

Exploring the Efficacy of Exposure and Response Prevention Therapy on Obsessive Compulsive Disorder

Alyssa Rhodes

Abstract

Exposure and response prevention therapy (EX/RP) is a well-established treatment method for combatting intrusive obsessions and repetitive, time-consuming compulsions that classify obsessive-compulsive disorder (OCD). Through therapist encouragement and self-monitoring, individuals confront their compulsive fears, in vivo or imaginal, without the ability to alleviate anxiety through obsessive behaviours. The following paper's purpose is to evaluate the efficacy of this therapy and its components for treating individuals diagnosed with OCD. Research showed that response prevention had a promising impact on those as young as 11. Other research emphasized the positive effects of EX/RP on all ages contingent on patients' ability to adhere to the therapy techniques, specifically response prevention. Moreover, studies have found that this singular type of therapy had more effectiveness and fewer disadvantages than other types of anxiety therapies, biological therapies, or integrative therapies. Cumulatively, the studies supported and affirmed EX/RP as a leading treatment method for OCD on the grounds of its efficacy.

The revised fifth edition of the Diagnostic and Statistical Manual of Mental Disorders states that an individual must experience time-consuming obsessive thoughts, compulsions, or both to receive a diagnosis of obsessive-compulsive disorder (OCD) (DSM-5-TR; American Psychiatric Association [APA], 2022). Obsessions are persistent, intrusive thoughts, images, or urges that cause anxiety or distress due to fear of a hypothetical catastrophic event that will happen if they do not follow their routines (APA, 2022). Compulsions are the alleviating routines of repetitive behaviours or mental acts individuals feel obligated to perform to prevent said event and, thus, alleviate distress (APA, 2022). These excessive routines must take more than an hour a day and are not better explained by another disorder. Symptoms must also be independent or exceed the breadth of other causes, such as substance use or other medical conditions, and are severe enough to interrupt daily functioning (APA, 2022). Individuals are often highly cognizant of how these intrusive thoughts and behaviours become instrumental and often obstructive to their everyday functioning. It is a highly prevalent anxiety disorder that affects 1-3% of men and women in their lifetime; thus, treatment efficacy is a necessary area of research (Barlow et al., 2021). One highly utilized and consequently well-researched cognitive behavioural approach to treating OCD is exposure and response prevention therapy (EX/RP) (Barlow et al., 2021). EX/RP involves in-session graded exposure exercises with a therapist where a patient confronts increasingly severe stimuli or thoughts that would regularly trigger alleviating behaviours or compulsions (Geller, 2022). However, they are barred from distress-alleviating routines, known as response prevention, and encouraged to do the same out of session. By restricting their behavioural responses, diagnosed individuals are forced to challenge their dysfunctional cognitions (Geller, 2022). Therefore, they come to understand that

catastrophe is not imminent when deviating from their routine, as their obsessions may lead them to believe. The goal of the therapy is that over time, the severity of the symptoms will dissipate as they learn that behaviours are not preventative and thoughts do not equate to danger. This paper will explore the effectiveness of exposure and prevention therapy for those with obsessive-compulsive disorder.

