

Family-Based Treatment for Young Children with OCD:

A Case Study of a 5-Year-Old Child and His Mother

An Empirically Supported Treatment Case Study
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By

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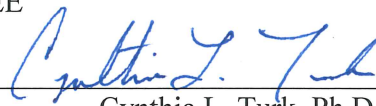
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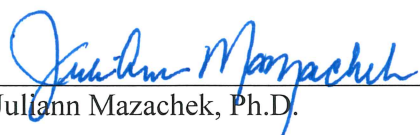
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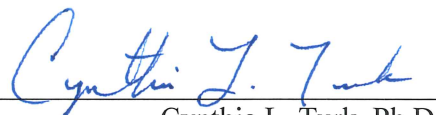


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Abstract

The following is a de-identified case study that presents the treatment process and outcome for a young child and his mother, with fictional names of Ian and Tiana Good. Ian is a 5-year-old Caucasian Hispanic male, and Tiana is a 37 Caucasian Hispanic female. Ian is an elementary school student who resides in a midsize city in the Midwestern United States. Ian was seen at a not-for-profit agency. Ian presented with severe obsessive-compulsive symptoms that affected his cognitions, emotions, behaviors, and overall functioning. Family-Based Cognitive Behavioral Therapy (FB-CBT), written by Freeman and Garcia (2009), was the therapy utilized to assist Ian and his mother in learning skills to effectively manage and reduce obsessive-compulsive symptoms. Psychoeducation, differential reinforcement strategies, cognitive strategies, and exposure and response prevention were all used to treat Ian. This case study reviews the relevant scientific literature and then presents the initial interview, assessments, diagnosis, treatment plan, implementation of interventions, and barriers to treatment. A transcription of one session is provided as a demonstration of Ian and Mrs. Good's work in session using the family-based approach to treatment.

Keywords: Obsessive-Compulsive Disorder, Family-Based Cognitive Behavioral Therapy (FB-CBT), Exposure, Response Prevention, Parent Inclusion, Intervention

Family-Based Treatment for Young Children with OCD:
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The central feature of obsessive-compulsive disorder (OCD), as defined by the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association [APA], 2013), is the presence of either obsessions and/or compulsions. Obsessions are repetitive or intrusive thoughts, images, or impulses. Compulsions are repetitive behaviors or mental actions that are utilized to reduce the psychological distress associated with obsessions.

OCD affects about 1.2% of the population in the United States (APA, 2013). Marginally higher rates of OCD are found in adult females compared to adult males, although males are more likely to exhibit symptomology during childhood (APA, 2013). Between 1-3% of children experience symptomology associated with OCD; however, these percentages may underestimate the true number of children with OCD symptomology, as young children may struggle to identify obsessions and compulsions due to cognitive immaturity (Choate-Summers et al., 2008; Flament et al., 1988). Several clinical trials involving young children have been conducted, noting that young males are more likely to receive a diagnosis of OCD and are overrepresented in the pediatric population (Castle, Deale, & Marks, 1995).

Depression, anxiety, disruptive behavior disorders, and attention-deficit/hyperactivity disorder are commonly comorbid with OCD (Storch et al., 2008). Autism spectrum disorder (ASD) may also occur with OCD. The prevalence of OCD is significantly higher among individuals with ASD than typically developing peers, with a median prevalence of 10% (1.47-37.2%) within this population (Neil & Sturmey, 2014).

Cognitive Behavioral Therapy is known to be efficacious for OCD, but the extent to which these findings generalize to treating young people with complex comorbidities like autism spectrum disorder, remains unclear (Murray, Jassi, Mataix-Cols, Barrow, & Krebs, 2015). Limited empirical attention has been given to this population as they are rarely included in clinical trials. It is unclear as to why the exclusion of this population occurs, although Murray et al. (2015) hypothesized that individuals with ASD and OCD are less likely to report symptomology in early childhood and that this population is difficult to treat. Consequently, evidence-based treatment options for this population consist of modified CBT protocols that account for the cognitive, behavioral, and emotional delays and excesses of ASD (Murray et al., 2015).

Early childhood onset of OCD disrupts academic, social and family functioning, is associated with sleep problems, limits participation in recreational activities, lowers self-esteem, and impedes typical child development (Geller et al., 2007; Flament et al., 1988; Piacentini, Bergman, Keller, & McCracken, 2003; Storch et al., 2010). Over one-third of individuals who experience untreated OCD over the course of their life span report a decreased quality of life (Palermo et al., 2011). According to Palermo et al (2011), these individuals have difficulties with interpersonal relationships, struggle to retain employment, and report that symptoms negatively interfere with their workday. If left untreated, OCD may be a chronic diagnosis with low rates of remission (APA, 2013).

Theoretical Model

This case study examined the effects of treating a child with OCD using the interventions described in *Family-Based Treatment for Young Children with OCD* (FB-CBT for OCD), developed by Freeman and Garcia (2009). The FB-CBT for OCD manual was adapted from

several existing treatments, including the March and Mulle (1998) manual, *OCD in Children and Adolescents: A Cognitive Behavioral Treatment*; and the Piacentini, Jacobs, and Maidment (1998) manual, *Individual CBT and Family ERP/Family Treatment: A Multicomponent Treatment Program for Children and Adolescents with Obsessive-Compulsive Disorder*.

FB-CBT is a multi-modal treatment approach that uses both cognitive and behavioral strategies to educate families about OCD. It teaches families strategies to reduce family accommodations, which is any way family members play a part in the maintenance of obsessions and compulsions through allowing avoidance of fear-evoking stimuli, participating in rituals, or modifying routines to allow OCD behaviors to occur. While simultaneously teaching the child to manage their obsessions and engage in responses other than compulsions or rituals. FB-CBT emphasizes the application of therapeutic tools in a manner that is developmentally appropriate for the cognitive ability of the child. Throughout treatment, families are systematically taught to reinforce desired behaviors while extinguishing undesired behaviors. Families learn how to effectively implement exposure and response prevention (ERP) with their child inside treatment sessions. ERP is then practiced in the child's natural environment as "homework" in the absence of the therapist. Utilization of ERP continues until a significant decrease in obsessive and/or compulsive behavior has been obtained (Freeman & Garcia, 2009).

Cognitive Model

Beck's cognitive theory emphasizes the role that cognitions have on influencing an individual's feelings (e.g., anxiety) and behavior (Beck, 1967). Cognitions include a person's thoughts, beliefs, and perceptions. According to Beck (1967), emotional problems arise when distorted thinking patterns influence the interpretation of environmental events. He states that behavior is not necessarily determined by what is actually happening in the environment.

Instead, behavior is significantly determined by the individual's perception of the environment (Franklin & Foa, 2014; Padesky, 1994; & Piacentini, et al., 2014).

Anxious individuals have thought patterns, or "schemas," that contain assumptions about the environment and interfere with coping (Beck, 2011; Franklin & Foa, 2014). These schemas are hypothesized to be rigid, inflexible, and concrete compared to the schemas of healthy individuals (Beck, 2011; Franklin & Foa, 2014). Schemas maintain anxious symptoms when they are maladaptive and dysfunctional (Padesky, 1994). Once schemas are formed, they are maintained through the process of distorting, not noticing, and discounting contradictory information, or by seeing contradictory information as an exception (Beck, 1967; Padesky, 1994). Individuals are typically not aware of their cognitive distortions unless they are trained to monitor and identify them (Beck, 2011).

For children, cognitive and language development are relevant to how their thought processes influence their behavior. Literature discusses that, due to cognitive immaturity, the percentage of children who are impacted may be an underestimate of what is currently reported. This immaturity causes difficulties with articulation of distorted thoughts, leading to missed identification of symptoms, unless compulsions are egregious (Choate-Summers, Freeman, & Garcia, 2008). For example, young children may find it difficult to describe the feared outcomes of refraining from their compulsions or be unable to identify obsessive thoughts and subsequent compulsions. These differences between children and adults may be due to the lack of cognitive maturation, requiring extensive support from parents to implement treatment with young children (Belsky, 1981; Freeman, Choate-Summers, et al., 2008). Parents become the pathway for cognitive strategies to be implemented with young children using a developmental approach.

FB-CBT for young children uses cognitive tools to help families understand, manage, and reduce OCD symptoms (Freeman & Garcia, 2009). Without intervention, family members may have insufficient knowledge to recognize the obsessions and compulsions experienced by their young child and the thoughts that maintain them (Farankin, Morris, & Budzyn, 2018). Families are coached on cognitive strategies, such as externalizing OCD symptoms and “bossing back OCD.”

Behavioral Model

Freeman and Garcia (2009) utilize ERP, which involves extinction of anxiety through exposure. The Inhibitory Learning Model (ILM) proposes how exposure works (Craske et al., 2014). The emotional response to the conditioned stimulus diminishes over time through repeated exposure in the absence of the feared outcome and/or engagement in safety behaviors and compulsive rituals. Extinction trials do not eradicate the initial condition stimulus-unconditioned stimulus (CS-US) association. Instead, extinction trials result in a new CS-US association that competes with the existing fear-producing CS-US association (Abramowitz & Arch, 2014).

Craske et al. (2014) discussed research-based strategies for increasing inhibitory learning through exposure therapy. As previously stated, ERP does not cause an obsessional fear to be unlearned. Rather, ERP creates an opportunity for a current conditioned aversive to be paired with a contradictory opportunity where the conditioned aversive develops a new meaning associated with safety. New learning occurs by structuring exposure tasks that can violate threat expectancies. New learning is also promoted by eliminating safety behaviors. Learning through extinction increases tolerance to a previously conditioned aversive stimulus.

According to the inhibitory learning model, even though a new CS-US relationship has been created through exposure therapy, the old CS-US relationship can still trigger a fear response (Craske et al., 2014). Geller et al. (2019) suggested that younger children are less adept at discriminating feared conditioned stimuli and exhibit a unique extinction pattern that suggests deficits in inhibitory learning. Due to this deficit, there is a need for continued exposures outside of therapy sessions, even continuing once therapy has concluded. With repeated exposure to the feared stimuli, the child will strengthen the non-threatening meaning of the stimuli and inhibit previous obsessional fears.

Obsessions and/or compulsions endure if the individual does not receive information that is contrary to their predictions of negative consequences (Franklin & Foa, 2014; Franklin, Morris, & Budzyn, 2018). For young children, avoiding contact with events of disconfirmation is more likely to occur due to the family environment. Family members often make accommodations and modify their behavior in response to the child's OCD. Family studies suggest children with OCD are likely to have an immediate relative who is also experiencing OCD symptomology (Choate-Summers et al., 2008; Freeman & Garcia, 2009). Consequently, the child with OCD is likely to have family members that accommodate the child's OCD. These family members will require education and support as they learn how to help their child to learn how to confront their fears without engaging in rituals.

It is important to note that children may struggle to engage in feared behavior. Young children who are starting to build tolerance towards feared conditioned stimuli may need an additional preferred stimulus that provides reinforcement for engaging in exposure activities that elicit fear. Freeman and Garcia's (2009) treatment includes positive reinforcement. For example, a token chart or choice of candy is used to increase desired behaviors, such as practicing

exposures. Parents are taught to implement different kinds of positive attention, such as praise statements, tangible rewards, and privileges, to provide contingencies that promote compliance with ERP (Choate-Summers et al., 2008). Overall, the goal is to introduce systems that are functional and meet the needs of the child and family.

One of the biggest difficulties is the family's response to OCD symptoms that arise outside of a therapy session (Choate-Summers et al., 2008). Families are trained to manage OCD symptomology in a variety of ways. First, families are taught differential attention; that is, they learn to reinforce desirable behaviors (e.g., approaching a feared stimulus) and use extinction procedures, such as ignoring unwanted behaviors (e.g., requests for reassurance). Second, parents employ modeling such that they demonstrate behaviors for the child to imitate. Third, parents use scaffolding to help the child increase self-regulation.

These interventions are discussed and practiced with the family during each treatment session to increase understanding and the utilization of each tool. When therapists use discussion and practice with families, it provides opportunities to reinforce (social validation) the family for the appropriate use of each tool. With the use of social validation, research has shown increases in participation in treatment and fidelity of implementation in the absence of the therapist (Choate-Summers et al., 2008, Freeman & Garcia, 2009). When these tools are used together, a foundation for success is created wherein OCD treatment can be successful for this age group (Choate-Summers et al., 2008; Freeman & Garcia, 2009; Gellar et al., 2017). Therapists need to be mindful of the difficulties that families may encounter as they implement treatment techniques out of session. For OCD therapy to be effective, parental support is essential and is achieved through parent coaching. By the end of treatment, the goal is for

families to implement these tools with their children and effectively translate opportunities for growth within their child's natural environment in the absence of a structured therapy session.

Empirical Support for Intervention

This review of empirically supported treatments will focus on the five meta-analyses examining therapy interventions for children with OCD conducted within the last 10 years. Three of these meta-analyses examined the general efficacy of CBT in the treatment of pediatric OCD. Two meta-analyses specifically examined the role of family involvement in pediatric OCD treatment outcomes.

Sánchez-Meca, Rosa-Alcázar, Iniesta-Sepúlveda, and Rosa-Alcázar (2014) analyzed published randomized control trials (RCTs) looking at the efficacy of psychological and/or pharmacological treatment for pediatric OCD. This meta-analysis included RCTs that examined the efficacy of CBT, pharmacological treatment, or a combined treatment approach and included a control group (e.g., placebo, waitlist, relaxation training). This study also examined moderator variables related to each condition. The 24 studies used in this meta-analysis had a total sample size of 1,223 participants who completed the posttest (656 in treatment and 567 in control groups). All treatment modalities were efficacious in reducing OCD symptoms. Effect sizes were very large for CBT ($d = 1.742$), and combined treatment ($d = 1.710$) and were significantly greater than the moderate effect size for pharmacotherapy alone ($d = .746$). A meta-regression model was used to predict the effect of CBT, pharmacotherapy, and combined treatment controlling for type of control group. Assuming an active control group, the expected effect for CBT was 1.203, for pharmacotherapy .745, and for combined treatment 1.704. In this analysis, CBT still exhibited a larger effect size than pharmacotherapy. Additionally, depression, anxiety, and other secondary responses improved, especially for participants who received CBT.

Utilization of a CBT protocol with high family involvement and total number of intervention hours had a significant positive impact on the effect size. Clomipramine was more efficacious than serotonin reuptake inhibitors (SRIs) but was not recommended for use due to more severe side effects.

