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Clinical Considerations When Tailoring Cognitive Behavioral Treatment For Young Children With Obsessive Compulsive Disorder

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Abstract

Research on the effectiveness of cognitive-behavioral therapy, and in particular, exposure with response prevention for Obsessive-Compulsive Disorder (OCD), has only been systematically evaluated in children and adolescents ages 7-17. These treatments do not address the unique characteristics of young children with OCD. This paper discusses clinical considerations for treating OCD in young children (ages 5-8), including cognitive developmental differences, family context, unique symptom correlates, and initial contact with the mental health system. A family-based treatment program consisting of psychoeducation about OCD in young children, parent education, and exposure with response prevention for young children and their parents is described. Issues to consider regarding implementation of this treatment, research with a young population, and future directions for research are presented.

Obsessive-Compulsive Disorder (OCD) is a serious and significant psychiatric disorder in early childhood, affecting as many as 2-3% of children and adolescents (e.g., Valleni-Basile et al., 1995). At any given moment, between 0.5 and 1% of the pediatric population suffers from OCD (Flament et al., 1988). However, these figures may underestimate the true magnitude of the problem in children under 9 years of age, because young children tend to be secretive about OCD symptoms and may experience developmentally-based difficulty articulating their concerns to others (Rapoport et al., 2000).

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Symptoms of OCD may have a significant impact on academic performance. For example, spending time in the morning completing compulsions may contribute to a child's tardy arrival or absence from school. In addition, parents and children report that obsessions and compulsions can disrupt a child's ability to concentrate, complete homework, or achieve the level of academic success of which he/she is capable (Valderhaug & Ivarsson, 2005). Given that early childhood coincides with the beginning of formal schooling, OCD-related difficulties during this period may have a particularly devastating impact upon the establishment of strong academic functioning and peer relationships (Valderhaug & Ivarsson, 2005). Intervention at an early stage is designed to enable the child to master skills and reduce symptomatology before problematic patterns are well established. In this way, coping skills can be in place when developmental transitions (such as starting formal schooling) occur, thereby minimizing the chance that the child's anxiety will interfere with learning (Hirshfeld-Becker & Biederman, 2002).

In recent years, research on the effectiveness of cognitive behavior therapy (CBT), and in particular, exposure with response prevention, has been carefully reviewed and studied in children and adolescents with OCD (e.g., Abramowitz, Whiteside, & Deacon, 2005, for a review). While there are encouraging results for the efficacy of CBT, the samples have not included young children with OCD below the age of 7, and the treatment models have not directly addressed the unique characteristics of young children with OCD.

This paper describes a developmentally tailored, family-based treatment program for early childhood onset OCD that addresses the unique needs of young children (ages 5-8) with OCD. While the program is adapted from treatment manuals for OCD in children and adolescents (e.g., March & Mulle, 1998; Piacentini, Jacobs, & Maidment, 1997), there are particular differences between this family-based treatment program for young children and current CBT programs for OCD in children and adolescents (see Table 1). Specifically, the overall focus of this treatment program is to provide both child and parents with a set of "tools" to help them understand, manage, and reduce OCD symptoms. Most importantly, parents administer the practices of treatment at home and in session, which is an integral part of the intervention.

The family-based program consists of 3 principal components: psychoeducation about OCD in young children, parent education and tools to facilitate exposure, and child tools adapted to allow young children to participate in exposure with response prevention. Each of these components of treatment is considered to be important in

Table 1
ERP modifications for young children versus the ERP for older children/ adolescents

ERP for older children/ adolescents	Modifications for ERP with young children
Primarily focuses on providing individual treatment to the child.	The child is included in the treatment to the level of the child's developmental capacity but treatment may be primarily focused on teaching the parents tools to help their child fight back against OCD.
Provides the child with cognitive tools for resisting OCD	Provides both child and parents with a set of "tools" to help them understand, manage, and reduce OCD symptoms.
Provides psychoeducation regarding the nature of OCD to the parents and children together.	Provides two sessions of psychoeducation regarding OCD with the parents alone, prior to introducing the children to treatment.
Treatment focuses on repeated exposures without performing compulsions.	Exposures may be modified to occur within the context of developmentally appropriate play.
Parents included at the discretion of the clinician.	Incorporates a formal parent training component to help parents learn tools to help their child (e.g., attention, modeling, and guiding the child's emotional regulation in response to an event).

observing treatment response. For young children (ages 7-8) who are cognitively and developmentally capable of utilizing the child tools, all three components of treatment are considered to be important in reducing symptoms of OCD (see Figure 1). However, for very young children (ages 5-6) who are cognitively or developmentally unprepared to participate actively in treatment, the parent tools are considered to be the primary mechanism by which symptom reduction occurs (see Figure 2). For example, young children who are unable to report their own emotional state and fear ratings in situations which provoke OCD require their parent's support to successfully face them.

