to expand or replicate the procedure for each intervention. It is also unknown if ERP specifically was administered. There is also no mention of treatment adherence to determine fidelity of the clinicians to each model. The results for treatment outcome related to OCD symptoms were clinically and statistically more significant for the MCT group in comparison to the ERP group, which was maintained at the one and three month follow-ups.

In summary, at this time there is very little evidence to help draw conclusions about the effectiveness of MCT compared to ERP. The two studies reviewed have conflicting results, and the Rajezi et al. (2024) study has serious limitations due to the lack of detail provided on their intervention procedures, reducing the ability to interpret and clinically utilize the results of their research. Melchior et al. (2023) have explained the surprising non-significance between their two treatment groups, as MCT and ERP may have overlapping mechanisms of change, specifically with the design of ERP prioritizing expectancy violation in the ERP group. Both of their treatment groups displayed reductions in dysfunctional metacognitive beliefs relating to the significance and consequences of intrusive thoughts and the necessity of performing rituals, despite the ERP group not receiving specific treatment on metacognitive challenging. These results may indicate preliminary evidence of MCT as a promising alternative to ERP for OCD, especially if treatment adherence to ERP is compromised or treatment response was insufficient.

Treatment effectiveness of ACT vs ERP

There are two studies published in the last seven years that met criteria for this review. Zemestani et al. (2022) completed a randomized clinical trial investigating OCD treatment outcome in three groups: SSRI only, SSRI and ERP, and SSRI and ACT. In both the ERP and ACT groups, participants received psychopharmacology management as well as twelve 90 minute sessions of the psychotherapy intervention. The ACT group followed a treatment manual based on Twohig et al. (2010, 2015), which prioritized psychological flexibility through mindfulness and experiential exercises, values-based action, and improving functioning despite OCD symptoms. Additionally, participants in this group were instructed to do homework between sessions for approximately 30 minutes every day. The ERP intervention was based on a

treatment manual (Foa et al., 2012) and prioritizes the mechanism of habituation by following graded exposure therapy using SUDs levels until fear reduction occurs. Participants were instructed to complete response prevention, and both in-session and between session exposures were used upwards of 30 minutes every day. Both treatments were provided by the same clinician who received specialized training and supervision for the duration of the study. Sessions were also recorded and reviewed weekly, and all recordings were coded for adherence by an independent psychologist. Their results showed no clinically or statistically significant differences between groups on treatment outcome related to OCD symptoms. Both groups reached clinically significant improvement on their OCD symptoms at post-treatment that was maintained at the 3 month follow-up.

Derakhtkar et al. (2022) conducted an RCT to compare the effectiveness of several interventions for OCD. They looked at five groups in total: CBT with ERP, MCT, ACT, another intervention and a waitlist control. The delivery for all treatments was eight sessions for a duration of 75-90 minutes. The CBT/ERP group followed the Whittal and McLean model (1999, 2002), which utilizes exposure to feared situations in the context of evaluating cognitive errors related to the appraisal process present in OCD. The goal is to disprove the personal significance of OCD thoughts, and then practice not reinforcing obsessions by paying attention to and acting on them. The MCT intervention was based on Wells (2008), which included the majority of treatment focusing on practicing detached mindfulness with respect to obsessions, directly challenging metacognitive beliefs using behavioural experiments, exposure and response commission, delay, modification and lastly banning performing rituals. The ACT intervention was based on Smith et al.'s (2017) manual and prioritized using mindfulness and defusion exercises, metaphors, and giving up trying to control obsessions. The last few sessions focused

on present focus engagement with values-based behaviours. Their results revealed that all treatments were effective compared to the control group, however, the ACT treatment had a statistically and clinically superior improvement in comparison with MCT and CBT/ERP. These results were maintained at the 1 month follow-up.

Treatment effectiveness of ACT and ERP hybrid

At the time of writing this paper, no research studies investigating ERP and either hybrid or sequential MCT have been published. There was one study that investigated a hybrid ERP/ACT intervention compared with standard ERP. Twohig et al. (2018) designed an RCT comparing ERP and ACT with ERP to evaluate if further treatment gains could be attained through this fusion of interventions. The interventions were delivered in 16 individual sessions every two weeks for a duration of 120 minutes per session. The ERP group completed an intervention designed to treat OCD through the habituation mechanism of fear extinction (prolonged, repetitive hierarchical exposure with response prevention), based on a treatment manual (Foa & Kozak, 2004). The ERP/ACT group followed a modification of the ERP intervention (in a manual by Twohig et al., 2015) and only changed the rationale and psychoeducation sessions to introduce the concept of psychological flexibility. In-session exposures were framed as ways to practice psychological flexibility. Values-based behaviours were emphasized at the beginning of treatment, in the construction of exposures, and at the end during relapse prevention. Both groups were instructed to complete daily exposure practice between sessions. Therapists that provided the interventions were trained by the creators of the interventions, had weekly supervision, and sessions were recorded and coded for adherence to therapy by blind to treatment condition assessors, and all scored 100%. Treatment outcomes for both groups were clinically and statistically significant with no differences related to treatment

outcomes, adherence to therapy or dropout. These results were maintained at the one month follow-up.

Summary of ACT vs ERP

The overall results of the three studies reviewed are conflicted, but the majority of findings support no superior treatment outcome for OCD between interventions.

There are several limitations with the Derakhtkar et al. (2022) study. The Wells and Fisher (2008) model of MCT for OCD in the original pilot studies these authors cited included an increased number of sessions compared to this study (15, almost double), which is a problematic modification to this intervention as MCT has specifically designed linear progression and learning aims through each sequence of the treatment. Reducing the number of sessions by half may have created a poor replication of this intervention. Additionally, the authors indicate that they remained consistent with each model due to the research therapists' attendance at workshops. However, additional credentials of these therapists are missing, including what supervision (if any was provided) looked like. There was also no therapy adherence tracking to verify the validity that each group remained consistent to the intervention protocol assigned.

Overall findings and research directions

Overall, there was no clear indication of a superior treatment based on treatment outcome for OCD. No study reported significant drop out rates between groups. Based on the research reviewed in this paper, findings favouring ACT in Rajezi et al. (2024) and Derakhtkar et al. (2022) appear to be more related to poor research design rather than actual superior treatment effects. Notably, even the studies with the original intervention creators as co-authors and clinical supervisors during treatment adherence did not demonstrate any superior treatment

outcomes between interventions. The remaining three studies reviewed provide additional support in the scientific community for ACT, MCT and ERP as effective treatments for OCD. At this time, it is unknown the long-term stability of these outcomes as the research reviewed had follow-up periods ranging from 0 to 3 months. As is recommended to determine the long-term outcome of psychological treatment, usually over 12 months is a good indicator of lasting treatment effects (Fisher et al., 2020).

Interestingly, the results also provide more support for the likely overlap of psychological processes outside of each model's proposed targets. This is not new in ERP research, as Twohig et al. (2010) introduced this possibility into the scientific literature, and Ong et al. (2022) consistently report evidence for shared mechanisms across ACT, MCT, and ERP when treating OCD. However, it is unknown which hypothesized process (i.e. reappraisal, thought control, fear extinction, psychological flexibility) is most responsible for treatment outcome in MCT vs ACT vs ERP. Guidance in this area will help us to dismantle and implement treatment options more effectively. For instance, if rumination is interrupting ERP treatment progress (such as becoming a compulsion and preventing response prevention), then clinicians need guidance on what type of mechanism works best to address this. For this reason, future research should include mediation analysis to help determine why certain associations are happening. Current researchers have pooled together data from RCTs investigating treatment effectiveness in OCD populations and compiled an overall meta-analysis studying moderators and predictors of treatment (Fisher et al., 2020), however there are very few mediation analyses in the literature. The information resulting from this type of evidence may help clinicians problem solve and determine what requirements should be met when considering switching modalities with a client who is not progressing with

ERP. One research idea would be to sequentially administer ACT or MCT to people with OCD who had a non-response to ERP or to treat residual symptoms.

One of the criticisms of ERP mentioned at the beginning of this chapter involved high client drop-out rates in ERP treatment. In three of the RCTs reviewed, there were no significant differences in participant drop-out rates between treatment groups (drop-out rates ranged from 0.025 - 19%) although both Rajezi et al. (2024) and Derakhtkar et al. (2022) did not report drop-out numbers. It is possible that this concern may not be as problematic as initially thought, and some more recent meta-analyses suggest therapy drop-out rate is not particularly higher in ERP compared to pharmacological or psychological interventions (Johnco et al., 2020; Ong et al., 2016). Client drop-out from therapy may be more strongly related to other reasons than treatment modality, such as fit with the therapist, scheduling or financial difficulties, or relocation. Future studies should ensure to report not just drop-out rates, but therapy refusal rates so this data can be specifically understood as reasons for drop-out. Measures such as the Reasons for Leaving Treatment Questionnaire (Ball et al., 2006) can capture more specific information about drop-out rates which are important details that may be difficult for researchers to hypothesize without asking participants directly. These details can assist both researchers and clinicians to assess for and adjust to problems resulting specifically from ERP and increase patient improvement with the intervention.

Regarding comorbid diagnoses that ERP theoretically was not designed to address which may impact OCD symptoms, all sample characteristics in the five RCTs reviewed had slightly different eligibility/exclusion criteria. Melchior et al. (2023) excluded potential participants with severe depression, bipolar 1 or other thought disorder spectrum diagnoses, substance abuse requiring specialized treatment, and participants who initiated any additional psychotherapy

outside of the study intervention during the trial. Their sample characteristics did not include specific comorbid diagnoses, so it is unknown whether presence or improvement in comorbid conditions occurred. Rajezi et al. (2024) also excluded participants with severe depression, psychotic or substance use disorders, and borderline or antisocial personality disorders. Their sample characteristics were otherwise unreported with reference to comorbidity. Twohig et al. (2018) screened out schizophrenia, severe depression or active suicidal risk, and previous experience with ERP, ACT or receiving current psychotherapy. Their sample characteristics did include a very small percentage of anxiety, depression, eating disorders and some substance use disorders although only depression symptoms were measured over the trial. As the comorbidities in their sample were small (only one participant with SUD and one participant with eating disorder symptoms) their result may be interpreted as ERP and ACT+ERP treatment outcomes for OCD are not inhibited by comorbid mood disorders (excluding severe depression). Zemestani et al. (2022) screened out psychotic disorders, bipolar disorders, active suicidal ideation, substance use, all personality disorders and receiving psychotherapy in the past twelve months. Their sample characteristics included a large amount of major depressive disorder across all three groups (41.6 - 53%), generalized anxiety disorder (6 - 16%), social anxiety disorder (6-25%) and specific phobias (15%). No measures were used to determine clinical improvement in these disorders or their relationship to OCD symptoms. Lastly, Derakhtkar et al. (2022) reported screening out participants that received any kind of psychological or pharmacological intervention. All other psychiatric information is unknown about their sample characteristics.

