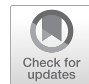

Adapting PCIT to Treat Anxiety in Young Children: The PCIT CALM Program

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Abstract

Despite tremendous progress and success in the development of well-established treatments for anxiety presenting in middle childhood and adolescence, advances in the development of supported practices for treating early childhood anxiety has lagged. Fortunately, in more recent years, the field has begun to witness a number of very important advances in the development of interventions designed specifically to treat early childhood anxiety and behavioral inhibition. One of the most promising advances in this area has been the adaptation of parent–child interaction therapy to address early childhood anxiety problems. As in traditional PCIT for early externalizing problems, PCIT adaptations for early-onset anxiety target child symptoms indirectly by reshaping the primary context of child development. This chapter reviews the research support for the PCIT CALM program and describes the program in detail. The chapter concludes with a case example of the program.

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Anxiety disorders are collectively the most prevalent category of mental health problems affecting children and adolescents (Comer & Olfson, 2010; Kessler et al., 2012). These disorders are characterized by marked and persistent fear or worry, and are typically accompanied by considerable behavioral avoidance and life interference. For example, child anxiety disorders are associated with serious family dysfunction, peer problems, reduced academic performance, sleep disturbance, irritability, and the development of other mental health problems such as depression, substance use, and suicidality (e.g., Cornacchio, Crum, Coxe, Pincus, & Comer, 2016; Cummings, Caporino, & Kendall, 2013; Green et al., 2016; Swan & Kendall, 2016; Thompson-Hollands, Kerns, Pincus, & Comer, 2014; Weiner, Elkins, Pincus, & Comer, 2015; Wu, Goodwin, Comer, Hoven, & Cohen, 2010). When left untreated child anxiety problems often persist into adulthood, during which time they are associated with a number of other mental and physical comorbidities, life impairments, and overall reduced quality of life (e.g., Comer et al., 2011; Lever-van Milligen, Lamers, Smit, & Penninx, 2017).

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The precursors of anxiety disorders (e.g., behavioral inhibition) as well as formal diagnosable anxiety disorders commonly onset in *early* childhood. It is estimated that between 2% and 9% of preschoolers already suffer from an anxiety disorder (Egger & Angold, 2006; Wichstrom et al., 2012), and the impact of preschool anxiety disorders on family functioning is comparable to the impact of attention-deficit/hyperactivity disorder or disruptive behavior disorders (Towe-Goodman, Franz, Copeland, Angold, & Egger, 2014). Typically, early-onset anxiety disorders do not remit on their own, and can show particularly pernicious symptom trajectories across time. Accordingly, effective early intervention for preschool anxiety problems is critical.

Despite tremendous progress and success in the development of well-established treatments for anxiety presenting in middle childhood and adolescence (Higa-McMillan, Francis, Rith-Najarian, & Chorpita, 2016), advances in the development of supported practices for treating early childhood anxiety has lagged (Carpenter, Puliafico, Kurtz, Pincus, & Comer, 2014). Fortunately, in more recent years, the field has begun to witness a number of very important advances in the development of interventions designed specifically to treat early childhood anxiety and behavioral inhibition (e.g., Carpenter et al., 2014; Cartwright-Hatton et al., 2011; Comer et al., 2012; Hirshfeld-Becker et al., 2010; Rapee, 2013). These programs are specifically tailored for compatibility with preschool children, they draw on conceptual models that emphasize how parents can inadvertently encourage and maintain problematic patterns of early child anxiety, and position parents as the primary agents of change for improving their child's anxiety.

One of the most promising advances in this area has been the adaptation of parent–child interaction therapy (PCIT; Eyberg & Funderburk, 2011) to address early childhood anxiety problems. As in traditional PCIT for early externalizing problems, PCIT adaptations for early-onset anxiety target child symptoms indirectly by reshaping the primary context of child development (i.e., parent–child interactions; Elkins, Mian, Comer, & Pincus, 2017). Further, as in traditional PCIT, the majority of sessions are spent with the therapist coaching parents in real time from behind a one-way mirror through a parent-worn earpiece device. As in traditional PCIT, parents learn Child-Directed Interaction (CDI) skills, which serve to strengthen mutually rewarding and positive parent–child relationships, and which encourage the practice of selectively attending to specific positive child behaviors to increase the frequency of those behaviors. However, unlike traditional PCIT, adaptations of PCIT for child anxiety place less emphasis on effective discipline and parent-directed interactions (PDI), and instead devote at least half of the treatment course to coaching parents to effectively guide their children through exposures to anxiety-provoking situations and to minimize avoidance.

There have now been several iterations of adapted PCIT for early-onset anxiety, and a current version receiving empirical investigation is the *PCIT Coaching Approach behavior and Leading by Modeling* (CALM) Program (Carpenter et al., 2014; Elkins et al., 2017). The PCIT CALM Program targets the full range of early-onset anxiety disorders, emphasizes in-session parent-led exposures and parental modeling of brave behavior, and incorporates live bug-in-the-ear parent coaching during in vivo exposure tasks (Puliafico, Comer, & Albano, 2013). In this chapter, we consider the rationale for modifying PCIT to treat early-onset anxiety problems and we review the research-to-date on such PCIT adaptations. We then turn our attention to a more in-depth presentation of the PCIT CALM Program, and to bring the material to life we present a brief case example of a young child treated with the PCIT CALM protocol. We conclude with some thoughts about future directions in the adaptation of PCIT to treat early child anxiety problems.

Why Adapt PCIT to Treat Early–Onset Anxiety?

To understand the underlying rationale for modifying PCIT to treat early-onset anxiety problems, it is important to first consider two factors that

have somewhat slowed progress in our field's understanding of how to best treat early-onset anxiety problems. First, there exists a commonly held belief that preschool anxiety is developmentally normal and naturally dissipates with time. Studies in developmental epidemiology have dispelled these misconceptions (Egger & Angold, 2006; Wichstrom et al., 2012). Whereas low-to-moderate levels of anxiety in the preschool years are normative, severe anxiety presentations do not remit on their own and in fact get worse with time.

Second, the well-supported cognitive-behavioral methods for treating anxiety in older children and adolescents (see Higa-McMillan et al., 2016) draw heavily on clinical methods that are often beyond the developmental capacities of younger children, making their simple extension to early childhood misguided (see Carpenter et al., 2014; Cornacchio, Sanchez, Chou, & Comer, 2017). For example, presenting the basic cognitive-behavioral model of anxiety to children requires them to comprehend sophisticated notions of psychological causality and to appreciate complex relationships among thoughts, feelings, and behaviors (Cornacchio et al., 2017). Such abilities are often poorly developed in the preschool years. In addition, the more limited receptive and expressive language abilities and metacognitive capacities that characterize early childhood may preclude younger children from effectively engaging in such cognitive treatment elements as thought monitoring and restructuring maladaptive cognitions. Similarly, advanced theory of mind and perspective-taking skills, which may not be present at earlier developmental stages, are necessary for clinical approaches that encourage children to reflect on how other people might perceive the same situations differently (see Cornacchio et al., 2017).

Fortunately, across the past decade or so, the field has come to accept that very young children can indeed suffer clinical anxiety, that such anxiety in very young children warrants treatment, and that when working with very young children it is misguided to apply the same clinical techniques and formats successfully used to treat anxiety in older children and adolescents. Broadly speaking, the modern treatment adaptations that have been used to treat early-onset anxiety can be divided into two types: *Downward Extensions* and *Developmentally Lateral Extensions* (Carpenter et al., 2014).

Downward extensions typically retain all of the core content of supported treatments for anxiety in older children—including recognizing anxiety and other emotion states, generating coping thoughts, and relaxation training—but adjust some of the format and specific methods of treatment delivery. For example, downward extensions for early child anxiety will cover the same material covered in treatment for older anxious children, but will increase use of concrete language and imagery, offer more tangible learning opportunities and interactive games, use puppets to help explain treatment material to children, and place a stronger emphasis on a reward system. Essentially, a downward extended treatment starts with the content found to work with older children, and then adjusts the delivery of this content to improve communication to younger children.