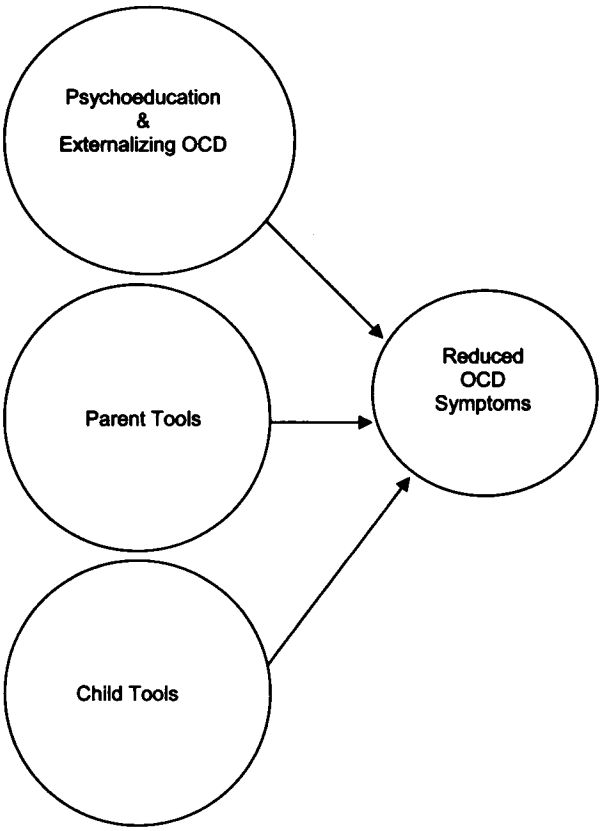

Figure 1. Proposed Treatment Model for Young Children with OCD (ages 7-8)

Background for Treatment of Young Children with OCD

Current treatment approaches have typically excluded young children under 7 for a variety of reasons, including developmental differences in symptom presentation and the treatment modality. For example, OCD symptoms are somewhat different in children, as compulsions without articulated obsessions are common, and the compulsive behaviors themselves may be different than those observed in adolescents or adults (Rosario-Campos et al., 2001; Swedo, Rapoport, Leonard, Lenane, & Cheslow, 1989). This may be even more pronounced in children younger than 7, due to their cognitive and language development. Young children may have difficulty describing

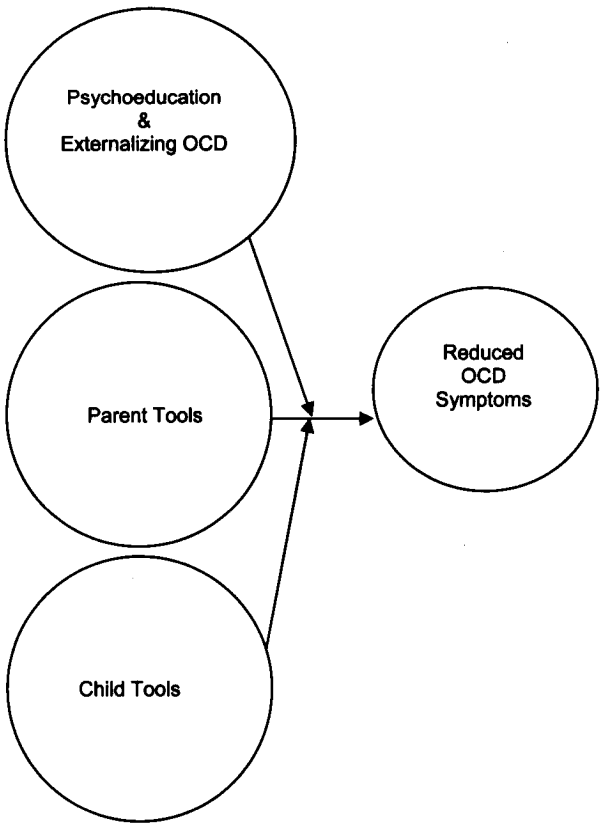

Figure 2. Proposed Treatment Model for Very Young Children (ages 5-6) with OCD

the feared consequence behind their compulsions, which makes it difficult to differentiate compulsions from tics or other repetitive behaviors in this age group. Increased sensory phenomena-related compulsions, such as the need to touch or tap things until they feel "just right," are also prominent in the youngest age bracket of OCD sufferers (Rosario-Campos et al., 2001). These differences between children and adults may largely be due to developmental factors, such as the degree of the child's cognitive maturation (Freeman, Choate-Summers et al., 2007).