In summary, although there is some consistency in exclusion criteria (psychosis, severe depression or substance use disorders, personality disorders), only some of the studies reviewed provided comorbidity data. For randomized controlled trials, this is to be expected for this stage

of what the scientific community can verify through efficacy trials. However, we still do not know how complex presentations of OCD and other severe comorbidities (such as PTSD, substance use, severe depression) are best treated. Future studies may want to include these diagnoses and progress in moderator studies to see if there are any strength of relationship that might help clinicians decide when to introduce ERP treatment to complex client presentations.

Other patient characteristics likely also contribute to which treatment approach is most effective, including subtype of OCD. For example, people with OCD where inflated responsibility is a core feature of their presentation may benefit from added cognitive therapy to ERP, as opposed to increased behavioural elements to therapy (Steketee, 2019). In their research, Steketee (2019) reported OCD participants with high inflated responsibility and threat predictions benefited more from cognitive therapy rather than behavioural elements. It may make sense that beliefs (such as testing if holding a knife spontaneously makes oneself lose control and kill their loved ones) are more responsive to disconfirmation through reality testing, and fear of internal states (disgust and feeling contaminated) may be more responsive to approaches that do not feature belief testing. For disgust, it has been suggested that working backwards from an ERP mindset, which may look like exposing oneself in the context of their values and prioritizing staying in these environments over a long period of time (such as consistent, hours long exposures for months eventually adding in response prevention) is more important than trying to habituate to or change the cognitive appraisal of disgust (International OCD Foundation & Gallagher, 2023). This approach is more aligned with an ACT model rather than CBT or MCT. In the papers reviewed during this capstone, none of the participant samples included a specific breakdown of OCD subtypes, which may be a participant moderator to include in future research studies. Such moderators would assist clinicians in determining treatment fit at the

beginning of clinical decision making instead of using a trial and error approach which may potentially waste client time and financial resources.

Another reason there could be no evidence to support a superior model of treatment is that, although they propose to use different mechanisms, as a general summary all three treatments aim to help the client cease doing compulsions. MCT, CBT/ERP, and ACT all involve developing relapse plans near the end of treatment to assist the client in continuing their practice of the intervention and avoid an increase in symptoms over time. For example, Twohig et al. (2018) included participant adherence to ERP. Their results indicate that in both treatment conditions, participants complied with response prevention above 75%. Therefore, treatment should be directed according to what is helping the client consistently avoid doing compulsions. Some treatments may generalize better, in terms of implementation exercises, and ACT is likely to be the simplest to maintain due to the lack of specific testing such as in behavioural experiments. It also might increase motivation for living a life despite OCD symptoms due to the consistent reflection back to value-driven behaviour. In future studies investigating treatment outcomes across interventions, one way to determine this would be during follow-up, to have clients rate how effortful or consistent they were with homework/relapse prevention. Using a daily diary format, or another way to measure homework compliance in terms of completion rates and quality of tasks (Kazantzis et al., 2004), it would be interesting to see how effortful the relapse prevention was over time without the support and guidance of the therapist, and if clients could effectively translate their new skill development to new OCD themes or compulsions.

Additionally, future studies should also include participant response and feedback, as understanding preference and fit based on characteristics would be helpful. Only one study evaluated in this capstone (Twohig et al., 2018) included participant evaluation using the

Treatment Evaluation Inventory (TEI) (Kelley et al., 1989 as cited in Twohig et al., 2018) in both treatment conditions. Their results indicate no significant difference between acceptability or treatment expectancy between groups. However, this is in contrast with other published research. For instance, Thompson et al. (2021) designed a very small single group case design that compared if frontloading ERP sessions, then ACT, then ERP sessions had an impact on treatment outcome and psychological flexibility. Although their results did not demonstrate either approach as superior in either treatment outcome nor psychological flexibility, their small sample size ($n=4$) allowed for detailed case information and qualitative feedback from each participant to be included in the results. Some participants that achieved remission from OCD symptoms expressed a strong preference for one treatment over the other, which is important for clinicians to consider and is likely to be related to participant engagement in their treatment. Future research studies may want to include both a qualitative and quantitative measure of participant evaluation of treatment to help researchers understand the nuances and personal preferences that may impact treatment engagement.

Chapter 3

Future Directions

Overview of trends of psychotherapy treatment for OCD

In 1966, Meyer introduced the first scientific investigation of intentionally exposing and preventing compulsions in the treatment of OCD. Over the next thirty years, increasing research came out to support this intervention as superior to pharmaceuticals alone (Foa et al., 2005), and the behavioural paradigm of ERP was cemented as the gold standard approach for the treatment of OCD. However, there began to be increased conflicts in the scientific literature around the treatment success of ERP, tolerability of ERP, and the suitability of OCD presentations that are more covert and less accessible to change via reality testing. In 1985, Salkovskis introduced a cognitive therapy model for treating OCD, which posits that belief change through reappraisals in the six areas of dysfunctional beliefs may be an alternative viable treatment (as cited in Whittal et al., 2002). Cognitive therapy for OCD includes behavioural elements such as exposure and behavioural experiments in the service of evaluating and modifying cognitive misappraisals in six belief domains: at the content level (responsibility, overestimation of threat, perfectionism) and at the metacognitive level (control over thoughts, intolerance of uncertainty, over importance of thoughts) (OCCWG, 1997). The cognitive approach subsequently demonstrated empirical support in comparison to ERP (Whittal et al., 2010) and is included in NICE clinical guidelines for the treatment of OCD (NICE, 2005). However, this was the last pivotal change in the treatment of OCD that has been captured in NICE clinical guidelines. Furthermore, Fisher et al. (2020) completed a meta-analysis of individual patient data ($n = 1626$) from 24 RCTs that investigated treatment outcome of OCD using manualized approaches according to NICE (2005)

guidelines. Their results confirm the trend that treated patients were significantly improved compared to controls, however, there were small effect sizes between treatment groups and overall almost 80% of treated patients remained symptomatic at the end of treatment. These authors' call to action included that manualized treatment approaches need further development to improve treatment efficacy, and that future research might consider establishing research findings evaluating specific models and individual patient characteristics that may moderate treatment outcome. This finding, in combination with the pattern of overlapping mechanisms of change across treatments revealed in the review of RCTs in chapter two, may indicate a trend that individual characteristics are likely to be contributing to the success of treatment more so than a specific evidence-based modality. The next section provides more detail on this topic.

Determining treatment fit

The future of OCD research on treatment outcomes needs to prioritize understanding how individual client characteristics impact treatment fit. For instance, there is some support for subtypes of OCD that primarily feature obsessions and mental compulsions, obsessions that are not easily tested in reality and OCD with primarily inflated responsibility to be potentially more responsive to a cognitive therapy approach to OCD treatment (Rachman, 1983). However, there are conflicting results in the literature (Abramowitz et al., 2005). One reason for this contradiction is that there may be subtypes of OCD influencing treatment outcome. The subtype of mental contamination in OCD presentations has been the focus of current research as to how this phenomena impacts treatment outcome. Mental contamination was introduced by Rachman, (1994) and originally was considered to include the experience of feeling dirty or disgusted internally and without contact with a physical source of contamination. As research has expanded in this area, mental contamination is now considered to often contain a moral element,

be usually provoked by a person rather than an object, has demonstrated to be related to perceived instances of moral betrayal, and the contamination is unique to the afflicted person (Rachman, 2006). Some forms of mental contamination may also include fears of morphing (Zysk et al., 2016), such as losing personal characteristics like moral values as a consequence of being near or “visually contaminated” by a person with perceived moral deficits. Mental contamination has been demonstrated to be more common than previously thought (Monzani et al., 2015), and currently has strong theoretical and treatment support in cognitive therapy (Rachman et al., 2014). It is recommended by leaders in this area of OCD research that taking a behavioural approach (such as ERP) first in the treatment of mental contamination may be insufficient, and targeting the mental contamination through a cognitive approach is likely to reduce the necessity of later applications of ERP (Rachman et al., 2014). Mental contamination serves as an example of how such individual characteristics of OCD itself may be contributing to modality fit.

However, subtype is just one variable of patient characteristics. A large area that is very understudied is OCD comorbidities, as many treatment outcome studies include eligibility criteria that includes disorders that are also likely to respond to CBT such as anxiety disorders and depressive disorders (Gordon et al., 2023). However, many RCTs are excluding comorbidities that are likely to be confounding variables such as neurodiversity, PTSD, PMDD, eating disorders, serious self-harm, personality disorders and psychosis (Gordon et al., 2023). This gap in the research leaves clinicians lost as to how to design and apply treatment in an evidence-based manner. For instance, if a client presents with both OCD as well as premenstrual dysphoric disorder (PMDD), there currently exists no research or even a single case study on how to treat this presentation. Clinicians providing evidence-based treatments have to determine

how to accommodate the impact of PMDD when treating the OCD. At this point in time, although there are no treatment outcome studies there is one clinical decision-making model (Gordon et al., 2023) to assist clinicians in determining patient readiness for ERP amongst complicated comorbidities. This model provides a decision tree to help clinicians functionally assess if ERP readiness is present, or if another evidence-based treatment would assist the client prior to ERP. This decision-making model has yet to be tested in empirical studies but is based on good clinical judgment and prior evidence-based readiness models for ERP. The future of research in this area needs to expand.

