**An Open Trial of Acceptance and Commitment Therapy with Exposure and Response Prevention in an Intensive Outpatient Setting for Adults with OCD**

**Abstract**

Intensive outpatient (IOP) treatment settings for adults with obsessive-compulsive disorder (OCD) are common, but data on their effectiveness is limited. The effectiveness of IOP treatment for adults with OCD using combined Acceptance and Commitment Therapy (ACT) and Exposure and Response Prevention (ERP) was studied with eight adults. The intervention was 15 hours per week for three weeks. Measures were collected at pre-treatment, one-week, two-weeks, post-treatment, and at one-month follow-up. At the end of treatment, all participants were in the mild range of OCD symptom severity with a mean symptom decrease of 58%. Psychological inflexibility, depression, anxiety and stress significantly decreased through treatment and participants ended treatment below clinical range for psychological inflexibility and non-clinical to mild range for depression, anxiety and stress. The results of this study provide preliminary support for the effectiveness of ACT and ERP in an IOP setting for adults with OCD. The focus of this paper is on the clinical application of this treatment.

 *Keywords:* acceptance and commitment therapy, exposure and response prevention, obsessive-compulsive disorder, intensive outpatient treatment, adults

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Obsessive Compulsive Disorder (OCD) is characterized by obsessive thoughts, images, or impulses and related compulsive actions that are aimed at neutralizing or regulating obsessions (American Psychiatric Association, 2013). OCD affects about 1% of the population (Kessler et al., 2005) and causes deficits across various areas of functioning including low quality of life (Kugler et al., 2013).

Access to treatment for OCD is limited based on location and access to outpatient providers with OCD specializations (O’Neill & Feusner, 2015). There are multiple solutions to treatment access, including methods of care, teletherapy, and increased provider training. Intensive outpatient programs (IOP) or partial programs for OCD are worthy of further exploration. IOPs are day treatment programs that usually incorporate group and individual therapy sessions, and depending on the focus of the treatment, it can involve exposure work completed with coaches. IOPs typically involve intensive, 10-40 hour weeks of treatment for multiple weeks. One large benefit of IOP is that a client can receive their treatment, in person, while only being away from home for a few weeks. The price is lower than residential because the client resides outside the treatment center (e.g., in a hotel). IOP treatments have been explored for many diagnoses, including PTSD, eating disorders and chronic pain, and can result in clinically significant reductions in symptom severity across diagnoses (Hayes et al., 2019; Hussey & Flynn, 2019; Rauch et al., 2020).

The primary treatment approach for OCD is Exposure and Response Prevention (ERP), a cognitive behavioral therapy (Hofmann & Smits, 2008; Norton & Price, 2007; Tolin, 2010). The processes that appear to be the most important in ERP is willingly confronting key stimuli and being open to fear and anxiety while the key stimulus is present (Reid et al., 2017; Twohig et al., 2015). Acceptance and Commitment Therapy (ACT) is gaining empirical support for helping individuals to stay open to their fear (Bluett et al., 2014). ACT is a cognitive behavioral therapy that focuses on improving psychological flexibility which involves seeing thoughts for what they are, being open to internal experiences, being present, knowing ones values, and making notable steps towards those values (Hayes et al., 2013).

ACT may turn out to be a logical integration to ERP as the processes of change associated with ACT may facilitate change in exposure exercises. Psychological inflexibility is high in those with OCD and mediates the presence of OCD (Bluett et al., 2014; Hayes et al., 2013). In one treatment study, willingness to experience obsessions was shown to be a predictor of change in exposure-based treatment of OCD suggesting that fostering willingness is an important factor in helping individuals access ERP based treatments (Reid et al., 2017). Another study examined predictors of treatment outcomes in exposure-based treatments and found that willingness was the most accurate predictor of treatment outcomes (Ong et al., 2019). Further supporting these findings, another study suggested that ACT processes, particularly acceptance increased engagement with exposures (Levitt et al., 2004). Similarly, experiential avoidance has been shown to play a role in predicting therapists preference for and willingness to use exposure-based treatments for OCD (Scherr et al., 2015), suggesting that if the therapist is not fully present with the ERP, the client will have greater difficulty fostering willingness to be present with the anxiety and fear. Studied broadly, psychological inflexibility has been shown to predict outcomes in ACT and CBT based treatments suggesting that while psychological inflexibility is present the client will have greater difficulty engaging in treatment and processes of change will be inhibited (Wolitzky-Taylor et al., 2012). This suggests that it is worthwhile to emphasize psychological flexibility while teaching exposure therapy.