In contrast, PCIT adaptations for early child anxiety offer *developmentally lateral extensions* of methods found to work with other diagnostic conditions (e.g., externalizing disorders) in the same age group. Here the first emphasis is on identifying a successful format for the treatment of children in the preschool age range, and then on making content adjustments to specifically address anxiety problems. Unlike downward extension treatments for child anxiety, PCIT adaptations for child anxiety focus on parents as the primary agents of change, and these programs do not require metacognitive, perspective-taking, or abstract problem-solving skills of the young child. PCIT adaptations implement the live bug-in-the-ear parent-coaching format from behind a one-way mirror during naturalistic parent–child interactions that has been shown to work so well in optimizing the ecological validity of treatment for early child populations. Rather than directly engaging young children in treatment tasks and content that may be incompatible with their cognitive development, PCIT adaptations for early child anxiety work to reshape parenting practices and patterns of parent–child interactions in order

to adjust the immediate antecedents and consequences of targeted behavior patterns. Whereas traditional PCIT targets externalizing and disruptive behavior problems, PCIT adaptations for early-onset anxiety target anxious and avoidant child behavior patterns.

The PCIT CALM Program is based on the rationale that positive parental attention to and modeling of "brave" behavior can function to increase the frequency of such behavior in young children, while withdrawal of parental attention from anxiety-related and avoidant behaviors (e.g., whining, reassurance-seeking, refusal to engage in feared activities) can function to extinguish these behaviors (Puliafico et al., 2013). Indeed, research shows that intrusive, overprotective, controlling, and overly accommodating parenting, particularly in anxiety-provoking situations, is associated with child anxiety (Hudson, Comer, & Kendall, 2008; McLeod, Wood, & Weisz, 2007; Thompson-Hollands et al., 2014). Parents of anxious children often grant less autonomy and take over tasks that children should be able to normatively perform independently (McLeod et al., 2007). Parents of anxious children can "rescue" children from distress sooner than parents of nonanxious children, sometimes as a means of regulating their own anxiety (Kerns, Pincus, McLaughlin, & Comer, 2017). This, in turn, can serve to deny children important opportunities to learn to effectively cope with anxiety and to develop a repertoire of emotion regulation skills that prepare them to successfully and independently navigate age-appropriate situations.

Research Supporting PCIT as a Treatment for Anxiety

Initial support for the adaptation of PCIT to treat early-onset anxiety began with the pioneering studies of Pincus and colleagues and their research with young children diagnosed with separation anxiety disorder (Pincus, Eyberg, & Choate, 2005; Pincus, Santucci, Ehrenreich, & Eyberg, 2008). After determining that unmodified standard PCIT by itself was not sufficient to reduce early child separation anxiety, Pincus and colleagues developed and introduced a complementary three-session adjunctive PCIT treatment phase that specifically promoted brave behavior (i.e., "Bravery-Directed Interactions, or BDI; Pincus et al., 2008). Their initial PCIT adaptation was a fixed nine-session protocol, and included three CDI sessions followed by three BDI sessions, and finally three PDI sessions. The BDI phase did not incorporate bug-in-the-ear in vivo coaching and was instead more consistent with traditional CBT for child anxiety. In BDI, parents and children were taught the importance of nonavoidance and how to conduct separation practices outside of session. An initial pilot trial found that the majority of children treated with this nine-session protocol no longer met diagnostic criteria for separation anxiety disorder following treatment, whereas all children in a waitlist comparison condition retained their separation anxiety disorder diagnosis (see Carpenter et al., 2014).

Building on these promising findings, Comer and Puliafico developed the PCIT CALM Program to target the full range of anxiety disorders affecting young children (beyond a sole focus on separation anxiety disorder), placing greater emphasis on in-session, parent-led exposures and parental modeling, weaving in CDI skills more directly into the anxiety-focused aspects of treatment, and incorporating live, bug-in-the-ear coaching during *in vivo* exposure tasks (Comer et al., 2012; Puliafico et al., 2013). A detailed overview of the PCIT CALM Program is provided in the next section of this chapter.

An initial small pilot trial examining the PCIT CALM Program found that, in a mixed sample of young children presenting with social anxiety disorder, generalized anxiety disorder, separation anxiety disorder, and/or specific phobia, roughly two-thirds showed full diagnostic response following treatment (meaning they no longer met diagnostic criteria for any anxiety disorders at posttreatment). These children also exhibited significant functional improvements. Research examining the effectiveness of the PCIT CALM Program

is ongoing, with current studies examining tele-mental health formats that offer opportunities to meaningfully extend the reach and scope of treatment. Over the last couple of years, case studies have been published examining videoconference-based delivery of the PCIT CALM Program for early child anxiety (e.g., Cooper-Vince, Chou, Furr, Puliafico, & Comer, 2016), and Comer and colleagues are currently conducting a waitlist-controlled randomized trial evaluating Internet-delivered PCIT CALM (I-CALM) in the treatment of early child anxiety.

The PCIT CALM Program

The PCIT CALM Program is a family-focused treatment developed for the treatment of children ages 8 and below suffering from excessive anxiety. Flexibility should be applied when making age-related decisions about whether the PCIT CALM Program is appropriate for a given child. For example, cognitively advanced 7- and 8-year-old children may benefit more from individual cognitive-behavioral treatment, which directly teaches children anxiety management skills. Likewise, 9-year-olds showing less cognitive maturity may benefit from the PCIT CALM Program's strictly behavioral approach and emphasis on reshaping parenting practices and parent–child interactions.

Table 1 provides a session-by-session overview of the 12-session PCIT CALM Program, adapted from Comer et al. (2012). For research purposes, the PCIT CALM protocol was initially developed as a 12-session protocol, although it is certainly possible to implement it as mastery-oriented treatment that is not fixed in length. The PCIT CALM Program includes eight exposure sessions (whereas the original Pincus adaptation included just two). To optimize the number of sessions devoted to exposures, and noting that few of the separation-anxious children in the Pincus trial showed significant externalizing problems, PDI is not included in the PCIT CALM Program. For some children with co-occurring disruptive behavior problems, it will be useful to augment PCIT CALM treatment with a traditional course of PDI.

The first phase of PCIT CALM is comparable to the first phase of traditional PCIT and focuses on strengthening a positive and mutually rewarding parent–child relationship through the teaching and coaching of CDI skills. Because positive attending is a foundational skill in the reinforcement of brave (e.g., approach) behavior, the use of CDI skills by parents (including active ignoring of anxious and avoidant behavior) is heavily emphasized early in PCIT CALM (see Puliafico et al., 2013). As in traditional PCIT, PCIT CALM introduces CDI skills to parents during an initial parent-only session, but in PCIT CALM this parent-only session also incorporates psychoeducation about the nature of child anxiety, and includes the collaborative development of an individualized fear hierarchy. This fear hierarchy provides a guide for the subsequent engagement in graduated exposure tasks. Early sessions also coach parents in the use of CDI skills during low-level exposure tasks. Exposures are introduced during the CDI portion of treatment to begin reinforcing a child's approach behavior in mildly anxiety-provoking situations, and to build parents' confidence in applying CDI skills when their children encounter anxiety-provoking situations.

The second phase of PCIT CALM more directly focuses on providing instruction and coaching in a specific set of directive parent skills (abbreviated in a four-step acronym—the DADS steps—which we describe below) to use in anxiety-provoking situations for their child. The DADS steps constitute a specific behavioral sequence for parents to follow in exposure situations. They incorporate positive attending and active ignoring from the CDI phase of treatment, but also include the use of direct commands to more actively prompt child exposure to feared situations. Brief session-by-session descriptions of the PCIT CALM protocol, adapted from Puliafico et al. (2013), are provided below.