Another area of individual characteristics that likely impacts treatment outcome concerns patient preference in their treatment. Patient preference is important as this has been theorized to also contribute to client's motivation, willingness, initiation and adherence to treatment (Sidani et al., 2009). Current data supports that OCD patients tend to prefer psychotherapies to medication only, or other medical interventions such as deep brain stimulation (Patel & Simpson, 2010). Within psychotherapies, there have been no direct comparisons of patient preference between evidence-based treatments such as ERP or cognitive therapy. As more options for OCD treatment become approved through empirical testing, patient preferences will likely be further understood as more evidence emerges.

The last area of individual characteristics that may impact treatment outcome is how culturally adaptable manualized, evidence-based treatments are for improving OCD. The predominant sample characteristics in the majority of treatment studies involve WEIRD populations, which do not account for the impact of oppression and other systemic disadvantages micro-identities face when living with OCD (Yip, 2025). For instance, due to increased stigma towards mental health in cultural identities outside of Western perspectives, discussing and

disclosing difficulties with mental health may be threatening to a client's social standing (Williams et al., 2020). This stigma, in combination with already unacceptable thoughts and fears that occur in OCD, may create significant blocks to engage in treatments like formal ERP and CBT. This may mean that not only could it take longer in treatment for a client of these cultural backgrounds to understand their mental health condition without increasing self-shame, it also may have an impact on how the techniques used in manualized treatments can be employed. For example, standard tools in CBT orient the client to measure and test if their personal standards, beliefs, or fears are accurate using reality-based evidence instead of emotional evidence. These tools and techniques like surveys, responsibility pie charts, and behavioural experiments become tricky when secrecy about mental health is important to the client. Additionally, psychoeducation and therapy buy-in during ERP, CT or even MCT include using empirical research to educate the client and allow them to consent to treatment. In non-Western cultures, personally relevant information and "stories" can be more influential than empirical research conducted outside their own communities, which may be a protective stance against discrimination (Williams, 2017). If future research continues to explore individual factors when evaluating modalities, it may be interesting to see if less manualized approaches like ACT, which utilize techniques that draw on metaphors and experiential tools with or without exposure, may be more acceptable in non-Western cultures. Evidently, there is a need for this area of research to expand rapidly so it is known if current clinical guidelines are effective across cultures, how to avoid the potential for racial and cultural harm during treatment, and how to include and improve access to treatment for ethnographic and culturally minority clients. Research needs to determine not only treatment superiority to aid in clinicians making these decisions, but also how to evaluate the risk to the client. Notably, current research supports no

increase in harm occurs during exposures compared to what clients may face day to day (Schneider et al., 2020), and while their sample was very large it contained no data concerning minority identities. The potential for harm, including a worsening of OCD symptoms, feeling misunderstood and uniquely vulnerable when confronting OCD, loss of time, finances and motivation to engage in treatment is still undetermined when applying CBT and ERP for the treatment of OCD symptoms in minority populations.

Adverse Effects

Risk of harm or unwanted effects is an ongoing area of concern in OCD treatment (McKay et al., 2021) that is understudied and potentially contributing to treatment outcome. Currently, adverse effects are typically inferred via dropout, treatment refusal and nonadherence to treatment. However, there exists a range of definitions for adverse effects, from serious and observable effects like increased suicidality, to unwanted effects of psychotherapy such as painful realizations or increased distress (Moritz et al., 2015). Moritz et al. (2015) conducted a survey on OCD patients measuring wanted and unwanted effects of psychotherapy and noted that patients may erroneously attribute adverse effects or events in their life to their psychotherapy treatment. This information conflicts with previous research on the topic claiming that there has been no empirical evidence to verify. Although patient perspectives are essential to understand how psychotherapies are experienced, the field may grow from implementing both clinician and patient perspectives on adverse events during psychotherapy. There is a careful balance to be maintained in understanding if clinicians are administering treatment effectively, and ethically, and if adverse events pertain in those circumstances; then knowledge of what risk of harm exists to which clients (such as clients with minority identities) is important to know. Clinically, this type of monitoring is essential in order to both preserve the therapeutic

relationship as well as prevent unnecessary treatment failure due to client or clinician misunderstanding. Additionally, more empirical data that increases understanding of adverse effects, client safety and risk of harm during psychotherapies may educate practitioners that have a negative bias towards evidence-based treatments for OCD. The next section delves deeper into clinician beliefs about modalities for OCD treatment.

Clinician Beliefs and Allegiance to Modalities

There is a significant, and curious amount of clinician allegiance to singular modalities when treating OCD. For example, Spencer et al. (2023) argue how it is unethical to treat OCD outside of a behavioural paradigm such as ERP, and further claim the limitations of behavioural approaches are misunderstood, inaccurate and perpetuated by clinicians who are not well trained to treat OCD. These authors make little room in their argument for the potential that behavioural approaches may not suit all cases of OCD, despite evidence suggesting the important role of cognitive therapy (Mclean et al., 2001) in addressing areas contributing to residual symptoms of OCD after ERP treatment (Olatunji et al., 2013, as cited in McKay et al., 2015). Additionally, this resolute stance does not account for low treatment response from manualized approaches captured in the most recent meta-analysis (Fisher et al., 2020) which was published three years before their article. This is to say that there may be significant research and allegiance bias (Uhre et al., 2020) present in the field of research outcomes on OCD. These biases prevent clinicians from practicing from a true evidence-based approach that follows the epistemology of empiricism: theory must reflect the existing evidence, not the other way around (Moorey, 2023). It would also mean that the current industry reluctance to refer clients who do not respond successfully to behavioural approaches to a different evidence-based modality for OCD treatment may be unjustified. There is significant hesitancy in referring clients to other evidence-

based modalities, possibly due to the concern of malpractice and disservice to the client (Schneider et al., 2020). If additional changes in the field continue supporting modalities outside of a behavioural paradigm, referrals may occur in a more timely manner before other aversive outcomes appear for the client, such as distrust in the psychotherapy field, hopelessness, and treatment fatigue (Knox et al., 2022). Additionally, in the future of this area of research and clinical practice, there may be more acceptance and encouragement of clinicians to train in several modalities that are evidence-based to treat OCD in outpatient settings. As the therapeutic relationship is a strong predictor of clinical outcome (Wolf et al., 2022), interventions and modalities must be delivered in this context. OCD practitioners may feel more willing to obtain training in order to preserve this therapeutic relationship and improve outcomes for clients who are not responding well to ERP.

Many clinicians have negative opinions about the use of exposure, that is, the specific and intentional evocation of patient distress during psychotherapy (Schneider et al., 2020). These beliefs may be reinforced by their own professional experience, perhaps due to misapplication of CBT to OCD. Without specialized training and supervision, it is likely that clinicians who attempt to use exposure or cognitive techniques in therapy to treat OCD are increasing harm such as moving too fast through the hierarchy, poorly designed targets on the hierarchy, and not executing techniques such as behavioural experiments or exposure appropriately (McKay et al., 2021). With the addition of preliminary evidence to support MCT and ACT as potential alternatives for treating OCD, there may be clinicians who prefer to use other therapeutic elements alongside behavioural elements to produce therapeutic change. However, clinicians who hold preferences against using behavioural elements should be cautious in their decision to treat OCD. While evidence reviewed in this paper suggests clinicians may not have to use

exposure as their only tool in treating OCD, they should be able and willing to use it effectively and as needed. Exposure is likely a key mechanism in OCD treatment, suggesting it is a necessary component (Gunter & Whittal, 2010) but not sufficient for all client presentations. What is important for research is to further understand why, and for whom, modalities that do not rely on behavioural elements exclusively to produce therapeutic change can be reliably recommended for OCD treatment.

Best Practices

OCD is a very complicated disorder, and there has been demonstrated harm by worsening of OCD symptoms with the application of psychotherapies in the past (McKay et al., 2021). Specifically, McKay et al. (2021) reviewed mechanisms of harmful treatments for OCD and mention specific components of psychotherapies. For example, those that encourage or result in the client practicing trying to control their thoughts, or reassurance from the therapist that prevents the client from tolerating uncertainty or fear, are to be considered harmful to clients with OCD. There is still very limited evidence to suggest any changes at this point, therefore, the best practices recommended in this paper remain the same as current guidelines. Clinicians should begin by performing a thorough assessment determining comorbidities, and presentation of OCD symptoms using clinical interviewing, the Yale-Brown Obsessive Compulsive Scale (Goodman et al., 1989), and other well validated measures such as the Obsessive-Compulsive Inventory (Foa et al., 2002) and the Obsessive Beliefs Questionnaire-44 (Obsessive Compulsive Cognition Working Group, 2001). A thorough understanding and analysis of the functions of OCD and other co-occurring symptoms should be obtained, as well as the client's insight to their symptoms. Clinicians should spend sufficient time understanding the client's clinical history, lifetime context of symptoms, and important potential factors like motivation for treatment and

medical history. The client's previous experience with psychotherapy treatment in general, as well as previous treatment for OCD specifically should be thoroughly investigated by the clinician. The assessment portion is where the clinician decides which first line treatment to employ. For instance, a client presenting with OCD and contact contamination as well as mental contamination with previous unsuccessful attempts of ERP may be best served by a cognitive approach as discussed earlier in this chapter (Rachman et al., 2014). Previous unsuccessful attempts of ERP should be evaluated if patient adherence and homework compliance were barriers to treatment success, and reasons for lack of adherence assessed for potential impact prior to recommending another application of ERP. For instance, circumstances related to stressful life events such as moving cities may have overwhelmed a client's availability for OCD treatment in the past, and they are now more available to commit to OCD treatment. In comparison, clients who have experienced difficulty with homework compliance in past OCD treatment due to co-occurring difficulties such as substance use, suicidality, severe depression, and chronic pain need to be evaluated to determine if their capacity for first line OCD treatments is high enough to engage in treatment (Gordon et al., 2023).