In the first study of ACT for OCD, a multiple baseline study with four participants, significant reduction in compulsions (68% reduction pre- to post-treatment), OCD features, experiential avoidance, anxiety, and depression were found (Twohig et al., 2006). ACT was tested in other single subject design studies examining the OCD subtype scrupulosity with decrease of average daily compulsions from pre-treatment (*M*=25), to post- treatment (*M*=5.6), and follow-up (*M*= 4.3), indicating sub-clinical range (Dehlin et al., 2013). The first randomized controlled trial of ACT compared ACT and a combined ACT and progressive muscle relaxation (PMR); the ACT condition saw significant reduction in OCD from pre- to post-treatment (46-56% reduction) and pretreatment to follow up (46-66% reduction) and showed greater changes over the PMR condition (pre- to post-treatment 13-18%, and pretreatment to follow-up 16-18%; Twohig et al., 2010).

ACT for OCD has also been studied internationally in four clinical trials in Iran. In each trial, symptom severity significantly reduced and psychological flexibility increased. When compared to other treatment modalities like CBT, ERP, and medication alone, combined ACT and ERP was found to be more effective (Baghooli et al., 2014; Esfahani et al., 2015; Rohani et al., 2018; Vakili et al., 2015). ACT for OCD has also been explored in children and adolescents (Armstrong et al., 2013; Barney et al., 2017; Shabani et al., 2019) showing significant reductions in OCD and increased psychological flexibility in varying age groups and across cultures. ACT has also been shown to be useful in the treatment of Obsessive-Compulsive related disorders including Trichotillomania, skin picking, and Hoarding disorder (Bluett et al., 2014; Ong et al., 2021).

In the clearest examination to date, researchers examined the integration of ACT and ERP for OCD. Twohig et al (2018) examined treatment acceptability, engagement in exposure tasks, and whether integrating ACT principles would increase treatment engagement and response in ERP. Clinically significant change at post-treatment was as follows: ERP (68-77% of participants) and combined ERP and ACT (70-75% of participants). There were no between-group differences detected at post-treatment (Twohig et al., 2018). ACT alone and combined ACT and ERP are effective treatment options for OCD, however access to these treatments is an issue.

IOP is a viable option for addressing access barriers. In a meta-analysis and systematic review of 17 trials, intensive CBT was compared with standard CBT as a treatment for youth and adults with OCD. It was found that there was a larger effect at post-treatment in intensive CBT (Hedges g= 2.44) compared with standard CBT but at the 3-month follow-there was no between group differences (Jónsson et al., 2015). This suggests that intensive CBT is effective for youth and adults with OCD with similar maintenance to standard treatment. Another meta-analysis and systematic review of 19 studies examined residential and inpatient intensive treatment for adults with OCD. Findings from pre-admission to discharge showed symptom reduction of 10.7 points on the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS; Hedges g=1.87; Veale et al., 2016). The programs were intensive, long-term treatments and demonstrated that intensive settings are effective at reducing symptom severity for adults with severe OCD. The cost and duration of these treatments are much greater than IOP. There are two studies examining treatment efficacy and cost-effectiveness in an IOP or partial hospital setting. In a study examining partial hospitalization for adults, findings showed 25% reduction in symptoms severity (mild range of symptoms) and gains were maintained at follow-up (6, 12, 18 months) (Bytritsky et al., 1996). Another study examined cost-effectiveness of childhood OCD treatment by comparing nine treatment strategies including antidepressant medication, CBT, combined antidepressant medication, and CBT delivered through IOP consisting of 12-15 hours per week for 4-5 weeks, and partial hospitalization consisting of 30 hours per week for 12 weeks. Findings suggested that IOP treatment for OCD was cost-effective in terms of improvement in symptom severity measured by the Children’s Yale-Brown Obsessive Compulsive Scale (CY-BOCS) from pre- to post-treatment (*M*=16.42 , *SD*=8.94) indicating the speed of symptom changes were most efficient in this treatment option (Gregory et al., 2020).

The purpose of this study is to examine the effectiveness of a combined ACT and ERP treatment for OCD in an IOP setting. We predict a reduction in OCD symptom severity and a decrease in psychological inflexibility. Finally, we predict that symptoms of depression, anxiety, and stress will decrease over the course of treatment.

