

# Evidence-based Practice for Childhood Anxiety Disorders

Golda S. Ginsburg · Julie Newman Kingery

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**Abstract** Anxiety disorders are among the most common psychiatric conditions in children and adolescents. Empirical evidence suggests that the majority of youth will show clinically meaningful benefits after a short-term course of cognitive-behavioral therapy (CBT). This article presents an update on the status of this treatment literature and provides clinicians with a description of specific CBT strategies. A case example illustrating the implementation of these strategies is also included. Tips for managing frequently encountered obstacles and a clinical algorithm for sequencing strategies are discussed.

**Keywords** Childhood anxiety · Evidence-based practice

## Introduction

According to the latest version of the Diagnostic and Statistical Manual (DSM-IV-TR, American Psychiatric Association, 2000), there are nine anxiety disorders (excluding those due to medical conditions, substances, and not otherwise specified). While separation anxiety disorder (SAD) is the only anxiety disorder noted as having a childhood onset, all of these disorders affect youth. Indeed, the prevalence of anxiety disorders among children and adolescents is alarming, with estimates as high as 20% (Costello, Egger, & Angold, 2004). Of greater concern is the functional impairment and personal suffering caused by

these disorders. Children with excessive anxiety often have difficulty attending school and experience impairment in their school performance (Ialongo, Edelsohn, Werthamer-Larsson, Crockett, & Kellam, 1994, 1995; Wood, 2006); they avoid social activities such as extra curricular events, tend to be less liked and neglected by peers, and display deficits in social skills (Albano, Chorpita, & Barlow, 2003; Strauss, Forehand, Smith, & Frame, 1986); and their family routines are also disrupted, prohibiting family outings to restaurants, malls, or other gatherings (Langley, Bergman, McCracken, & Piacentini, 2004). Finally, anxious youth experience severe personal distress, report feelings of low self-worth, engage in distorted patterns of thinking, and suffer with frequent somatic symptoms (e.g., Alfano, Beidel, & Turner, 2006; Ginsburg, Riddle, & Davies, 2006; LaGreca & Stone, 1993). The most common anxiety disorders in youth are specific phobia (SP), generalized anxiety (GAD), social anxiety (SOC), and separation anxiety (SAD). Consequently, these disorders are the focus of the present article.

## Current Status of CBT for Anxiety Disorders in Children

Over 15 controlled clinical trials suggest that CBT is the most effective psychosocial treatment evaluated for anxiety disorders in children, with response rates (defined as no longer meeting diagnostic criteria for the primary anxiety disorder), ranging from 60% to 80% (e.g., Beidel, Turner & Morris, 2000; Bogels & Siqueland, 2006; Kendall, 1994; Kendall et al., 1997; Silverman et al., 1999a, b; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006). The treatments evaluated in these studies are generally short term (10–20 sessions), and are effective in both group and

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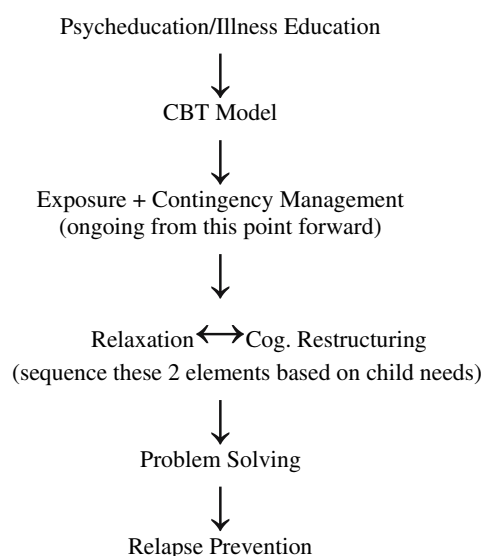
G. S. Ginsburg (✉) · J. N. Kingery  
Division of Child and Adolescent Psychiatry, Department of  
Psychiatry and Behavioral Sciences, Johns Hopkins University  
School of Medicine, 600 North Wolfe Street/CMSC 312,  
Baltimore, MD 21287-3325, USA  
e-mail: gginsbu@jhmi.edu

individual formats, and with and without structured family involvement (Barrett, Dadds, & Rapee, 1996; Mendlowitz et al., 1999; Spence, Donovan, & Brechman-Toussaint, 2000; Wood et al., 2006).