Table 1 Session-by-session overview of the PCIT CALM Program for early childhood anxiety problems (adapted from Comer et al., 2012)

Session	Attendees	Content
1	Parent(s) only	*CDI teach + exposure hierarchy building*: (1) Orient parents to program; (2) Psychoeducation about anxiety and the family; (3) Introduce exposure therapy and develop individualized fear hierarchy; (4) Teach parents CDI skills (Praise, Reflection, Imitation, Description, Enthusiasm); (4) Role play CDI skills; (5) Assign at-home CDI
2	Parent and child	*CDI coach 1*: (1) Orient child to program; (2) Review child's anxiety, child's behavior, and at-home CDI from previous week; (3) Orient family to bug-in-the-ear coaching format; (4) Code parent CDI skills; (5) Live-coach parents in CDI; (6) Provide parent feedback; (7) Assign at-home CDI
3	Parent and child	*CDI coach 2 ± exposure preparation*: (1) Review child's anxiety, child's behavior, and at-home CDI from previous week; (2) Code parent CDI skills; (3) Live-coach parents in CDI; (4) Provide parent feedback; (5) Prepare family for upcoming low-level in-session exposure; (6) Assign at-home CDI
4	Parent and child	*CDI coach 3 ± exposure session 1*: (1) Review child's anxiety, child's behavior, and at-home CDI from previous week; (2) Code parent CDI skills; (3) Live-coach parents in CDI; (4) Live-coach parents in low-level exposure task; (5) Provide parent feedback; (6) Prepare family for upcoming low-level in-session exposure; (7) Assign at-home CDI
5	Parent and child	*CDI coach 4 ± exposure session 2*: (1) Review child's anxiety, child's behavior, and at-home CDI from previous week; (2) Code parent CDI skills; (3) Live-coach parents in CDI; (4) Live-coach parents in low-level exposure task; (5) Provide parent feedback; (6) Prepare family for upcoming parent-only didactic session regarding the promotion of brave child behaviors in moderate-to-high level exposure tasks; (7) Assign at-home CDI
6	Parent(s) only	*DADS teach session*: (1) Review child's anxiety, child's behavior, and at-home CDI from previous week; (2) Introduce and teach parents DADS steps for the promotion of brave child behaviors (*D*escribe situation, *A*pproach situation, give *D*irect Command for child to join situation, provide *S*elective attention based on child's performance); (3) Role-play DADS steps; (4) Prepare family for upcoming moderate-level exposure task; (5) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
7	Parent and child	*DADS coach 1 ± exposure session 3*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in moderate-level exposure task using DADS steps; (5) Provide parent feedback; (6) Prepare family for upcoming moderate-level in-session exposure; (7) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
8	Parent and child	*DADS coach 2 ± exposure session 4*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in moderate-level exposure task using DADS steps; (5) Provide parent feedback; (6) Prepare family for upcoming high-level in-session exposure; (7) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
9	Parent and child	*DADS coach 3 ± exposure session 5*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in high-level exposure task using DADS steps; (5) Provide parent feedback; (6) Prepare family for upcoming high-level in-session exposure; (7) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
10	Parent and child	*DADS coach 4 ± exposure session 6*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in high-level exposure task using DADS steps; (5) Provide parent feedback; (6) Prepare family for upcoming high-level in-session exposure; (7) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
11	Parent and child	*DADS coach 5 ± exposure session 7*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in high-level exposure task using DADS steps; (5) Provide parent feedback; (6) Prepare family for upcoming high-level in-session exposure; (7) Prepare family for upcoming final session; (7) Assign at-home CDI and at-home DADS practice in out-of-session exposure tasks
12	Parent and child	*DADS coach 6 ± exposure session 8*: (1) Review child's anxiety, child's behavior, and at-home DADS practice from previous week; (2) Code parent CDI skills; (3) Brief live-coach of CDI; (4) Live-coach parents in high-level exposure task using DADS steps; (5) Provide parent feedback; (6) Review child's progress in treatment; (7) Encourage continued practice of skills learned in treatment; (8) Graduation ceremony for family

Note: CALM = *C*oaching *A*pproach behavior and *L*eading by *M*odeling; CDI = child-directed interactions; DADS steps = *D*escribe situation, *A*pproach situation, give *D*irect Command for child to join situation, provide *S*elective attention based on child's performance

Session 1: Psychoeducation/CDI Teach Session

After an initial intake evaluation, the first PCIT CALM session includes just the therapist and parents in order to: (1) present the rationale for focusing on parenting and parent–child interactions in the treatment of child anxiety symptoms; (2) provide psychoeducation about child anxiety; (3) describe factors that could maintain child anxiety, including parenting behaviors; (4) teach parents skills in positive attention and active ignoring that will be practiced in later sessions; and (5) initiate a hierarchy of the child's feared and avoided situations. Typically, session 1 lasts approximately 90–120 min, or can be broken across two parent-only sessions.

When providing a rationale for parent-based treatment, the therapist first explains how individual therapies for older child anxiety are ill-suited for young children who may lack the developmental capacities to properly utilize cognitive coping skills taught in such treatments. Therapists inform parents that the PCIT CALM Program indirectly targets child anxiety by working to reshape parenting practices and parent–child interactions that can inadvertently maintain child anxiety symptoms. During this session, the therapist also emphasizes that the development and maintenance of child anxiety is influenced by both genetic and environmental factors, and that parents can potentially lessen child anxiety symptoms by modifying their behavior toward their child. Parents are informed that certain behaviors intended to reduce their child's distress (e.g., allowing their child to avoid feared situations, or attending to reassurance seeking, whining or crying), can serve an immediate goal of making the child more comfortable in the moment. They are also informed, however, that in the long-term, these behaviors reinforce anxiety-driven behaviors. The PCIT CALM therapist further communicates that, as parents learn to attend more positively and saliently to their child's brave behaviors and to ignore anxiety-driven behaviors, the brave behaviors will be reinforced and anxiety-driven behaviors may begin to dissipate.

In session 1 of PCIT CALM, the therapist also teaches parents the PRIDE skills that are at the center of CDI in traditional PCIT (Eyberg & Funderburk, 2011). These skills include: Labeled *P*raise (specific praise of child's positive behavior), verbal *R*eflections (echoing a child's statement), *I*mitation, Behavioral *D*escriptions (narration of child's behavior), and *E*nthusiasm. Parents are also told to avoid questions, commands, and criticisms, each of which can interfere with the reinforcement of desired or "brave" behaviors. Therapists teach parents to actively ignore undesired behaviors, rather than providing attention to them. The CDI Teach session of the standard PCIT manual (Eyberg & Funderburk, 2011) provides thorough coverage of how therapists can best teach the PRIDE skills through instruction and role plays. For homework, therapists assign parents to devote 5 min each day to practicing these new positive attending skills during individual playtime with their child (i.e., special time).

Finally, parents work with the therapist to develop a hierarchy of situations that their child fears and/or avoids. This individualized fear hierarchy (or fear ladder) then serves as a roadmap for graded exposure tasks in future sessions. Situations on the fear ladder must be as specific as possible. For example, instead of listing "Being around others," the parents should list all social situations that elicit anxiety (e.g., talking during circle time, meeting new or unfamiliar people, playing in large groups, playing in medium-sized groups, talking to an adult). This will provide a more thorough guide of the child's fears and will more strategically inform exposure planning.

Sessions 2 and 3: CDI Coach Sessions

Parents and their child attend these sessions, which are intended to increase the parent's skills in positive attending and active ignoring. The therapist first orients the child to treatment and then briefly reviews the past week's progress and the parents' daily special time assignment. For the remainder of the session, the parents play with

their child while the therapist codes and coaches parents in CDI skills from behind the one-way mirror. Traditionally, the therapist coaches from behind a one-way mirror. However, real-time coaching can also occur over the Internet using videoconferencing and Bluetooth earpieces with the family at their home and the therapist at his or her office (Comer et al., 2015; Comer et al., 2017). If two parents are attending, the sessions are divided in half so that each parent spends individual time interacting and playing with their child. For each parent, the therapist first codes the parents' use of the PRIDE skills during child-led interactions for 5 min from an adjacent monitoring room. The therapist then uses the data from this coding exercise to inform individualized parent coaching delivered through a bug-in-the-ear device during parent–child interactions. The therapist coaches parents to achieve CDI mastery criteria: ten labeled praises, ten behavioral descriptions, and ten reflections, with no more than three questions, commands, or criticisms during the 5-min coding period. The parents are reminded that these positive attending skills are essential to effectively reinforce their child's brave behavior. Throughout this phase of treatment, parents continue practicing positive attending during special time each day with their child.

Sessions 4 and 5: CDI Coach/Exposure Sessions

During these sessions, CDI coding and coaching continue as described above, but in these sessions the therapist and parents begin presenting the child with low-level in-session exposure situations. These exposures are chosen from the low-end of the child's fear ladder and are intended to provoke only mild anxiety. The therapist coaches the parents to use the CDI skills to reinforce their child when he or she approaches the exposure situations. Parents are also instructed to actively ignore avoidance, as well as any anxiety-based behaviors (e.g., whining, crying, excessive reassurance seeking) in these low-level exposure situations. Low-level exposures are selected for these early sessions to maximize initial success and so parents can first practice using CDI skills to promote child bravery in relatively manageable situations. For homework, the therapist also encourages the parents to use CDI skills to reinforce brave behaviors in naturally occurring anxiety-provoking situations, while also continuing to practice special time each day.