Although there are questions regarding its efficacy, EX/RP has been established as a standard method for combating the effects of OCD for many, including adolescents. One effectiveness study concentrated on the impacts of exposure and response prevention on this demographic, suspecting EX/RP would have a long-term impact on the severity and impairment of adolescent OCD (Riise et al., 2016). 15 male and seven female patients aged 11-17 were recruited from an outpatient treatment unit and participated in the trial. Pre-treatment analysis using the Children's Yale-Brown Obsessive Scale, or Y-BOCS (Goodman et al., 2021), classified six with extreme OCD falling within the 32-40 range, 14 participants scored severe in the 24-31 range, and two were moderate cases with a score of 16-23. Collectively, the mean Y-BOCS score at pretreatment was a severe 28.0 (Riise et al., 2016). The post-treatment analysis involved an independent rater who administered a Y-BOCS interview, and then again at three and six-months follow-up. Patients also received a self-report collected six-months post-treatment. Results found that EX/RP is a promising method for adolescents (Riise et al., 2016). The Y-BOCS scores, used to determine response and remission, found that 20 adolescents responded positively immediately after, and 16 attained response and remission and were dubbed as recovered (Riise et al., 2016). Four patients achieved improved status as they responded to the treatment but scored above a 12 on the assessment, while only two fell into the unchanged category (Riise et al., 2016). While these status quotas fell with time, as did participant numbers, improvements compared to pretest assessments are irrevocable. 12 completers retained their remission status at post-trial follow-up, one regressed to improved status, and three deteriorated to unchanged (Riise et al., 2016). Moreover, three of the four adolescents that fell into the improved category continued to improve and recover by the second follow-up, while the other participants' category was static (Riise et al., 2016). By the end of the experiment, the unchanged category comprised two patients who did not respond to treatment and one recovered patient who did not partake in the follow-up Y-BOCS interviews and was thus reclassified (Riise et al., 2016). This small and tightening sample size dampens the generalizability of the study's findings to the entire adolescent population. Similarly, implementing exclusionary terms and referrals to other therapies for those with comorbid symptoms narrowed the sampling frame. It consequentially left questions regarding the impact of EX/RP on non-textbook cases of OCD. The nature of an effectiveness study and its lack of a control group also translates to a lack of proof for causality (Barlow et al., 2021). Nonetheless, the study laid a foundation for replication studies with a more extensive and psychologically diverse sample. The research also illustrated the clinical significance of EX/RP in the treatment of OCD, even though researchers used intent-to-treat analysis (Riise et al., 2016). This may underrepresent the treatment's efficacy as it assumes non-completers did not benefit from the treatment whatsoever (Barlow et al., 2021). In sum, it further established the strength of exposure prevention therapy even in a niche demographic.

Building on the effectiveness study that illustrated the benefits of EX/RP on OCD prognosis for young individuals with malleable minds is a clinical trial comparing the method to

other therapies. Much like the effectiveness study formerly mentioned, this randomized study recruited outpatients and included the Y-BOCS as a pre- and post-measure (Lindsay et al., 1997). Unlike the adolescent research, this research included eighteen adult patients, an experimental group who received fifteen hours of EX/RP, and a control group who received the same amount of comprehensive anxiety management therapy (Lindsay et al., 1997). To do this, researchers employed several other measures, such as self-report surveys, like the Maudsley Obsessional Compulsive Inventory, or MOCI (Hodgson et al., 1977), to gauge the severity and presence of common obsessions among participants. The pre- and post-therapy differences have similar findings to the effectiveness study (Riise et al., 2016) and found EX/RP a highly effective treatment for OCD. The original mean score on the Y-BOCS for the EX/RP group was 28.70, constituting severe symptoms, whereas post-treatment, the average fell to a mild 11.00 (Lindsay et al., 1997). In contrast, the average score at pre-measure for the control group who received anxiety management therapy was 24.44 and ended at 25.89 (Lindsay et al., 1997). Moreover, the control and experimental groups differed significantly when comparing pre- and post-treatment MOCI scores. The control group's starting MOCI was 20.33 out of a maximum score of 30 for extreme severity. Post-trial, the control group dropped to 17.89, whereas the experimental group saw a significant decline from 17.00 to 9.56 (Lindsay et al., 1997). Moreover, this study is unlike others as it took great precaution to standardize and account for participants' impressions of their therapists to isolate the efficacy of EX/RP compared to other therapy models. The study's results and the standardizing precautions researchers took reaffirm that EX/RP is an effective mode of treatment for common symptoms. Although all participants finished the study as intended, its small sampling frame limits its generalizability. However, it is a flaw easily remedied by replication with more extensive trials, and the results remain clinically significant as they mirror similar studies (Lindsay et al., 1997). Another weakness that a larger sample could likely solve is that during the randomizing process, a skewed gender ratio emerged, with the control group consisting of one male and eight females (Lindsay et al., 1997). Thus, gender roles could have confounded the patient's response to the therapies. Finally, unlike the adolescent trial, there was no recorded follow-up with participants, which risks the long-term effectiveness of the results (Riise et al., 2016). Despite the limitations of a small sample and short study, these results compound the support for EX/RP as an effective way of treating OCD for a variety of ages.