Despite these positive findings, this treatment literature has many methodological limitations. For instance, sample sizes are generally small, limiting generalizability and prohibiting analyses of moderators or mediators of treatment response. Studies also have generally relied on wait-list controls rather than alternative active treatments, reducing the ability to identify specific curative ingredients. Response rates suggest that 20–40% of youth do not improve significantly, highlighting that these treatments are not a panacea. Despite these and other limitations (see Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002 for critical review of CBT studies), most anxious youth show clinical benefits after a short-term course of CBT. Below is a description of the key treatment strategies that comprise CBT interventions for the most common pediatric anxiety disorders. Readers interested in more detailed clinical descriptions can obtain treatment manuals from the original developers of CBT treatments for anxiety or purchase one of several clinician- and parent-friendly books such as *Clinical practice of cognitive therapy with children and adolescents* (Friedberg & McClure, 2002), *Keys to parenting your anxious child* (Manassis, 1996), *Helping your anxious child* (Rapee, Spence, Cobham, & Wignall, 2000), *Help for worried kids* (Last, 2006), *Anxiety cure for kids* (Spencer, DuPont, & DuPont, 2003), and *Freeing Your Child From Anxiety* (Chansky, 2004).

### CBT Treatment Strategies

Primary CBT treatment strategies for childhood anxiety disorders include: psychoeducation, exposure (i.e., “facing fears”), contingency management, affective education, relaxation training, cognitive restructuring, problem-solving, and varying amounts of parental involvement. Each of these skills is described below. Figure 1 proposes an algorithm for implementing the CBT strategies, which is based on our clinical experience working with anxious youth (Ginsburg, Silverman, & Kurtines, 1995; Laballarte, Ginsburg, Walkup, & Riddle, 1999). Practitioners should proceed with CBT if the following conditions are met: (1) anxiety is the primary disorder, (2) comorbid conditions, if present, will not interfere with implementing CBT, (3) family psychopathology will not significantly undermine treatment success, and (4) the patient and family are “ready” for CBT (i.e., motivated and willing to engage in treatment). If these conditions are not met, alternative interventions or concurrent treatments will be needed (e.g., concurrent treatment for comorbid conditions, referral for



**Fig. 1** Clinical algorithm

treatment of parental psychopathology). When these conditions are met, CBT should begin with psychoeducation about anxiety disorders and the CBT model. Next, we recommend developing the fear hierarchy and beginning low-level exposures in conjunction with contingency management. Once a child begins exposures (continued throughout treatment), the next steps are sequenced according to the individual characteristics of the child. For example, therapists can introduce relaxation training if a child’s somatic symptoms are more prominent or cognitive restructuring if cognitions are easily accessible and interfering. The final skills are generally problem-solving and putting all skills into a coping plan. Continual monitoring of improvement (or lack thereof) and identification of the obstacles to treatment success are needed to evaluate the necessity for augmentation or alternative interventions. As treatment nears its end, relapse prevention is introduced and a plan for fading contact with the clinician is discussed.

### Psychoeducation

Psychoeducation involves presenting facts about anxiety and its disorders (e.g., the nature, prevalence, causes, and course of anxiety) and providing an overview of the treatment program (i.e., CBT model, rationale, and goals). Providing information about anxiety normalizes this emotion and helps the child and family better understand and communicate about the child’s anxiety. Describing the CBT model demystifies the therapy process (i.e., parent and child know what treatment will involve and what they will need to do to get better), instills hope, and increases motivation for a positive outcome.