McGuire et al. (2015) conducted a meta-analysis for the efficacy of CBT and medication in childhood OCD relative to comparison conditions (e.g., placebo, waitlist, relaxation training). They also examined treatment moderators. The meta-analysis included 20 RCTs, producing a sample size of 507 for CBT and 789 for SRIs. Treatment outcome was assessed in terms of efficacy, response, and symptom/diagnostic remission. CBT produced large treatment effects according to all three metrics of treatment outcome. Greater CBT effects were found in the context of greater co-occurring anxiety disorders, greater therapeutic contact, and lower treatment attrition. SRI treatment produced moderate treatment effects according to the three metrics of treatment outcome. The only moderator of the drug treatment outcome was that better methodological quality was associated with a lower treatment response.

Wu, Lang, and Zhang (2016) examined 13 CBT trials for OCD in children ($N = 415$) that included the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) as an outcome measure. A weighted mean difference (WMD) was calculated by comparing mean and standard deviation of pre- and post-treatment CY-BOCS scores for patients treated with CBT. CY-BOCS scores differed significantly between pre-treatment and post-treatment based on the WMD in the direction of significant symptom improvement.

A meta-analysis was conducted by Thompson-Hollands, Edson, Tompson, and Comer (2014) to determine potential pooled effects of family inclusive treatment (FIT) for OCD and identify factors that explain variable treatment responding. This analysis included 29 studies ($N =$

1,366) that examined the response to treatment for children and adults with OCD, including OCD symptomology and global functioning. For the entire sample, the mean age was 17.89 ($SD = 9.72$; range = 7.1–37.0). FIT for OCD found large treatment effects on OCD symptom reduction (pooled $d = 1.68$) and increased global functioning (pooled $d = .98$). An analysis of moderators showed that individual FIT compared to group FIT was superior at increasing global functioning. FIT targeting symptom accommodation, compared to no targeted symptom accommodation intervention, was linked to increased global functioning as well.

Iniesta-Sepúlveda, Rosa-Alcázar, Sánchez-Meca, Parada-Navas, J. and Rosa-Alcázar, (2017) reviewed the current literature with the purpose to analyze global effectiveness of cognitive-behavior-family treatment (CBFT) with extensive parental involvement for children with OCD. The Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) and parent-report of family accommodation with the Family Accommodation Scale for Obsessive-Compulsive Disorder were used as outcome measures. Potential moderator variables were also examined. This meta-analysis included 27 RCTs that used CBFT (individually vs. group) and 6 control groups (waitlist, relaxation training). The total sample size was 893 in the posttest measurement. The effect size index was the standard pretest-posttest mean change index. For OCD symptoms, the adjusted mean effect size for CBFT was clinically significant in the posttest ($d_{adj} = 1.464$). For family accommodations, effect size was statistically significant but to a lesser extent than for OCD symptoms ($d_{adj} = 0.511$). CBFT was judged to be an effective treatment for reducing OCD symptoms but with a limited effect for family accommodation. However, the authors suggest that these results should be interpreted with caution, as only 9 studies have provided accommodation data with no available posttest controls for comparison. Superior treatment outcome was noted for participants who completed individual CBFT over group

CBFT. In summary, the meta-analytic findings lend credence to the utility of CBT and family inclusion in psychological treatments for childhood OCD.

Presenting Problem and Relevant History

Demographics and History

Ian is a 5-year-old male Caucasian Hispanic elementary school student who resides in a midsize city in the Midwestern United States. Ian is currently living with his father John Good, and his mother, Tiana Good, and his paternal grandparents. He has two adult siblings who live outside of the home. Ian is the only child living in the household. The family recently moved in with Ian's paternal grandparents due to financial difficulties, and the family qualifies for state assistance for health insurance. Ian's father has frequently traveled for work since Ian received his diagnosis of ASD, and his mother is the primary caregiver. Mrs. Good reported that Ian has a fantastic relationship with his grandfather but struggles to connect with his grandmother and is frequently reprimanded by her. Ian also experiences a disconnected relationship with his father. Ian frequently has outbursts where the mother has to assist with communication and follow through with tasks. Ian and his mother have a strong relationship.

Education

Ian attends a rural preschool program in a public school and earns satisfactory grades, yet he struggles socially. Mrs. Good has built many layers of support for herself and Ian, including educators from his school and community organizations. However, Ian does not enjoy being around peers. His teachers report that Ian often plays independently and expresses limited enjoyment in activities. He frequently seeks out assurance that he is completing activities correctly. He will, at times, disrupt the class to gain reassurance from the teacher.

Medical/Psychological Treatment History

Mrs. Good reported Ian's health has been a concern since he was three years old. Ian has experienced health problems that include frequent rashes and a milk protein allergy. Ian also has an aversion to eating certain foods due to texture. Due to concerns about Ian's health, Mrs. Good made statements that indicated a need to control many aspects of his daily routine and life, including his clothing and his diet (caloric intake and food type). In the latter part of 2018, the family consulted a team from a local research hospital where the consensus was to insert a feeding tube due to low food consumption. Mrs. Good reported that all medical concerns are now under control. Physicians have concluded that his health has improved and that he has gained weight since using a feeding tube in tandem with independent eating.

Mrs. Good reported that Ian received a diagnosis of ASD when he was two and a half years old. Ian started receiving early intensive behavioral intervention for two years. This treatment was overseen by an autism specialist and intensive individual support provider inside his home and in the community environment. Mrs. Good reported that he made great gains when he was in therapy, including learning how to communicate verbally with others. Ian was receiving 35-40 hours a week of intensive intervention that decreased to 5-10 hours a week when the intensive individual support provider moved. Ian did not receive behavior therapy for the next 8 months. During this time, his aberrant behaviors intensified, and he regressed on previously mastered skills.

Presenting Problem

Ian and his mother requested services from a not-for-profit outpatient community mental health clinic because of her concerns about aggression (hitting, kicking, biting) and Ian's recurrent negative statements of "it's a bad day" when tasks were not completed to "perfection."

Ian repeatedly completed the same task three times when they were “not right” several times throughout the day and made statements of it being “a good day” once they were completed.

Assessment

Diagnostic Measures

Mini International Neuropsychiatric Interview for Children and Adolescents

(MINI-KID). The MINI-KID (Appendix A) was developed by Sheehan et al. in 2010. MINI-KID is a short standardized diagnostic interview for DSM-IV (APA, 2000) and the International Statistical Classification of Diseases and Related Health Problems – Tenth Revision (ICD-10; World Health Organization, 2004) psychiatric disorders in children and adolescents. MINI-KID is an extension of the adult version of the Mini-International Neuropsychiatric Interview (MINI) developed by Sheehan et al., in 1998. The instrument uses two to four screening questions for each disorder. The instrument can be administered by interviewing parent(s) and the child together or separately. In 2016, the MINI-KID was revised to accommodate the adjustments to the DSM-5 and listed as version 7.0.2, with no additional psychometric data to reflect the edits. The MINI-KID (version 7.0.2) was utilized as a diagnostic tool for this case study.

The MINI-KID is completed in a brief semi-structured interview format. Administration time is approximately 30 minutes. It can be used for children between the ages of 4 and 17 (Duncan et al., 2018; Sheehan et al., 2010). The MINI-KID includes modules covering depressive disorders, suicidality, bipolar disorders, anxiety disorders, obsessive compulsive disorder, posttraumatic stress disorder, alcohol abuse, substance abuse, tic disorders, attention deficit hyperactivity disorder, disruptive disorders, psychotic disorders, eating disorders and pervasive developmental disorders. Screening questions are initially answered using a forced choice of “yes” or “no” to experienced symptoms in the disorder-specific subsection. If one of

the questions is affirmed, further investigation ensues to determine if full diagnostic criteria is met. Within each disorder-specific subsection, questions are organized in a sequential, pre-determined order. If the examinee answers “no” to one of the earlier items in the subsection, the subsection is discontinued. After administering each disorder-specific section, the examiner indicates whether the individual is likely to meet criteria for each specific DSM-5 diagnosis. The MINI-KID instructs the clinician to reference the DSM-5 before officially assigning a diagnosis to the examinee.

The psychometric properties of the MINI-KID were evaluated involving two large-scale studies, which included children receiving psychological treatment and a comparison sample of children from the general population (Duncan et al., 2018; Sheehan et al., 2010). The following discusses the psychometric properties of the MINI-KID, the DSM-IV, and DSM-IV-TR screening, respectively. Sheehan et al. (2010) assessed 231 American children where test-retest reliability was assessed by administering the MINI-KID one to five days after the initial administration and completed by the same interviewer. Sheehan et al. (2010) reported a range of test-retest reliabilities from $r = .41$ to 1.00 across the nine categories.

Duncan et al. (2018) assessed 238 American children, comparing children who did not receive mental services with children who were currently receiving treatment. Test-retest reliability was assessed by administering the MINI-KID initially and again 7 to 14 days later by the same interviewer. Across the nine different diagnostic categories, samples, and informants, test-retest reliability fell between $r = .33$ to $.79$, with the average test-retest reliability being $r = .52$ (Duncan et al., 2018). Duncan et al. (2018) noted that substantial to excellent convergent validity was indicated between the MINI-KID to Schedule for Affective Disorders and Schizophrenia for School Aged Children-Present and Lifetime Version (K-SADS-PL).

Assessments of convergent validity between the MINI-KID, the Brief Child and Family Phone Interview (BCFPI), and the K-SADS-PL, which are used to diagnose children and adolescents in clinical settings, produced encouraging results (Duncan et al., 2017; Sheehan et al., 2010). More specifically, the MINI-KID has been shown to agree with the BCFPI, ranging from $r = .29$ to $r = .93$ (average $r = .62$) for the comparable subscales on the youth version. When compared to the K-SADS-PL convergent validity was found to be $k = .57$ for all behavior disorders.

Obsessive-Compulsive Disorder Measures

Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS). The CY-BOCS (Goodman et al., 1986) (Appendix B) is a 10-item clinician-rated or self-report measure. Items are rated on a 5-point Likert scale (0-4). It measures the severity of both obsessions and compulsions (Goodman et al., 1986). This semi-structured measure is used at the beginning of therapy to gather the baseline symptomatology of OCD and then used weekly to rate severity of symptomatology as therapy continues. Obsessive symptoms and compulsive symptoms are assessed separately, including identifying time occupied, interference, distress, ability to resist, and degree of control. The obsessive and compulsion section is summed within its symptom category; a total score is calculated from both sections (0-40). Scores are interpreted as follows: subclinical (0-7), mild (8-15), moderate (16-23), severe (24-31), and extreme (31-40). The CY-BOCS has good internal consistency with an alpha of .87 (Goodman et al., 1986). Specifically, with individuals with ASD and OCD, Wu et al. (2014) noted good overall internal consistency; however, the obsession severity scale produced an alpha of .86 and the compulsion severity scale produced an alpha of .59. Goodman et al., (1986) found the CY-BOCS demonstrated high convergent validity across Tourette's Disorder Scale – Parent Rated (TODS-PR) scale (Storch et al., 2004), the National Institute of Mental Health – Global

Obsessive-Compulsive Scale (NIMH-GOCS; Freeman, 2011), and the Child Obsessive Compulsive Disorder Impact Scale (COIS; Cook et al., 2015). The CY-BOCS shows good interrater reliability and construct validity in a pediatric ASD population (Wu et al., 2014).

Additional Objective Measures and Subjective Measures.

Vineland Adaptive Behavior Scales - 3, Comprehensive Interview Form (Vineland-3). The Vineland-3 (Appendix C) (Sparrow, Cicchetti, & Saulnier, 2016) is a 3-domain core adaptive measure (Communication, Daily Living Skills, and Socialization) with two optional domains (Motor Skills and Maladaptive Behavior). Although the Vineland-3 is offered in a variety of forms, this case study utilizes the Comprehensive Interview Form. The Vineland-3 is described as an easily comprehensible, standardized instrument to assess adaptive function in children and adults (birth through age 90+) (Sparrow, Cicchetti, & Saulnier, 2016). The Vineland-3 can be administered in a semi-structured interview style within 40-50 minutes with both optional domains completed. A standard score of adaptive functioning is indicated as respondents note 0 as “Never”, 1 as “Sometimes”, and 2 “Usually”. The score from each subdomain creates a raw score converted into a standard score to be compared to an age equivalent score. Standard scores are then converted into Adaptive Behavior Composite Scores, similar to a standard score of an IQ test. Using a professional interviewer style, the clinician counters misperception by the interviewee and provides clinical judgment regarding overall interpretation (Sparrow, Cicchetti, & Saulnier, 2016). The Vineland-3 uses qualitative labels to describe the individual’s adaptive performance ability in each domain: High, Moderately High, Adequate, Moderately Low, and Low Adaptive Level. According to Sparrow, Cicchetti, and Saulnier (2016), internal consistency of the interview form averaged from good to excellent (.83-.98), and test-retest reliability of the interview form averaged good to average (.83-.97). The

Vineland-3 has high convergent validity to the Bayley-III Adaptive Behavior Scale (Sparrow, Cicchetti, & Saulnier, 2016).

Achenbach Child Behavior Checklist – (CBCL/1.5-5). The CBCL/1.5-5 (Appendix D) (Achenbach & Rescorla, 2000) is for ages 1.5 to 5 years old and is a component of the Achenbach System of Empirically Based Assessment (ASEBA). The ASEBA system is comprised of various forms to assess the behavioral, emotional, and social functioning of people ranging from 18 months to over 90 years (Rescorla, 2005). Although the CBCL is offered in a variety of forms depending on the age of the child and the rater (i.e., parents, teachers, or caregivers), this case study utilizes the CBCL/1.5-5 parent version. The CBCL/1.5-5 does not require training to administer and can be completed in 10 to 15 minutes. Respondents rate each of the 99 items on the CBCL/1.5-5 based on the child's behavior within the past two months on a three-point scale: (a) 0, not true; (b) 1, somewhat or sometimes true; or (c) 2, very true or often true (Rescorla, 2005).