**Methods**

*Participants*

To be eligible for the study, participants needed to be 18 years of age or older and meet diagnostic criteria for OCD assessed during the intake session with a clinical psychologist, a doctoral student supervised by a clinical psychologist, or a registered psychological assistant with supervision by a psychologist. The intake consisted of a Structured Clinical Interview for the DSM-V (SCID-5) and baseline assessment of symptoms as described in greater detail below. Participants also completed the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS), the Depression, Anxiety, Stress Scale-21 (DASS-21), and the Acceptance and Action Questionnaire-II (AAQ-II). The participants were self-referred for intensive outpatient OCD treatment. If a participant met criteria for study inclusion, they were assigned to begin an intensive outpatient treatment of 15 hours per week for 3 weeks. All assessment and treatment sessions occurred at the East Bay Behavior Therapy Center, a private practice setting that provides specialized treatment for children, adolescents, and adults with anxiety and OCD. This study was approved by the IRB at the Wright Institute. See Table 1 for participant demographic information.

*Measures*

*Yale-Brown Obsessive Compulsive Scale* (Y-BOCS; Goodman, Price, Rasmussen, Mazure, Delgado, et al., 1989; Goodman, Price, Rasmussen, Mazure, Fleischmann, et al., 1989). OCD severity was measured using the Y-BOCS, a 10-item symptom severity scale and symptom checklist delivered through a semi-structured interview. The checklist identifies the personal specific obsessions and compulsions, the severity scale assesses the main obsessions (items 1-5) and compulsion (6-10) based on time, interference, distress, resistance and degree of control. The clinician rates each item from 0 (no symptoms) to 4 (extreme) based on participants report from the last week. The total score ranges from 0 to 40. The Y-BOCS is the most common measure of OCD symptom severity and displays good reliability and validity (Goodman, Price, Rasmussen, Mazure, Delgado, et al., 1989; Storch et al., 2005).

 *Depression Anxiety Stress Scale-21* (DASS-21;Henry & Crawford, 2005). DASS-21 is a 21-item measure of depression, anxiety, and stress symptoms in adults. The items are scored on a scale of 0 (Did not apply to me), 1 (Applied to me to some degree), 2 (Applied to me to a considerable degree), and 3 (Applied to me very much). There are seven items in each subscale: anxiety (DASS-21 A), depression (DASS-21 D), and stress (DASS-21 S) and scores range from 0-21. DASS-21 has been validated and displayed good reliability and validity (Henry & Crawford, 2005).

*Acceptance and Action Questionnaire-*II (AAQ-II; Bond et al., 2011). The AAQ-II is a 7-item measure of experiential avoidance/psychological inflexibility. The items assess unwillingness to experience unwanted thoughts or emotions and the inability to be present in the moment and in the presence of unwanted psychological experiences, the inability to act in accordance with values. The AAQ-II displays good reliability and validity

*Clinical Intervention*

The effect of treatment was assessed in an open trial design. Participants were admitted into treatment from the clinic waitlist and completed a two-hour face-to-face intake session to assess baseline symptoms (discussed in greater detail in the next section). The intervention consisted of three-hour sessions, 5 days a week, totaling 15 hours a week. This individual treatment lasted for three weeks and was comprised of ACT & ERP. Participants completed assessments weekly and at one-month follow-up. The intervention was based on four stages to facilitate combined ACT & ERP treatment (Twohig et al., 2015; Zurita-Ona, 2021). While ACT is a process-based treatment, there is variability based on client-specific needs. Included here, is a description of the typical course of treatment.

**Session 1: Intake.** The first session was a 2-hour face-to-face meeting to assess OCD symptoms, depression, anxiety, stress, mood, trauma, vulnerability factors, and psychological flexibility. A general overview of the treatment course was discussed. As needed, psychoeducation about OCD was provided. Discussion of how OCD has impacted the participant’s quality of life was included to introduce concepts around the cost of engaging with obsessions. Intakes were conducted by either a psychologist, doctoral candidates, or a registered psychological assistant with supervision by a licensed psychologist.