A key aspect of presenting facts about anxiety is to highlight the tripartite model (i.e., the three ways that anxiety/fear shows itself): bodily reactions (e.g., heart beating fast, stomach aches, shaking, and sweating), anxious thoughts (e.g., “People will laugh at me” “What if I make a mistake?”), and actions or behaviors (e.g., avoidance or tantrums when faced with anxiety-provoking situations). Differentiating “normal” versus problematic anxiety helps families identify areas in which anxiety has become a problem that warrants intervention. It is also crucial to emphasize that anxiety is common (e.g., everyone feels anxious sometimes, almost one in every 10 children has problems with anxiety) and some amount of anxiety can be helpful (e.g., to ensure that you look both ways before crossing the street). However, anxiety can cause problems in our daily lives (e.g., school performance, social activities) when it is too severe, frequent, or intense.

In discussing the causes of anxiety, therapists should explain that anxiety disorders are multi-determined. For instance, the development of anxiety disorders is influenced by biological factors (e.g., anxiety disorders tend to run in families, children are born with different temperaments) and specific learning factors (e.g., having a bad experience, watching others have an anxious reaction). Finally, anxiety is also influenced by environmental factors and stressful life events (e.g., death of a loved one, family conflict, critical or cautioning parenting style). Conveying that anxiety disorders are multi-determined prevents or reduces families’ tendency to search for the “root cause” and can also help therapists and families do a “check up” on all areas of a family’s life that might impact anxiety.

To explain how treatment works, the CBT model is presented. Overall, it is important to emphasize that the goal of CBT is not to reduce all anxiety but to decrease *excessive* levels of anxiety and help the child to develop coping skills. The CBT model can be illustrated using a triangle that includes anxious thoughts, somatic feelings, and behaviors. Given that these three components of anxiety are inter-related, changing one of the aspects often leads to changes in the others. Specific CBT skills target each manifestation of anxiety. For example, exposure tasks (i.e., facing your fears) target the behavioral component; recognizing and changing anxious thoughts addresses the cognitive component of anxiety, and being able to identify anxious feelings and use relaxation skills has an impact on the somatic symptoms of anxiety.

To help the child identify these aspects of his/her own anxiety, a self-monitoring form (i.e., a daily diary), can be used. This form requires children to briefly record anxiety-provoking situations that occur during the day, along with their thoughts, actions or behaviors (see Table 1) and a rating of anxiety severity. Keeping track of this information reinforces the CBT model and can help a child to more

**Table 1** Jackie’s daily diary

Situation	What did you do?	Thought	How afraid? (0–10)
Mom was going to drop me off to play at a friend’s house	I started crying and asked mom to stay	Something bad will happen to my mom.	7
I had to give a book report in front of class	I froze and couldn’t give the report	I’m going to mess up and everyone will laugh	5

10 = Extremely afraid; 5 = Somewhat Afraid, 0 = Not at all afraid

readily identify antecedents, responses, and consequences of anxiety-provoking situations. This increased awareness serves as a cue for the child to utilize skills (e.g., relaxation, problem-solving, cognitive restructuring, and exposure) that he/she learns over the course of treatment.

Another critical component of psychoeducation is to emphasize the importance of practicing skills *between sessions*. It is helpful to use a “team” metaphor, in which the child, parent, and therapist are all working together and the therapist is like a coach, teaching new skills and providing weekly assignments to practice at home. However, just like any new skill that the child learns (e.g., basketball, piano), he/she will not get better without practicing often.

### Exposure Tasks and Contingency Management

Exposure refers to having children “face their fears.” Two types of exposure tasks are generally used—imaginal and in vivo. For both types, children are introduced to their feared situation gradually using a fear hierarchy, rather than all at once (i.e., flooding). The child and parent are given the rationale for the exposure tasks (presented during psychoeducation) so that they understand why it is important and are motivated to practice exposure tasks. For instance, when we avoid situations that we are afraid of (e.g., riding an elevator), our anxiety initially decreases. This decrease in anxiety is rewarding (e.g., feeling relieved) but strengthens the anxious and avoidance behavior (e.g., taking the stairs rather than the elevator) through a process called negative reinforcement. As a result, we continue to avoid the anxiety-provoking situation. With ongoing avoidance, our level of anxiety tends to increase (e.g., when stairs are not available and riding the elevator is the only option, this is extremely anxiety provoking).