The CBCL/1.5-5 yields T scores ($M = 50$, $SD = 10$) for seven “syndrome” scales: Emotionally Reactive, Anxious/Depressed, Somatic Complaints, Withdrawn, Sleep Problems, Attention Problems, and Aggressive Behavior (Achenbach & Rescorla, 2000). The form also provides five “DSM-oriented” scales: Affective Problems, Anxiety Problems, Attention Deficit/Hyperactivity Problems, Pervasive Developmental Problems, and Oppositional Defiant Problems. Each of the syndrome scales are grouped into broader scales (i.e., Internalizing, Externalizing, Total Problems). Achenbach and Rescorla (2000) describe the Internalizing scale as being comprised by the Emotionally Reactive, Anxious/Depressed, Somatic Complaints, and Withdrawn syndrome scales. The Externalizing scale is determined by the scores for the Attention Problems and Aggressive Behaviors syndrome scales. The Total Problems scale is

derived from the sum of all 99 items on the CBCL/1.5-5. According to Achenbach and Rescorla (2000), the CBCL/1.5-5 was standardized based on the scores from a national sample of 700 non-referred children. Achenbach and Rescorla (2000) provide information regarding the reliability of the CBCL/1.5-5 based on test-retest, cross-informant agreement, and internal consistency coefficients. Test-retest coefficients were obtained by comparing the ratings of 68 non-referred children by their mothers on two occasions approximately 8 days after the initial completion. The scales revealed a test-retest reliability ranging from .68 to .92, with a mean of .85 across all scales. The mean reliability of cross-parent agreement was .61. The degree of internal consistency was represented by Cronbach's alpha, which determines how consistent items are within the same test. A comparison of the syndrome scales revealed coefficients ranging from .66 to .95. The DSM-Oriented scales ranged from .63 to .86. The older version of the CBCL/2-3 was compared to the Richman Behavior Checklist (BCL) yielding correlations ranging from .56 to .77. Further support was reported when the CBCL/2-3 Total Problem scale correlated with a frequency rating of .70 with The Toddler Behavior Screening Inventory and the Infant-Toddler Social and Emotional Assessment (Achenbach & Rescorla (2000)).

Fear Hierarchy. A hierarchy is an individualized list of situations in which the client experiences distressing obsessions and compulsions. The client, family members, and therapist discuss distressing situations and create a list of potential specific situations (e.g., "buckling seat belt") or general categories (e.g., "completing tasks independently") where OCD symptoms produce a large barrier to daily functioning. The client and therapist consider each distressing situation to determine which situations would be anxiety-provoking by rating the situation utilizing the "Feelings Thermometer" (Freeman & Garcia, 2009). The "Feelings Thermometer" is a scale ranging from 0 (no anxiety; not necessarily happy but calm and relaxed) to 10 (the

worst anxiety the person has experienced or can imagine experiencing when wanting to engage in a compulsion). The client rates the fear/anxiety for each situation, indicating the level of distress (butterflies) experienced on the feelings thermometer. The distressing thoughts and or events are then rank-ordered with the first event being the least distressing rating (lowest thermometer rating given), and the last event being the most distressing event (the highest thermometer rating given). The hierarchy is used as an individual measure of treatment outcomes.

Treatment Goal Tracking Form. This measure was created by the therapist to track behaviors corresponding to treatment goals. During exposure sessions, the therapist used this measure to track the frequency of behaviors or the number of attempts or responses in which a behavior occurred. For some behaviors, frequency was measured through a partial interval recording measurement. That is, it was noted when the behavior occurred during a defined interval (e.g. attempts to engage in a compulsion, response prevention). For other behaviors frequency was tracked across a defined interval. That is, it was noted whether the behavior occurred during the entire length of that interval (e.g. calm body and voice). The behaviors operationally defined. Data collected using this measure was graphed to show progress. Progress is indicated when goals are met at a specified criterion and maintained for a target number of sessions. When the target is achieved, measurement is discontinued.

Diagnostic Assessment Results and Objective Interpretation.

The therapist administered the MINI-KID modules for Oppositional Defiant Disorder (ODD), Social Anxiety Disorder (SAD), Generalized Anxiety Disorder (GAD), and Obsessive-Compulsive Disorder (OCD) and CY-BOCS to obtain information relevant to making an accurate diagnosis of OCD. The Vineland-3 was used to determine Ian's level of adaptive living

tasks per parental report to help determine treatment planning. The CBCL was used to gather information relevant to parental concerns about maladaptive behaviors and perceived emotional problems.

MINI-KID. During the administration of the MINI-KID modules for ODD, SAD, GAD, and OCD. Mrs. Good reported that he appeared afraid in social situations but not afraid of someone watching him. No reports were made by Ian or his mother with experiencing a fear of being teased, difficulties talking in front of his peers, or him being afraid of eating or writing while being observed, indicating no presence of SAD. Ian and his mother both indicated that he was not worried about several things at once (e.g., school, friends, health). Ian reported that it “needs to be right.” Mrs. Good elaborated that Ian was not worried about multiple areas of his life; instead, he meant that things needed to be a certain way for him to complete his daily routine, indicating no presence of GAD.

Mrs. Good stated Ian has experienced three symptoms consistent with ODD over the last six months, including: losing his temper, being “touchy” or easily annoyed by others, and refusing to do what others tell him to do. Ian does not meet DSM-V criteria for oppositional defiant disorder because his behaviors are not indicative of a pattern of angry/irritable mood, argumentative, or vindictive behavior lasting 6 months and including four symptoms.

Ian and his mother reported 4 symptom criteria consistent with OCD over the last month, including: being unable to banish bad thoughts and impulses, or impulses go away but thoughts repeatedly coming back after attempts to get rid of them (criterion A); not being able to stop doing the ritual over and over again multiple times a day, which causes difficulties for Ian at school, at home, and with his family (criterion B); the obsessive-compulsive symptoms are not attributable to psychological effects of substance or other medical conditions, and no organic

causes of symptomology, as the therapist was mindful of Ian's nutritional health as a factor for instigating symptom expression (criterion C); and the current symptomology was not better explained by his previous diagnosis or an additional diagnosis (criterion D). Ian has obsessions prior to his engagement in compulsions. His distress is caused by the obsession rather than rigidity of routine. Ian's behaviors of excessive reassurance seeking and perfectionistic task completion caused problems at home, at school, and with his extended family, starting 6 months ago.

All diagnostic criteria were met for OCD. Parental report indicated poor insight on Ian's behalf. Ian had completed a diagnostic reevaluation for autism spectrum disorder three months prior to this evaluation, which concluded that Ian continues to struggle with social, communication, and behavioral excesses and deficits indicating the presence of ASD.

CY-BOCS.

Mrs. Good completed the CY-BOCS to assess Ian's obsessive-compulsive symptoms. Mrs. Good reported that Ian struggles with two current obsessions, including excessive concern for perfection and need for reassurance (e.g., *I am bad if it isn't done to perfection* – “not a good day;” and *I need to be told that I am doing the right thing* – “Mamma, it's gonna be a good day”). Mrs. Good reported that Ian has struggled with a range of compulsions in conjunction with his obsessions. Ian is compelled to complete certain daily living tasks at least three times (e.g., brushing his teeth and pouring himself a drink to his desired stopping point), and rituals of checking tasks repeatedly to make sure he didn't make a mistake. He would continue performing these actions of compulsions/rituals until he “felt right.” Mrs. Good also reported that Ian has several rituals that involve her. Mrs. Good reported that if she did not pour liquid to a specific line in Ian's cup he wouldn't drink from the cup until she dumped out the cup and refilled it three

separate times. When playing with toys together, she needs to leave the toy in the “perfect” place when finished or Ian would knock down the toys and reset them three times. After completing tasks multiple times until it “felt right,” Ian would seek out reassurance (“It’s going to be a good day mommy? It’s a good day? It’s a good day mom?”) from Mrs. Good. Mrs. Good reported that she would respond to the requests for reassurance and provide additional attention to Ian and physical touches (hugs, squeezes, and rubbing his hair) when he sought out reassurance. According to the score collected from Mrs. Good, Ian has a CY-BOCS total score of 32 which is in the extreme range of severity.

Vineland-3.

Ian’s Adaptive Behavior Composite (Standard Score = 74) summarizes his overall level of adaptive functioning. The confidence level indicates that there is 95% confidence that Ian’s true Adaptive Behavior Composite is within the range of 69 and 78. Ian’s Adaptive Behavior Composite score places his overall adaptive behaviors range from a *Low* to *Moderately Low* level of functioning.

The Communication domain score provides a measure of how an individual speaks and understands others. Thus, this domain focuses on communication used in functional situations on a daily basis. The skills in this domain include, among others, the ability to listen to others, communicate information verbally, and reading and writing. There is a 95% chance that Ian’s Communication domain score falls between 69 and 81. Ian’s communication skills are within the *Moderately Low* range of functioning (Standard Score = 75). Mrs. Good reported that, when instructed, Ian can state his complete home address correctly when asked, identify left and right, and read simple stories out loud. Mrs. Good reported Ian is unable to state how he is feeling upon

request when he is upset, complete tasks when requested up to an hour later, or write simple sentences of three or more words.

The Daily Living Skills domain score gives a measure of the daily living skills that an individual utilizes for everyday tasks, such as taking care of personal needs, caring for home maintenance, and using resources in the community. There is a 95% chance that Ian's Daily Living Skills domain score falls between 66 and 75. This indicates that Ian's daily living skills (Standard Score = 70) are within the *Moderately Low* range of adaptive functioning. Mrs. Good reported that Ian is able to cover his mouth when he coughs, make simple snacks or meals when asked, and names "penny," "nickel," "dime," and "quarter," when asked. Mrs. Good reported that Ian is unable to use the toilet during the day and night independently, understand dangerous situations, or understand that some items cost more than others.

The Socialization domain score describes interpersonal skills – that is, skills which an individual might use for free time, to get along with others, and to play activities. For example, this domain assesses the ability to develop relationships and engage in social activities, and the capacity to control emotions and manage difficulties. There is a 95% chance that Ian's Socialization domain score falls between 60 and 68. His socialization abilities (Standard Score = 65) are in the *Low* range of functioning. Mrs. Good reported that Ian gives cards and/or gifts to immediate family members on "special days" on his own initiative and will copy a peer's behavior in a new situation when he encounters a situation and is unsure how to act. Mrs. Good reported that Ian is unable to respond to hints or indirect cues in conversation, nor is he aware of the value of others' time.

CBCL-1.5-5.

The Child Behavior Checklist was completed by Mrs. Good to obtain her perception of Ian's problems. On the Child Behavior Checklist 1.5-5 (CBCL-1.5-5) problem scale for boys aged 5, the Total Problems scale score was in the clinical range (above the 90th percentile). Mrs. Good reported *clinical* observations on the *Withdrawn* and *Aggressive Behavior* subscales and *borderline* elevation on the *Emotionally Reactive* and *Attention Problems* subscales. These scores indicate that Mrs. Good reported more problems than are typically reported for boys aged 5, particularly *Withdrawn*, *Aggressive Behavior*, *Emotionally Reactive*, and *Attention Problems* nature.

DSM-5 Diagnoses

F40.11 Obsessive Compulsive Disorder, Poor Insight

F84.0 Autism Spectrum Disorder, Mild

Differential Diagnosis:

300.02 (F41.1) Oppositional Defiant Disorder. Mrs. Good stated that Ian struggles with following requests to stop engaging in ritualistic behaviors. Ian reported not wanting to make others upset when he would engage in ritualistic behaviors. Mrs. Good reported that he doesn't often appear angry or resentful and is not argumentative with authority figures. Ian does not meet DSM-V criteria for oppositional defiant disorder because his behaviors are not indicative of a pattern of angry/irritable mood, argumentative, or vindictive behavior lasting 6 months and including four symptoms.

300.23 (F40.11) Social Anxiety Disorder (Social Phobia). Ian and his mother did report that he is fearful in social situations. Ian described his fear as difficulty with not having play "go right" (toys set up three times) and "having a bad day" if play does not "go right." Mrs. Good

reported that he requests peers to manipulate toys in a specific way but struggles with following other children in play. According to Mrs. Good, he has difficulty engaging in social reciprocity. He fails to share interests, emotions, or affect with others. Ian reported that if he did not complete steps in a specific way, or if something was “not right,” he would “replay” it until he felt better. Neither Ian nor his mom expressed that Ian experienced fear of negative evaluation by others. Rather, his discomfort in social and play situations is better accounted for by his need for perfection that is associated with OCD and the rigidity of play commonly seen with a diagnosis of ASD rather than social anxiety disorder.

300.02 (F41.1) Generalized Anxiety Disorder. Ian and his mother reported concern associated with adaptive living skills, school performance, and social relationships. Ian stated that he has a need for living tasks, schoolwork, and play to be completed to perfection or “go right” by completing a specific routine. Ian described more need for perfection and routine “rituals” rather than concern about school performance and social relationships. Ian does not meet the DSM-V criteria for generalized anxiety disorder; his symptoms are better explained by another mental disorder, as his anxiety is focused on the need for perfection and rituals.

For the purpose of the current case study, OCD was the primary diagnosis targeted, consistent with his presenting problem. While in treatment for OCD symptoms, the family continued to be on a waitlist for behavior analytic services for his ASD.

Case Conceptualization

Etiology

Choripita and Barlow (1998) developed the conceptual groundwork for limited perceived control in susceptibility to anxious symptoms across different developmental stages. The triple vulnerability model of psychopathology is an interaction of diatheses, suggesting several

vulnerabilities must be in place before anxious symptoms are expressed (Barlow, 2002).

According to this model, the generalized biological vulnerability consists of genetic influences (heredity) that promote the expression of anxiety and negative affect. Some individuals have a predisposition to have a heightened biological reactivity to novel environments or stressors while having a lower threshold for a fight-or-flight reaction to occur (Barlow, 2002).

The triple vulnerability model states that biological vulnerability is expressed when psychological vulnerabilities are present as well. The generalized psychological vulnerability is the perception that environmental events are unpredictable and uncontrollable, in turn decreasing the individual's sense of control (Barlow, 2002). Parenting influences then generalized psychological vulnerability of an individual where lack of predictable care and nurturing from caregiver's impact the sense of control a child creates (Barlow, 2002).

Specific psychological vulnerability must be present along with the generalized biological and psychological vulnerabilities in order for a specific clinical disorder to develop (Barlow, 2002). Specific psychological vulnerability is developed by learning through early experiences or observation that a specific feature, internal sensation, or situation is dangerous. For individuals with anxiety disorders, beliefs that anxiety-related sensations and events are uncontrollable contributes to the maintenance and exacerbation of symptoms (Barlow, 2002).

Ian presented with multiple contributing factors that led to the development of his OCD. Ian has a genetic predisposition, as Ian's mother reported experiencing OCD symptoms across her lifespan. Ian exhibits both anxiousness and perfectionistic tendencies similar to the reports his mother discussed during the diagnostic interview.