**Session 2 and 3: Values and Exposure Plan Development.** This session focused on developing an understanding of how OCD symptoms have impacted participant’s quality of life. This discussion included understanding participant’s values, such as spending time with family or working in the participant’s job of choice, that have been impacted or taken away by engaging with OCD. Workability (determining if behaviors result in high quality of life) and willingness (being open to obsessions and other internal experiences) were addressed in this session. Rule governed behavior (following verbally created rules about how the world works) was contrasted against contingency shaped behavior by discussing the workability of following obsessions. Rule-governed behavior was normalized for the participant and the therapist highlighted how these rules interfere with engaging in values. Examples of rule-governed behavior include statements like “I can’t handle it!. I need to know, for real. If my obsessions are repetitive, that means they’re important. I have to do something about this obsession, right now! Because I think about it, it means I want to do so! I’m weird, because I have weird thoughts. I know my obsessions are real. Thinking is always helpful. Because I think so, it makes me so. Not doing anything about it is the same as causing it.”

Another focus of session 2 included creating a values-based exposure plan. This component of treatment is consistent with ERP, however there is additional emphasis on linking exposures to the participant’s values. The plans included several exposure options that the participant could choose from during a given coached exposure session. This was accomplished by creating interoceptive, situational, and imaginal exposure plans with the participant based on their specific triggers. For example, one participant has an obsession about contracting testicular cancer and his sperm being negatively affected because of battery radiation from computers, but this participant really wanted to obtain a major in computer science. He knew that he will need to sit a minimum of 15 hours in front of a computer per week for lab time, not counting other hours for homework and other projects using his laptop. His values-based exposure plan included several options based on his values. One option was to stay in a computer store for 15, 30, 45 minutes, and 1 hour to become knowledgeable about different types of technology. He could also choose to work in a computer lab for 30, 60, 90, and 120 minutes to build flexibility around situations that were not within his control. Another option was to create a personal website with five pages on his laptop while placing the laptop on his testicles without pushing it away, to practice being flexible with uncomfortable situations that happen in day-to-day living. In all these exercises, the client was helped to stay in touch with the ways his world would grow if he kept practicing exercises like these.

**Session 4: Introduction to ACT Skills.** In session 4, participants were introduced to the acronym WISE MOVES which provided a framework to make ACT skills accessible during exposure exercises. WISE MOVES is a retrieval cue of ACT processes to help participants face an obsession they are fused with while repeatedly building a new behavioral pattern. The first principle of WISE MOVES is “watch your mind,” which encourages participants to utilize defusion exercises while experiencing an obsessive thought. An example of this is having the participant name an obsession and visualize it as an object. The second principle is “invite the obsessions,” which asks the participant to accept an obsession or make room for the obsession. An example of this is when participants notice the obsession they are having, chooses to not respond to the obsession and reengage in their values-based task. The third principle is “stay with your experience,” which invites participants to stay in the present moment regardless of the obsessions they are experiencing. An example is using a body scan and then describing their internal experiences like “my heart is beating fast” or “my hands feel sweaty.” The purpose is to notice these sensations non-judgmentally and to be curious about them. The fourth principle is “either toward or away from your values,” which encourages the participant to use their values as a way to decide how to react after noticing their obsession and being in the present moment. An example of this would be the participant asking themselves “what is important to me in this moment? What do I care about enough to face these obsessions? What do I value enough that is worth this discomfort?”

The fifth principle is “make a choice,” which asks the participant to identify what is important to them when an obsession arises and then commit to a choice about how to handle that obsession. An example is when a participant tells themselves “I fully commit to do \_\_\_\_\_\_\_” or “I choose to do \_\_\_\_\_\_\_\_\_\_ in this moment.” The sixth principle is “observe what comes with the choice,” which encourages participants to notice the result of the choice they made and to continue engaging in experiences and accepting the urges that may arise. An example of this is when urges arise, noticing the urge and redirecting their attention back to the present moment activity. The seventh principle is “valuing your choice,” which invites participants to acknowledge the challenge in the work and valuing the strength it takes to engage in exposures. The eighth principle is “engage with what is next in life” which asks participants to notice the results of engaging in values-based exposures and to learn to continue living their lives. An example of this is the participant asking themselves “what’s the next think I need to be doing right now?” The ninth principle is “soften up with self-compassion,” which asks participants to notice judgmental or critical thoughts they are having about themselves and engage in practice of self-compassion. An example is when participants acknowledge judgements, they are having toward themselves, name the judgements like “Ms. Critic” and then address the judgement specifically like “Ms. Critic, I know you care, thanks, but I can’t give you attention right now.” Participants were invited to access the WISE MOVES skills when engaging in exposure exercises or when in the presence of a trigger in their daily lives. This was accomplished by engaging in an exposure exercise and as obsessions came up, the participant was encouraged to access WISE MOVES. This provided an understanding of how this could be accomplished in other settings as well.