Explaining that anxiety is reduced via habituation can also be helpful. By repeatedly facing the things that we are afraid of, our anxiety actually decreases (e.g., just like

getting into a pool in the summertime, at first the water seems very cold, but we quickly get used to the temperature of the water.). Another reason for reducing avoidance is that when children do not face feared situations, they miss the opportunity to practice coping skills and do not develop a sense of competence and confidence in handling these situations. As noted, it is important for children and parents to understand that facing fears is to be done *gradually* (i.e., facing low anxiety-provoking situations first).

To construct the fear hierarchy, the therapist, parent, and child brainstorm ideas of situations that are feared and avoided. Additional items can be taken from the daily diary and are often added during the course of treatment. The child rates his/her level of anxiety for each situation and ranks the situations from “least scary” (0) to “most scary (10).” Parents’ input at this stage is critical as they often identify anxiety-provoking situations omitted by the child and have insights into how difficult an exposure task is for their child. Discrepancies between the child and parent fear ratings should be discussed to reach a consensus. If a child insists upon a certain rating, therapists can suggest that the child “give it a try” and he/she will know whether the feared situation was easier or harder to face than he/she originally thought. To successfully target the child’s anxiety via exposure tasks, the situations on the fear hierarchy should also be specific. Rather than the general item of “introducing yourself to someone,” it would be important to specify “introducing yourself to a same age male peer during lunch at school.”

In conducting the exposure tasks, therapists allow the child to “take the lead” as much as possible (e.g., deciding which hierarchy item to practice as long as they are taking gradual steps toward facing fears). Particularly early in treatment, youth may be reluctant to face fears on their hierarchy. In these cases, the therapist can role play the situation or have the child imagine themselves in the situation before completing the in vivo exposure. Therapists also serve as a “coping model” engaging in the exposure task (expressing anxiety but using their own coping thoughts and skills aloud) and then have child complete the exposure task. For example, an 11-year old girl with SOC was reluctant to talk with unfamiliar adults, including the therapist’s coworkers. To make the task more fun and less threatening, the child created a pet survey (e.g., Do you have any pets? If so, what kind of pet? What is your pet’s name?). The therapist and child role played this task first and then went to nearby offices together. The therapist and child took turns asking the questions until the child felt comfortable asking the questions on her own. After several practice sessions, the child was able to conduct the pet survey on her own, while the therapist stayed in her office. Later in treatment, the child graduated to items that were farther up on her hierarchy (e.g., asking a stranger for directions, ordering food at a restau-

rant) and had developed the confidence to complete these tasks without the therapist’s help.

A final point about exposure tasks is the importance of contingency management. The basic principles of contingency management or “rewarding brave behavior” are usually discussed in a separate parent session. Therapists explain that behaviors are controlled by consequences (i.e., what immediately follows the behavior) and behaviors increase when they are followed by something positive or a reward (e.g., child is nervous about calling a friend but completes the task anyway, parent rewards the child by letting them stay up 15 minutes later, child is more likely to repeat the behavior in the future). Alternatively, behaviors decrease when they are not reinforced (i.e., extinction). For example, parents can remove privileges or the attention that they are giving to a particular behavior (e.g., child throws a tantrum and the parent ignores this behavior) and the behavior is likely to decrease. Parents also need to understand basic principles related to implementing rewards effectively (e.g., rewards must follow rather than precede behaviors, rewarding right away rather than delaying, not providing a reward that they were going to give anyway). Rewards should also be based on effort rather than perfect performance (e.g., if a child attempts to face a feared situation but it did not go smoothly, he/she could still earn a reward for trying).