Session 6: DADS Teach Session

Following the CDI portion of treatment, parents attend the DADS Teach session, in which they learn a behavioral sequence referred to as the DADS steps. The DADS steps are a set of sequential skills that directly model and reinforce brave behaviors. Specifically, when guiding their child in facing an anxiety-provoking situation, parents are taught to: (1) *D*ESCRIBE the situation; (2) *A*PPROACH the situation; (3) give a *D*IRECT COMMAND to the child to approach the situation; and (4) *S*ELECTIVELY ATTEND to the child's behavior to reinforce approach toward the feared situation, and ignore anxiety-related behaviors. The DADS steps are to be applied whenever a child encounters an anxiety-provoking situation, whether naturalistically, or as part of a scheduled exposure. Additional details of each of the four DADS steps are provided below:

Describe: As soon as the exposure begins, the parent makes at least three statements describing the situation. These descriptive statements should be brief and provide factual information to the child about the situation. Importantly, these descriptions should not provide reassurance to the child. For example, in a situation in which a child is afraid of an approaching dog, appropriate descriptive statements could include "It looks like a dog is headed toward us," "That dog is brown," and "He has a long purple leash."

Approach: After describing the situation to the child, the parent now personally approaches the situation so as to model brave behavior for the child and to demonstrate that the situation is safe. For example, in the above situation, the parent might reach out and pet the dog. In a situation

involving talking to a new person, the parent might warmly interact with the unfamiliar individual. In a separation situation, the parent may move toward the door away from the child and display comfort in the situation. Therapists instruct the parent to remain in the Approach step for 1–2 min to provide children the opportunity to begin approaching the anxiety-provoking situation on their own. During the Approach step, parents are encouraged to describe their own approach behavior and positive aspects of the situation for the child to hear. For example, a parent may say, "This dog has smooth fur" or "I'm having fun petting the dog." Sometimes the child might independently approach the anxiety-provoking situation during this step. In such cases, the parent should enthusiastically use the CDI skills to reinforce the child's spontaneous brave behavior.

Direct command: If the child does not spontaneously approach the anxiety-provoking situation during or after the Describe or Approach steps, the parent then provides a direct command to the child to approach the situation. Specifically, the parent must provide a statement that clearly instructs the child to engage in the specific approach behavior. For example, a parent might say "Please pet the dog," "Please say 'hi' to our new friend," or "Please stay at the table while I sit over there." As in the PDI Teach session of standard PCIT (Eyberg & Funderburk, 2011), the DADS Teach session also includes description of direct commands contrasted with indirect commands (e.g., questions and commands that do not clearly state what the child is specifically expected to complete). Examples of indirect commands include: "Why don't you pet the dog?" or "I bet you can stay at the table while I sit over there." In this case the child is explicitly given the option of avoiding compliance, which is why the direct command is preferred. The therapist instructs the parent to wait for 5 s without saying another word to afford an opportunity for the child to comply with the direct command to approach the anxiety-provoking situation.

Selective attention: Following the direct command for the child to engage in approach behavior, parents are instructed to differentially respond to the child's approach behavior versus any avoidance. The therapist instructs the parents to use CDI skills to attend to and reinforce any approach behavior evidenced by the child, no matter how small, and to selectively ignore any anxiety-related behaviors, such as reassurance-seeking, whining, or crying. For example, if a child is crying while also approaching a feared situation (e.g., a dog), an appropriate response would be for the parent to say, "Awesome job walking toward the dog" (labeled praise) while not making any mention of the child's tears.

In scenarios in which the child does not comply with the direct command to approach the feared situation, and there is no semblance of child approach behavior upon which to draw (e.g., the child who backs away from the dog, and won't even look at the dog), the parent concisely informs the child that he or she will continue engaging with the anxiety-provoking situation. The general statement is "I am going to keep on ____ (playing with our new friend, petting the dog, standing in the dark room)." This statement informs the child that the parent intends to remain in the anxiety-provoking situation until the child approaches it as well. After making this statement, the parent is instructed to actively ignore the child's behavior in general, but to overtly praise any signs of approach that the child exhibits. For example, if while the parent continues to engage in the feared situation, the child lifts his head up to briefly watch the parent engaging in the feared situation, the parent would be encouraged to say something like "I see you're looking over here at the dog," (behavioral description) or "I'm really proud you're able to look at the dog" (labeled praise). Importantly, if the child begins to approach the feared situation at *any* point during the DADS steps sequence, the parent should praise this behavior and fully attend to it enthusiastically using CDI skills. Thus, a parent may not need to progress through all of the DADS steps during a given exposure situation.

After teaching parents the DADS steps, the therapist engages the parents in a series of role-plays to further strengthen comprehension. The therapist and parents should role-play scenarios

in which the child begins approaching the featured situation at various points in the DADS sequence, as well as scenarios in which the child does not approach the situation. Parents are not assigned to begin using the DADS skills until their next treatment session to avoid using them incorrectly in the absence of coaching. Parents are assigned to continue practicing CDI skills with their child for 5 min each day.

Sessions 7 Through 12: DADS Coach/ Exposure Sessions

Following the DADS Teach session, the remaining sessions of PCIT CALM are spent coaching parents in their use of the DADS steps with their child. As in CDI coach sessions, DADS coach sessions start with a short meeting between the therapist and the parents to review the prior week and to plan for the session. The therapist then observes parent–child interactions from behind the one-way mirror and coaches parents through the bug-in-the-ear device. The therapist continues CDI observation and coding to ensure the parents maintain CDI proficiency. In earlier DADS Coach sessions, the therapist provides very detailed instructions for parents to introduce exposure situations and to appropriately use the DADS steps in these situations. The therapist coaches the parent through at least one exposure situation, and should remain in that exposure situation until the child achieves the targeted goal. When working with two-parent families, the switch from one parent's coaching session to the other's session should be delayed until the child meets the exposure goal set forth by the first parent.

A Comment About the DADS Sequence

In some exposure situations in which the therapist realizes that the initial task is too fear-provoking after reaching the D_2 Step, it is recommended that the parent restart the DADS steps from the beginning and break down the direct command (D_2 Step) into a smaller and less fear-provoking command. Once the child is able to successfully complete the lower level goal, the therapist can return to the D_2 Step and slowly increase the difficulty of the task until the child is able to complete the initial exposure goal. For example, it may be too difficult for a child to directly ask a question to an unknown person. Instead, the therapist will have the parent break down the initial exposure task to have the child practice asking a question to his/her mom or dad first, ask the same question closer to the target person, and finally have the child ask the question directly to the unfamiliar person. Quality exposure therapy should always be course-correcting in session, and such shaping is critical to help children to reach ultimate exposure goals.

Termination

For research purposes, the PCIT CALM protocol was initially designed as a 12-session protocol, but in clinical practice it should be implemented as a mastery-based treatment, with the actual treatment pacing determined by the parents' progress mastering the skills and by the child's success navigating his or her fear hierarchy across exposure exercises. Therapists should not transition from the CDI phase to the DADS phase until the parents achieve standard CDI mastery criteria: ten labeled praises, ten behavioral descriptions, and ten reflections—with three or fewer questions, commands, or criticisms—within a coded 5 min period. After beginning the DADS phase of treatment, treatment should not terminate until the DADS steps are mastered and the child has engaged in the highest item on the fear hierarchy. A rating scale such as the Preschool Anxiety Scale may also be used as a helpful measure of child anxiety during the course of treatment, and may be used to help inform decisions regarding termination. After termination, many parents will further benefit from periodic booster sessions that provide continued reinforcement of treatment skills.

A Case Example

Case Introduction and History

Connor was a 5-year-old, Latinx male brought by his biological mother for treatment at our clinic in Miami, Florida due to her concerns about his impairing social fears and considerable anxiety in situations in which he had to separate from her. Connor was an only child who lived with his biological mother and father, Mr. and Mrs. G. Regarding developmental history, Mrs. G reported that she did not have any complications during her pregnancy or during his delivery, and that he had no delays in reaching developmental milestones. No medical concerns were reported.