**Remaining treatment sessions (sessions 5-15).** The remaining treatment sessions involved participants engaging in one of their values-based exposures based on what felt important that day, their willingness to engage with that situation, and willingness to experience discomfort in service of engaging with their values. Participants were not encouraged to think about the relative ease or difficulty of a given exposure when choosing an exposure for that session. Sometimes with certain obsessions like harm, sexual, or pedophilia related obsessions, it can be more effective to heavily focus on the valued action instead of an exposure that really challenges the obsession. For example, in the case of scrupulosity, the participant may be encouraged to deeply engage with religious practices that evoke obsessions like attending services, talking with religious leaders, or reading scriptures. In this case, committing a religious infraction as the exposure would be difficult to link to values. Even though an “over the top” exposure can be beneficial (e.g., committing a moral infraction so the participant can practice with really difficult situations in case it were to occur in an everyday situation) these types of exposures are less clearly linked to one’s values. The participant is still encouraged to engage in exposure tasks that challenge their obsessions without engaging in compulsions but the focus is not on making the most “over the top” exposure but to engage with the feared stimulus in a way that connects with the way the participant wants to be living their lives. Avoidance is targeted in service of living a life that allows the participant to

During each values-based exposure, acceptance and defusion skills were introduced. For example, we might practice defusion by treating obsessions like a bossy coworker, where often not giving the co-worker attention is the best way to handle them. Similarly, acceptance could be practiced by treating the obsessions like an annoying house guest: one does not need to like the house guest to be kind and welcoming to them. Participants were encouraged to engage in self-compassion during exposure practice and in every-day life by using WISE MOVES. At the end of each exposure session, 15-20 minutes were dedicated to discussing the participants level of engagement and internal responses to the exposure. This time allows the participant to notice their capacity to experience internal discomfort associated with obsessions and their ability to choose to engage with ACT based skills that were practiced during the session. At the beginning of each week, participants developed a plan to practice WISE MOVES (approaching obsessions and uncomfortable internal experiences in service of their values). The purpose of this plan is to focus on the participant’s willingness to have obsessions and approach valued situations. See figure 1 for an example WISE MOVES exposure debrief.

Participants were encouraged to make several commitments each week with regard to engaging in compulsions. The first was to commit to themselves to not engage in compulsions. This involved making a choice about how the participant wanted to respond differently to urges. When participants reported urges to engage in compulsions, the therapist would say something like “Think about this for a moment, what would you like your tombstone to say? Here lies Patricia, she was very busy fighting obsessions with hundreds of compulsions and avoidant behaviors? Or, here lies Patricia, she was very busy loving, learning, and creating? Which tombstone would you choose?” Participants were encouraged to not engage in any of their compulsions, however the focus was to teach them skills to flexibly respond to all uncomfortable internal experiences associated with obsessions.

Participants were given several options for working toward not engaging with compulsions which is consistent with a traditional ERP approach. These included altering compulsions where the participant would not engage with the compulsion in the way that they normally would. For example, if a participant had contamination concerns and showers every night after dinner for 45 minutes, an alteration to this compulsion would involve taking a shower in the morning or at the gym rather than at the “normal” time. Another way to work with compulsions would be to shorten it. For example, a participant would pray for more than six hours a day because they feared not properly following religious practices would be encouraged to pray for less time each week. Another option is to delay compulsions. For example, a participant with obsessions about being a sexual predator and asks for reassurance was encouraged to delay asking reassurance questions and delay discussing past sexual encounters.

As treatment progressed, participants might have found it difficult to resist compulsions due to lack of clarity around their values or feeling that resisting compulsions was in conflict with their values. The therapist provided a rationale to help the participant re-engage with the intervention. For example, if a participant was fused with a reason-giving thought like “I can’t do this values-guided exposure” the therapist worked with the participant to notice the workability of this thought and acknowledging the costs associated with not using WISE MOVES. Another example, if a participant was fused with a nonfunctional value (a value that they feel they should deem important despite it not being something they truly value) and has a values-conflict like “I’d rather be safe,” the therapist worked with the participant to engage in values-clarification which included discussing what the participant truly valued. Another example, if a participant engaged in exposures as a compulsion as indicated by statements like “I’m doing hundreds of exposures to get rid of my obsessions,” the therapist would help the client see that obsessions—and other internal events—are part of a human life like changes in the weather. Controlling the weather is not something humans can do, but humans can be ready to manage it when it arrives.