Before youth start facing their fears, they should create a reward list. This list should include different types of rewards, such as activities (e.g., watching a movie, going out for ice cream), social (e.g., 15 minutes of special time a parent to play a game or work on a project), or tangible prizes (e.g., small toys, candy). Children may earn tokens or points that they can redeem for a reward. Therapists can use rewards to reinforce the completion of homework and active participation during therapy sessions. In addition, parents are taught to implement a reward system at home to reinforce children’s brave behavior. Youths of all ages enjoy picking a small, age-appropriate reward from a prize box in the therapist’s office for facing their fears during a session and completing practice assignments in-between sessions. It is important for children to have input into the types of items that are placed on the reward list. Some parents may express concern that their child is receiving rewards for things that he/she is “supposed to” be doing on his/her own (e.g., in the case of separation anxiety—sleeping in own room, going to school, staying home with a baby-sitter). It should be made clear that children benefit from rewards when they initially start facing their fears, however, after repeated practice, the behavior has natural rewarding consequences (e.g., the child feels proud of him/herself, has fun with the baby-sitter) and the reward can be faded. This approach is consistent with a transfer of control treatment model (see Ginsburg et al., 1995; Silverman & Kurtines, 2005).

## Affective Education

Affective education involves teaching children to identify a wide range of emotions through facial expressions, tone of voice, and body language. Youth are then taught to “be a detective” for clues about anxiety (e.g., heart pounding, palms sweating, stomachache, and shortness of breath). These clues serve as prompts or signals to employ their coping skills. To implement affective education, therapists can choose from a range of activities. Many children enjoy identifying different emotions while creating a collage or feelings dictionary with magazine pictures. Alternatively, some children prefer taking a more active approach such as charades by having the therapist and child guess various emotions that are “acted out.”

Once children demonstrate mastery over identifying a broad range of emotions, the next step is to identify somatic cues related to anxiety. Starting with a situation from the child’s fear hierarchy that provokes a low-level of anxiety, the child is asked to imagine or role play the situation with the therapist and describe his/her somatic symptoms of anxiety. Once children are successful at identifying their somatic cues of anxiety, relaxation training is taught to reduce these symptoms.

## Relaxation Training

Relaxation training targets the physiological symptoms of anxiety and can help anxious children relax and calm their bodies. Some relaxation exercises target the child’s overall level of physiological arousal (e.g., progressive muscle relaxation), whereas other skills are more useful “in the moment” when the child is faced with an anxiety-provoking situation (e.g., deep breathing). Children and their parents are taught that just like any skill (e.g., learning to ride a bike, play a musical instrument), it is possible to learn how to be more relaxed. If children can learn to relax and calm the tension in their bodies, this will help them to approach rather than avoid anxiety-provoking situations.

When teaching diaphragmatic breathing, children are told that they will learn how to relax their “insides” through breathing in a special way. Using a balloon as a metaphor, children are instructed to put one hand on their stomach and one hand on their chest. Next, they inhale through their nose (filling stomach/chest up like a balloon), hold for three seconds, and exhale while imagining that they are allowing all of the anxious feelings to leave their body. As they are practicing the deep breathing, they can also imagine themselves in their favorite place where they feel comfortable and relaxed.

For progressive muscle relaxation, youth are taught that one way to relax their bodies is to first experience the

difference between tense and relaxed by tightening and then relaxing their muscles. Just as they can make their body tense, they can also make it relax. Children are instructed to sit comfortably in a chair, take a few deep breaths, and then tense all of the muscles in their face by squeezing them tight, holding the tension for three seconds, and then relaxing their face. They are told to notice the difference between how their face felt when tense, and how their face muscles feel now that they are relaxed. This exercise is repeated with each of the following body parts: neck and shoulders, arms and hands, chest and stomach, legs and buttocks, and feet. Then the child can tense and relax their whole body—all body parts at one time. Therapists often tape record this set of instructions so that the child can use the tape while practicing the relaxation skills at home. Creative ways to teach this skill involve acting out the difference between a robot (i.e., tense muscles) and a rag doll (e.g., limp, relaxed muscles). Older children and adolescents may prefer to use a more sophisticated relaxation script, use meditation or yoga techniques, and can put reminders of these key relaxation strategies in noticeable locations (e.g., on the wall near his/her bed).