Young children with OCD, unlike older children or adults, may be unable to distinguish obsessional thoughts from other, non-intrusive recurring cognitions or images. Additionally, they may not

understand or be able to identify the connection between obsessional thoughts and subsequent compulsions, or to verbally express this pattern to others. Differences in symptom presentation must be addressed in an effective treatment model for young children. Similarly, it is normative and developmentally appropriate for young children to rely heavily on their parents for socialization, socio-emotional development, and behavioral regulation (Belsky, 1981). However, current CBT for OCD is primarily based on an individual, or child-only, modality of treatment and parent involvement is not formally structured into the treatment.

Formal inclusion of parents in treatment addresses the likelihood that OCD symptoms are not just a problem for the "identified patient" but also for other family members. Family studies suggest that children with OCD are likely to have at least one other affected 1st degree relative (Nestadt et al., 2000; Pauls, Alsobrook, Goodman, Rasmussen, & Leckman, 1995; Rosario-Campos et al., 2005). Thus, children may begin treatment embedded in a system that already supports OCD behaviors. However, even when no one else in the family has OCD, families affect and are affected by OCD through their accommodation of, and participation in, rituals and avoidance behaviors (Lenane, 1989, 1991; Pollack & Carter, 1999; Steketee, 1997). Children often involve family members in their ritualistic behavior, typically in the form of reassurance seeking (verbal checking) (Rettew, Swedo, Leonard, Lenane, & Rapoport, 1992). Indeed, parents are more likely to play an active role in young children's rituals (e.g., physically assisting with washing or checking) (Lenane, 1989; Leonard et al., 1989). Parents of young children may be *particularly* likely to accommodate OCD symptoms - to minimize both their child's distress and their own distress, and to streamline family functioning (Freeman et al., 2003). In addition, family accommodation is associated with a number of other negative factors such as less parent-child agreement, fewer solution-based strategies, and higher rates of depression and criticism among family members (Amir, Freshman, & Foa, 2000; Przeworski et al., 1999).

In addition to frank accommodation and its sequelae, other family behavior patterns are likely to affect young children with OCD. Parents of children with OCD have been found to show poor problem-solving skills, decreased confidence in the affected child, increased levels of expressed emotion (criticism and emotional overinvolvement) and increases in parental catastrophizing behavior (Barrett, Shortt, & Healy, 2002; Leonard, Lenane, & Swedo, 1993; Leonard, Swedo et al., 1993; Moore, Whaley, & Sigman, 2004). Thus, there may be an ongoing interactive cycle between the functioning of the child and the family.

For example, the presence of a child with OCD symptoms is likely to compromise in some way the functioning of the family unit and/or specific subsystems (parent-child, marital relationship). In turn, this compromised family functioning is likely to impact the child, and thus the symptoms of OCD. Thus, a family-based treatment modality is warranted to affect change for young children.

Program Description

The treatment program for young children for OCD was established at an outpatient anxiety disorders clinic affiliated with a medical center in a New England city in the United States. However, this treatment program could be easily transported to a community setting. The treatment is designed to be a 12-session treatment, occurring over 14 weeks. Sessions occur weekly, with the exception of the final two sessions which are tapered to every 2 weeks. The first two parent-only sessions are designed to be 90-minute sessions. All other sessions are approximately 60-minutes in length.[1]

Funding to establish and evaluate the program was provided by an R21 grant from the National Institute of Mental Health. Children, ages five to eight years, who were principally diagnosed with OCD via a semi-structured interview (Schedule for Affective Disorders and Schizophrenia in School-Age Children, K-SADS, Kaufman et al., 1997) and who had at least one parent who could participate in treatment were offered participation in the program. A diagnosis of OCD was established to differentiate repetitive behaviors associated with other diagnoses that require initiation of a different active treatment, such as thought disorder, pervasive developmental disorder, or documented mental retardation. Children who were not diagnosed with OCD were provided with appropriate referrals.