At the time of intake, Connor was enrolled in a pre-kindergarten classroom, with no reported academic or behavioral difficulties. He was performing at grade level and required no school-based accommodations or specialized academic services. Mrs. G. reported that Connor had no difficulties interacting and playing with family members at home, but his social interactions with peers were somewhat limited. Mrs. G. attributed his inhibition to social anxiety. Connor loved playing baseball, although his social concerns interfered with his willingness to play. Prior to his presentation to our clinic, Connor had never received psychosocial or pharmacological treatment for behavioral or mental health difficulties.

Baseline Assessment

Connor's mother was interviewed by a staff clinician using the Anxiety Disorders Interview Schedule for the *DSM-IV*, Parent Version (ADIS-IV-P; Silverman & Albano, 1996), a semi-structured parent-report diagnostic interview for children, with particularly thorough coverage of the anxiety disorders. The ADIS-IV-P collects parent reports of child symptoms that directly inform diagnoses that adhere to DSM-IV. Each diagnosis is also assigned a Clinical Severity Rating (CSR) ranging from 0 to 8 to reflect impairment and severity; CSRs $\geq$ 4 indicate diagnostic criteria are met for that disorder, whereas CSRs $\leq$ 3 reflect subclinical diagnostic presentations. For children over the age of 7 years, a parallel child ADIS-IV interview is conducted to complement the ADIS-IV-P, but given Connor's age only the parent interview was conducted.

During the ADIS-IV-P interview, Mrs. G. reported that Connor was highly avoidant and apprehensive of participating in group activities with both familiar and unfamiliar peers. Although he had no trouble playing and interacting with his parents, grandparents, aunts, a same-aged cousin, and other family members, Mrs. G. reported that Connor worried at school about answering questions in class, reading aloud, asking for help, working in groups, and initiating or joining group play. Connor also worried about what others might think of him in his extracurricular activities. Although he loved playing baseball with his cousins, and although he was very good at baseball for a 5-year-old, when his mother signed him up for a community baseball team he had a very difficult time playing on this community team and enjoying himself. He would "freeze" when it was his turn to bat or to run and stop a ground ball during baseball practices and games. Mrs. G. recalled that he sometimes shared that he worried that when he was at bat he might swing and miss and others would laugh at him. Connor's coach recognized that he was nervous, and he reportedly stopped having him to come to the plate to bat at practices. At the time of intake, Mrs. G. was seriously considering taking Connor off of the baseball team. She felt it was a "waste" to pay for this activity in which he refused to participate and that he clearly did not enjoy. Connor also detested having his picture taken, and when people would try to take his picture he would typically cry, hide his face, or run away.

Mrs. G. reported that Connor always made full eye contact at home and with all of his relatives, but that he maintained very little eye contact in all other social situations. Whenever his mother took him to a birthday party, he would remain by her side looking down the entire time and he would not interact with any of the other children. Connor's behavior was embarrassing

for Mrs. G., and his clinging prevented her from socializing with other mothers. Before each birthday party, Connor would plead for his mother not to take him, and about 6 months ago, Mrs. G. "gave in" and stopped taking him.

Mrs. G. felt Connor's social anxiety and avoidance were considerably interfering with his ability to maintain normal social interactions, were limiting his ability to form and maintain peer relationships, and were compromising his overall quality of life. She also felt that she and Mr. G. were themselves deeply affected by Connor's social anxiety. Although they were typically very gentle parents, they acknowledged that they would often "lose their cool" with Connor for not playing with other kids or enjoying himself in groups, and they found it exhausting to constantly consider whether he would participate in various activities. Connor received a diagnosis of social anxiety disorder (CSR = 6).

In addition to his social anxiety, Mrs. G. reported that Connor suffered from separation anxiety. In developmentally appropriate separation situations, Connor would commonly cry and beg his mother to stay with him. When at home, he insisted his parents remain in the same room as him, and at night he was unable to fall asleep alone. He required either his mother or father to lie next to him every night while he fell asleep. When his aunts or grandmother (with whom he was typically very comfortable) would babysit, Connor would cry for much of the time and tell them that he missed his parents. Connor received a secondary diagnosis of separation anxiety disorder (CSR = 5).

Course of Treatment

For the first session, Mrs. G. met with the therapist (without Connor) for the parent-only PCIT CALM initial session. The therapist provided an introduction to the treatment program, reviewed the rationale for a parent/family-focused treatment approach, and worked with Mrs. G. to identify treatment goals. The therapist provided psychoeducation about the nature of early child anxiety and the parenting practices that can be associated with enduring child anxiety (e.g., overprotection, modeling anxious responding). The therapist emphasized how parents' attention can powerfully shape young children's behavior and encouraged Mrs. G. to consider how learning to pay attention to, encourage, and praise Connor's "brave" behavior (e.g., approach behavior), while ignoring his anxious and avoidant behavior could help Connor engage in brave behavior more frequently. The therapist collaborated with Mrs. G. to create a fear hierarchy from which the exposure practices during the second phase of treatment would be selected. Social and separation situations were ranked from lowest to highest, based on how anxious they made Connor and how much he avoided them (see Fig. 1 for Connor's fear ladder).

During this parent-only initial session, the therapist also taught Mrs. G. the child-centered interaction (e.g., PRIDE) skills, with an emphasis on differential attention and the strategic use of praise to promote any small amount of incidental bravery from Connor. To enhance learning, the therapist also engaged Mrs. G. in a number of CDI role-plays and provided feedback as needed. Mrs. G was provided CDI skills and homework handouts and encouraged to practice and track special time in between sessions.

Mrs. G. and Connor both attended the second PCIT CALM session. The therapist introduced herself to Connor and oriented him to the program. She let Connor visit the observation room behind the one-way mirror, and let Connor try on the bug-in-the-ear device that his mother would be using for much of treatment, which he enjoyed. Connor was quite shy and said almost no words, but he was very attentive to what the therapist had to say. When the therapist stepped out and let Connor be alone in the playroom with his mother, Connor enjoyed making silly faces at the mirror.

The therapist then reviewed with Mrs. G. her homework engagement and Connor's anxiety symptoms from the past week. Mrs. G. reported that Connor and she both enjoyed the extra time together each night, but that she had trouble remembering the specific skills. The therapist applauded the mother's commitment to special time each night, and then coded Mrs. G. during

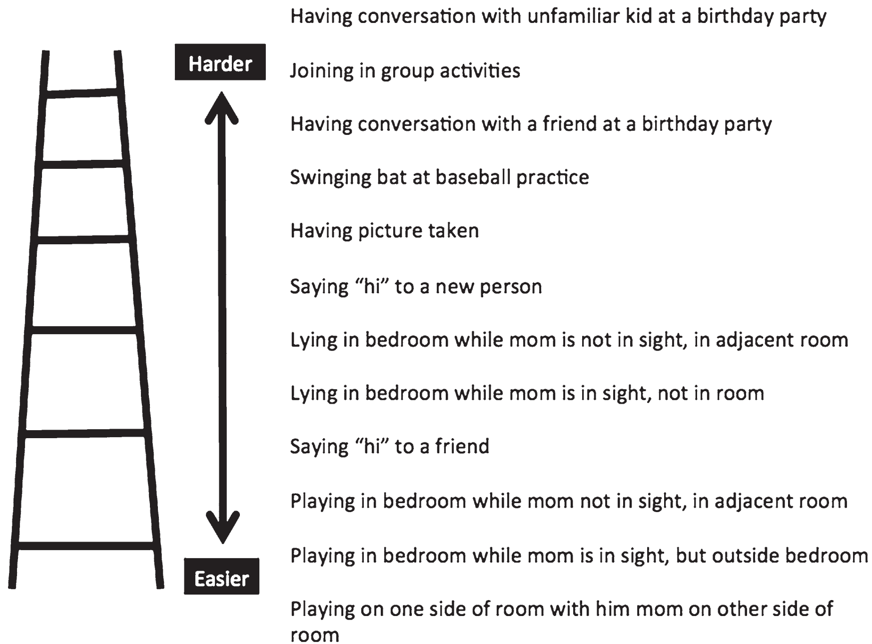

Fig. 1 "Fear ladder" for child treated with PCIT CALM

5 min of CDI with Connor. The therapist identified that Mrs. G. engaged in a number of behavioral descriptions during the coded interaction, and that coaching would emphasize the use of labeled praises and reflections. The therapist also identified that Mrs. G. would benefit from displaying more enthusiasm, and that she could make her attention more effective by limiting her use of questions and indirect commands during CDI time. Connor appeared to enjoy the play. The rest of the session was spent coaching Mrs. G., focusing mostly on increasing the number of labeled praises and reflections. At-home practice of CDI skills was assigned.