Environmental factors may also contribute to the onset of OCD. Psychosocial experiences can modify thinking patterns of an individual, in turn changing the way one interacts

with their environment based on what they have learned (Franklin & Foa, 2014). There is also evidence that stressful events can be a risk factor for individuals who are genetically predisposed to OCD. Findings suggest that children who are repeatedly exposed to stressful events experience an increased likelihood of OCD symptomology (Grisham, Anderson, & Sachdev, 2008).

Ian learned that completing tasks until he completed them correctly was desired when in therapy for ASD. Ian's early intensive behavioral treatment for ASD could have increased stress for him, increasing the likelihood that OCD symptoms were expressed. During therapy, when responses were incorrect, Ian would need to complete the task a total of three times (first response [incorrect response], prompted response, independent response, reinforcement) until he responded correctly. Mrs. Good reported that it didn't take long for Ian to learn new skills, but when he was learning, he had to complete tasks three times or independently to receive reassurance of the correct response. Ian learned through these experiences that he would need to complete tasks multiple times independently if he was incorrect in order to gain reassurance and social praise for perfect completion of said tasks. Ian's specific psychological vulnerability may have developed through early experiences that taught him that it is important to get things "right" and be reassured by others that his responses are indeed correct.

Maintenance

Throughout Ian's development, his mother reported that he struggled completing independent adaptive skills (e.g., brushing his teeth, pouring liquid into his cup) and social interactions with his same-aged peers. His mother reported that Ian would become "overwhelmed" and require reassurance as he attempted to complete tasks independently. She expressed wanting him to be a "normal" kid and "to be like everyone else" performing skills

such as brushing his teeth, pouring his own drink, playing, cleaning up his toys, and being a good friend. Ian learned that his mother would provide attention and praise for completing adaptive living tasks independently without errors. Positively reinforcing the completion of adaptive skills in the presence of reassurance-seeking behaviors contributed to the current ritualized reassurance-seeking behaviors.

Mrs. Good attempted to decrease reassurance to Ian during these daily living tasks. When his mother did not provide feedback, Ian would engage in maladaptive behaviors, such as throwing a tantrum or aggression towards her or family pets (extinction burst). Ian's mom noticed that tantrums decreased as he received reassurance (negatively reinforcing Ian's mom behavior of providing reassurance at his request). Providing reassurance positively reinforced his reassurance-seeking behaviors.

Similarly, when Ian would wake up and request that it be "a good day" (obsessive thought) to his mom, she would respond with affirmation (positive reinforcement) and allow Ian to engage in his daily routine until he completed it perfectly (compulsion), which reduced his anxiety (negative reinforcement of his compulsions). If Ian's mom did not allow him to engage in or complete his compulsions, he would engage in tantrum and/or aggressive behaviors, punishing her attempts to prevent him from ritualizing. Mrs. Good would then allow Ian to complete his routine (ritualizing) while vocalizing reassuring statements to him (positively reinforcing his compulsions).

Through this chain of events, Ian did not have the opportunity to learn that negative consequences do not occur when he is not reassured or when he is unable to complete tasks multiple times. Ian was never given the opportunity to tolerate his distressing symptoms and

learn that he would be able to have “a good day” in the absence of continued reassurance and perfectionistic behaviors.

Treatment Goals and Plan

With help from his mom and therapist, Ian was able to establish goals:

- 1) Decrease frequency of attempts to complete compulsive behaviors by 25% compared to baseline engagement in compulsive behaviors when engaging in non-preferred tasks for two consecutive sessions.
 - a. Increase criterion to 50% when a decrease of 25% has been maintained across two consecutive sessions.
- 2) Show calm body and voice when requested to complete a non-preferred exposure task for 15-minutes with data collected and feedback given on appropriate behavior every 2-minutes. Mastery is indicated when Ian engages in appropriate behavior 80-100% of opportunities for three consecutive sessions.
 - a. Show calm body and voice when requested to complete a non-preferred exposure task for 20-minutes with data collected and feedback given on appropriate behavior every 5-minutes. Mastery is indicated when Ian engages in appropriate behavior 80-100% of opportunities for three consecutive sessions.
- 3) Decrease severity of obsessive and compulsive symptoms by 25% compared to the average baseline score on the CY-BOCS and maintained across three assessment opportunities.
 - a. Increase criterion to 50% when a decrease of 25% has been maintained across three assessment opportunities.

- 4) Utilize breathing strategies when requested by individuals when calm and escalated 80-100% across three consecutive sessions for both conditions individually.
 - a. Objective: Ian will be able to count to ten and take a breath, “Take 10,” when requested in the absence of aberrant behavior. Ian will request to “Take 10” if he has not fully de-escalated.
- 5) Complete exposure tasks when requested in the absence of task refusal or tantrum/whining behavior and use at least one learned skill (breathing techniques and bossing back) every 5-minute partial intervals throughout the duration of exposure tasks when requested or independently. Mastery is indicated when Ian engages in appropriate behavior 80-100% of opportunities for three consecutive sessions.
- 6) Communicate anxiety/worry to others when requested by an adult to indicate his severity of symptoms when calm or escalated in the presence of a visual prompt (feelings thermometer) 80-100% in each condition individually for three consecutive sessions.
 - a. Objective: Ian will be able to indicate the number he would rate his “feelings/worry” with a visual prompt of the feelings thermometer and expressively state what number he would rate himself and what symptom(s) he was experiencing.

Parent Goals:

- 1) Increase use of specific praise statements while utilizing a token economy chart to increase desired behavior 80-100% independently during exposure sessions for three consecutive sessions.
- 2) Independently use response prevention when opportunities occur during exposure sessions with therapist within three feet for 80-100% for three consecutive days.

- a. Independently use response prevention when opportunities occur during exposure sessions with therapist six feet away for 80-100% for three consecutive days.
- 3) In the absence of therapist prompting, model two opportunities of appropriate use of tools that are used to decrease symptom severity (bossing back or breathing strategies) for Ian to imitate during exposure tasks across three consecutive sessions.
 - a. In the absence of therapist prompting, model five opportunities of appropriate use of tools that are used to decrease symptom severity (bossing back or breathing strategies) for Ian to imitate during exposure tasks across three consecutive sessions.
 - 4) Engage in at least two opportunities of self-care (engaging in preferred behaviors) within a seven-day period (between sessions) for two consecutive sessions.
 - a. Engage in at least four opportunities of self-care (engaging in preferred behaviors) within a seven-day period (between sessions) for two consecutive sessions.

Psychoeducation

The therapist and Mrs. Good completed the first two sessions without Ian. Goals of psychoeducation were to 1) provide education about OCD, 2) discuss any misattributions about OCD, 3) discuss the difference between OCD symptomology and typically development, and 4) describe the course of treatment. The therapist provided psychoeducation on the OCD Cycle (i.e., obsessions, anxiety, compulsions, relief), the development and maintenance of OCD (i.e., genetics, neurobiology, cognition, and avoidance through compulsions), and how FB-CBT with ERP could decrease Ian's symptomology of OCD if implemented during and outside of therapy.

FB-CBT for young children relies heavily on the involvement of the family. Mrs. Good agreed to be involved throughout the course treatment and showed an eagerness to learn. She

took notes during sessions and asked clarifying questions. Mrs. Good reported concern about how her own worries would impact Ian. Due to this concern, the therapist discussed the importance of parental self-care and how she would work on her own mental health to better help her child. Mrs. Good and therapist also discussed how the strategies (e.g. bossing back, breath techniques, specific praise) utilized with Ian would be helpful to her as well.

In the third session, Ian attended the session with his mother. Information was provided in a developmentally appropriate language for Ian to understand while the therapist asked questions to check for understanding from Ian. Ian and Mrs. Good made a token chart which was used to enhance the homework of practicing providing differential reinforcement of desired behaviors.

During the fourth through the tenth session, the client engaged in ERP. The child and parent learned and practiced tools to use when unwanted symptoms arise. For example, during one session, the child and parent externalized OCD symptoms as separate from the child by “bossing back” to the symptomology. FB-CBT suggests naming the undesired symptom as a tool to use when “bossing back” to OCD. For Ian, he found it useful to say “green pig” when he experienced an OCD symptom.

The therapist explained exposure and response prevention as a slow process of exposing the child to uncomfortable events until the events are less fear provoking than before. Ian and his mother were made aware that uncomfortable feelings will occur off and on throughout the course of treatment.

Lastly, Ian and his mother worked with the therapist to brainstorm a list of obsessions and compulsions for a fear hierarchy. Items were placed in order with 1 being the least distressing task and 6 being the most distressing task (see Table 1).

Parent Training

Parents play an active role in the implementation of change strategies. Specific parenting goals include: 1) reduce family accommodation of OCD symptoms, 2) reduce blame and criticism related to OCD symptoms, 3) promote positive problem solving, and 4) help create an understanding of the parent's role in modeling behaviors. There are three parenting tools that are relevant to achieving these goals: 1) differential attention (reinforcing appropriate behaviors), 2) modeling (engaging in behaviors that parents want their child to engage in), and 3) scaffolding (parent guiding emotional regulation in a moment of heightened fear response to increase independent use in the future). Figures 2-5 display Mrs. Good's progress with these training goals over the course of treatment.

The therapist explained how to use a preference assessment to select effective items and activities to reinforce desirable behaviors and how to extinguish problem behaviors. A token economy system was created and taught to the family. The token board was utilized during exposure tasks to add a visual representation of appropriate behavior and access to a desired outcome. Ian earned tokens for using coping strategies, engaging in alternative behaviors (completing tasks in the absence of compulsions or staying calm in the presence of feared situations and/or stimuli), and giving ratings of his distress. Mrs. Good and the therapist also discussed how to use the token economy system paired with encouragement when Ian was making positive statements and/or when he was engaging in behaviors that she wanted to increase (completing tasks when requested). Mrs. Good reported a noticed change during session four (Appendix F). She noted that the token system seemed to be more enjoyable to Ian during FB-CBT although it had been a struggle to implement during ABA therapy.

Child Training

In this treatment, children need to: 1) understand exposure tasks, and 2) rate their own anxiety. Ian was taught to use developmentally appropriate tools including: 1) learning how to externalize OCD (“boss back”) and 2) using the feelings thermometer to rate anxiety. Using the feelings thermometer across multiple environments (e.g., home, therapy sessions) helped to increase communication between Ian and his mother about how he was feeling.

ERP involves systematically creating situations that the child is uncomfortable in, and then therapeutic tools are used to work through the situations. The session four transcript below depicts how ERP was implemented and incorporated a variety of therapeutic tools. Mrs. Good modeled a variety of alternative behaviors during sessions when Ian started to engage in obsessive thoughts. She was able to model deep breathing exercises and the use of sensory items to keep his hands engaged. During the beginning of treatment Mrs. Good reported that Ian would engage in aggressive behavior towards her that had caused injury in the past. Due to the severity of this behavior, Ian was taught how to request a break (being alone in his room) in order to be able to leave the environment where he would engage in compulsions until he was able to complete the exposure task in the absence of aberrant behavior. The therapist discussed that this strategy was only to be used if Ian engaged in aggressive behavior. Mrs. Good was to exhaust her efforts utilizing the other tools and remain persistent when Ian was completing an exposure. Furthermore, Mrs. Good reported that Ian was using “bossing back” outside of exposures and that she was using it for herself. Figures 6-9 display Ian’s progress with these training goals over the course of treatment.

Family Focused Relapse Prevention

Ian and his mother completed ten therapy sessions. Six of those sessions were used to complete in-session exposures. The typical course of treatment is 14 weeks. The family completed nine sessions prior to requesting early termination due to an unexpected move. The tenth session was used to go over treatment progress and celebrate Ian's success.

During the last exposure session prior to the termination session, Ian was able to complete 20 minutes of an exposure task where he watched his mom move his toys out of their preferred location. Ian chose to walk away from the toys and not reset the items until the next day when he wanted to play with them. Prior to the termination session, Ian's mom filled out treatment measures and aided in the rescoring of the hierarchy form to be discussed at termination.

Relapse prevention was briefly discussed near the end of the tenth session. The therapist reminded Mrs. Good to use the tools practiced in session and rehearse the steps Ian could use to extinguish the "green pig" or the OCD behavior. The therapist also reminded Mrs. Good to routinely model the use of learned parenting tools (e.g., differential attention, scaffolding, exposure and response prevention) in daily life to address emergent worries, anxiety, and address accommodation they occurred. The therapist provided a list of referral locations where evidence-based practices were utilized in close proximity to where the family was moving that could assist in further treatment as needed.

Evaluation of Treatment Outcome

Subjective Evaluation

Mrs. Good reported that she learned to use a variety of tools that modified both Ian's and her behavior. She learned how to give attention to Ian for desired behaviors while managing her

own stress levels about Ian's symptomology. Mrs. Good struggled during the first part of treatment with understanding how previous accommodations increased the difficulty of the extinction process. Freeman and Garcia (2009) stated that a crucial part of treatment is discussing the use of parental scaffolding to remove all of the responsibility from the parent and some to the child. The therapist explained to Mrs. Good that scaffolding is helpful in learning how accommodations for Ian's anxiousness were actually hindering his progress. The therapist conveyed that placing some of the ownership of the compulsive behaviors on Ian and displaying confidence in him would help him "boss back" his obsessive-compulsive behaviors.

The therapist and Mrs. Good discussed how important it was that her "glass be full." In other words, her emotional well-being needed to be stable when completing exposures and other therapeutic interventions with Ian. Mrs. Good reflected that, at the start of creating the hierarchy, Ian wouldn't let her pour his drink into a cup or choose a different cup than the one that he preferred. At termination, Ian was able to use different cups without difficulty. Mrs. Good stated that he is no longer seeking reassurance. Instead, he is being the "boss" of himself and his emotions. During termination, Ian reported that he was going to miss coming to therapy but was excited to keep being "the boss" and that he "learned a lot."

Outcome Assessment Results and Interpretation

During the termination session, Ian, his mother, and the therapist reflected on Ian's growth through treatment by comparing reports and scores from pre-and post-treatment measures.

MINI-KID. At the conclusion of treatment, Ian no longer met diagnostic criteria for OCD (Sheehan et al., 2010). Current obsessive thoughts were managed, and compulsions did not occur.

CY-BOCS. The CY-BOCS was given at the beginning of each session. The weekly scores are shown in Figure 1. According to the scores on the CY-BOCS collected from Mrs. Good throughout treatment, Ian's pretest score was a 32, indicating extreme severity of symptoms related to OCD, where his posttest score was 15, indicating mild severity of OCD symptoms (Goodman et al., 1986).