Clinicians should first attempt well-designed ERP and/or cognitive therapy as the first line treatment for OCD symptoms (Swierkosz-Lenart et al., 2023). A thorough assessment and modification of ERP or cognitive therapy treatment designs should be attempted before concluding that treatment response is poor. Such modification may include redesigning the exposure hierarchy, changing the pacing of treatment, and introducing cognitive therapy techniques (McKay et al., 2021). It may also be good practice to investigate if the client is prioritizing the reduction of fear as their measurement of treatment progress. This reliance on the absence of fear can backfire in treatment (Buchholz & Abramowitz, 2019), and while fear

reduction is a good sign the client is engaging in exposures and reducing avoidance, it should not be the only measurement of progress. This is because clients over relying on the absence of fear may sacrifice learning to tolerate fear and distress which leads to assigning less importance to disturbing obsessional content, therefore breaking the maintenance cycle of OCD. Patients who complete ERP without this type of learning are likely to relapse as soon as new disturbing obsessional content appears in their mind, leading them to start back at square one with another round of ERP treatment. For these reasons, clinicians may want to encourage these types of clients to measure willingness to engage in the exposure and willingness to experience anything that occurs as opposed to subjective units of distress (Buchholz & Abramowitz, 2019). Using an ACT informed approach to ERP that prioritizes curiosity, making space to be present with all areas of awareness, and willingness to experience any internal experiences inherently involves accepting uncertainty and risk taking in the service of getting to live a life adherent to one's values (Coyne, 2025). Clinicians should also be recommending clients pursue pharmacological additions prior to concluding treatment non-response and referring out. The intensity, duration and frequency of ERP sessions should be evaluated with relevance to the severity of OCD symptoms (NICE, 2005). For outpatient therapists, more intensive treatment either through something like the Bergen 4 day intensive (Launes et al., 2019), or by recommending inpatient treatment should be considered.

Applied Practices

It is outside the scope of this paper to create training materials or clinical decision-making guidelines when considering which modality to use when treating OCD. However, I have created a clinician focused PowerPoint presentation (see appendix A) that summarizes the

results of this comparative research, as well as some questions and steps to consider when applying ERP.

Slide 1 - Introduction and research questions

Introduce OCD and how to identify OCD compared to other common anxiety disorders. OCD may share some similar mechanisms with other anxiety disorders such as intolerance of uncertainty and low distress tolerance. However, it is characterized by a persistent repetition of intrusive thoughts, images, and urges that do not resolve simply by avoiding their triggering situation. Briefly cover the four research questions: What is OCD and the impact of living with OCD? What are the current guidelines for treatment and what are the challenges associated with these guidelines? What does the empirical evidence support with alternative models such as ACT and MCT for the treatment of OCD? What should clinicians know about these findings, and what are some future directions for this field?

Slide 2 - What is ERP, MCT and ACT?

Introduce and briefly explain each model's approach to the treatment of OCD. Exposure and response prevention is a behavioural treatment that aims to interrupt the cycle of obsessions and compulsions by systematically and gradually exposing a client to their feared situation and practicing not doing compulsions. The goal of treatment is to reduce symptoms through fear extinction learning. ACT is also a cognitive behavioural treatment and aims to increase psychological flexibility by increasing value-driven behaviour despite symptoms of OCD, and decreasing experiential avoidance. Metacognitive therapy is similar to cognitive therapy and CBT, however, it prioritizes targeting misappraisals with metacognitions (such as believing

worrying is helpful) and how attentional control such as detached mindfulness prevents the OCD symptom cycle from maintaining itself.

Slide 3 - What are the current challenges to treating OCD?

Explain the problems associated with using ERP exclusively when treating OCD, and how MCT and ACT may overcome these challenges. The primary concerns with OCD relate to the high potential for drop out, treatment refusal, and tolerability of using behavioural elements only in the intervention. There is conflicting evidence in the literature that ERP is the best modality for all subtypes of OCD, in particular patients with primarily obsessional OCD, covert compulsions, and mental contamination. Newer models of psychotherapy such as ACT and MCT prioritize the usefulness of thoughts as opposed to the rational perspective of them and have been proposed to address these challenges by teaching attentional control (as opposed to thought control).

Slide 4 - What was the design of the literature review and the research questions?

This slide summarizes the basics of how clinical research is ordered, specifically, what treatment efficacy is, non-feasibility studies, and why treatment effectiveness studies were chosen for this essay. Effectiveness trials are designed to capture and measure superior treatment outcomes when comparing treatments. This literature review aimed to answer the question: What evidence exists investigating treatment effectiveness between ERP and MCT or ACT through comparative RCTs? Eligibility criteria included: adult participants, English, RCT only, treatment delivered by a clinician, published in the last 7 years and using measurements of change on well validated tools such as the YBOCs, and the DSM-5. There were five RCTs that met criteria, and two studies were missing information and had poor research designs and therefore their results

cannot be interpreted. The remaining three RCTs provided empirical support of treatment efficacy with all active group conditions, and no statistically significant group differences for treatment outcome, adherence or dropout at post-treatment and during follow-ups. The overall findings provide evidence that these modalities may have overlapping mechanisms of change.

Slide 5 - the overall findings

The overall findings suggest that currently there is no study that indicates a superior treatment for OCD, and all treatments so far are demonstrating significant treatment success. However, there are very limited studies available that have been appropriately designed to answer this research question. The field of treatment outcome research is likely to improve by increasing understanding of what individual patient factors impact treatment outcome. With increased number of trials, increased sample sizes, and research designs that plan to test for mediation analyses, we can understand more about if there is a superior treatment, and what variables are associated with this favourable response. The good news is that this preliminary evidence suggests that both MCT and ACT might be alternatives to people with OCD that cannot tolerate ERP or had a low treatment response or are unable to engage due to extratherapeutic factors. For clients with minority identities, the use of ACT in particular may improve treatment acceptability, although there is yet to be empirical research testing this. However, it is still important that ERP is the first line treatment until this data is established, and recommendations for ACT or MCT are not recommended until an ERP trial or cognitive therapy has been attempted.

Slide 6 - How to determine readiness for ERP

This slide transitions the presentation into a brief section discussing how to determine if a client is ready for ERP treatment. Introduce and explain the clinical decision-making model Gordon et al. (2023) have created. Propose questions for clinicians to consider:

- Are there additional serious mental or physical diagnoses that would interfere with the client's adherence to ERP?
- Is the client able to demonstrate understanding and application of the ERP model?
- Does the client have the capacity to engage in ERP in the dosage their OCD recovery may require?
- Does the client have mental compulsions or feared consequences that would not suit a reality testing approach?
- Does the clinician have the ability to perform prolonged and/or multiple sessions of ERP per week to initiate treatment?
- Does the clinician and client have the ability to conduct ERP in vivo?
- Does the clinician have clinical consultation or supervision available?
- Does the clinician have appropriate training?

Slide 7 - Troubleshooting ERP

In the absence of empirical data to support treatment modality recommendations, this slide provides questions for clinicians to consider when troubleshooting ERP. Micro-evaluation of how to determine ERP progress is as follows (Gillihan et al., 2012).

- Is there evidence the client habituates to distressing emotions or displays other types of inhibitory learning (i.e. distress tolerance or expectancy violation)?

- What is blocking ERP progress? Are adherence issues preventing delivery, or is it something else such as a comorbidity?
- Does the client feel in control of their treatment? Is the client willing to be in control of their treatment?
- Are the exposures making enough contact with the obsessional content?
- Is the pacing up the ERP hierarchy moving too fast and sensitizing the client?
- Is the clinician/client targeting the right content? Is the client performing response prevention correctly? Does session spend enough time prioritizing expectancy tracking and consolidating inhibitory learning?
- Is there family or other accommodation happening outside of the therapy session?
- Are any extratherapeutic factors occurring that are interrupting homework completion?

Slide 8 - Troubleshooting ERP cont.

Additional questions are presented with reference to how cognitive therapy or ACT might be helpful within the ERP trial as advised by trainings at the International OCD Foundation (Weg et al., 2025).

- Have any cognitive therapy techniques been administered to address components such as shame, guilt or responsibility?
- Is the client prioritizing cognitive misappraisals or errors when faced with real life evidence during ERP?
- What meaning is the client attaching to emotional discomfort within and outside of ERP exercises?

- Is the client able to make contact with present moment awareness both during and outside exposure exercises?
- If the client is unwilling to experience any aversive emotions, has an ACT approach to ERP been administered?
- Has the ERP hierarchy been reconceptualized based on willingness, and values-based exposures?
- Has an assessment of secondary loss/gains occurred?
- How is the therapeutic relationship? Does the client trust the clinician enough to be honest and vulnerable about their experiences?
- Has the client been working with a psychiatrist concurrently? Is there a medication management problem?
- From your hypothesis on what is blocking progress, would this problem be likely to occur in other modalities?

Conclusion

This capstone contributes to an expanding body of research advocating for individualized, empirically supported, and contextually sensitive approaches in the psychotherapeutic treatment of OCD, with the goal of improving both clinical outcomes and equitable access to care. The research reviewed highlights critical gaps in the field of OCD treatment relating to adverse effects, clinician beliefs and training in ERP delivery. Future research should extend efforts to investigate moderators of treatment efficacy, including patient characteristics such as comorbidities and cultural background. These efforts are essential to the paradigm shift away from a singular modality focus and towards a more flexible, evidence-based and culturally informed approach to treatment of adult OCD.