At the beginning of the third PCIT CALM session, the therapist first reviewed the child's anxiety symptoms and Mrs. G's home practice during the prior week. Homework compliance was strong. Connor and his mother were reportedly both enjoying their nightly special time, and Mrs. G. reported feeling more comfortable incorporating the CDI skills into their play. Mrs. G. and Connor were observed for 5 min of CDI coding, which revealed that Mrs. G was frequently using behavioral descriptions and reflections but still did not use labeled praises frequently and was inconsistent in her enthusiasm when playing with Connor. Connor spoke to his mother more in this session than in the initial coaching session. Mrs. G.'s skills improved during coaching and her pacing improved with skill drills. At the session's end, a few minutes were spent preparing for next week's upcoming low-level in-session exposure during which, for some of the play, Mrs. G. would sit about 5–7 ft away from Connor.

During the following two sessions (sessions 4 and 5), the session format continued as described above, with the exception that low-level exposures were added during CDI coaching. After CDI coding and 5 min of coaching, the therapist informed Mrs. G that they would soon begin the previously selected low-level exposure practice. During the play, after announcing the "bravery practice" to Connor, the therapist instructed Mrs. G. through the bug-in-the-ear device to calmly slide over about 1 ft from Connor without calling verbal attention to it, and to continue using her CDI skills to attend to his play. Mrs. G. did so, and Connor did not even seem to notice that she had moved. After a couple more minutes, the therapist instructed Mrs. G. to slide over another foot or two and to again continue using her CDI

skills. Mrs. G. did so, and Connor, absorbed in his play and his mother's attention, again did not seem to notice. Mrs. G. continued to use her CDI skills, while the therapist encouraged her to slide over another few feet. At this point Connor asked his mother repeatedly why she moved "so far away." The therapist encouraged his mother to answer one time, and then to ignore repetitions of the question, instead describing and praising positive aspects of Connor's play: "That's such an awesome Lego tower you built," and "You put the blue Legos on top of all of the red Legos." Soon Connor stopped asking his mother why she was sitting further away, and again became absorbed in his play. Session 5 followed a very similar procedure, with Mrs. G. ultimately using CDI skills while sitting on the very opposite side of the room by the end of the session and Connor relatively comfortable in his play. During these weeks, Mrs. G. was assigned to practice CDI at home, to practice CDI while sitting on opposite sides of the room from him, and finally to practice CDI while sitting outside of the room in which he is playing.

Mrs. G. attended the parent-only session 6 (DADS Teach) by herself. The therapist reviewed Connor's progress thus far and introduced the second phase of treatment using DADS steps to scaffold more difficult exposure tasks. Mrs. G. reported that she felt her relationship with Connor was improving, that he seemed a bit more positive and upbeat, and that she was impressed that when he plays in his bedroom at home, he was now allowing her to watch from outside of his room. At the same time, she reported that he was still extremely shy around other children and his teacher. Mrs. G. was provided a handout with the DADS steps so that she could follow along with the therapist while each skill was introduced. After teaching the DADS steps, the therapist playfully quizzed Mrs. G., and then led her in a series of role-plays using the newly learned DADS skills. Mrs. G was engaged throughout the role-plays, and expressed relative enthusiasm and cautious confidence in the next phase of treatment.

For the remaining sessions, the session format continued as described above, starting with check in, parent–child interaction coding, 5-min CDI coaching and then new exposure practices while Mrs. G. was coached in the DADS steps.

In the first DADS coaching session (session 7), both Connor and his mother attended. They also brought to session his cousin's best friend, Pepe, with whom Connor often played after school but rarely spoke to, so that Mrs. G. could be coached in the DADS steps while having Connor say hi to another child he knew well. During CDI coding, Mrs. G. met CDI mastery criteria for behavioral descriptions (14), labeled praises (13), and reflections (10), but missed meeting full CDI mastery criteria due to also using a number of questions (4) and indirect commands (3). CDI Coaching was spent helping Mrs. G. minimize questions and commands while retaining a high rate of behavioral descriptions, labeled praises, and reflections. When it was time for exposure practice, Mrs. G was coached to tell Connor, "You have been doing a great job being brave lately. Now we are going to practice being brave again. Pepe will come into the room and we will practice speaking to him." Pepe was brought into the playroom and instructed to begin coloring at the table on the opposite side of the room from Connor and his mother. Connor seemed a bit less relaxed with Pepe in the room, and he leaned in a little closer to his mother while they continued to play. The therapist prompted Mrs. G. to provide three descriptions to initiate the situation (D_1 Step): (1) "I see Pepe over there," (2) "He's coloring at the table," and (3) "He's using your favorite color, green, to color the house." Mrs. G. then modeled the brave behavior that Connor would be expected to do (A Step), by confidently saying "Hi, Pepe," who replied cheerfully "Hi, Mrs. G. Hey Connor." Connor leaned further into his mother and looked downward. Mrs. G. was coached to ignore the more withdrawn and avoidant clinging behavior. She was instructed not to hug him back as he burrowed into her, and to instead slide over a bit to give him some space.

Mrs. G. was guided to give Connor a direct command to say "hi" to Pepe (D_2 Step): "Connor, please say hi to Pepe." Connor did not utter any words and let out a very slight whine, but he did

look toward Pepe and he burrowed a little less into his mother. After waiting 5 s, Mrs. G. was coached to praise Connor for staying in the room and looking in the direction of Pepe. She was also coached to say "I'm going to keep talking to Pepe" and to then discontinue her current play with Connor and get up and interact with Pepe (S Step). Mrs. G. then used CDI skills to interact with Pepe about his drawing, while ignoring Connor's bids for attention (e.g., whining, pulling her shirt, trying to ask her if they could leave the room).

After about a minute of her ignoring Connor's anxious behavior, the therapist noted that Connor had calmed down and encouraged his mother to praise him for doing so ("Thank you for calming down—it's so fun to play with you when you are being calm!"). Connor picked up a crayon and began drawing on paper next to Mrs. G. and Pepe. Mrs. G. was coached to praise Connor for joining her and Pepe in the play ("Thanks for coloring with us!"). After a minute of Mrs. G. describing his play and praising him, Pepe naturally said to Connor ("Awesome rocket ship you're coloring, dude!"). Connor smiled but did not say anything. Mrs. G. was coached to provide a direct command for Connor to say "thank you" (D_2 step) and Connor indeed whispered (barely audibly) "thanks." Mrs. G.'s started to say "louder" but the therapist jumped in and coached her to ignore his whispering volume and instead to give him lots of labeled praises for bravely speaking to Pepe (S Step): "Awesome job, brave talking! So cool that you told Pepe 'thanks'!" Connor bashfully smiled. Mrs. G. was coached to return to using her CDI skills while playing with the two children.

After about 5 min, Mrs. G. was coached to instruct Connor to praise Pepe on his drawing (D_2 Step): "Tell Pepe you like the car he's drawing." Connor looked down and leaned into his mother. To help Mrs. G. wait five full seconds following her direct command, the therapist counted "1…2…3…" for her into the bug-in-the-ear device. Just as the therapist reached "4," Connor said in a whisper, "Cool truck." Without needing a prompt, Mrs. G. exclaimed "Awesome brave talking!" Pepe responded "Thanks, man!" Mrs. G. was instructed to revert back to using her CDI skills as she continued playing with the boys. The therapist and Mrs. G. were both delighted when Pepe asked Connor what the big yellow thing on his picture was, and Connor replied (somewhat louder than his previous comment): "It's the sun." Mrs. G. provided another enthusiastic labeled praise: "Thanks for answering Pepe—amazing brave talking! Mommy is so proud of all of your brave talking. You guys seem like you're having lots of fun!" At-home CDI practice was assigned as well as continued exposures, including letting Connor play in his bedroom while Mrs. G. worked in an adjacent room.