Additional Subjective and Objective Assessments. Pre- and post-treatment scores are presented for the Vineland-3 and CBCL-PRF in Table 2 and Table 3, respectively. The Vineland-3 indicated an Adaptive Behavior Composite of 74 at pretest, indicating moderately low adaptive range, where posttest Ian's Adaptive Behavior Composite was a 81, indicating in the adequate range of functioning (Sparrow, Cicchetti, & Saulnier, 2016). At pretest Ian's scores within the domains were 75 for Communication and 70 for Daily Living were Ian's posts indicated 80 and 82, respectively, reaching an adequate range of functioning (Sparrow, Cicchetti, & Saulnier, 2016). The domain of Socialization at pretest was indicated to be in the low range of functioning (Standard Score = 65), and at posttest increasing to moderately low range of functioning (Standard Score = 71) (Sparrow, Cicchetti, & Saulnier, 2016). Limited changes in this score is believed to be impacted by Ian's diagnosis of ASD.

The CBCL-PRF at pretest indicated *clinical* observations of *Withdrawn* and *Aggressive Behavior* subscales and *borderline* observations on the *Emotionally Reactive* and *Attention Problems* subscales. These scores indicated that Mrs. Good reported more problems than what are typically reported than for boys aged 5, in these specific subscales (Achenbach & Rescorla, 2000). At posttest, Mrs. Good reported no *clinical* observations and indicated *borderline* observations on the *Withdrawn* and *Aggressive Behavior* subscales indicating slightly more problems than typically reported for boys aged 5 (Achenbach & Rescorla, 2000).

Before the end of session, the therapist reviewed new ratings for the tasks listed on the hierarchy form. Ian was able to use poster paper and a marker to write down pre- and post-treatment ratings creating a visual representation of his symptom reduction, where “0” indicated no anxiety related to the task or thought and “10” indicated the worst anxiety imaginable related to the task or thought (Table 4). Prior to treatment, Ian’s median baseline of anxiety indicated on the hierarchy across six compulsion and obsessions was an “8,” where the median posttest was a “0,” indicating a significant decrease in symptom severity. Utilizing the visual that Ian created, Mrs. Good and the therapist were able to reinforce the growth that Ian made over the course of treatment, highlighting the significant decrease in severity.

Parent Goals. Data were collected utilizing the clinician developed measure (Appendix E) relevant to Mrs. Good’s treatment goals (Figures 2-5) based on the strategies/tools utilized in Freeman & Garcia’s (2009) treatment manual. The line on respective graphs indicate modifications to treatment goals due to the mastery criteria being met, as indicated in the treatment goals section. Overall, Mrs. Good was able to increase her use of specific labeled praise, independently identify when to block compulsions, model a variety of tools for Ian to utilize when he was engaged in a situation that was feared, and improved her self-care to manager her own anxious symptoms wouldn’t impede Ian’s progress.

Client Goals. Data were collected utilizing the clinician developed measure (Appendix E) relevant to Ian’s treatment goals (Figures 6-9) based on the strategies/tools utilized in Freeman & Garcia’s (2009) treatment manual. The line on respective graphs indicate modifications to treatment goals due to the mastery criteria being met, as indicated in the treatment goals section. Ian was able to decrease his need to complete compulsions during feared events over 50% from baseline, engage in feared events with a calm body and voice, engaged in breathing techniques

when requested and independently, and communicated his worry in the presence of a visual prompt.

Transcript: Self-Evaluation

What I Did Well

As a part of the requirements of completing a case study, a transcription of one session is written to allow the reader insight into one session of the student therapists choosing. “I”, the therapist review one session below (Appendix F) and highlight areas of that I could improve upon, as well as strengths that I demonstrated throughout the transcribed session. Comments about the session were made post-facto during the writing of the transcript, where I was able to note the thoughts and reasoning’s behind my thoughts and statements which were made during session and how my thoughts and statements were governed by the behaviors of Ian and Mrs. Good.

I had the opportunity to transcribe a session where several areas of strengths were displayed. I was able to explain how the exposure session would proceed with clarity and provided opportunities for the client and his mother to ask questions. I believe that I collected thermometer ratings as often as the treatment recommended and continued response prevention in the presence of aberrant behaviors. Throughout the session, I was able to demonstrate my ability to create corrective learning experiences, which gave Ian and Mrs. Good the opportunity to grow and learn during the exposure task. These experiences allowed me to validate Ian and his attempts to use strategies he had learned while continuing to stay within the framework of an evidence-based approach. Throughout this transcript, I was able to model appropriate usage of response prevention procedures in the presence of aberrant behaviors while collect baseline data on treatment goals while exposure tasks were being completed. I believe that this was the biggest

strength from this session, as I wouldn't have been able to demonstrate the growth that occurred without this session. I believe that the comments clearly reflect the knowledge that I have obtained through my training, where I was able to conceptualize my client in the present moment and respond in a way that would create opportunities for new associations and thought modifications.

Needs Improvement

When transcribing the session, I realized there are several areas where I could improve my clinical work. I need to provide a clearer opportunity for problem-solving barriers in homework. By increasing brainstorming opportunities, the client and client's mother could have asked clarifying questions and problem-solve potential barriers. I could have then provided reinforcement to both Ian and his mother for creating solutions, increasing their confidence to complete tasks outside of the therapy session. Through transcribing this session, I was able to recognize my lack of reinforcement to Mrs. Good during the exposure. I could have been more specific during this time to praise the efforts of Mrs. Good for not accommodating symptoms during Ian's distress.

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Table 1

Pre-Treatment Brainstorming Session of the Fear Hierarchy

Ranking	Description of Symptom	Label (O, C)	Notes
1	Buckling seatbelt three times.	Compulsion	
2	Opening the toothpaste lid three times.	Compulsion	
3	Resetting objects after parent touches.	Compulsion	Toy trains, specific stuffed animals reset three times
4	I need reassurance to know that I am doing the right thing.	Obsession	
5	I am bad if it isn't done right/in order.	Obsession	
6	Independently pouring liquid into a specific drinking cup until a specific amount indicated on the cup.	Compulsion	The client desired to pour out the liquid from the cup and repeat the process of getting new soda, opening it, and pouring into the cup.

Table 2

Pretest and Posttest Scores on the Vineland Adaptive Behavior Scale – 3rd Edition

Vineland – 3 Domains	Standard Score Pretest	Standard Score Posttest
Communication	75	80
Daily Living Skills	70	82
Socialization	65	71
Adaptive Behavior Composite	74	81

Note: M = 100, Standard Deviation = 15

Table 3

Pretest and Posttest Scores on the Child Behavior Checklist – Parent Report Form. (CBCL-PRF)

CBCL – PRF Domains	Pretest Score	Posttest Score
Emotionally Reactive	67*	62
Anxious/Depressed	58	51
Somatic Complaints	52	52
Withdrawn	79**	67*
Sleep Problems	59	50
Attention Problems	67*	62
Aggressive Behavior	77**	67*

Note: * = Borderline Severity Score and ** = Clinical Severity Score

Table 4

Pre-Treatment and Post-Treatment Fear Hierarchy Rating

Ranking	Description of Symptom	Label (O, C)	Severity Rating Before (Week 3)	Severity Rating Termination (Week 9)	Notes – desired response
1	Independently pouring liquid into specific drink cup until specific amount indicated on the cup.	Compulsion	7	0	Accept cup with liquid in the absence of repeated pouring.
2	Buckling seatbelt three times.	Compulsion	7	0	Sitting in 5-point harness with each clip/buckle clipped individually one times.
3	Opening the toothpaste lid three times.				Closing his own toothpaste lid one time.
4	Resetting objects after parent touches.	Compulsion	8	0	Toy trains, specific stuffed animals touched by parent without resetting objects.
5	I need reassurance to know that I am doing the right thing.	Obsession	8	2	Use bossing back to this during exposures and reinforce outcome.
6	I am bad if it isn't done right/in order.	Obsession	9	2	Use bossing back to this during exposures and reinforce outcome.

Note: Symptom severity was indicated on a Likert scale ranging from 0 (no anxiety; not necessarily happy but calm and relaxed) to 10 (the worst anxiety the person has experienced or can imagine experiencing when wanting to engage in a compulsion).