**Results**

The primary outcome variable is OCD symptom severity (Y-BOCS). Secondary outcomes were psychological flexibility (AAQ-2) and depression, anxiety, and stress (DASS-21). See table 2 for aggregate scores across time for OCD symptom severity, psychological flexibility, and depression, anxiety, and stress.

*OCD symptom severity*

A two-tailed, paired samples t-test showed significant decrease in symptom severity between pre-treatment and 3-weeks demonstrating that the treatment was effective *t*(7)= 7.138, *p*<.001. T-test analysis showed no significant difference in symptom severity between 3-weeks and one-month follow-up demonstrating that treatment gains were sustained *t*(7)= .886, *p*=.405.

Mean scores between pre-treatment and one month follow-up show a 58% decrease representing a decrease from severe to below clinical levels. Participants with Y-BOCS scores below 14 (75%) met criteria for clinical response of participants, consistent with Twohig et al. (2018), the remaining participants were in the mild-moderate symptom range.

*Psychological inflexibility*

A two-tailed, paired samples t-test analysis showed significant decrease in psychological inflexibility between pre-treatment and 3-weeks demonstrating that the treatment was effective *t*(7)=6.474, *p*<.001. T-test analysis showed no significant difference in symptom severity between 3-weeks and one-month follow-up demonstrating that treatment gains were sustained *t*(7)=1.614, *p*=.151. Psychological inflexibility mean scores decreased from clinical to below symptom range from pre-treatment to one month follow-up.

*Depression, Anxiety, and Stress*

A two-tailed, paired samples t-test analysis on the DASS-21 subscales showed significant decrease in depression between pre-treatment and 3-weeks demonstrating that the treatment was effective *t*(7)=.9.775, *p*<.001. T-test analysis showed no significant difference in depression between 3-weeks and one-month follow-up demonstrating that treatment gains were sustained *t*(7)= -.390, *p*=.708. A t-test showed significant differences for anxiety between pre-treatment and 3-weeks *t*(7)=2.800 *p*=.027. T-test analysis showed no significant difference in anxiety between 3-weeks and one-month follow-up *t*(7)= .893, *p*=.402 showing no lapse in gains. A t-test analysis showed significant findings for stress between pre-treatment and 3-weeks *t*(7)=2.505 *p*=.041. T-test analysis showed no significant difference in anxiety between 3-weeks and one-month follow-up *t*(7)= .1.528, *p*=.170 showing no lapse in gains.

Mean scores across the DASS-21 subscales decreased from clinical levels to below clinical levels from pre-treatment to one month. Mean total DASS-21 scores showed a 55% decrease; mean depression scores showed a 64% decrease; mean anxiety scores showed a 55% decrease; mean stress scores showed a 47% decrease from pre-treatment to one month following IOP treatment. Participants ended IOP treatment in subclinical ranges for depression, anxiety and stress. Mean scores on the DASS-21 subscales suggests that participants met criteria for recovery (Ronk et al., 2013).

**Discussion**

This study used an open trial design to examine changes in OCD symptom severity, anxiety, depression, stress, and psychological inflexibility using combined ACT and ERP for OCD in an IOP setting. Between pre-treatment assessment and treatment completion, all participants had marked improvement in OCD symptoms (58% decrease in symptom severity), psychological inflexibility (decrease of 48%), depression (64% decrease), anxiety (55% decrease), and stress (47% decrease). Gains made during treatment across domains were maintained from treatment completion to one-month follow-up.

The results of this study are consistent with the findings of intensive (1 to 4 hours per day; 4 to 10 hours per week) CBT programs for youth and adults with OCD which found that intensive CBT is an effective treatment (Jónsson et al., 2015). The results are also consistent with findings of intensive residential or inpatient treatment for adults with OCD which found that clients with severe OCD are able to make clinically significant improvements in intensive residential and inpatient treatment settings (Veale et al., 2016). These findings support the effectiveness of a three-week intensive treatment program. IOPs are designed to be intensive for short periods of time and can provide appropriate care for those who do not qualify for residential care. This provides greater access to treatment for individuals who would otherwise not have access to more intensive levels of care, who have other commitments within their lives and are not able to commit to an intensive residential stay, or are prevented from residential treatment for financial reasons. Finally, it demonstrates that in an intensive setting, symptom severity and psychological inflexibility can be decreased in a more finite period of time. The study provides preliminary data suggesting that ACT plus exposure therapy delivered in an IOP setting is an effective treatment.