References

- Abramowitz, J. S., & Jacoby, R. J. (2014). Obsessive-compulsive disorder in the DSM-5. *Clinical Psychology (New York, N.Y.)*, 21(3), 221-235. <https://doi.org/10.1111/cpsp.12076>
- Abramowitz, J. S., Taylor, S., & McKay, D. (2005). Potentials and limitations of cognitive treatments for obsessive-compulsive disorder. *Cognitive Behaviour Therapy*, 34(3), 140-147. <https://doi.org/10.1080/16506070510041202>
- Ahmari, S. E., & Rauch, S. L. (2022). The prefrontal cortex and OCD. *Neuropsychopharmacology (New York, N.Y.)*, 47(1), 211-224. <https://doi.org/10.1038/s41386-021-01130-2>
- Albert, U., De Ronchi, D., Maina, G., & Pompili, M. (2019). Suicide risk in obsessive-compulsive disorder and exploration of risk factors: A systematic review. *Current Neuropharmacology*, 17(8), 681-696. <https://doi.org/10.2174/1570159X16666180620155941>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: Author.
- Ball, S. A., Carroll, K. M., Canning-Ball, M., & Rounsaville, B. J. (2006). Reasons for dropout from drug abuse treatment: symptoms, personality, and motivation. *Addictive behaviors*, 31(2), 320–330. <https://doi.org/10.1016/j.addbeh.2005.05.013>
- Bakhshinejad, B., Khazaneha, M., Mehrabani, M., Sabahi, A., Sadatmoosavi, A., Tajedini, O., Esmaeili, O., & Mehrbani, M. (2024). Dynamic Tracking to Identify Topics and Thematic Evolution of Obsessive-compulsive disorder as an Emerging Topic. *Research*

- Journal of Pharmacy and Technology*, 303–308. <https://doi.org/10.52711/0974-360x.2024.00047>
- Bhikram, T., Abi-Jaoude, E., & Sandor, P. (2017). OCD: Obsessive–compulsive ... disgust? The role of. *Journal of Psychiatry & Neuroscience*, 42(5), 300–306. <https://doi.org/10.1503/jpn.160079>
- Buchholz, J. L., & Abramowitz, J. (2019). Using an acceptance and commitment therapy approach when exposure and cognitive therapy become rituals in the treatment of obsessive-compulsive disorder. *Journal of Cognitive Psychotherapy*, 33(3), 256–268. <https://doi.org/10.1891/0889-8391.33.3.256>
- Clark, D. A. (2013a). Cognitive Restructuring. In *The Wiley Handbook of Cognitive Behavioral Therapy* (pp. 1–22). <https://doi.org/10.1002/9781118528563.wbcbt02>
- Cognitive assessment of obsessive-compulsive disorder. (1997). *Behaviour Research and Therapy*, 35(7), 667–681. [https://doi.org/10.1016/s0005-7967\(97\)00017-x](https://doi.org/10.1016/s0005-7967(97)00017-x)
- Coyne, L. (2025). *Integrating ERP and ACT* [Webinar]. International OCD Foundation. <https://webinars.iocdf.org/learn/course/14/integrating-erp-and-act>
- Craske, M. G., Kircanski, K., Zelikowsky, M., Mystkowski, J., Chowdhury, N., & Baker, A. (2008). Optimizing inhibitory learning during exposure therapy. *Behaviour Research and Therapy*, 46(1), 5–27. <https://doi.org/10.1016/j.brat.2007.10.003>
- Craske, M. G., Treanor, M., Conway, C. C., Zbozinek, T., & Vervliet, B. (2014). Maximizing exposure therapy: An inhibitory learning approach. *Behaviour Research and Therapy*, 58, 10–23. <https://doi.org/10.1016/j.brat.2014.04.006>
- Derakhtkar, A., Khezrimoghadam, N., & Fazilatpour, M. (2022). The effectiveness of

- mindfulness-integrated cognitive behavioral therapy (MiCBT), meta-cognitive therapy (MCT), acceptance and commitment therapy (ACT), and cognitive behavioral therapy (CBT) on obsessive-compulsive disorder (OCD). *International Journal of Health Studies (Undergoing change to Shahroud Journal of Medical Sciences)*, 46-52.
<https://doi.org/10.22100/ijhs.v8i2.876>
- Goodman, W. K. (1989). The yale-brown obsessive compulsive scale. *Archives of General Psychiatry*, 46(11), 1012. <https://doi.org/10.1001/archpsyc.1989.01810110054008>
- Gorbis, E., Gorbis, A., & Jajoo, A. (2024). Clinical insights into PTSD and OCD comorbidity. *International Journal of Biomedical Research & Practice*, 4(4).
<https://doi.org/10.33425/2769-6294.1036>
- Exner, C., Kleiman, A., Haberkamp, A., Hansmeier, J., Milde, C., & Glombiewski, J. A. (2024). Metacognitive therapy versus exposure and response prevention for obsessive-compulsive disorder – A non-inferiority randomized controlled trial. *Journal of Anxiety Disorders*, 104, 102873. <https://doi.org/10.1016/j.janxdis.2024.102873>
- Fisher, P. L., & Wells, A. (2008). Metacognitive therapy for obsessive-compulsive disorder: A case series. *Journal of Behavior Therapy and Experimental Psychiatry*, 39(2), 117–132.
<https://doi.org/10.1016/j.jbtep.2006.12.001>
- Fisher, P. L., Cherry, M. G., Stuart, T., Rigby, J. W., & Temple, J. (2020). People with obsessive-compulsive disorder often remain symptomatic following psychological treatment: A clinical significance analysis of manualised psychological interventions. *Journal of Affective Disorders*, 275, 94–108. <https://doi.org/10.1016/j.jad.2020.06.019>
- 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. *Journal*

- of Consulting and Clinical Psychology*, 51(2), 287–297. <https://doi.org/10.1037/0022-006x.51.2.287>
- Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. M. (2002). The Obsessive-Compulsive Inventory: Development and validation of a short version. *Psychological Assessment*, 14(4), 485–496. <https://doi.org/10.1037/1040-3590.14.4.485>
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99(1), 20–35. <https://doi.org/10.1037//0033-2909.99.1.20>
- 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. *American Journal of Psychiatry*, 162(1), 151–161. <https://doi.org/10.1176/appi.ajp.162.1.151>
- Foa, E. B., Yadin, E., & Lichner, T. K. (2012). *Exposure and response (ritual) prevention for obsessive compulsive disorder*. Oxford University Press.
<https://doi.org/10.1093/med:psych/9780195335286.001.0001>
- 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. *Journal of Obsessive-Compulsive and Related Disorders*, 1(4), 251–257. <https://doi.org/10.1016/j.jocrd.2012.05.002>
- Gordon, C., Gasbarro, A., Wendell, V., Fischer, S., Hardin, R., & Marino, J. (2023). Assessing exposure and response prevention readiness for clients with obsessive compulsive disorder and co-occurring conditions: A decision-making model and case example.

Professional Psychology: Research and Practice, 54(4), 305–313.

<https://doi.org/10.1037/pro0000516>

Greenberg, D., & Huppert, J. D. (2010). Scrupulosity: A unique subtype of obsessive-compulsive disorder. *Current Psychiatry Reports*, 12(4), 282–289.

<https://doi.org/10.1007/s11920-010-0127-5>

Gunter, R. W., & Whittal, M. L. (2010). Dissemination of cognitive-behavioral treatments for anxiety disorders: Overcoming barriers and improving patient access. *Clinical Psychology Review*, 30(2), 194–202. <https://doi.org/10.1016/j.cpr.2009.11.001>

Hansen, B., Kvale, G., Hagen, K., Havnen, A., & Öst, L.-G. (2018). The Bergen 4-day treatment for OCD: Four years follow-up of concentrated ERP in a clinical mental health setting. *Cognitive Behaviour Therapy*, 48(2), 89–105.

<https://doi.org/10.1080/16506073.2018.1478447>

Herren, J., & Brannan, E. (2018). Clinical considerations for implementing exposure and response prevention for pediatric OCD. *The Brown University Child and Adolescent Behavior Letter*, 34(6), 1–7. <https://doi.org/10.1002/cbl.30298>

Hoyt, W. T., & Del Re, A. C. (2017). Effect size calculation in meta-analyses of psychotherapy outcome research. *Psychotherapy Research*, 28(3), 379–388.

<https://doi.org/10.1080/10503307.2017.1405171>

International OCD Foundation. (2023, April 25). *Disgust-Based OCD: Thoughts on a new treatment protocol*. International OCD Foundation.

<https://iocdf.org/blog/2023/04/25/disgust-based-ocd-thoughts-on-a-new-treatment-protocol/>

- Johnco, C., McGuire, J. F., Roper, T., & Storch, E. A. (2019). A meta-analysis of dropout rates from exposure with response prevention and pharmacological treatment for youth with obsessive compulsive disorder. *Depression and Anxiety, 37*(5), 407–417.
<https://doi.org/10.1002/da.22978>
- Kazantzis, N., Deane, F. P., & Ronan, K. R. (2004). Assessing compliance with homework assignments: Review and recommendations for clinical practice. *Journal of Clinical Psychology, 60*(6), 627–641. <https://doi.org/10.1002/jclp.10239>
- Kazdin, A. E. (2007). Mediators and mechanisms of change in psychotherapy research. *Annual Review of Clinical Psychology, 3*(1), 1–27.
<https://doi.org/10.1146/annurev.clinpsy.3.022806.091432>
- Kelley, M. L., Heffer, R. W., Gresham, F. M., & Elliott, S. N. (1989). Treatment evaluation inventory—short form. *PsycTESTS Dataset*. <https://doi.org/10.1037/t49940-000>
- Kim, H., Wheaton, M. G., Foa, E. B., & Simpson, H. B. (2023). Identifying trajectories of symptom change in adults with obsessive compulsive disorder receiving exposure and response prevention therapy. *Journal of Anxiety Disorders, 96*, 102711.
<https://doi.org/10.1016/j.janxdis.2023.102711>
- Knox, S., Miller, C., Twidwell, R. E., & Knowlton, G. (2022). Client perspectives on psychotherapy failure. *Psychotherapy Research, 33*(3), 298–315.
<https://doi.org/10.1080/10503307.2022.2110020>
- Launes, G., Laukvik, I. L., Sunde, T., Klovning, I., Hagen, K., Solem, S., Öst, L.-G., Hansen, B., & Kvale, G. (2019). The bergen 4-day treatment for obsessive-compulsive disorder: Does it work in a new clinical setting? *Frontiers in Psychology, 10*.
<https://doi.org/10.3389/fpsyg.2019.01069>