Doctoral-level therapists and psychology interns familiar with cognitive behavioral treatment of anxiety received training via tape observation, manual review, and on-going supervision from a clinical psychologist with expertise in the treatment of OCD. Prior to conducting the treatment, therapists reviewed information on early childhood treatment and OCD and observed a sample case receiving the treatment. Supervision addressed therapist questions including manual implementation, balancing family process aspects of treatment to cognitive-behavioral skills training, and managing time constraints.

The pilot sample included 42 children, ranging in age from 4-8 years[2] (mean, 7.11; SD 1.26) and their parents. The participants were primarily Caucasian (80% Caucasian, 2% Hispanic, 2% Asian or Pacific Islander, 2% Native American, 2% multi-racial, and 12% no response/unknown) and middle class (although 8% of the sample was

below the poverty level) with roughly equal gender distribution (57% female). With regard to co-morbid diagnoses (as measured by the K-SADS), 9.5% had a tic disorder, 19% had ADHD, 54.8% co-morbid internalizing diagnoses and 35.7% co-morbid externalizing diagnoses. 14.3% were taking an SSRI for OCD and 4.8% were taking a psychostimulant for ADHD. As indexed by the baseline CY-BOCS (M = 22.36; SD = 4.17; range = 11-32) scores, the sample had moderately severe OCD symptoms. The mean age of onset of the sample was 4.99 (SD = 1.27) and 16% (n=7) of the children had previous treatment (either medication and/or psychotherapy).

To improve accessibility of the treatment and when resources were available, staff provided child-care services for siblings and child participants while the parents received training. Parents were present for interventions with the child, to reinforce learning for themselves and gradually become the child's primary coach. Pilot data from the program suggest that this treatment is feasible with this population, both in terms of therapist administration of the treatment and the family's ability to accept and comply with treatment (Freeman, Garcia et al., 2008). Following treatment, parents interviewed stated that they felt their children's symptoms had improved, which they attributed directly to treatment effects, as opposed to maturation or other changes in the family. Parents were positive in their views regarding the treatment and the help that their child received. Preliminary data also point to the potential success of this program, as 62% of young children who completed CBT for OCD were classified as achieving clinical remission of their symptoms, as compared with 20% of children who completed the active control condition (Freeman, Garcia et al., 2008).

Assessment and Diagnosis of OCD in Young Children

Prior to beginning a treatment program for OCD in young children, proper assessment and diagnosis needs to occur. In particular, it is important to differentiate OCD ritualized behaviors from normal developmental behaviors, such as a specific bedtime routine. Considerations can be made regarding timing (OCD rituals tend to last for a longer period of time), developmental role (normal rituals tend to help master anxiety and enhance socialization), interference (normal rituals typically do not cause difficulties in the life of the child or family), and distress regarding the ritual (while a normal ritual may be soothing to a child, if missed the child's distress can generally be soothed by other methods; OCD rituals tend to create significant distress if interrupted or missed and while being completed; Leonard, Goldberger, Rapoport, Cheslow, & Swedo, 1990).

OCD symptoms are primarily assessed using the Child Yale-Brown Obsessive Compulsive Scale (CY-BOCS, Scahill et al., 1997). The CY-BOCS is a 10 item semi-structured clinician rated interview that assesses OCD symptoms and severity. Developmentally sensitive anchors and probes were developed specifically for this age range. For example, to evaluate the length of time occupied by OCD symptoms, the clinician references the length of a television show, a movie, or a school day. The literature supports the use of the CY-BOCS in children as young as 6 years (March & Leonard, 1998) and it was used successfully in this treatment program with 5 year olds.

It is also important to differentiate OCD concerns from other anxiety or behavioral difficulties. While more assessment tools are available for older children and adolescents, there are reliable assessment tools available for young children and their parents. For example, a semi-structured interview administered by a trained clinician is important to distinguish OCD from other anxiety and behavioral concerns. In this treatment program, the Schedule for Affective Disorders and Schizophrenia for School Age Children-Present and Lifetime Version (K-SADS-P/L) is used (Chambers, 1985; Kaufman et al., 1997). The K-SADS-P/L is a semi-structured, clinician rated interview that yields DSM-IV diagnoses across the Axis I domains in children as young as 5 years (Hirshfeld-Becker et al., 2004; Youngstrom, Gracious, Danielson, Findling, & Calabrese, 2003). Both parents and children who are able to participate are interviewed to determine OCD and other anxiety concerns.