## Cognitive Restructuring

Cognitive restructuring involves introducing children to the concept of self-talk and how cognitions influence emotions and behavior. CBT models posit that anxious thoughts (i.e., thoughts of danger and threat) increase and maintain anxiety. Cognitive restructuring teaches children how to identify these thoughts and replace them with more realistic or neutral ones. Introducing this skill includes an explanation about how self-talk (e.g., “That will be too dangerous,” “What if something bad happens?”) often leads to avoidance of feared situations and heightened anxious feelings. CBT stresses that it is possible to have different thoughts in the same situation (e.g., to change your mind about something). Some thoughts make you feel scared or anxious, whereas other thoughts do not.

For young children who have not had prior experience with identifying their thoughts, it is helpful to provide cartoons or drawings with empty “thought bubbles” and ask the child to fill in what the cartoon character might be thinking (Kendall & Hedtke, 2006). Starting with simple situations, such as a child opening a present at a birthday party or dropping an ice cream cone, can facilitate the process of identifying thoughts. After asking the child what the cartoon character might be thinking, the therapist and child can fill in the thought bubbles and link the thoughts to feelings and behaviors.

Next, introducing the idea that it is possible to have different thoughts in the same situation can be



accomplished by providing a picture of a child participating in an activity (e.g., playing soccer, riding a bike, petting a dog) with two different empty thought bubbles above his/her head. The therapist and child work together to generate several possible thoughts for this situation. Youth are often able to understand that the process of changing your mind (e.g., used to dislike broccoli and now they like it) is similar to changing your anxious thoughts to coping thoughts.

By modeling his/her own thoughts in an anxiety-provoking situation, the therapist teaches the child to identify anxious thoughts (e.g., “What do I think is going to happen?”) and then “gather evidence” for how realistic these thoughts are by asking questions such as: Do I know for sure that this is going to happen? What else might happen? Has this ever actually happened before? Has this happened to anyone I know? What is the worst that could happen and is that really so bad? Answering these questions should help the child to generate realistic coping thoughts, reduce his/her anxiety level, and facilitate successful exposures. After modeling this skill, the therapist and child work together to identify anxious thoughts and generate coping thoughts for a situation that is anxiety provoking for the child. For example, a child with GAD who worries that a burglar will break into his/her house at night can gather evidence by answering the questions listed previously and generate coping thoughts such as “No one has ever broken into our house or any of our neighbors’ houses before,” “We live in a safe neighborhood,” “The strange noises that I hear at night are usually just my cat or a tree branch hitting my window,” “Burglars usually break in during the day when no one is home,” “We have an alarm system,” and “The doors are locked.”

Anxiety can also be identified as something that “tricks us” into thinking that the worst is going to happen, when this is not actually the case. To prevent themselves from being tricked by their anxiety, children can also be taught to identify common “thinking traps” (Kendall & Hedtke, 2006). Children who have difficulty generating coping thoughts can imagine what coping thoughts a hero or role model would use in a particular situation. Another strategy is to create a coping card (i.e., a list of the coping thoughts generated for a particular situation). Children can post this card on the refrigerator or on the wall in their bedroom, carry it in their pocket, or place it in a school notebook so that they can refer to the list “in the moment” when faced with an anxiety-provoking situation.

### Problem-solving

Another component of some CBT programs for anxiety is problem-solving, which encourages youth to develop a

plan for coping with their anxiety (i.e., what the child can do to make the situation less anxiety provoking so that they can complete exposures). In our own clinical work, we have found the SOLVE acronym to be particularly helpful, where each letter stands for a specific problem-solving step. The steps of this problem-solving method are as follows: (1) **S**ettle down—don’t try to solve problems when you are upset, (2) **O**wn the problem—identify what part of the problem is under your control (3) **L**ist solutions—write down all ideas even if they seem silly and don’t evaluate the solutions yet! (4) **V**ote for one solution after listing the pros & cons of each one, (5) **E**ngage in the one solution that seems best, evaluate the outcomes, and repeat the steps if needed.