- McKay, D. (2006). Treating disgust reactions in contamination-based obsessive–compulsive disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 37(1), 53–59.
<https://doi.org/10.1016/j.jbtep.2005.09.005>
- McKay, D., Abramowitz, J. S., & Storch, E. A. (2021). Mechanisms of harmful treatments for obsessive–compulsive disorder. *Clinical Psychology: Science and Practice*, 28(1), 52–59.
<https://doi.org/10.1111/cpsp.12337>
- 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 Research*, 225(3), 236–246.
<https://doi.org/10.1016/j.psychres.2014.11.058>
- McLean, P. D., Whittal, M. L., Thordarson, D. S., Taylor, S., Söchting, I., Koch, W. J., Paterson, R., & Anderson, K. W. (2001). Cognitive versus behavior therapy in the group treatment of obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology*, 69(2), 205-214.
- Melchior, K., van der Heiden, C., Deen, M., Mayer, B., & Franken, I. H. A. (2023). The effectiveness of metacognitive therapy in comparison to exposure and response prevention for obsessive-compulsive disorder: A randomized controlled trial. *Journal of Obsessive-Compulsive and Related Disorders*, 36, 100780.
<https://doi.org/10.1016/j.jocrd.2023.100780>
- Meyer, V. (1966). Modification of expectations in cases with obsessional rituals. *Behaviour Research and Therapy*, 4(4), 273–280. [https://doi.org/10.1016/0005-7967\(66\)90023-4](https://doi.org/10.1016/0005-7967(66)90023-4)

- Middleton, R., Wheaton, M. G., Kayser, R., & Simpson, H. B. (2018). Treatment resistance in obsessive-compulsive disorder. In *Treatment Resistance in Psychiatry* (pp. 165–177). Springer Singapore. https://doi.org/10.1007/978-981-10-4358-1_11
- Monzani, B., Jassi, A., Heyman, I., Turner, C., Volz, C., & Krebs, G. (2015). Transformation obsessions in paediatric obsessive-compulsive disorder: Clinical characteristics and treatment response to cognitive behaviour therapy. *Journal of Behavior Therapy and Experimental Psychiatry*, *48*, 75–81. <https://doi.org/10.1016/j.jbtep.2015.02.004>
- Moorey, S. (2023). Three ways to change your mind: An epistemic framework for cognitive interventions. *Behavioural and Cognitive Psychotherapy*, *51*(3), 187–199. <https://doi.org/10.1017/s1352465822000698>
- Moritz, S., Fieker, M., Hottenrott, B., Seeralan, T., Cludius, B., Kolbeck, K., Gallinat, J., & Nestoriuc, Y. (2015). No pain, no gain? Adverse effects of psychotherapy in obsessive-compulsive disorder and its relationship to treatment gains. *Journal of Obsessive-Compulsive and Related Disorders*, *5*, 61–66. <https://doi.org/10.1016/j.jocrd.2015.02.002>
- Moritz, S., Külz, A., Voderholzer, U., Hillebrand, T., McKay, D., & Jelinek, L. (2018). “Phobie à deux” and other reasons why clinicians do not apply exposure with response prevention in patients with obsessive-compulsive disorder. *Cognitive Behaviour Therapy*, *48*(2), 162–176. <https://doi.org/10.1080/16506073.2018.1494750>
- National Institute for Health and Care Excellence. (2005, November 29). Obsessive-compulsive disorder and body dysmorphic disorder: Treatment (Clinical guideline CG31). <https://www.nice.org.uk/guidance/cg31/resources/obsessivecompulsive-disorder-and-body-dysmorphic-disorder-treatment-pdf-975381519301>

- Nelson, E. A., Abramowitz, J. S., Whiteside, S. P., & Deacon, B. J. (2006). Scrupulosity in patients with obsessive–compulsive disorder: Relationship to clinical and cognitive phenomena. *Journal of Anxiety Disorders, 20*(8), 1071–1086.
<https://doi.org/10.1016/j.janxdis.2006.02.001>
- Nielsen, S. K. K., Stuart, A. C., Winding, C., Øllgaard, M., Wolitzky-Taylor, K., Daniel, S. I. F., Vangkilde, S., Rosenberg, N., Hageman, I., & Jørgensen, M. B. (2025). Group acceptance and commitment therapy versus cognitive behavioral therapy/exposure response prevention for obsessive compulsive disorder: A block randomized controlled trial. *Psychotherapy and Psychosomatics, 1*–20. <https://doi.org/10.1159/000544070>
- Normann, N., & Morina, N. (2018). The efficacy of metacognitive therapy: A systematic review and meta-analysis. *Frontiers in Psychology, 9*. <https://doi.org/10.3389/fpsyg.2018.02211>
- Obsessive Compulsive Cognition Working Group. (2001). Development and initial validation of the obsessive beliefs questionnaire and the interpretation of intrusions inventory. *Behaviour Research and Therapy, 39*(8), 987–1006. [https://doi.org/10.1016/s0005-7967\(00\)00085-1](https://doi.org/10.1016/s0005-7967(00)00085-1)
- Olatunji, B. O., Rosenfield, D., Tart, C. D., Cottraux, J., Powers, M. B., & Smits, J. A. J. (2013). Behavioral versus cognitive treatment of obsessive-compulsive disorder: An examination of outcome and mediators of change. *Journal of Consulting and Clinical Psychology, 81*(3), 415–428. <https://doi.org/10.1037/a0031865>
- Ong, C. W., Clyde, J. W., Bluett, E. J., Levin, M. E., & Twohig, M. P. (2016). Dropout rates in exposure with response prevention for obsessive-compulsive disorder: What do the data really say? *Journal of Anxiety Disorders, 40*, 8–17.
<https://doi.org/10.1016/j.janxdis.2016.03.006>

- Ong, C. W., Petersen, J. M., Terry, C. L., Krafft, J., Barney, J. L., Abramowitz, J. S., & Twohig, M. P. (2022). The “how” of exposures: Examining the relationship between exposure parameters and outcomes in obsessive-compulsive disorder. *Journal of Contextual Behavioral Science, 24*, 87–95. <https://doi.org/10.1016/j.jcbs.2022.03.009>
- Patel, S. R., & Simpson, H. B. (2010). Patient preferences for obsessive-compulsive disorder treatment. *The Journal of Clinical Psychiatry, 71*(11), 1434–1439. <https://doi.org/10.4088/jcp.09m05537blu>
- Rachman S. J. (1983). Obstacles to the successful treatment of obsessions. In *Failures in Behaviour Therapy* (Edited by Foa E. B. and Emmelkamp P. M. G.), pp. 35-57. Wiley, New York.
- Rachman, S. (1994). Pollution of the mind. *Behaviour Research and Therapy, 32*(3), 311–314. [https://doi.org/10.1016/0005-7967\(94\)90127-9](https://doi.org/10.1016/0005-7967(94)90127-9)
- Rachman, S. (1998). A cognitive theory of obsessions: Elaborations. *Behaviour Research and Therapy, 36*(4), 385–401. [https://doi.org/10.1016/s0005-7967\(97\)10041-9](https://doi.org/10.1016/s0005-7967(97)10041-9)
- Rachman, S. (2006). *Fear of contamination: Assessment and treatment*.
- Rachman, S., Coughtrey, A., Shafran, R., & Radomsky, A. (2014). *Oxford Guide to the Treatment of Mental Contamination*. OUP Oxford.
- Rachman, S., de Silva, P., & Röper, G. (1976). The spontaneous decay of compulsive urges. *Behaviour Research and Therapy, 14*(6), 445–453. [https://doi.org/10.1016/0005-7967\(76\)90091-7](https://doi.org/10.1016/0005-7967(76)90091-7)
- Radomsky, A. S., Alcolado, G. M., Abramowitz, J. S., Alonso, P., Belloch, A., Bouvard, M., Clark, D. A., Coles, M. E., Doron, G., Fernández-Álvarez, H., Garcia-Soriano, G., Ghisi, M., Gomez, B., Inozu, M., Moulding, R., Shams, G., Sica, C., Simos, G., & Wong, W.

- (2014). Part 1—You can run but you can't hide: Intrusive thoughts on six continents. *Journal of Obsessive-Compulsive and Related Disorders*, 3(3), 269–279.
<https://doi.org/10.1016/j.jocrd.2013.09.002>
- Rajezi, S., Ansari, P., Yaghubi, H., Fata, L., Hassanabadi, H., Noorbakhsh, S. S., Jordan, J., Zahiroddin, A., Shams, J., Janbozorgi, M., Naderi Rajeh, Y., & Ahmadi, H. (2024). Metacognitive therapy versus cognitive behavioral therapy for OCD: A randomized controlled trial. *International Journal of High Risk Behaviors and Addiction*, 13(2).
<https://doi.org/10.5812/ijhrba-145235>
- Reuter, B., Miano, A., Wassermann, J., & Elsner, B. (2024). Why does exposure-based therapy fail in some individuals with obsessive-compulsive disorder? *Expert Review of Neurotherapeutics*, 24(8), 723–726. <https://doi.org/10.1080/14737175.2024.2365949>
- Rouf, K. (2004). *Oxford guide to behavioural experiments in cognitive therapy*. OUP Oxford.
- Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. *Behaviour Research and Therapy*, 23(5), 571–583. [https://doi.org/10.1016/0005-7967\(85\)90105-6](https://doi.org/10.1016/0005-7967(85)90105-6)
- Schneider, E. E., Schönfelder, S., Domke-Wolf, M., & Wessa, M. (2020). Measuring stress in clinical and nonclinical subjects using a German adaptation of the Perceived Stress Scale. *International Journal of Clinical and Health Psychology*, 20(2), 173–181.
<https://doi.org/10.1016/j.ijchp.2020.03.004>
- Schneider, S. C., Knott, L., Cepeda, S. L., Hana, L. M., McIngvale, E., Goodman, W. K., & Storch, E. A. (2020). Serious negative consequences associated with exposure and response prevention for obsessive-compulsive disorder: A survey of therapist attitudes

and experiences. *Depression and Anxiety*, 37(5), 418–428.

<https://doi.org/10.1002/da.23000>

Senter, M. S., Patel, S. R., Dixon, L. B., Myers, R. W., & Simpson, H. B. (2021). Defining and addressing gaps in care for obsessive-compulsive disorder in the United States.