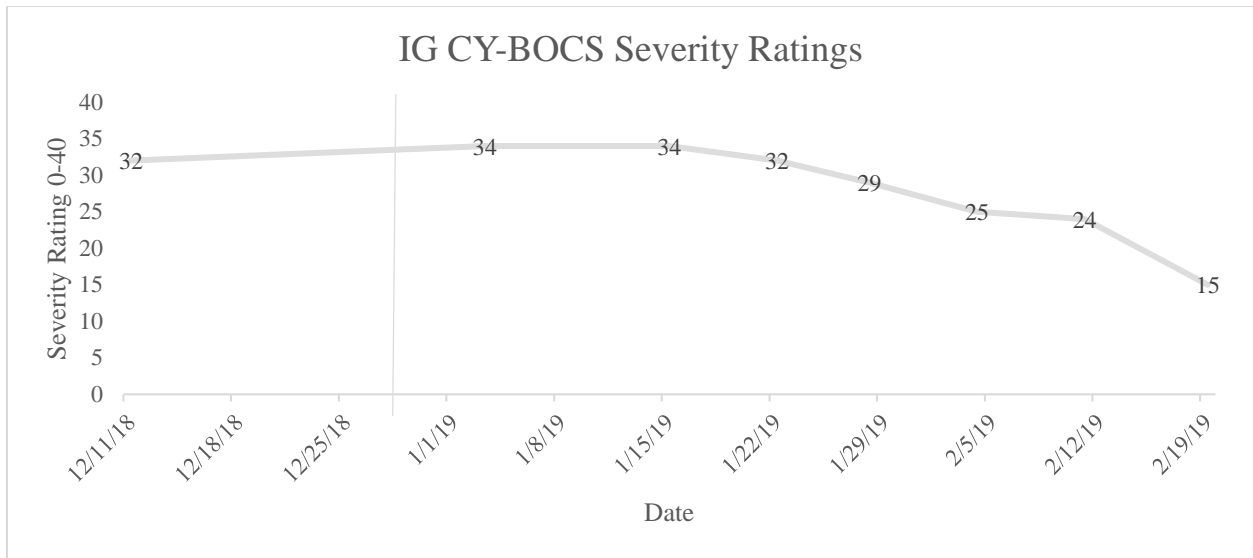


Figure 1 – CY-BOCS Severity Ratings and Child Training Goal 3

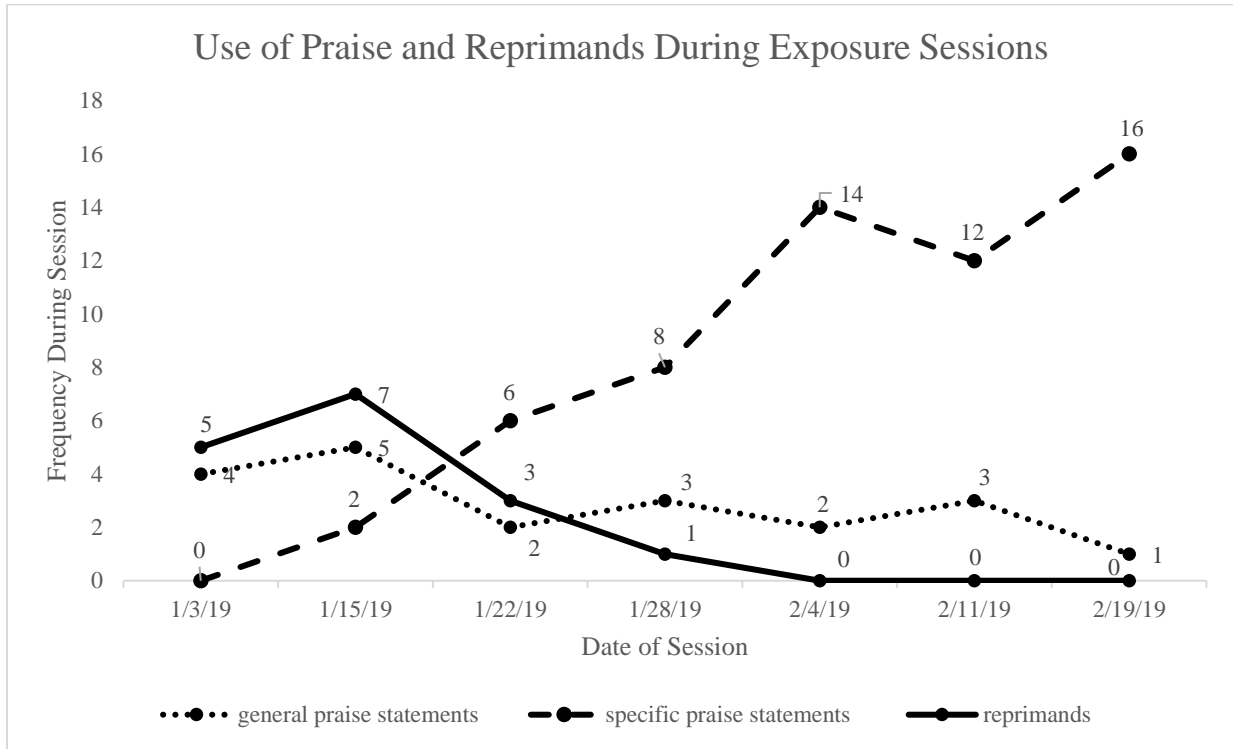


Figure 2 – Parent Training Goal 1

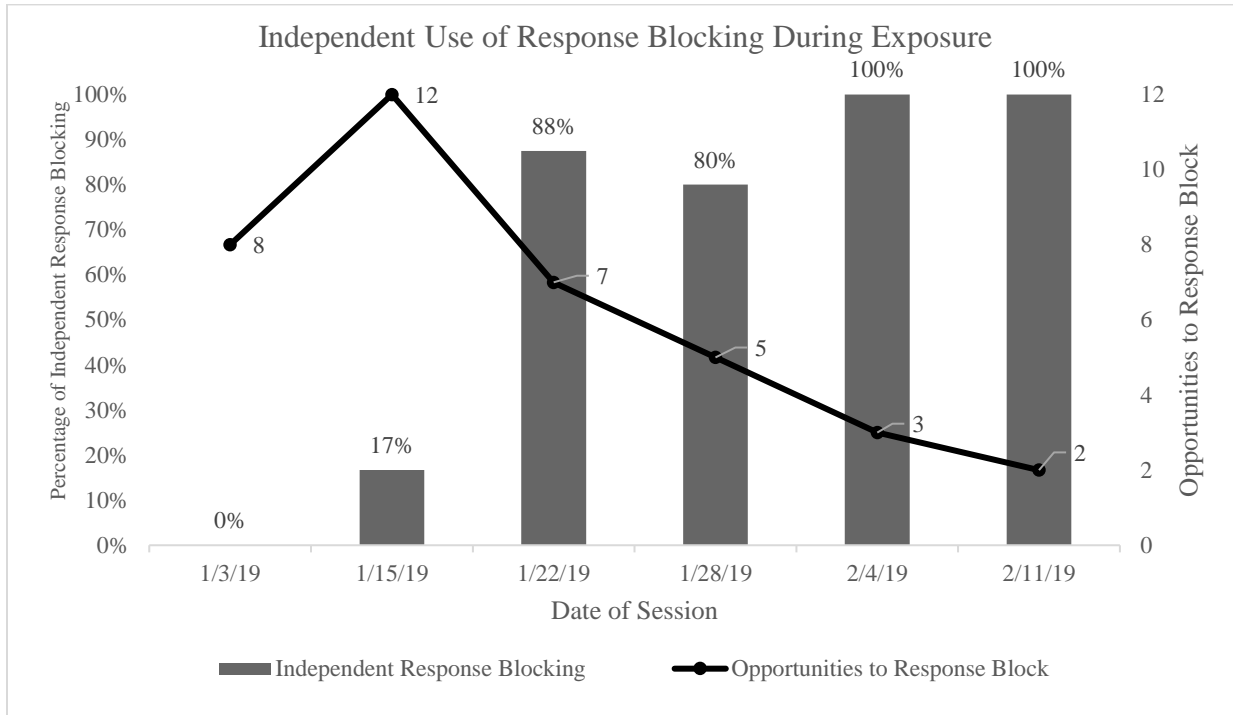


Figure 3 – Parent Training Goal 2

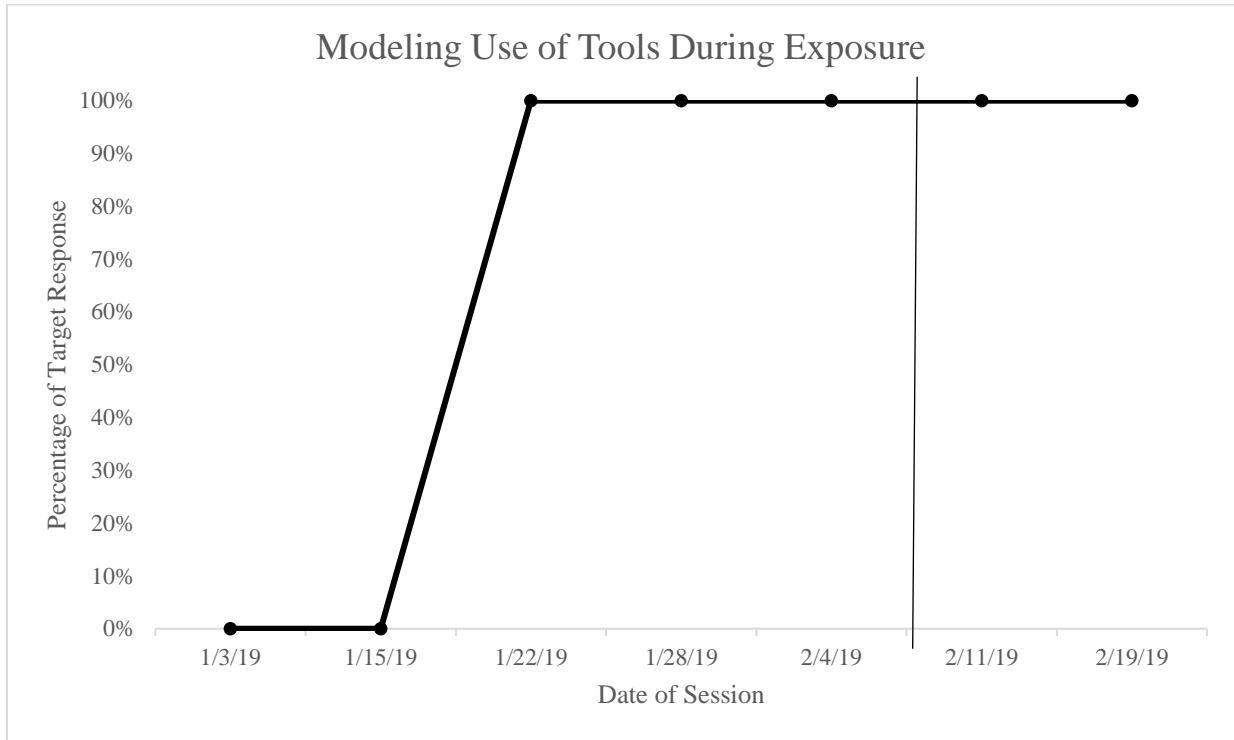


Figure 4 – Parent Training Goal 3

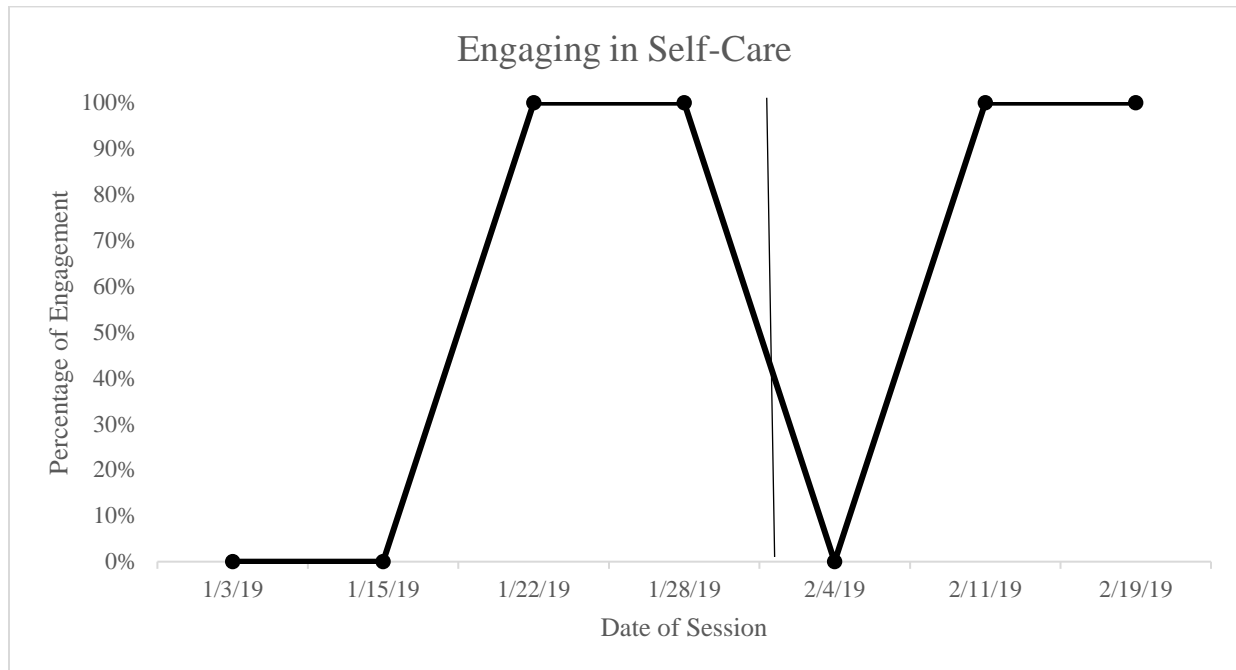


Figure 5 – Parent Training Goal 4

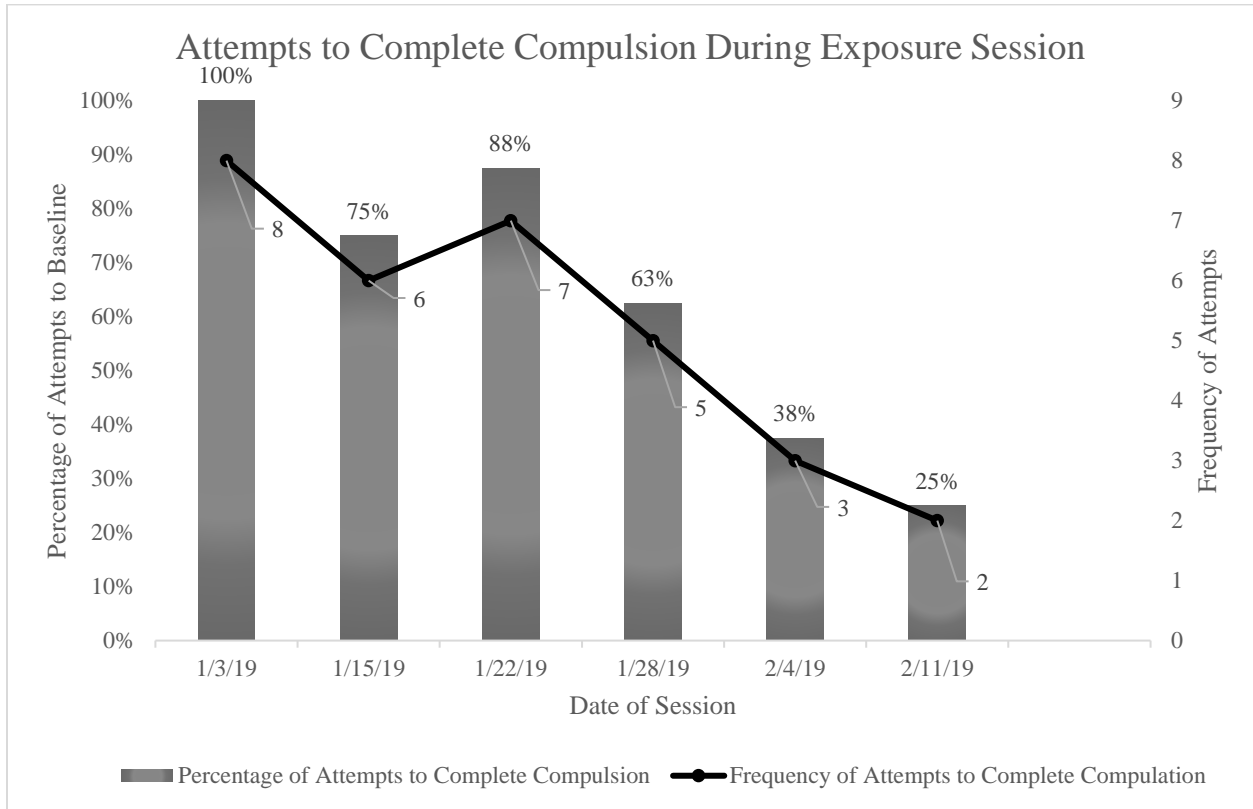


Figure 6 – Child Training Goal 1

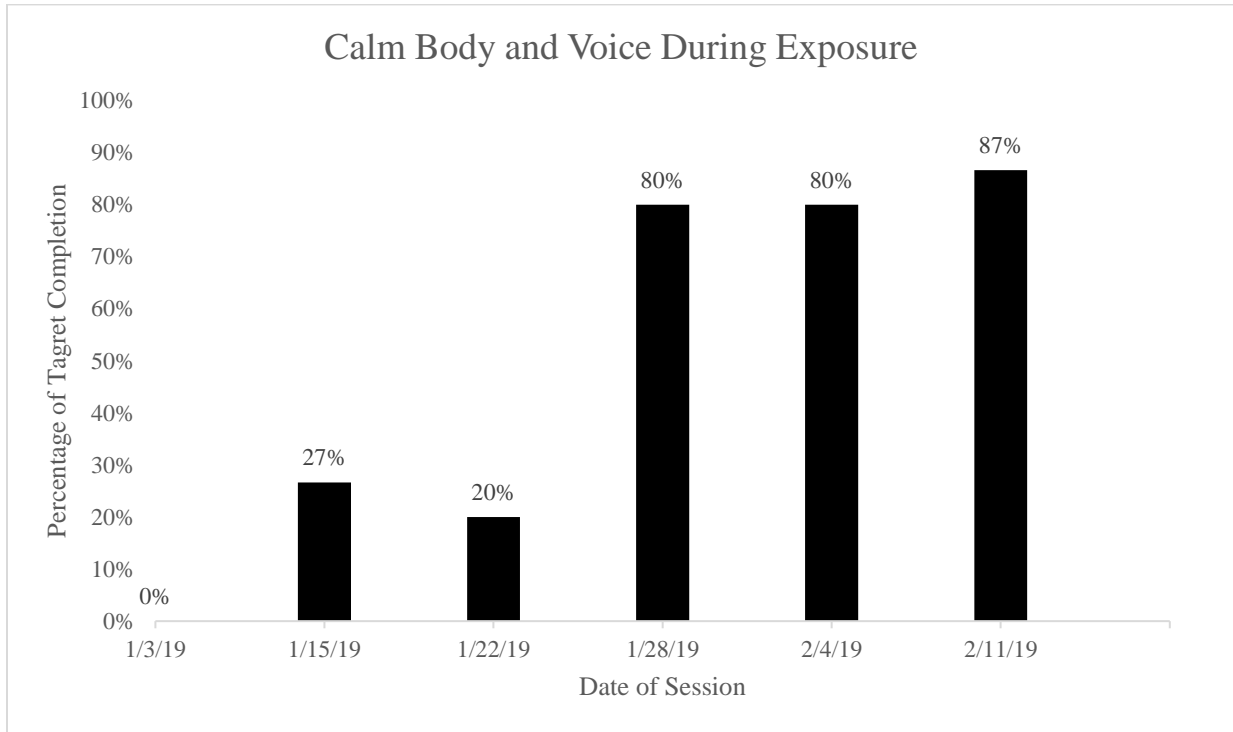


Figure 7 – Child Training Goal 2

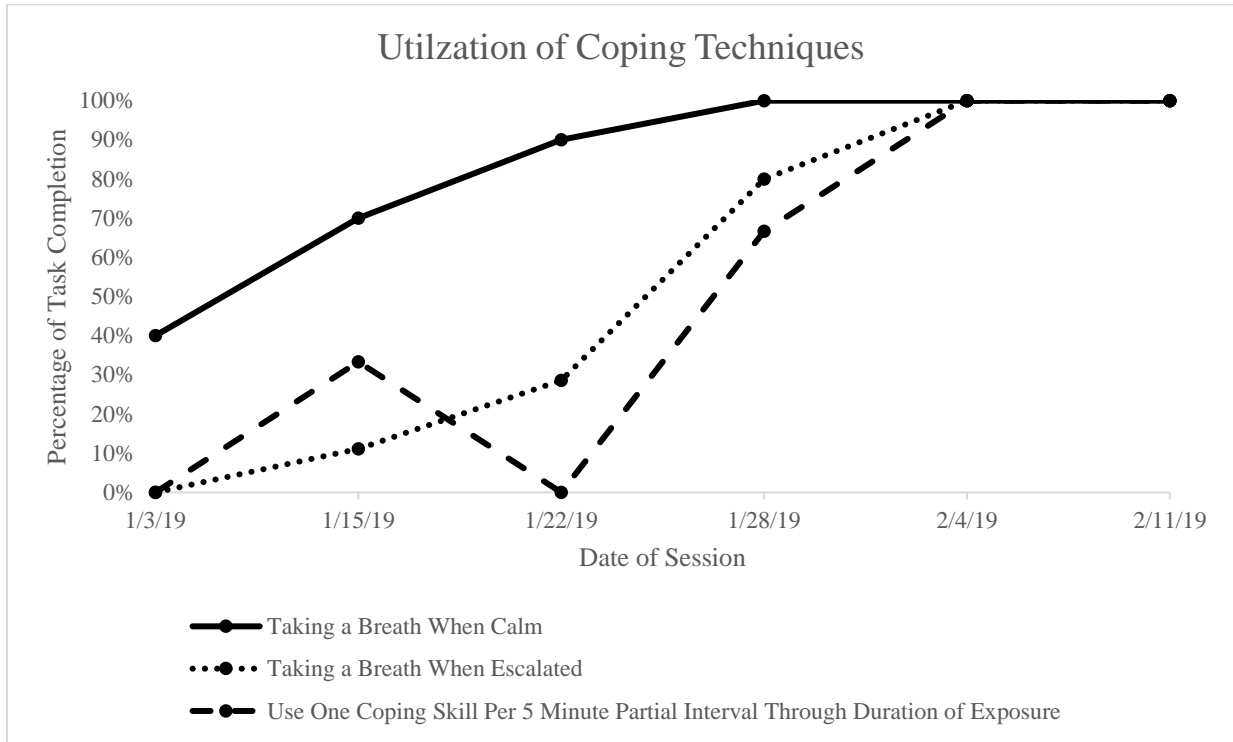


Figure 8 – Child Training Goal 4

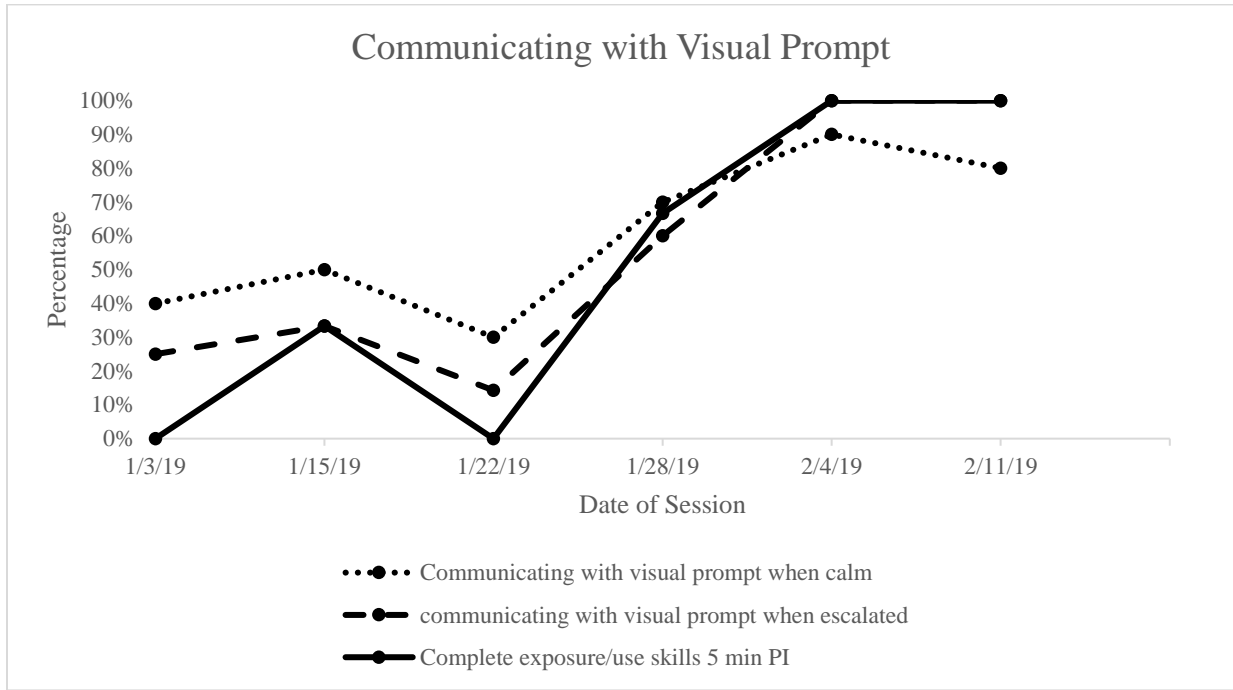


Figure 9 – Child Training Goal 5

Appendix A

The Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID) is a copyrighted measure that cannot be reproduced. A detailed description of the measure, including information for obtaining copies of the specific items, can be accessed using the information provided below.

Sheehan, D. V., Sheehan, K. H., Shytle, R. D., Janavs, J., Bannon, Y., Rogers, J. E., . . .

Wilkinson, B. (2010). Reliability and validity of the Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID). *Journal of Clinical Psychiatry*, 71(3), 313-326.

Appendix B

The Children's Yale-Brown Obsessive-Compulsive Scale is a copyrighted measure that cannot be reproduced. A detailed description of the measure, including information for obtaining copies of the specific items, can be accessed using the information provided below.

Goodman, W., Price, L., Rasmussen, S., Riddle, M., & Rapoport, J. (1986). *Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS)*. National Institutes of Mental Health.

Appendix C

The Vineland Adaptive Behavior Scale - 3 is a copyrighted measure that cannot be reproduced.

A detailed description of the measure, including information for obtaining copies of the specific items, can be accessed using the information provided below.

Sparrow, S., Cicchetti, D., Saulnier, C. (2016). *Vineland Adaptive Behavior Scales* (3rd ed.).

Bloomington, MN: Pearson.

Appendix D

The Child Behavior Checklist is a copyrighted measure that cannot be reproduced. A detailed description of the measure, including information for obtaining copies of the specific items, can be accessed using the information provided below.

Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.

Appendix E

Date/Time: _____

Child: IG

+ means independent response, P indicates prompted response, and - incorrect response or engaged in aberrant behavior

IG Child Treatment Goals

Goal 1: "Attempted Compulsions"

Frequency of attempted compulsions- (completing tasks in three (setting up tasks, starting over)

Circle current target 25% or 50%

--

Goal 2: "Calm Body and Voice"

IG will complete the current exposure tasks keeping his hands and feet by his side or engaged in the activity in the absence of hitting, kicking, or pinching. IG will also use a voice level no louder than a conversational tone that could be heard from 2 feet away during exposure tasks. IG will refrain from whining and crying when requesting or responding to questions, bossing back, or manding to adults

Provide feedback a current target duration:

Circle Current Target: 2-min w/ feedback 15-min exposure or 5-min w/ feedback 20-min exposure

--

Goal 3: "Severity"

Graph CY-BOCS data

Goal 4 "Take 10"

When IG is requested to take a breath in the presence of calm (meaning experiencing no anxiety or aggressive behaviors and crying) and escalation (engaged in aberrant behavior

Calm

--

Escalated

--

Goal 5 "Complete exposure in the absence of task refusal or tantrum" across 5-minute observations

- 1) Complete exposure tasks when requested in the absence of task refusal or tantrum/whining behavior and use at least one learned skill (breathing techniques and bossing back) every 5-minute partial intervals throughout the duration of exposure tasks when requested or independently.
- 2) Tantrum behavior begins when IG uses an elevated voice, "screams" with or without tears and may engage in falling to the floor and moving body parts up and down or side to side and may roll on the floor.
- 3) Whining begins with IG drops his tone of voice and or pitch in a voice that can be heard within 2 ft or more away (can occur during conversation) where phrases may contain (nooo, I don't wanna, do I have to, not today) but are documented when voice pitch changes (tally under task refusal if not pitch change) or statements of needing to complete tasks correctly (do it right, feel right).
- 4) Task refusal begin with talking tone and pitch phrases may contain (nooo, I don't wanna, do I have to, not today) but are documented when voice pitch changes (tally under task refusal if not pitch change)

Note Activity to side

0=no opportunity
+ if goal was observed in the 5-minute interval for each target area

If Tantrum/whine, or task refusal occur during interval graphed as - during the opportunity. If no engagement in aberrant behavior and use of skill + for opportunity
Calculate overall percent per opportunity and graph as %

Interval	Tantrum /Whine	Task Refusal	Use of Learned skill
5			
10			
15			
20			

Goal 6 "Communicate Anxiety"

- 1) Communicate anxiety/worry to others when requested by an adult to indicate his severity of symptoms when calm or escalated in the presence of a visual prompt (feelings thermometer).
 - i. Objective: Ian will indicate the number he would rate his "feelings/worry" with visual prompt using feelings thermometer and expressively state number and what symptom(s) he was experiencing. When calm and escalated

Calm

--

Escalated

--

TG Parent Treatment Goals

Goal 1 "Praise Statements"

- 1) Increase use of specific praise statements while utilizing a token economy chart.
- 2) Tally number of each statement
 - a. Reprimand - any phrase that indicates a stop of behavior (no, don't, do that, you're not doing it right)