To teach this method, start with a simple, non-anxiety provoking example (e.g., “You’re getting ready for school and realize that you can’t find the jeans you want to wear. What are all the different things that you could do to try to solve this problem?”). Next, brainstorm solutions with the child, even inserting a few humorous or unlikely possibilities to make the task more fun (e.g., you could go to the mall to buy a new pair of jeans before school or you could just decide to stay home from school that day). If the child does not add specific CBT skills to the solution list on his/her own, the therapist can suggest strategies such as using coping thoughts and/or relaxation skills. After creating a list of possible solutions, instruct the child to evaluate each solution and rank order them starting with the solution that the child thinks will be the most effective.

After completing the problem-solving steps with this simple example, use the SOLVE method for an anxiety-provoking situation that occurred recently in the child’s life, or one of the situations on the child’s hierarchy. At the end of the session during which problem-solving is introduced, parents join the session and the child teaches them the skills. Given that family conflict (e.g., fights with siblings, parents) contributes to increased levels of anxiety, parents and children can use the SOLVE steps to help resolve disagreements/conflict among family members. For homework, the child is typically asked to practice problem-solving for anxiety-provoking situations that occur during the week.

### Relapse Prevention

Toward the end of treatment, it is important to review all skills learned in treatment and talk with the child and parents about relapse prevention (i.e., noticing signs of increased anxiety and implementing coping skills to address this). Relapse prevention is a critical aspect of helping children maintain the gains that they have made in treatment and preventing future “slips” (e.g., anxiety

increases when child goes back to school after a holiday break) from turning into larger problems (e.g., missing several days of school). Also, given that progress with anxiety does not occur in a perfectly linear fashion, parents and children need to understand that there will be ups and downs along the way.

To introduce relapse prevention, predict that there will be a time when the child's anxiety will return (e.g., the child has a bad day, a stressful life event happens). Slips are common and when they happen, it does not mean that the child is "back at square one" in terms of his/her progress following treatment or has forgotten all of the skills that he/she learned to manage anxiety. When slips happen, children and parents need to keep things in perspective (e.g., "this is probably just a bump in the road"), refresh their memory on the skills learned in treatment and continue to practice them, and be vigilant so that the problem does not get too big to handle (e.g., if the child starts to occasionally avoid social situations, the child should start facing these situations rather than continuing to avoid them). At the conclusion of treatment, the most important message to convey is to continue practicing the skills learned in treatment, applying the CBT strategies to both old and new situations.

### Parental Involvement

Kendall (2000) proposes that parents are involved in anxiety treatment in three ways. As "consultants," parents provide therapists with additional information about the child's anxiety (e.g., specific situations that are challenging for a child with separation anxiety). As "collaborators," parents facilitate exposure tasks and practice other treatment skills with the child outside of the therapy sessions. Finally, some parents are "co-clients" when their own anxiety symptoms or parenting behaviors are impacting their child's anxiety (e.g., parent of a child with GAD who points out possible dangers, parent of a child with SAD who worries about child's ability to cope and therefore does not implement exposure tasks). Parents often hold some combination of these roles during their child's anxiety treatment.

The necessity of parental involvement in treatment varies depending upon a number of factors including the age and/or diagnosis of the child and the anxiety level of the parent (for a more detailed discussion of these factors see Suveg et al., 2006). In general, younger children tend to require more parental involvement than older children and adolescents. However, if the treatment goal is to establish more independence from parents (e.g., separation anxiety), even with younger children therapists may decide to limit the amount of time in which parents are involved in

the session. In addition to parent check-ins at the beginning and/or end of individual sessions with the child, parent only sessions are often utilized to provide an orientation to the program, answer parents' questions, and gather additional information about the child that will inform the course of treatment. Parent sessions can also be used to discuss obstacles to the child's progress in treatment (e.g., non-compliance with therapy homework assignments), solicit parent feedback regarding specific anxiety-provoking situations to add to the child's fear hierarchy, and discuss ways in which parents can assist with upcoming exposure tasks. Separate parent sessions also provide an opportunity to discuss the role of family factors in maintaining the child's anxiety (e.g., parental anxiety, marital discord) and make appropriate referrals, if necessary.