Psychiatric Services, 72(7), 784–793. <https://doi.org/10.1176/appi.ps.202000296>

Sharma, E., Sharma, L. P., Balachander, S., Lin, B., Manohar, H., Khanna, P., Lu, C., Garg, K., Thomas, T. L., Au, A. C. L., Selles, R. R., Højgaard, D. R. M. A., Skarphedinsson, G., & Stewart, S. E. (2021). Comorbidities in obsessive-compulsive disorder across the lifespan: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 12.

<https://doi.org/10.3389/fpsy.2021.703701>

Shean, G. (2014). Limitations of randomized control designs in psychotherapy research.

Advances in Psychiatry, 2014, 1–5. <https://doi.org/10.1155/2014/561452>

Sidani, S., Miranda, J., Epstein, D. R., Bootzin, R. R., Cousins, J., & Moritz, P. (2009).

Relationships between personal beliefs and treatment acceptability, and preferences for behavioral treatments. *Behaviour Research and Therapy*, 47(10), 823–829.

<https://doi.org/10.1016/j.brat.2009.06.009>

Siev, J., Rasmussen, J., Sullivan, A. D. W., & Wilhelm, S. (2020). Clinical features of

scrupulosity: Associated symptoms and comorbidity. *Journal of Clinical Psychology*, 77(1), 173–188. <https://doi.org/10.1002/jclp.23019>

Smith, B. M., Bluett, E. J., Lee, E. B., & Twohig, M. P. (2017). Acceptance and commitment therapy for OCD. *The Wiley Handbook of Obsessive Compulsive Disorders*, 596–613.

<https://doi.org/10.1002/9781118890233.ch33>

- Soondrum, T., Wang, X., Gao, F., Liu, Q., Fan, J., & Zhu, X. (2022). The applicability of acceptance and commitment therapy for obsessive-compulsive disorder: A systematic review and meta-analysis. *Brain Sciences, 12*(5), 656.
<https://doi.org/10.3390/brainsci12050656>
- Spencer, S. D., Stiede, J. T., Wiese, A. D., Guzick, A. G., Cervin, M., McKay, D., & Storch, E. A. (2023). Things that make you go Hmm: Myths and misconceptions within cognitive-behavioral treatment of obsessive-compulsive disorder. *Journal of Obsessive-Compulsive and Related Disorders, 37*, 100805. <https://doi.org/10.1016/j.jocrd.2023.100805>
- Spielmanns, G. I., & Flückiger, C. (2018). Moderators in psychotherapy meta-analysis. *Psychotherapy Research, 28*(3), 333–346.
<https://doi.org/10.1080/10503307.2017.1422214>
- Stahnke, B. (2021). A systematic review of misdiagnosis in those with obsessive-compulsive disorder. *Journal of Affective Disorders Reports, 6*, 100231.
<https://doi.org/10.1016/j.jadr.2021.100231>
- Starcevic, V., Berle, D., Brakoulias, V., Sammut, P., Moses, K., Milicevic, D., & Hannan, A. (2011). Functions of compulsions in obsessive-compulsive disorder. *Australian & New Zealand Journal of Psychiatry, 45*(6), 449–457.
<https://doi.org/10.3109/00048674.2011.567243>
- Steketee, G., Siev, J., Yovel, I., Lit, K., & Wilhelm, S. (2019). Predictors and moderators of cognitive and behavioral therapy outcomes for OCD: A patient-level mega-analysis of eight sites. *Behavior Therapy, 50*(1), 165–176. <https://doi.org/10.1016/j.beth.2018.04.004>

- Stengler-Wenzke, K., Kroll, M., Matschinger, H., & Angermeyer, M. C. (2006). Subjective quality of life of patients with obsessive-compulsive disorder. *Social Psychiatry and Psychiatric Epidemiology*, *41*(8), 662–668. <https://doi.org/10.1007/s00127-006-0077-8>
- Subramaniam, M., Soh, P., Vaingankar, J. A., Picco, L., & Chong, S. A. (2013). Quality of life in obsessive-compulsive disorder: Impact of the disorder and of treatment. *CNS Drugs*, *27*(5), 367–383. <https://doi.org/10.1007/s40263-013-0056-z>
- Swierkosz-Lenart, K., Dos Santos, J. F. A., Elowe, J., Clair, A.-H., Bally, J. F., Riquier, F., Bloch, J., Draganski, B., Clerc, M.-T., Pozuelo Moyano, B., von Gunten, A., & Mallet, L. (2023). Therapies for obsessive-compulsive disorder: Current state of the art and perspectives for approaching treatment-resistant patients. *Frontiers in Psychiatry*, *14*. <https://doi.org/10.3389/fpsy.2023.1065812>
- Thompson, B. L., Twohig, M. P., & Luoma, J. B. (2021). Psychological flexibility as shared process of change in acceptance and commitment therapy and exposure and response prevention for obsessive-compulsive disorder: A single case design study. *Behavior Therapy*, *52*(2), 286–297. <https://doi.org/10.1016/j.beth.2020.04.011>
- Twohig, M. P., Abramowitz, J. S., Bluett, E. J., Fabricant, L. E., Jacoby, R. J., Morrison, K. L., Reuman, L., & Smith, B. M. (2015). Exposure therapy for OCD from an acceptance and commitment therapy (ACT) framework. *Journal of Obsessive-Compulsive and Related Disorders*, *6*, 167–173. <https://doi.org/10.1016/j.jocrd.2014.12.007>
- Twohig, M. P., Abramowitz, J. S., Smith, B. M., Fabricant, L. E., Jacoby, R. J., Morrison, K. L., Bluett, E. J., Reuman, L., Blakey, S. M., & Ledermann, T. (2018). Adding acceptance and commitment therapy to exposure and response prevention for obsessive-compulsive

- disorder: A randomized controlled trial. *Behaviour Research and Therapy*, *108*, 1–9.
<https://doi.org/10.1016/j.brat.2018.06.005>
- Twohig, M. P., Hayes, S. C., Plumb, J. C., Pruitt, L. D., Collins, A. B., Hazlett-Stevens, H., & Woidneck, M. R. (2010). A randomized clinical trial of acceptance and commitment therapy versus progressive relaxation training for obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology*, *78*(5), 705–716.
<https://doi.org/10.1037/a0020508>
- Uhre, C. F., Uhre, V. F., Lønfeldt, N. N., Pretzmann, L., Vangkilde, S., Plessen, K. J., Gluud, C., Jakobsen, J. C., & Pagsberg, A. K. (2020). Systematic review and meta-analysis: Cognitive-Behavioral therapy for obsessive-compulsive disorder in children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(1), 64–77. <https://doi.org/10.1016/j.jaac.2019.08.480>
- van der Heiden, C., Melchior, K., Dekker, A., Damstra, M., & Deen, M. (2016). Metacognitive therapy for obsessive-compulsive disorder: A pilot study. *Journal of Obsessive-Compulsive and Related Disorders*, *9*, 24–29. <https://doi.org/10.1016/j.jocrd.2016.02.002>
- 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. *Journal of Obsessive-Compulsive and Related Disorders*, *8*, 38–49. <https://doi.org/10.1016/j.jocrd.2015.11.005>
- Weg, A, Riemann, B., Kropfing, J., Franklin, M., Björgvinsson, T. & Mazza, M. (2025). *Difficult Cases: Increasing Motivation, Incorporating ACT, and Options for Levels of Care* [Webinar]. International OCD Foundation.

<https://webinars.iocdf.org/learn/courses/25/difficult-cases-increasing-motivation-incorporating-act-and-options-for-levels-of-care>

- Wells, A. (2011). *Metacognitive therapy for anxiety and depression*. Guilford Press.
- Whittal, M. L., & McLean, P. D. (1999). CBT for OCD: The rationale, protocol, and challenges. *Cognitive and Behavioral Practice, 6*(4), 383–396. [https://doi.org/10.1016/s1077-7229\(99\)80057-1](https://doi.org/10.1016/s1077-7229(99)80057-1)
- Whittal, M. L., Woody, S. R., McLean, P. D., Rachman, S. J., & Robichaud, M. (2010). Treatment of obsessions: A randomized controlled trial. *Behaviour Research and Therapy, 48*(4), 295–303. <https://doi.org/10.1016/j.brat.2009.11.010>
- Whittal, M. L., Rachman, S., & McLean, P. D. (2002). Psychosocial treatment for OCD: combining cognitive and behavioral treatment. In G. Simos (Ed.), *CBT: a guide for the practicing clinician* (pp. 125–149). East Sussex: Brunner-Routledge.
- Williams, M., Sawyer, B., Ellsworth, M., Singh, S., & Tellawi, G. (2017). Obsessive-Compulsive and related disorders in ethnoracial minorities. *The Wiley Handbook of Obsessive Compulsive Disorders, 847–872*. <https://doi.org/10.1002/9781118890233.ch48>
- Williams, M. T., Rouleau, T. M., La Torre, J. T., & Sharif, N. (2020). Cultural competency in the treatment of obsessive-compulsive disorder: Practitioner guidelines. *The Cognitive Behaviour Therapist, 13*. <https://doi.org/10.1017/s1754470x20000501>
- Wolf, N., Oppen, P. van, Hoogendoorn, A. W., Balkom, A. J. L. M. van, & Visser, H. A. D. (2022). Therapeutic alliance and treatment outcome in cognitive behavior therapy for obsessive-compulsive disorder. *Frontiers in Psychiatry, 13*. <https://doi.org/10.3389/fpsy.2022.658693>

- World Health Organization. (n.d.). *Obsessive-compulsive disorder*. Mortality DB. Retrieved May 21, 2025, from <https://platform.who.int/mortality/themes/theme-details/topics/indicator-groups/indicator-group-details/MDB/obsessive-compulsive-disorder>
- Yip, J. (2025). *Treating OCD in Culturally & Ethnically Diverse Populations* [Webinar]. International OCD Foundation. <https://webinars.iocdf.org/learn/courses/20/treating-ocd-in-culturally-ethnically-diverse-populations>
- Zemestani, M., Salavati, M., Seyedolshohadayi, A., Petersen, J. M., Ong, C. W., Twohig, M. P., & Ghaderi, E. (2020). A preliminary examination of acceptance and commitment therapy versus exposure and response prevention for patients with obsessive-compulsive disorder on an optimal dose of ssris: A randomized controlled trial in Iran. *Behavior Modification*, 46(3), 553–580. <https://doi.org/10.1177/0145445520982977>
- Zysk, E., Shafran, R., Williams, T. I., & Melli, G. (2015). Development and validation of the morphing fear questionnaire (MFQ). *Clinical Psychology & Psychotherapy*, 23(6), 533–542. <https://doi.org/10.1002/cpp.1987>

Appendix A**EVIDENCE-BASED TREATMENTS FOR ADULTS
WITH OBSESSIVE-COMPULSIVE DISORDER
(OCD)**

An overview comparing MCT, ACT and ERP

By Michelle Morin
CPC 680 Counselling research capstone

Land Acknowledgement

City University is situated on the unceded traditional territories of the x^wməθk^wəyəm (Musqueam), Sk̓wx̓wú7mesh (Squamish), and səlilwətəł (Tsleil-Waututh) Nations.