Finally, the Children's OCD Impact Scale (COIS) is an assessment tool that provides a standardized format for evaluating the impact of OCD on psychosocial functioning (Piacentini, Bergman, Keller, & McCracken, 2003). The COIS consists of three subscales: Social Impact (7 items), School Impact (6 items), and Home/Family Impact (7 items). The COIS is a useful measure that has been found to predict functional status independent of diagnostic severity (Piacentini et al., 2003). It has also been shown to be responsive to improvement through treatment (Geller et al., 2001).

Psychoeducation

The cognitive developmental level of young children affects the child's ability to understand and participate in treatment. Thus, information regarding OCD as a neurobehavioral disorder is presented to the parents alone in two initial sessions of psychoeducation. The goals of psychoeducation are to (1) provide education about the neurobiology of OCD, (2) correct specific misattributions about OCD, (3) differentiate between OCD and non-OCD behaviors, and (4) describe the treatment program in detail. Psychoeducation regarding the

treatment program and rationale with the parents alone is considered to be a key component of treatment. In the initial sessions, the therapist allies with the parents and obtains their approval of the exposure model prior to introducing it to the child. The psychoeducation sessions with the parents lay the groundwork for the remainder of treatment and are especially important, as many young children will not fully understand the treatment rationale. However, as their parents understand and apply CBT principles and subsequently learn the actual interventions, these young children are able to benefit from this family-based treatment.

Psychoeducation with the Child

In the third session, which is the first session with both the child and parents, limited information regarding the neurobiology of OCD is provided in age-appropriate language to the child. The aim of this information is to help children, with their parents, to externalize OCD as a biobehavioral problem separate from the child (Fitzgerald, MacMaster, Paulson, & Rosenberg, 1999). While young children may not completely understand the reason for exposure and response prevention, like older children and adolescents, they are often able to grasp the basic principle that they can be the "boss" of these OCD behaviors.

Psychoeducation provides a rationale for treatment recommendations such as exposure. Failure to properly educate the parents and child concerning treatment before progressing can lead to setbacks, which significantly impede therapy and may ultimately result in attrition. For example, a parent who does not agree with the treatment or has difficulty tolerating their child's anxiety during an exposure may end the task prematurely, or withdraw the child from treatment. Similarly, it may be difficult for a parent to tolerate seeing their child perform tasks such as touching dirty objects, so they must be in agreement prior to the actual exposure exercises. To increase parent and child engagement and motivation, psychoeducation is presented as simply as possible, via simple, engaging modalities, including the use of visual imagery, metaphors and developmentally relevant examples.

To assist in motivation and understanding of OCD symptoms, part of education regarding OCD focuses on "externalizing" OCD symptoms, or distinguishing between OCD behaviors and the child. For parents, externalizing OCD symptoms is provided with important information regarding the neurobehavioral model of OCD, that OCD is a disorder of the brain that influences behavior (March & Mulle, 1998). The importance of a non-blaming approach to the child's OCD symptoms is emphasized. To help young children "externalize" their

OCD symptoms, obsessions and compulsions may be described to children as an "OCD Monster" that they can then fight back against. Additionally, drawing the "OCD Monster," assigning it a nickname, and imitating it help externalize OCD for the child. Through this process, the child learns to be the "boss of OCD" and fight back against the monster, rather than blame OCD for their behavior.

Therapists explain exposure and response prevention through concrete, basic examples. Families come to understand the concept of overcoming fears through facing them, rather than through avoidance. For example, touching and petting dogs of gradually increasing size would help overcome a fear of dogs. Through the use of examples and metaphors, parents and children are educated about OCD and the course of CBT, and understand that the therapist is both aware of and sympathetic to their discomfort. This contributes to their confidence in and adherence to the program.

Parent Training

In this treatment program, parents play an active role in the implementation of behavior change strategies. In addition to reduction of the child's OCD symptoms, the specific goals of the parenting component of this family based treatment are to: (1) reduce family accommodation of child OCD symptoms, (2) reduce criticism and hostility related to child OCD symptoms, (3) promote positive family problem solving related to child OCD, and (4) help parents understand the role of their own modeling of anxious interpretations and behaviors.