 This study has several clinical implications. Primary implication is that IOP treatment for OCD using combined ACT and ERP is effective, which provides another treatment access point for people who either do not meet requirements for residential level of care or who have not had success with outpatient treatment. Clinically we suggest a notable dose of exposure-based treatment for OCD as a first line intervention. Exceptions could be when the client has failed or refused ERP in the past, or if there is a component of the case that indicates ACT or a combined ACT and ERP treatment would be better (i.e., high AAQ scores; O’Neill & Feusner, 2015; Twohig et al., 2015). A course of ERP can be 1-4 hours in one or multiple sessions. Attending sixteen total sessions would be typical based on the outcome research (Abramowitz et al., 2002). It is possible that many more sessions are necessary. If no response is seen to weekly outpatient therapy, IOP could be a logical next step before residential treatment and could include a combined ACT and ERP.

 One interesting theoretical issue with this study is that it is highly exposure based. Exposure exercises are the key of the treatment for OCD and anxiety disorders (Abramowitz et al., 2003) and evidence for the additional utility of ACT should be demonstrated. Typical ACT for OCD incorporates some exposure, however, the emphasis is on building psychological flexibility with a strong emphasis on valued-living. As written about in many publications, exposure exercises from an ACT standpoint have some notable differences from exposures from an ERP standpoint (Twohig et al., 2015). Evidence supports the use of ACT with and without formal exposure exercises (Bluett et al., 2014; Twohig et al., 2018). Still, from an empirical standpoint, it is no surprise that this treatment was useful as we have significant evidence of the efficacy of ERP for OCD (Hofmann & Smits, 2008; Tolin, 2010). Therefore, the novelty of this study is the success of a three-week intensive treatment for OCD over how exposures were delivered.

 There are several limitations to this study. The first limitation is the open trial design and limited sample size. This, however, is typical in starting a line of work and provides preliminary evidence that OCD can be treated using ACT-based treatments in an IOP setting. The open trial design, however, does make it difficult to attribute outcomes to a specific treatment factor. Additionally, due to the combined nature of the treatment, it is difficult to distinguish what components of the treatment led to treatment outcomes. There is a notable line of work showing that ACT alone is useful as a treatment for OCD. This evidence lessens this concern and suggests that the combined treatment is likely useful. Still, further research is needed to demonstrate replicability and generalizability of the IOP setting to a larger sample. Another limitation of this study is the homogeneity of participants. Further research is necessary to sample from a more diverse population across a variety of factors including socioeconomic status, age, education, race and ethnicity. Self-selection bias is another limitation to consider, all participants were financially responsible for costs associated with treatment which increases motivation for treatment engagement and may have impacted the results. Future research should aim to address this by sampling from a more heterogeneous sample. Another limitation to consider is the demand characteristics associated with the setting of this study and future research should aim to examine the effectiveness of this treatment in a controlled environment. Additionally, the study relied primarily on self-report measures for secondary treatment aims (psychological inflexibility, depression, anxiety, and stress). Further research is necessary to assess these domains using clinician-administered measures. It is important to note that passage of time could impact symptom severity and without a control condition it is difficult to know with certainty that changes were only due to treatment and is important to explore in future research. The study design had follow-up assessment one month following treatment completion, while this is indicative of maintenance of treatment gains, a longer follow-up period would be a better indicator of maintenance and would be beneficial to explore further. Finally, there are limitations around the feasibility of widely implementing treatment in an IOP setting however, it is important to consider that IOP would not be considered the first line treatment for all clients and would only be recommended provided it is feasible for the client by taking work, family and location-based factors into account.

 In summary, these preliminary data suggests that ACT-based exposure therapy treatment for OCD effectively address symptom severity, psychological inflexibility, experiential avoidance, and domains of distress in an IOP setting. Future research should examine ACT-based treatment of OCD in an IOP setting with a larger, heterogeneous sample. This study supports the feasibility of implementing this treatment in an IOP setting but further research is needed to assess replicability of these findings.

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