PURPOSE OF CAPSTONE + RESEARCH QUESTIONS

Purpose: to evaluate the research using an empirical lens to determine if there is a superior modality to treat adult OCD

- What is OCD and the impact of living with OCD?
- What are the current guidelines for treatment and what are the challenges associated with these guidelines?
- What does the empirical evidence support with alternative models such as ACT and MCT for the treatment of OCD?
- What should clinicians know about these findings, and what are some future directions for this field?

WHAT IS OCD?

- OCD: Intrusive thoughts, urges, images that are unacceptable, + compulsions (mental or behavioural) (Abramowitz & Jacoby, 2014).
- It tends to impact between 1 - 4% of general adult population in North America (Ahmari & Rauch, 2022).
- Elevated risk of suicide, loss of income, poor quality of life (Stengler-Wenzke et al., 2006).



Image retrieved from
<https://shgreenwichkingstreetchronicle.org/123814/opinions/debunking-the-trivializing-of-ocd/>

CURRENT GUIDELINES TO TREAT OCD

- Exposure and Response Prevention (ERP) (Foa et al., 2012)
- prioritizes experiential learning of fear extinction through real life and imaginal exposure scenerios without engaging in compulsions.
- Example: Client with contact contamination fear follows this hierarchy:
 - **3 SUDS** - touch outside shoes no hand washing
 - **5 SUDs** - touch outside shoes and eat a sandwich without washing hands
 - **6 SUDs** - touch dog's feet and spread to all light switches in the house, no hand washing or cleaning



Image retrieved from : <https://images.squarespace-cdn.com/content/v1/5748cc56746fb940f105bd1c/8142955d-2d99-4f8c-8833-51c8c61a74c2/SAS+-+E+ERP.png>

PROBLEMS WITH ERP

Treatment adherence problems:

- high potential for drop out (Spencer et al., 2023)
- treatment refusal and fatigue (McKay, 2006)
- availability of treatment (Hansen et al., 2018)
 - dosage of exposure + potency of exposure can be barriers to treatment adherence



Treatment Failure

- comorbidity (Gordon et al., 2023)
- subtype of OCD (disgust, mental contamination)

Image retrieved from <https://www.skincancer.org/blog/feel-like-a-human-whack-a-mole-game-you-might-need-field-therapy/>

ALTERNATIVES TO ERP



- **Acceptance and Commitment Therapy (ACT)**

- uses the mechanism of **psychological flexibility**
- increase value-driven behaviours and decrease experiential avoidance (Twohig et al., 2015)

- **Metacognitive Therapy (MCT)**

- uses behavioural experiments and detached mindfulness to target **missappraisals of metacognitions** (i.e. having the thought means the fear will happen) (Wells, 2011).

Image retrieved from
https://smb.ibsrv.net/imageresizer/image/article_manager/1200x1200/108531/165074/heroimage0.125549001578411639.jpg

SUMMARY OF THE REVIEW AND ANALYSIS

- eligibility criteria:
 - must be randomized controlled trials
 - research design must evaluate clinical effectiveness
 - use standardized measures (YBOCs, DSM-5)
 - adult populations
 - past 7 years
- Results
 - 5 RCTs met criteria. Overall findings did not point to a superior modality for treating adult OCD.
 - the most surprising takeaway is that there is evidence for shared mechanisms between modalities.

IMPLICATIONS FOR CLINICAL RESEARCH AND TREATMENT

- Research directions should focus on better understanding individual client characteristics
 - moderators - Who is each modality best suited for?
 - mediators - how is each modality working?

- Not enough evidence to jump straight to using ACT or MCT when first treating OCD
 - until the data is present, current clinical guidelines should be followed to prevent harm

DETERMINING READINESS FOR ERP

Some questions to consider based on (Gorden et al., 2023) :

Client capacities	Clinician capacities
Are there additional serious mental or physical diagnoses that would interfere with the client's adherence to ERP?	Does the clinician have the ability to perform prolonged and/or multiple sessions of ERP per week to initiate treatment?
Is the client able to demonstrate understanding and application of the ERP model?	Does the clinician and client have the ability to conduct ERP in vivo?
Does the client have the capacity to engage in ERP in the dosage their OCD recovery may require?	Does the clinician have clinical consultation or supervision available?
Does the client have mental compulsions or feared consequences that would not suit a reality testing approach?	Does the clinician have appropriate training?

TROUBLESHOOTING ERP

Microevaluation of ERP progress (Gillihan et al., 2012):

Progress	Design	Adherence
Is there evidence the client habituates to distressing emotions or displays other types of inhibitory learning (i.e. distress tolerance or expectancy violation)?	Are the exposures making enough contact with the obsessional content?	Is the client performing response prevention correctly?
What is blocking ERP progress? Are adherence issues preventing delivery, or is it something else such as a comorbidity?	Is the pacing up the ERP hierarchy moving too fast and sensitizing the client?	Is there family or other accommodation happening outside of the therapy session?
Does the client feel in control of their treatment? Is the client willing to be in control of their treatment?	Is the clinician/client targeting the right content?	Are any extratherapeutic factors occurring that are interrupting homework completion?

TROUBLESHOOTING ERP CONT.

Considerations for clinicians, as advised by trainings at the International OCD Foundation (Weg et al., 2025).

Cognitive therapy	ACT
Have any cognitive therapy techniques been administered?	Is the client able to make contact with present moment awareness both during and outside exposure exercises?
Is the client prioritizing cognitive misappraisals or errors when faced with real life evidence during ERP?	If the client is unwilling to experience any aversive emotions, has an ACT approach to ERP been administered?
What meaning is the client attaching to emotional discomfort within and outside of ERP exercises?	Has the ERP hierarchy been reconceptualized based on willingness, and values-based exposures?

TROUBLESHOOTING ERP CONT.

Other

Has an assessment of secondary loss/gains occurred?

How is the therapeutic relationship? Does the client trust the clinician enough to be honest and vulnerable about their experiences?

Has the client been working with a psychiatrist concurrently? Is there a medication management problem?

From your hypothesis on what is blocking progress, would this problem be likely to occur in other modalities?

REFERENCES

- Abramowitz, J. S., & Jacoby, R. J. (2014). Obsessive-compulsive disorder in the DSM-5. *Clinical Psychology (New York, N.Y.)*, 21(3), 221-235. <https://doi.org/10.1111/cpsp.12076>
- Ahmari, S. E., & Rauch, S. L. (2022). The prefrontal cortex and OCD. *Neuropsychopharmacology (New York, N.Y.)*, 47(1), 211-224. <https://doi.org/10.1038/s41386-021-01130-2>
- Foa, E. B., Yadin, E., & Lichner, T. K. (2012). *Exposure and response (ritual) prevention for obsessive compulsive disorder*. Oxford University Press. <https://doi.org/10.1093/med:psych/9780195335286.001.0001>
- Hansen, B., Kvale, G., Hagen, K., Havnen, A., & Öst, L.-G. (2018). The Bergen 4-day treatment for OCD: Four years follow-up of concentrated ERP in a clinical mental health setting. *Cognitive Behaviour Therapy*, 48(2), 89-105. <https://doi.org/10.1080/16506073.2018.1478447>
- 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. *Journal of Obsessive-Compulsive and Related Disorders*, 1(4), 251-257. <https://doi.org/10.1016/j.jocrd.2012.05.002>
- Gordon, C., Gasbarro, A., Wendell, V., Fischer, S., Hardin, R., & Marino, J. (2023). Assessing exposure and response prevention readiness for clients with obsessive compulsive disorder and co-occurring conditions: A decision-making model and case example. *Professional Psychology: Research and Practice*, 54(4), 305-313. <https://doi.org/10.1037/pro0000516>
- McKay, D. (2006). Treating disgust reactions in contamination-based obsessive-compulsive disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 37(1), 53-59. <https://doi.org/10.1016/j.jbtep.2005.09.005>
- Spencer, S. D., Stiede, J. T., Wiese, A. D., Guzick, A. G., Cervin, M., McKay, D., & Storch, E. A. (2023). Things that make you go Hmm: Myths and misconceptions within cognitive-behavioral treatment of obsessive-compulsive disorder. *Journal of Obsessive-Compulsive and Related Disorders*, 37, 100805. <https://doi.org/10.1016/j.jocrd.2023.100805>
- Stengler-Wenzke, K., Kroll, M., Matschinger, H., & Angermeyer, M. C. (2006). Subjective quality of life of patients with obsessive-compulsive disorder. *Social Psychiatry and Psychiatric Epidemiology*, 41(8), 662-668. <https://doi.org/10.1007/s00127-006-0077-8>
- Weg, A., Riemann, B., Krompinger, J., Franklin, M., Björgvinsson, T., & Mazza, M. (2025). *Difficult Cases: Increasing Motivation, Incorporating ACT, and Options for Levels of Care* [Webinar]. International OCD Foundation. <https://webinars.iocdf.org/learn/courses/25/difficult-cases-increasing-motivation-incorporating-act-and-options-for-levels-of-care>