The "parenting tools" and "family process" components of this program speak to the need to address parental modeling and family accommodation of symptoms. The central parenting "tools" include: (1) differential attention (a reinforced behavior or response increases in frequency while an alternative response or behavior becomes less frequent), (2) modeling (the parents behave in a certain way and the child copies parental behavior), and (3) scaffolding (the parent guides the child's emotional regulation in response to an event or situation until the child ultimately internalizes the response as self-regulation leading to independence). When used together, these parenting tools provide the foundation for successful implementation of OCD treatment in this age group. Parenting tools are discussed and rehearsed in each session and then practiced at home as part of weekly homework assignments. As noted above, because the psychopathology of OCD so often directly elicits the involvement of the parents (e.g., reassurance seeking), it is critical to bring parents into the treatment context rather than focus solely on the child. This is accomplished initially meeting with the parents alone and instructing the parents in the treatment.

Parents are then present while their children receive instruction and are gradually incorporated more actively into the treatment. By the conclusion of treatment, parents are guiding their children in completion of the exposure within the session with the support of the therapist. In this way, parents are able to more effectively translate the treatment from the office to the child's home.

For example, one parenting tool frequently discussed is the concept of consistency in between-session homework practice. Many parents express the wish to give their children breaks from doing challenging EX/RP tasks at home, because in-session work is often difficult. However, inconsistency in an exposure regimen creates confusion for children, and may inadvertently contribute to treatment-resistant OCD symptoms. To underscore the importance of consistency, OCD is compared to juvenile diabetes. Both are biologically based disorders in need of consistent management. Allowing inconsistency between treatment sessions and home settings can be just as damaging, if not biologically, certainly psychologically, for children with OCD as for children with diabetes.

Parent training also addresses the parent's own anxiety about observing their children's distress during the anxiety-provoking exposure tasks required during the child training. Some parents act preemptively to protect their child from anxiety-provoking situations through accommodating their child's behaviors or terminating EX/RP before habituation occurs. Although this may be effective for reducing anxiety in the short term, it unwittingly maintains and exacerbates OCD symptoms in the long term.

In a related vein, some parents seek to minimize their own distress by rushing children through the treatment too quickly. Many parents find it difficult to see their child experience distress, and accommodate their child's symptoms to reduce their own distress resulting from seeing their child experience emotional pain. Throughout treatment, a goal of parent training is to assist parents in gaining the confidence and skills necessary to gradually expose their children to anxiety-provoking situations in life. As parents learn to tolerate their own distress, they are then able to model this for their children. Parents can thereby increase their conviction in their own and their child's ability to cope with anxiety. This increased confidence of the parents may be a key ingredient to success of this treatment, particularly with very young children who may not understand the role of exposure in fighting back against OCD.

At different points in treatment, parents may attempt exposures before their child is ready. For example, eager parents who understand the value of exposure may trick their children into completing

exposures, without allowing their children the opportunity to participate in the process of selecting the exposure. Unfortunately, children forced into doing EX/RP homework against their will are less likely to want to continue with treatment and may resist, by becoming overtly oppositional, or more covertly through the use of distraction or avoidance during exposures. Parents may also punish children for *not* participating in EX/RP tasks, rather than using incentives to increase their child's willingness and motivation. One of the goals of parent training is to educate the parent in order for them to engage in treatment in a way that is helpful and the appropriate pace for the child. Parents learn to effectively participate in exposures, and are then able to support their child doing exposures at home.

Child Training

To address the developmental needs of young children, the child training tools incorporate simple, child-friendly metaphors and increased reliance on experiential tools to facilitate EX/RP. Due to their more limited capabilities in terms of abstract thinking in general and of recognizing and expressing their own emotions in particular, the "child tools" component of our treatment includes special strategies to help children to: (1) understand exposure tasks and (2) rate their own anxiety. Recognition of young children's shorter attention spans means messages to children must be as brief and simple as possible. In-session child involvement focuses on reviewing, learning, and practicing exposure tasks. As such, children may only be present for a portion rather than for the entire session.

The goals of the child tools are to provide children and parents with some basic and developmentally appropriate "tools" to implement exposure and response prevention (EX/RP). These tools include: (1) learning how to externalize ("boss back") OCD, and (2) using a feelings thermometer to rate anxiety. Very simple examples are used to help young children to externalize OCD. For instance, therapists may tell children, "You're purple!" resulting in children arguing they, of course, are not. This example illustrates that although the "Worry Monster" may tell children that their worries seem real, it does not make it true.