Further establishing the positive impact of EX/RP on individuals with OCD in a clinical environment is the results of a randomized placebo-controlled trial comparing EX/RP to and in conjunction with clomipramine. This study only partially confirmed the researchers' hypothesis that a mixed methods approach of EX/RP and clomipramine would be most effective in treating OCD symptoms (Foa et al., 2005). As suspected, the experiment's three active groups, those undergoing EX/RP, taking clomipramine, or both, showed more significant progress against their symptoms than the placebo group. Expectedly, supplementing clomipramine with EX/RP also showed greater effectiveness on participant outcomes than medication alone (Foa et al., 2005). However, the integrative approach was not more effective than EX/RP alone on any measures (Foa et al., 2005). Furthermore, of those in the EX/RP group, no adverse effects were reported, unlike those who only received clomipramine (Foa et al., 2005). The clomipramine group had an average of three reported side effects, and 78% of participants reported at least one side effect as moderate or severe (Foa et al., 2005). Compared to 68% of patients in the mixed therapy

group who experienced one severe side effect and an average of two (Foa et al., 2005). In the placebo group, 46% of participants experienced side effects (Foa et al., 2005). These results emphasize and further validate the advantages of EX/RP. This study also prioritized generalizability and causality as this was a double-blind study with a sample size of 149 diagnosed individuals (Foa et al., 2005). However, dosage and EX/RP potency may have convoluted the combined group's results. The effectiveness study illustrated how EX/RP was successful enough to categorize a person as recovered (Riise et al., 2016). Thus, clomipramine may have been rendered irrelevant to patient treatment in this study, especially because patients did not receive the maximum doses of the medication (Foa et al., 2005). Replicating this study in a longer time frame where participants could be graduated to stronger EX/RP and larger doses of clomipramine would better equip researchers to scope and compare treatment effects. Nevertheless, these results further substantiate EX/RP as a leading course of treatment for individuals.

Studies have shown that EX/RP is a promising treatment method with a high response rate across different demographics. However, there are variables in who and how patients fare to the therapy. A study on patient adherence and treatment outcomes with EX/RP for OCD looked at components of adherence that mattered most and how that translated to effectiveness. The results may explain the low retention rate of the adolescent effectiveness study (Riise et al., 2016) and why most of those who dropped out of the EX/RP group in the randomized trial comparing dual and monotherapies did so because they disliked exposure (Foa et al., 2005). Researchers in this trial used the Patient EX/RP Adherence Scale, or PEAS (Simpson et al., 2010), ratings to examine diagnosed individuals randomly assigned to the EX/RP group during a clinical study, where the other groups were assigned to a serotonin reuptake inhibitor or a placebo pill (Simpson et al., 2010). The scale measured the quantity of at-home exposures attempted, the quality of exposures, and the success of response prevention (Simpson et al., 2010). As the researchers hypothesized, each component significantly correlated with post-treatment results. A higher PEAS score was strongly correlated to lower post-treatment severity despite original symptom severity (Simpson et al., 2010). Additionally, the study showed that response prevention is vital to positive and permanent patient outcomes (Simpson et al., 2010). Those whose PEAS scores indicated they could resist less than 50% of their compulsions after five therapy sessions had under a 20% probability of minimal symptoms by the end of eight sessions (Simpson et al., 2010). Although there was a strong correlation between response prevention and patient outcome, proving causality within this trial is impossible. The group participated in all three components that form the basis of EX/RP. Thus, the components would be entangled, and the specific results of each part would be highly convoluted. Moreover, this study was one where all participants finished the trial; thus, an analysis of why and what individuals refuse EX/RP is unavailable. However, unlike others, this study proposed an applied theory that therapists can refer to when evaluating a patient's potential adherence, what therapy components are most impactful, and whether a patient will respond positively to EX/RP. Thus, this study is opening a future of more efficient and effective EX/RP treatment for individuals with OCD.