At the beginning of session 8, Mrs. G. reported that since last week's session, Connor was feeling really proud of himself. He apparently bragged to his father and to his aunt that night about how good his brave talking was in the session, and they had decided to take him out for a celebratory dessert that night. Mrs. G. also reported that overall Connor seemed a bit more relaxed this past week, and his teacher had sent her an email this week also commenting that he seemed less "in his shell" than in the previous week. His teacher noted that he raised his hand to answer her questions in front of the class on two occasions that week.

The following week (session 8), Mrs. G. met CDI mastery criteria during the 5-min coding session. For this session, the clinic receptionist brought in her 5 -year-old son ("Timmy"), whom Connor did not know, to take part in that session's exposure focused on Connor interacting with a boy he did not know. Connor did a terrific job saying hi to Timmy and the two interacted well during an extended play session. Mrs. G. successfully used the DADS steps throughout the session, with only minimal periodic prompting and/or correction from the therapist. The majority of parent coaching involved the therapist praising how strongly Mrs. G. was using the skills, and how brave Connor was being with Timmy.

Exposures during sessions 9 through 12 entailed Connor having his picture taken, playing baseball at a park next to the clinic, and throwing a mock birthday party. Across sessions 9 through 11, Mrs. G. reported that Connor's anxiety was showing substantial improvements. At home,

Connor was now regularly playing in his room without his parents needing to be in the room (or even watching him) as long as they were on the same floor of the house. Many of their out-of-session exposures involved sleeping away from them, and he was now at the point where he could fall asleep without his parents lying down next to him or even sitting in his room, as long as they were sitting in the adjacent room. His teacher commented that he seemed to be enjoying himself more in the classroom. Although he was still quite shy, he was answering her questions out loud (albeit with one or two word answers), and he was playing with kids a bit more in the classroom and on the playground. In addition, Mrs. G. reported that he even batted at the plate once at baseball practice and twice stopped balls that were hit in his direction.

Mrs. G. had some trouble applying the DADS steps during the exposures involving Connor having his picture taken. She began the exposure with three descriptions (D_1 Step), and then modeled the activity for him by letting the therapist take her picture multiple times (A Step). When Mrs. G. instructed Connor to "stand over there so Dr. D. can take your picture" Connor whined and hid under a pile of toys in the corner, and Mrs. G. yelled at Connor to "get out of there and stop embarrassing yourself!" The therapist quickly reminded Mrs. G. how important it was to model a calm posture during exposures, to ignore anxious and avoidant behavior, and to display confidence that Connor would ultimately do the exposure. The therapist instructed Mrs. G. to engage in her own play, while describing her play loudly enough for Connor to hear about it. Mrs. G. began playing with a Mr. Potato Head set, and talked about how much fun she was having with it. When Connor quieted down a bit, Mrs. G. was coached to praise him for calming down: "I love how you're being calm now. I get so proud when you can calm yourself down." Connor approached his mother and began playing with her, and Mrs. G. was again coached to praise his return to the play.

After a few minutes of CDI play, the mother was coached to again describe that the therapist had a camera (D_1 Step), and to model the exposure activity he was expected to engage in (A Step), although the therapist suggested they lessen the difficulty a bit. Specifically, Mrs. G. had the therapist take a picture of her feet while she made a silly face off camera. Connor giggled at his mother's face, and Mrs. G. provided him with a labeled praise: "I love how silly you're being when I'm having my picture taken." Mrs. G. then gave Connor a command to "put your feet in front of Dr. D.'s camera and make a silly face so she can take your picture" (D_2 Step). Connor ran over and put his foot out while making a funny face, and his mother jumped in with a very enthusiastic labeled praise. After this success, they worked their way up to having his picture taken while he made a silly face, and then to having his picture taken with her, with the therapist, and with the clinic receptionist. He was really enjoying himself by the end of the session, and his mother reported that he even let his dad take silly pictures of him in between sessions without protest.

On the final session, the therapist threw a mock birthday party, which also doubled as a treatment graduation party. In addition to Mrs. G. and Connor, Connor's father, aunt, Pepe, the clinic receptionist, and Timmy all attended. Cake was served, and there were a number of group activities (e.g., games, problems to be solved), that the therapist had Connor work on collaboratively with Timmy and Pepe. Mrs. G. was encouraged to continue using the DADS steps to encourage and reinforce Connor's brave talking and participation in the group activities. Connor enjoyed these activities, and told his therapist that he was proud of himself for doing such great brave talking at the party.

In this final session, the therapist also reviewed Connor's and his mother's progress throughout treatment, and reviewed relapse prevention strategies.

Assessment of Treatment Response

The week following the 12th session (the graduation/mock birthday party) Mrs. G. returned to the clinic for a post-treatment evaluation. She

reported that although Connor was still a relatively shy child, he seemed to be showing much more bravery, and he was increasingly proud of himself for all of his "brave talking." Importantly, she felt that she had learned important tools for having a more enjoyable relationship with Connor and for helping guide him to challenge himself more in anxiety-provoking situations. She talked about how powerful it was for her to see him step out of his "comfort zone" and for things to go well for him, and also how powerful it was for her to step out of her "comfort zone" and see that the anxiety did not "break" him. She also reported that the home environment was much more enjoyable, which she attributed to Connor's not needing his parents at his side, and to her keeping her cool more and not yelling at him when she was frustrated with his anxiety. Baseball games and birthday parties were also much more enjoyable—by the end of treatment, Connor was willing to take a turn at bat approximately once every other practice, and at birthday parties he was being less clingy and more open to talking and laughing with the other children. His teacher still described him as a shy child who needed extra prompting and offered few spontaneous interactions with other children, but also noted that he was still much more outgoing than he was ever in the year, and that he was continuing to improve. Connor was able to join group play with children he knew well, but still exhibited some difficulty in joining the play with unfamiliar peers.

At this posttreatment evaluation, the ADIS-IV-P was again administered. Following treatment, Connor no longer met diagnostic criteria for separation anxiety disorder. Connor did continue to meet diagnostic criteria for social anxiety disorder, although relative to his baseline presentation the severity of his social anxiety disorder significantly decreased, and his symptoms were associated with significantly less impairment and interference (CSR = 4 at posttreatment, compared to CSR = 6 at intake).

Conclusion and Future Directions

Despite the prevalence, impairment, and long-term trajectory associated with early-onset anxiety disorders, historically evidence-based practices for anxiety in younger children have been relatively understudied. Recent years have witnessed critical advances in the evaluation of developmentally sensitive treatment strategies for early-onset anxiety problems. Among these innovations, PCIT adaptations for anxiety, such as the PCIT CALM Program, have shown very promising results. This chapter presented a session-by-session overview of the PCIT CALM program, and included an illustrative case example to help bring the treatment to life.

The important challenge ahead, as with all PCIT adaptations (Elkins et al., 2017), will be to consider how to best disseminate these clinical advances for widespread adoption and broad implementation. The majority of children in need lack access to quality mental health care. Regional workforce shortages in mental health services (and PCIT services in particular) limit the availability of care, and stigma-related concerns about going to a mental health facility interfere with the acceptability of care.

Technological advances may be central to efforts to increase the accessibility and acceptability of care. The field of PCIT has seen the advent of Internet-delivered PCIT (I-PCIT; Comer et al., 2015)—a videoconferencing-based format for the delivery of real-time PCIT to the home. All I-PCIT sessions are conducted online with families participating from their own homes. Using webcams, families stream home-based parent–child interactions to their remote therapist who provides real-time parent coaching through a parent-worn Bluetooth earpiece. The first randomized trial of I-PCIT examined children with externalizing problems (Comer et al., 2017), and found 70% of children treated with I-PCIT showed treatment response. Many gains were maintained across a 6-month follow-up period, and were comparable to the gains found in comparison youth treated

with clinic-based PCIT. Importantly, in this trial the rate of "excellent response" was significantly higher in I-PCIT than in clinic-based PCIT, and I-PCIT was associated with significantly fewer parent-perceived barriers to care (Comer et al., 2017). Indeed, I-PCIT formats may improve the accessibility of treatment, and may also improve the ecological validity of care by treating families in their natural settings. Over the last couple of years, case studies have been published examining videoconference-based delivery of the PCIT CALM Program for early child anxiety (e.g., Cooper-Vince et al., 2016), and our program is currently conducting a waitlist-controlled randomized trial evaluating Internet-delivered PCIT CALM (I-CALM) in the treatment of early child anxiety. If such telemental health formats for the remote delivery of the PCIT CALM Program prove successful, our field may be in a stronger position to better translate our clinical advances into a meaningful public health impact.