The use of such techniques helps clarify the process of identifying the irrational thinking maintaining the obsessions. It also allows the parents, child and therapist to clearly identify even more worries and begin elaborating a more detailed exposure hierarchy. This process also helps therapists, parents, and their children to work together as a team beginning EX/RP with confidence and at an appropriate pace. The goal of the EX/RP component is to have parents

and children work together to develop a hierarchy and implement EX/RP. The basic goal of EX/RP is to gradually expose the child to the most uncomfortable situations until fear decreases on its own without the performance of rituals (the process of habituation). A reward program established in conjunction with the child's parents facilitates home-based practice of EX/RP. The child earns rewards for successful completion of homework assignments. Success is defined as fighting an OCD battle by facing an OCD situation. If OCD wins a particular battle, the circumstances are reviewed to determine how OCD won and help the child continue the fight to win the war.

The development of a fear thermometer in young children has unique challenges. Young children may have particular difficulty in accurately rating their relative discomfort during exposure, and identifying low vs. high levels of anxiety. This is somewhat different than treatment of older children and adolescents, who may be able to provide more accurate anxiety ratings. With young children, behavioral indications of anxiety (e.g., shaking, tenseness, facial cues) are often more useful clues to the child's internal state than self-report ratings. Similarly, with young children, a clinician may not observe the habituation curve that typically occurs in exposure exercises as anxiety gradually diminishes (Foa & Kozak, 1986). For instance, anxiety may appear to abate instantaneously or spike unexpectedly. As the child continues to practice exposure exercises, and the parent consistently encourages approach behaviors, the anxiety responses seem less confusing. With time, the child, clinician, and parents understand the anxiety response better and are able to structure exposures accordingly.

In young children, anxiety may be overwhelmingly high before they are able to recognize and articulate their feelings. This may lead clinicians to inadvertently select stimuli from exposure hierarchies that are too difficult. It also may lead parents who are participating in exposure tasks to misinterpret a task as "too easy." In addition, an exposure exercise may seemingly go from "not a problem" to "the worst ever" with little warning. Clinicians are encouraged to prepare parents and children that OCD can be "tricky" and, at times, unexpected. Additionally, therapists calmly model use of the "toolbox" during these unanticipated exposure difficulties to help children and their parents learn that while OCD is "tricky," the child is still able to be in control.

When working with small children, therapists encourage parents to "start low and go slow." More specifically, therapists, parents, and children collaboratively select initial exposure tasks of low to moderate difficulty. Young children are slowly engaged in EX/RP during in-

session play activities. In the context of play, young children may not only take longer to reach their optimum anxiety levels, but also take longer to reach extinction. Therefore, sessions may be expanded to allow for more "massed" exposure, and continued practice at home is crucial to ensure treatment gains.

When working with families of young children, it is often useful to use humor. Generally, when conducting aversive or difficult exposures, therapists and parents may first model the exposure in a humorous fashion. For example, with a child who fears the feeling of stickiness on the hands, the therapist might melt a small peanut butter cup in her hands and enjoy the snack in an exaggerated way (e.g. "Mmmm. My hand snack is so sticky and delicious. I think I'll lick it off instead of washing").

When working with young children, therapists should be attentive to pacing sessions well. Children may be emboldened by success and thus, may want to do too much too soon. Similarly, parents may become excited by initial successes of their children and encourage difficult exposures too quickly. While enthusiasm is encouraging, moving too quickly may set children up for failure if they are unable to carry out the requisite response prevention. To prepare for exposures, therapists are encouraged to establish session agenda in conjunction with the family and child, and to clearly inform everyone of the plan, so the parent is aware of and does not overstep the child's capabilities. Additionally, therapists are encouraged to be flexible, to adapt the hierarchy to changes in the child's symptoms and information provided by the parents.

Process Issues

Therapist flexibility is expected in the treatment of young children with OCD. For example, the order of presentation of topics within a given session may need to be altered to best meet the needs of a child or family. In the case of some children (particularly 5-6 year olds), it may be necessary to complete the portions of the session that require the child to be most active (e.g., "child tools") early in the hour. Alternatively, if parents come into the session with a particular family or parenting concern, then it may make sense to start with parenting tools.