 - b. General Praise - statements that provide encouragement however no specific context for encouragement (way to go, good job, yes babe)
 - c. Specific praise - s encouraging statement with specific context (nice job taking a breath, etc.)

Reprimand	Gen. Praise	Spec. Praise

Goal 2 "Response Blocking"

- 1) Independently use response prevention (not allowing compulsions to occur) when opportunities occur during exposure sessions with therapist within current target feet from therapist
 - a. + indicates. Independent - indicates prompted to block or missed attempt

Circle current target: therapist 3 ft away or therapist 6 ft away

--

Goal 3: "Model Strategies"

- 1) Frequency, In the absence of therapist prompting, model current target opportunities of appropriate use of tools that are used to decrease symptom severity (bossing back or breathing strategies) for Ian to imitate during exposure
- Circle current target 2 or 5
- | |
|--|
| |
|--|

Goal 3: "Engage in Self-Care"

- 1) Engage in at least current target self-care (engaging in preferred behaviors) within a seven-day period (between sessions).
 - a. Current target circle 2 or 4
 - i. Yes or No

1) Mastery is indicated when Ian engages in appropriate behavior 80-100% of opportunities for current target sessions - review treatment plan during graphing.

Appendix F

Session 4 Transcript:

T: Hi guys, how are you two today?

C: I'm doing okay.

CM: We have been doing alright, we've had our ups and downs.

T: We will definitely get to discussing all of the ups and downs, but before we move on, I wanted to discuss the outline for today's session.

CM: Sounds good.

C: Can I play with something while we wait?

T: I have some sand that you can set in your lap. Remember to keep it in your lap and answer questions when they are asked or we will take a break from playing, we have a very busy day.

C: Yes, Mrs. Mikayla.

T: Today we are going to review the importance of the feeling thermometer, learn how to "boss back," and we will get to do our first exposure.

CM: Ya know Mrs. Mikayla, we gunna do it, aren't we Ian!

C: Yep

T: Let's dive into the symptom monitoring worksheets, anything that you would like to go over?

CM: No problem, Ian refused to use a different cup the most, but you can see it.

T: I can see a lot of things from this, look at how many amazing details you were able to write down. You took duration data – or how long Ian spent engaging in that behavior and how you reacted during those situations. The most difficult thing that it looks like you did more was involved Ian in the monitoring worksheet. Tiana, what did you find most important about this worksheet?

CM: Well, first of all, I was able to really see how much I yell at the kid, and how much my family pushes my buttons when I am trying to handle situations with Ian. I was shocked at the amount of time that is spent handling these situations and thought where did all my time go. I remember talking from last week about accidentally reassuring or giving into him. Which I caught myself doing a lot.

Comment: At this point, it was important to validate Mrs. Good's completion of the homework as she struggles with her own worries, especially her reactions to aberrant behavior, as she mentioned prior, she felt like a bad mom when Ian wouldn't calm down. Shifting her focus back to the positives, rather than ruminate about the perceived negatives, was needed to complete the remainder of session, however this gave me insight into her thinking patterns in the absence of prompts.

T: I can imagine being shocked, spending what, 32 minutes with just one behavior out of 14 that happened through the last week. I remember you mentioning that you were worried about doing this, however great moms help their children and that is exactly what you're doing. Ian, what do you think you learned from doing this with mom?

CM: It's a lot. Mom yells a lot but I get it at the end which helps me calm down.

T: Well Ian, I am glad that you mentioned that because for you be able to be happier and have fun with your friends we will want to work on other ways to calm down. How about using the reward chart?

C: IT WAS THE BEST (Client jumps up off the chair)

CM: I have to say, it worked pretty well. I was a skeptic. I know we have tried this before doing ABA but he hated it. Later in the week after he started earning rewards, like gummies, he was able to tell me when he was worried about "being bad".

T: Ian, how did it feel when mom told you that you were doing good and when she was proud of you before you were upset or need to do your routines?

I: It's okay (Client smiled)

Comment: During this part of the conversation I was observing. Ian to identify possible behaviors that may impact the remaining parts of session. I wanted to make sure to provide additional prompts as needed as Ian was still new to the environment and responding to my instructions. As Ian engaged in attention seeking behaviors from mom, I was worried that aberrant behavior (jumping off chairs etc.) would increase and Mrs. Good would point, out problem behavior, however she answered the question and even mentioned a positive behavior Ian engaged in. It may have been helpful at this point for mom to demonstrate how she used the token chart to increase desired behaviors and how she gave praise as this skill was crucial for exposure.

CM: I think it was better than okay (all laughed)

T: Is there anything that would have worked better or anything you wanna change for the weeks to come?

C: NOOOO

T: Oh, I mean we will keep checking in and earning cool prizes for awesome behaviors like what Mom told me.

C: Okay

CM: I think we should keep goin, it doesn't seem to be hard

T: Sounds great. If this changes at all, we will talk about this from every session out to make sure this monitoring system continues to work for you guys. Did you guys end up thinking up a name for OCD?