References

Carpenter, A. L., Puliafico, A. C., Kurtz, S. M. S., Pincus, D. B., & Comer, J. S. (2014). Extending parent-child interaction therapy for early childhood internalizing problems: New advances for an overlooked population. *Clinical Child and Family Psychology Review, 17*, 340–356.

Cartwright-Hatton, S., McNally, D., Field, A. P., Rust, S., Laskey, B., Dixon, C., … Woodham, A. (2011). A new parenting-based group intervention for young anxious children: Results of a randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 50*, 242–251.

Comer, J. S., Blanco, C., Grant, B., Hasin, D., Liu, S. M., Turner, J. B., & Olfson, M. (2011). Health-related quality of life across the anxiety disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry, 72*, 43–50.

Comer, J. S., Furr, J. M., Cooper-Vince, C., Madigan, R. J., Chow, C., Chan, P. T., … Eyberg, S. M. (2015). Rationale and considerations for the Internet-based delivery of parent-child interaction therapy. *Cognitive and Behavioral Practice, 22*, 302–316.

Comer, J.S., Furr, J.M., Miguel, E., Cooper-Vince, C.E., Carpenter, A.L., Elkins, R.M., …, Chase, R. (2017). Remotely delivering real-time parent training to the home: An initial randomized trial of Internet-delivered parent-child interaction therapy (I-PCIT). Journal of Consulting and Clinical Psychology 85(9):909–917

Comer, J. S., & Olfson, M. (2010). The epidemiology of anxiety disorders. In H. B. Simpson, F. Schneier, Y. Neria, & R. Lewis-Fernandez (Eds.), *Anxiety disorders: Theory, research, and clinical perspectives* (pp. 6–19). NY: Cambridge University Press.

Comer, J. S., Puliafico, A. C., Aschenbrand, S. G., McKnight, K., Robin, J. A., Goldfine, M., & Albano, A. M. (2012). A pilot feasibility evaluation of the CALM Program for anxiety disorders in early childhood. *Journal of Anxiety Disorders, 26*, 40–49.

Cooper-Vince, C., Chou, T., Furr, J. M., Puliafico, A. C., & Comer, J. S. (2016). Videoteleconferencing early child anxiety treatment: A case study of the Internet-delivered CALM (I-CALM) Program. *Evidence-Based Practice in Child and Adolescent Mental Health, 1*, 24–39.

Cornacchio, D., Crum, K. I., Coxe, S., Pincus, D. B., & Comer, J. S. (2016). Irritability and severity of anxious symptomatology among youth with anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 55*, 54–61.

Cornacchio, D., Sanchez, A. L., Chou, T., & Comer, J. S (2017). Cognitive-behavioral therapy for children and adolescents. In S. G. Hofmann & G. Asmundson (Eds.), *The science of cognitive behavioral therapy: From theory to therapy*. New York, NY: Elsevier.

Cummings, C. M., Caporino, N. E., & Kendall, P. C. (2013). Comorbidity of anxiety and depression in children and adolescents: 20 years after. *Psychological Bulletin, 140*, 816–845. https://doi.org/10.1037/a0034733

Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: Presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry, 47*, 313–337.

Elkins, R. M., Mian, N. D., Comer, J. S., & Pincus, D. B (2017). Parent-child interaction therapy (PCIT) and its adaptations. In J. L. Luby (Ed.), *Handbook of preschool mental health: Development, disorders, and treatment* (2nd ed.). New York, NY: Guilford.

Eyberg, S., & Funderburk, B. (2011). *Parent-child interaction therapy protocol*. Gainesville, FL: PCIT International.

Green, J. G., Comer, J. S., Nadeau, M., Donaldson, A., Elkins, R. M., Reid, G., & Pincus, D. B. (2016). School functioning and use of school-based accommodations by treatment-seeking anxious children. *Journal of Emotional and Behavioral Disorders, 25*(4), 220–232.

Higa-McMillan, C. K., Francis, S. E., Rith-Najarian, L., & Chorpita, B. F. (2016). Evidence base update: 50 Years of research on treatment for child and adolescent anxiety. *Journal of Clinical Child and Adolescent Psychology, 45*, 91–113.

Hirshfeld-Becker, D. R., Masek, B., Henin, A., Blakely, L. R., Pollock-Wurman, R. A., McQuade, J., … Biederman, J. (2010). Cognitive behavioral therapy for 4- to 7-year-old children with anxiety disorders:

A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 78*, 498–510.

Hudson, J., Comer, J. S., & Kendall, P. C. (2008). Parental responses to positive and negative emotions in anxious and non-anxious children. *Journal of Clinical Child and Adolescent Psychology, 37*, 303–313.

Kerns, C., Pincus, D. B., McLaughlin, K., & Comer, J. S. (2017). Maternal emotion regulation during child distress, child anxiety accommodation, and links between maternal and child anxiety. *Journal of Anxiety Disorders, 50*, 52–59.

Kessler, R. C., Avenevoli, S., Costello, E. J., Georgiades, K., Green, J. G., Gruber, M. J., … Merikangas, K. R. (2012). Prevalence, persistence, and sociodemographic correlates of DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. *Archives of General Psychiatry, 69*, 372–380.

Lever-van Milligen, B. A., Lamers, F., Smit, J. H., & Penninx, B. W. (2017). Six-year trajectory of objective physical function in persons with depressive and anxiety disorders. *Depression and Anxiety, 34*, 188–197.

McLeod, B. D., Wood, J. J., & Weisz, J. R. (2007). Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review, 27*, 155–172.

Pincus, D. B., Eyberg, S. M., & Choate, M. L. (2005). Adapting parent-child interaction therapy for young children with separation anxiety disorder. *Education and Treatment of Children, 28*, 163–181.

Pincus, D. B., Santucci, L. C., Ehrenreich, J. T., & Eyberg, S. M. (2008). The implementation of modified parent-child interaction therapy for youth with separation anxiety disorder. *Cognitive and Behavioral Practice, 15*, 118–125.

Puliafico, A. C., Comer, J. S., & Albano, A. M. (2013). Coaching *a*pproach behavior and *l*eading by *m*odeling: Rationale, principles, and a case illustration of the CALM Program for anxious preschoolers. *Cognitive and Behavioral Practice, 20*, 517–528.

Rapee, R. (2013). The preventative effects of a brief, early intervention for preschool-aged children at risk for internalising: Follow-up into middle adolescence. *Journal of Child Psychology and Psychiatry, 54*, 780–788.

Silverman, W. K., & Albano, A. M. (1996). *The anxiety disorders interview schedule for children and parents— DSMIV version*. Graywind, New York.

Swan, A. J., & Kendall, P. C. (2016). Fear and missing out: Youth anxiety and functional outcomes. *Clinical Psychology: Science and Practice, 23*, 417–435.

Thompson-Hollands, J., Kerns, C. E., Pincus, D. B., & Comer, J. S. (2014). Parental accommodation of child anxiety and related symptoms: Range, impact, and correlates. *Journal of Anxiety Disorders, 28*, 765–773.

Towe-Goodman, N. R., Franz, L., Copeland, W., Angold, A., & Egger, H. (2014). Perceived family impact of preschool anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 53*, 437–446.

Weiner, C. L., Elkins, R. M., Pincus, D. B., & Comer, J. S. (2015). Anxiety sensitivity and sleep-related problems in anxious youth. *Journal of Anxiety Disorders, 32*, 66–72.

Wichstrom, L., Berg-Nielsen, T. S., Angold, A., Egger, H. L., Solheim, E., & Sveen, T. H. (2012). Prevalence of psychiatric disorders in preschoolers. *Journal of Child Psychology and Psychiatry, 53*, 695–705.

Wu, P., Goodwin, R., Comer, J. S., Hoven, C., & Cohen, P. (2010). The relationship between anxiety disorders and substance use among adolescents in the community: Specificity and gender differences. *Journal of Youth and Adolescence, 39*, 177–188.