Another example concerns the reward program. Behavioral reinforcement with sticker charts or other rewards is often very effective in increasing the child's motivation for change. The reward plan is one of the ways that parenting tools are put into action in the treatment program. Rewards are used as a form of positive attention to increase behaviors, such as completing homework assignments. Parents are

taught about different kinds of positive attention, including 1) praise and encouragement, 2) tangible rewards, and 3) privileges. Parents are encouraged to develop a specific reward program to help increase their child's motivation to complete exposure assignments. Therapists follow-up on the reward program as appropriate, as some anxious children may become so focused on the contingencies that it begins to interfere with their activities and family functioning. Overall, the goal is to complete all session elements in a manner that best matches the needs of the child and family.

As determined to be relevant by the therapist, other process issues may be addressed, including the parents' understanding of OCD development, addressing negative attributions, and the family's response to OCD symptoms. Process issues become very important with the difficulty of blending CBT, family therapy, and parent training models into one family-based treatment. While the CBT model is the predominant focus in treatment, and the target of treatment is OCD symptoms, other therapeutic techniques may play a role depending on the family's response in treatment. For example, the therapist may need to balance a problem focused CBT approach with a process-oriented family approach, particularly if obstacles continually arise to conducting exposure tasks. In addition, the therapist may need to balance an alliance with the child and the family against OCD versus an alliance with the parents as part of a parent-training model, particularly if the family is having difficulty completing homework assignments.

Potential Obstacles to Treatment

Parents of young children with OCD, by virtue of the fact that their children are young, are more likely to be experiencing their first contact with the mental health system as a parent. At any age, disagreement with diagnosis and/or treatment approach generally interferes with compliance to treatment recommendations. However, parents of young children may be especially vulnerable to these difficulties. Thus, in the treatment of young children, it is especially important to identify and respond to issues of adjustment to having a child with a psychiatric problem.

Researchers have conceptualized expectations of treatment and perceptions of treatment relevance as potential barriers to treatment adherence by families (see Nock & Ferriter, 2005 for a review). These potential barriers to treatment must be addressed to maximize the potential for a positive outcome. For example, information provided early in the referral process, such as diagnosis and treatment rationale, predicted treatment retention in a parent management class for

behavior disorders (Peters, Calam, & Harrington, 2005). Thus, our treatment model includes an extended informational session as part of the consenting process.

In addition, recent research indicates that a brief intervention prior to initiating treatment, such as having parents generate motivational statements and identify plans for overcoming potential barriers to treatment, can produce a moderate treatment effect on parent motivation and a large effect on parent treatment adherence (Nock & Kazdin, 2005). We incorporate this strategy into the early sessions of treatment to deter treatment dropout.

Conclusion: Future goals and Directions

In conclusion, young children with OCD have unique characteristics and require a treatment addressing cognitive developmental differences, family context, symptom correlates, and a family's initial contact with the mental health system. Preliminary evidence suggests that our family-based, developmentally tailored CBT model is acceptable to families of young children with OCD (Freeman, Garcia et al., 2008). In addition, the treatment program is designed in a concise system of evaluation and treatment that could be easily transported to the community.

However, more research is needed to test the efficacy of this treatment model. In addition, more knowledge is needed in the field of early childhood OCD. For example, the developmental variability in this age range is not well understood. While there is both clinical and research evidence that some children as young as five can participate in cognitive tasks, including cognitive training (Grave & Blissett, 2004), the factors that would separate these children from other young children who would have difficulty understanding the treatment model are not well understood. These factors would likely include cognitive, developmental, and environmental factors (including exposure to formal schooling and family interaction style).

When working with young children with OCD, it is possible that an early intervention model may be more appropriate, rather than a treatment model. Future research might address the treatment of sub-syndromal symptoms in children and application of these CBT principles to nonclinical OCD symptoms in a model of secondary prevention of the development of OCD. As earlier age of onset and longer duration of OCD symptoms have been associated with persistence of OCD symptoms (Stewart et al., 2004), early and frequent intervention is needed. Intervening early with young children offers a unique opportunity to hopefully prevent the development of long-standing problematic behaviors. Such intervention increases the probability of

keeping OCD-affected youngsters on track with developmental milestones and thus may offer economic benefits of increased productivity, along with enhanced life quality, into adolescence and adulthood.

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Notes

1. The treatment manual is in the process of publication. For information regarding obtaining it, please contact the second author, Jennifer Freeman, at the Pediatric Anxiety Research Clinic, One Hoppin Street, Providence RI 02906.
2. Although the treatment and study were designed for children ages 5-8, we did enroll two four year old children who appeared cognitively and developmentally able to participate.

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