C: Green pig

CM: King Smoothcheeks, from angry birds. Ian calls them green pig. They are the birds are trying to knock over on the boxes. He asked me and we thought this would be a good thing to choose that would go with the reward chart.

C: AAAAANNNGGGRRRRYYY BIIIIIRRRRRDDD.

CM: Try again, you can say it calmly in a sentence.

C: I love angry birds.

T: Thanks for telling me, I will keep that in mind as we spend more time together. It is now time to review the hierarchy that we went over last week. We know that most of the triggers happen during specific routines and when Ian isn't able to complete the repetitive tasks.

CM: I think that the order that all of these go in, like worst behaviors to least is hard for Ian because they all cause some distress that is hard for him to pick apart what is worse or better.

T: I am glad that you say that, we know that it is difficult for him to really parse apart what he is feeling and this is why you helped us create the ratings and with the data that we have been taking with the monitoring sheets. It seems that you have hit the nail on the head with the most distressing things seeming to have the longest duration lasting. Would you agree?

CM: Oh yes.

T: Ian, if you had to choose from the paper what would be the hardest, what would it be?

C: (client points to the hierarchy last space, parents touching specific objects)

T: Great, remember how I asked you last session, what do you think you would be able to do first? Which would that be?

C: Thinking I'm bad or everything is bad if something doesn't go to plan.

T: This is a theme or pattern when things are not the same, that all things are bad when things aren't in order or perfect.

C: Yeah, perfect.

T: We will work on these green pigs and so them who is boss.

CM: That would be great.

T: Let's go over our feelings thermometer again before we keep going. Did you bring it?

CM: Absolutely.

C: I like the thermometer.

T: Me too buddy. This helps us use our tools in our belt to fight back against the OCD symptoms, whoops I mean green pig. It lets us gain control of the green pigs by helping figure out which one bothers someone a lot and which ones are less, but all of us working together can knock them out. Let's take a look at the list from last week when we have rating last week, we were looking for how upset each symptom made you. As we look at this again, I want to focus on what the rating would be if we asked you to change or not do that behavior.

C: Mmmmmm, lots of changes.

T: In what way?

C: Up, up, up.

T: I can see why trying something different can make our butterflies go up on the thermometer.

CM: I really shocked that he told you that right now.

Comment: I believe that Ian was able to respond to the requests when asked about his fear as he could visualize what the fear looked like and in an age-appropriate way for him to understand and share with others. Using his preferred name also established rapport

with him as he was communicating using his language, for example going onto the next level and working to beat his own green pig's inside of him.

T: We never want to underestimate what he thinks and give him the opportunity to think and process his emotions when he is calm and reward the process of this.

CM: no underestimation, but man he sure likes you.

T: We all have to stick together with this. So Ian, if I were to ask you to pour the Mountain Dew into this cup, where would you be on the thermometer?

C: 8

T: Okay, so we have some wiggle room, it wouldn't be the mostest butterflies in your tummy, but quite a bit of butterflies in it.

C: (shook his head yes, stops, stares at chart and points to the 7.)

T: It has a lot of butterflies too, like when someone moves your stuff. When telling the number of worry two different things can be the same number, and I love that those green pigs aren't getting in our way.

C: Mrs. Mikayla, touching my things (points to the 8), no pouring in my spot is 7.

T: Thanks for telling me, how do you know the difference?

C: Need to yell, and dump it out, Then better. I set it up sometimes, it gets knocked down, all day is bad. Set it up, knock down, set up, knock down and ask mamma, it's good with me only?

Comment: These open questions were used to determine level of receptive and expressive language use when reporting symptoms when calm and in the absence of fear. These differences would help provider additional real-life examples for Ian as we discuss the tools. It would have been helpful to continue reviewing the hierarchy as it would have given a more accurate rating.

T: Let's talk about more tools in our tool belt and how to be the boss of our green pigs so we can knock out our pigs. We are going to learn about how to talk to OCD, oh man, green pig by “bossing back”. How does it sound to be the boss Ian?

C: YEAH!

T: Great! I want to teach you how to boss back. Bossing back means talking back to green pig and telling it who is in charge. Sometimes that mean that you know that it's controlling you and you have to tell it that it won't get the best of you. It means that you don't believe what it is saying. And sometimes it means that you get to do the opposite of what it is wanting you to do. What do you think of that?

C: (shrugs his shoulders) Sounds hard.

T: That is why mommy and I are here to help you.

C: Okay.

T: Bossing back can be hard, because we think of OCD or green pig as being sneaky, like when you don't see the pigs around the boxes. Sometimes you start to think you can knock over the green pigs, but they do something so they are in charge. We don't want that do we?

C: NO WAY!

T: So it's a good idea to tell those green pigs or your OCD to back up, you're not the boss of me; you can't tell me what to do! One of the best things that you can do to help you be the boss of those pigs is to keep good thoughts about you in your noggin. When kiddos think I am bad or that the whole day is going to be bad, it's easier for green pigs to be sneaky and boss you around.

C: Not sneaky on me!

T: Well that sounds good! Because when you think “The day will be okay, if this one thing messes up, or I will use my tools to help me; you will become super strong and be the boss of

you. This kind of positive talk to yourself is what helps before, during, and after an exposure task or those things where you get really upset if they go not your way. Do you remember what it is called when you talk back to your green pigs?

C: Uuuuummm...some talk.

T: CLOSE! Positive self-talk. You try

C: Positive self-talk (low tone of voice)

T: Nice work Ian saying the phrase, we are getting close for our first task. Mom, we are going to need your help to boss back green pigs or OCD today. We need you to help use positive self-talk about what Ian could do.

CM: Sounds good!

Comment: It may have been beneficial for Ian to practice bossing back statements where I stated “you’re not the boss of me” rather than explaining positive self-talk first and then practicing, I observed Ian sinking in his chair, avoiding eye contact, and a low voice. I noted the behavioral observation at the time, but I was unable to put together that a question was asked, and he gave an incorrect response. Ian also received monotone feedback when he was incorrect which could be a factor of limited responses. Monotone feedback and practice responding is commonly used in behavior analytic practices. Monotone feedback for incorrect responses and positive practice is commonly used with student who have on the autism spectrum disorder and was not a part of the FB-CBT protocol.

T: Great, now that we have reviewed the things that we will use to knock out the green pig, let’s try it here! Mom I have this daily practice form for you to help fill out during the exposure. This will help us know what we attempted today, what strategies that we could use, and our

thermometer ratings as we do it. We want to see the thermometer ratings go down to 1 or 0 or a 70% decrease so 10 to a 3 would be good especially for our first try today. What questions do you have?

CM: I write the numbers Ian tells us when we are doing the activity?

T: Yes, we will have the thermometer out on the table for Ian to see and I will ask him every minute during the task to tell me how he is feeling. Ian, the first task is going to be pouring the liquid from the bottle into the cup and taking a drink. We will go into the kitchen, get out a bottle of Mountain Dew and a cup that you normally don't drink from. You and I are going to pour the Mountain Dew into this cup and stop together and take a drink. The most important thing is to keep the Mountain Dew in the cup and take a drink and keep doing this until the butterflies in your tummy are very still. When you take a drink, use your tools like taking breaths, bossing back, and tell us numbers when I ask and you will get a token on your token chart.

C: Yes, Mrs. Mikayla

T: Mom are you ready?

CM: I think so.

T: I know that we have talked about what Ian wants to work for when he completes today task. Mom I want you to ask Ian what he would like if he is able to make it through the task today.

Comment: It was important to have Mrs. Good establish the new reinforcement pattern across multiple environments and while in the safety of session. Mrs. Good had the opportunity to obtain feedback on how she offered and withheld rewards contingent upon desired behavior. Having an additional tangible reinforcer can help increase responding as mentioned in the FB-CBT manual, especially children with comorbid diagnoses.

CM: Ian, after you do your task what do you want to work for.

C: Big squeezes mommy please.

CM: I can do that!

T: Nice work! Ian, what are you going to tell yourself when you feel those pigs trying to take control?

C: Green pigs are not the boss of me! My day will...

T: I can drink out of this cup and all will be okay. You say it.

C: I can drink this cup and be okay.

T: NICE! I wrote that on the thermometer for you to read if you forget. When I need you to give me a number from the thermometer, I will say number, okay. Any questions before we begin?

Comment: It was my hope by providing a rational response as a model, not specifically taught in this manual but would be considered a bossing statement as they are used in anxiety treatments, that Mrs. Good would be able to have a variety of tools to use without direct teaching as well as the tools that she had learned the prior sessions. By providing the groundwork during this first exposure session, I was able to see what skills she had naturally, what type of language she felt comfortable using, and what skills would need to be systematically taught and practiced over the course of treatment. The hope was to identify any patterns Mrs. Good engaged in when she responded to Ian's undesired behaviors (e.g. accommodation to Ian's undesired behaviors and providing negative reinforcement) and learn how to adjust future sessions to increase success for Ian and Ms. Good to grow.

CM: Nope, I am good. Ian?

C: GOOD.

T: Ian we are going to walk to the fridge and grab the Mountain Dew and get the cup from the cabinet and begin the pouring, mom remember tell Ian that he is doing good with specific things like pouring the drink in the cup and taking drinks or when he is using his tools like deep breaths or bossing back his OCD.

C: Okay Mrs. Mikayla.

T: What is your number?

C: 9

T: Boss back

C: Drink from cup be okay

T: That's a token

T: Walk to the fridge and get the Mountain Dew then we will grab a cup from the cabinet.

T: Put it on the table and open the lid

C: (begins to cry therapist helps open lid and blocks self-stimulatory behavior) Drink from cup be okay.

CM: That's bossin back, keep sayin it.

T: Number

C: 10

T: That's saying it, you got a token, pick up the bottle and pour into the cup

CM: Way to go, picking up the bottle!

C: (client pours Mountain Dew into cup and dumps it over)

CM: Drink from the cup, it will be okay.

T: (picks up cup and helps C pour into the cup) Pour drink. Nice clear instructions and specific praise statement mom.

Comment: Throughout exposure, while Ian was rating his worry, data was also collected on Mrs. Good's verbal behavior during exposure sessions as she wanted to increase positive feedback that she gave to Ian rather than becoming overwhelmed, yelling, and accommodating his symptoms. Mrs. Good was given social validation when she used praise statements during session, like the one above. This additional teaching step, which is more specific than what was mentioned in the manual by Garcia & Freeman (2009), with the hope that this would help give Mrs. Good social validation when she was working on her goals and recognition of her ability to change her own behavior.

CM: That's doing it!

T: Number

C: (points to 10)

CM: Nice showing me your number buddy; that's a token.

T: Pick up the cup and take a drink.

CM: You got this, drink from cup and be okay.

C: (puts mouth to cup and takes a drink, client screams and reaches for mom)

CM: You took a drink; take a drink and be okay (mom steps away from Ian)

T: Do it again, pick up the Mountain Dew bottle, pour, and drink

C: (reaching for mom) Take a breath

CM: Yes, Ian take a breath

T: Number

C: (points to 9 and takes a breath)

CM: That's a token buddy good taking a breath

T: Do it again, pick up the Mountain Dew bottle, pour, and drink

C: (picks up the Mountain Dew, pours and drinks with tears in his eyes)

CM: Oh my Goodness you did it Ian, you drank from the cup. Drink from cup and be okay! You got a token!

T: Remember to boss back

C: Drink from cup and be okay.

T: Number

C: 6

CM: Nice saying the number bud, that's a token!

T: Let's do it again, pick up the Mountain Dew bottle, pour, and drink

CM: you can do it and say it to, be the boss. Drink from cup and be okay.

C: Drink from cup and be okay.

T: Yes Ian, you can drink from the cup and be okay.

C: (relaxed shoulders, no tears, or self-stimulatory behavior. Picks up the Mountain Dew bottle, pours, and drinks)

CM: (shakes her head up and down with a smile) Look at you buddy, you are okay and drinking from this cup. Got a token!

T: Number

C: 3

T: Let's do it again, you're the boss.

C: (relaxed shoulders, no tears, or self-stimulatory behavior. Picks up the Mountain Dew bottle, pours, and drinks)

CM: That's a token for calm body and voice and doing what you're asked!

T: That's it bud, do it again.

C: (relaxed shoulders, no tears, or self-stimulatory behavior. Picks up the Mountain Dew bottle, pours, and drinks)

CM: Be the boss baby! You got it (mom has tears in her eyes) you got another token!

T: Number

C: 1

CM: YOU FILLED YOUR TOKEN CHART BUDDY!

T: Great work you two! Ian you may have squeezes from mommy.

Comment: Through this first exposure task, I was attempting to model for Mrs. Good how an exposure session would go, as she would spend the next week to replicate this session with Ian. It was my hope to provide a balance of modeling and opportunities to give her feedback when she engaged with Ian. I would hope that in the future I would label which strategies I was implementing to increase awareness of each tool that could be used during exposure tasks as indicated in the treatment manual.

C: Mommy, squeezes please.

CM: Of course Ian.

T: Ian after your big squeezes from mom, if you want to play with the sand again you may while we talk. (Mom cleans up spill and Ian goes back to the living room, mom and therapist go back to living room). WOW! What was that like? What did you learn?

C: I did it, I was the boss.

CM: You sure were. I didn't believe that it would go as well as it did. You didn't make him stop and clean it up or anything.

T: Why would I not want to stop? What would that teach him?

CM: That he wouldn't have to drink it yet and that he would have to clean.

T: Exactly. From the last two sessions we worked really hard on how to find ways to reward behaviors we want to see. We have talked about the token board and filling that up for his prize box or squeezes. We are now going to flip it and not pay attention to those behavior, like dumping out the cup, when we ask him to do something that may cause anxiety. Over time, the hope is that Ian's symptoms will decrease as he creates new learning patterns.

CM: I have to practice at this and I think after seeing you today I can definitely try.

T: So your homework for next week will be to continue working on removing attention for any complaints or refusals. You will continue to use the monitoring sheet from last week at home to document your involvement in the symptoms.

CM: Sounds good.

T: Homework is critical to this treatment. Ian, what is important?

C: Homework with mom

T: YES! I want you to complete three opportunities of practicing this exposure task throughout the week for us to discuss next session. What questions do you have before we end for today?

Comment: By giving Mrs. Good a chance to ask questions rather than being instructed to do things it would help her feel more confident when implementing the homework. In the future, additional discussion of a plan to implement homework should be utilized, discussing barriers and additional brainstorming if barriers were to arise.

CM: Nope. See you next week.

T: Great I will see you guys next week, at the same time.

C: Bye Mrs. Mikayla

T: See ya guys!