The purpose of analyzing these studies and their respective findings regarding EX/RP for treating OCD symptomology was to assess the efficacy of this treatment method. Additionally, what made the technique so impactful, which research identified as response

prevention (Simpson et al., 2010). Moreover, research supported adherence as imperative for treatment success and crucial for determining a patient's outcome (Simpson et al., 2010). The studies also exhibited how age was irrelevant in the outcome of EX/RP and that it was effective for adolescents as young as 11 (Riise et al., 2016). However, the most convincing support for including this treatment in care plans is that EX/RP was more impactful than anxiety management therapy (Lindsay et al., 1997), biological therapies and mixed method therapies without any adverse effects (Foa et al., 2005). The diversity of the mentioned studies also helped remedy each other's shortcomings. Thus, despite the limitations of the studies, the support for EX/RP is substantive. In conclusion, exposure and response prevention therapy's popularity in treating OCD is substantiated by its ability to mitigate OCD symptoms.

References

- American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders (5th ed., 2021 rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Barlow, D. H., Durand M. V, Hofmann, S. G., & Lalumière M. L. (2021). *Abnormal Psychology: An Integrative* (Sixth Edition). Nelson Education.
- Geller, J. (October 2022). *What is obsessive-compulsive disorder?* Psychiatry.org. <https://www.psychiatry.org/patients-families/obsessive-compulsive-disorder/what-is-obsessive-compulsive-disorder>
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). *Yale-Brown Obsessive Compulsive Scale* (YBOCS). APA PsycTests. <https://doi.org/10.1037/t57982-000>
- Hodgson, R. J., & Rachman, S. (1977). *Maudsley Obsessional-Compulsive Inventory (MOC)*. APA PsycTests. <https://doi.org/10.1037/t08347-000>
- Foa, E. B., Liebowitz, M. D., 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. *The American journal of psychiatry*, 162(1), 151–161. <https://doi.org/10.1176/appi.ajp.162.1.151>
- Lindsay, M., Crino, R., & Andrews, G. (1997). Controlled Trial of Exposure and Response Prevention in Obsessive-Compulsive Disorder. *The British Journal of Psychiatry: The Journal of Mental Science*, 171, 135–139. <https://doi.org/10.1192/bjp.171.2.135>
- Riise, E. N., Kvale, G., Öst, L. G., Skjold, S. H., Hansen, H., & Hansen, B. (2016). Concentrated Exposure and Response Prevention for Adolescents with Obsessive-Compulsive Disorder: An Effectiveness study. *Journal of Obsessive-Compulsive and Related Disorders*, 11, 13-21. <https://doi.org/10.1016/j.jocrd.2016.07.004>
- Simpson, H. B., Maher, M. J., Wang, Y., Bao, Y., Foa, E. B., & Franklin, M. (2010). Patient Adherence Predicts Outcomes from Cognitive Behavioural Therapy in Obsessive-Compulsive Disorder. *Journal of Consulting and Clinical Psychology*, 78(2), 247–252. <https://doi.org/10.1037/a0018324>
- Simpson, H. B., Maher, M., Page, R. J., Gibbons, C. J., Franklin, M. E., & Foa, E. B. (2010). Development of a Patient Adherence Scale for Exposure and Response Prevention Therapy. *Behaviour Research and Therapy Journal.*, 41(1), 30-37. <https://doi.org/10.1016/j.beth.2008.12.002>