To maximize the child's progress in treatment, parenting skills specifically related to parenting an anxious child are often discussed. Given that certain parental behaviors tend to increase anxiety in children, parents can be taught to identify common traps or "parenting slips" (e.g., over-protection, accommodating their child's anxiety, overcontrol, modeling anxious behavior) and replace these behaviors with "parenting tips" (e.g., encouraging child autonomy and facing fears, setting realistic expectations, recognizing/rewarding child coping behavior, ignoring child reassurance seeking, modeling coping behavior). Most parents are doing the best job that they can and use strategies that they think are in their child's best interest (e.g., telling a child with separation anxiety that he/she does not have to attend day camp). However, parents' good intentions (e.g., parent makes phone call to arrange play date because child is too shy to call themselves) can actually maintain or increase the child's anxiety level in the long run.

### Case Example

Jackie is a 10-year old Caucasian female who lives with her mother, father, and older brother. Although her parents noted that she was generally a shy child, at the beginning of her fifth grade school year, she had increased difficulty separating from her parents and her anxiety began to impair her functioning in more obvious ways (e.g., fights before going to school in the morning, avoided getting together with friends). Her somatic complaints (e.g., headaches, stomachaches) had resulted in several missed days of school, frequent visits to the school nurse, and doctor visits in which Jackie's pediatrician could find no medical cause for these symptoms.

After a comprehensive evaluation, Jackie was diagnosed with both separation and social anxiety disorder. Symptoms consistent with separation anxiety included crying

when separating from parents to attend school each morning (parents drove her to school because she would miss the bus), following family members around the house so she would not have to remain in a room alone, refusing to stay with a baby-sitter, and difficulty sleeping alone in her room (she would sneak into her parents' room at night). In terms of social anxiety, Jackie refused to attend sleepovers, and had difficulty attending birthday parties or playing at a friend's house unless her mother or father could stay with her, and was shy and nervous when meeting new people and performing in front of others (e.g., reading out loud in front of the class).

## Treatment

At the first CBT session, Jackie had difficulty separating from her parents. The therapist allowed the parents to sit in the room during the first portion of the session and then move to a room across the hall (rather than the waiting room, which was further from the therapist's office). Over the course of the next sessions, the therapist faded the parents' involvement in the sessions by gradually having them sit in the waiting room and then join for a check-in at the end of the session. To facilitate this process, the therapist created a reward system for in-session behavior, in which Jackie could earn points toward a reward for separating from her parents for greater amounts of time and paying attention during the session.

During the psychoeducation component of treatment, Jackie identified difficulty breathing and heart pounding as her somatic symptoms of anxiety. Initially, she had trouble differentiating anger from anxiety, but was able to understand this distinction after completing role play exercises with the therapist in which they acted out situations involving various emotional expressions. Jackie was asked to complete a daily diary to track the situations, thoughts, and severity of anxious feelings for various anxiety-provoking situations that she encountered during the week.

At the next session, Jackie had completed the daily diary (see Table 1) and was rewarded (i.e., earned a point toward therapist's reward system). Separate anxiety hierarchies were constructed for separation and social situations (see Table 2 for separation anxiety hierarchy). Time was also spent with Jackie and her parents to develop a contingency management plan, in which Jackie could earn points (recorded on a chart that she hung on her bedroom wall) for facing her fears in situations outside of session and exchange these points for privileges or prizes at home. In developing the reward list, small, medium, and large rewards were included so that Jackie had the option of earning both short-term and longer-term rewards.

**Table 2** Jackie's fear hierarchy for separation anxiety situations

Situation	Fear rating (0–10)
Spending time alone in a room at home that is on the same floor as the room where other family members are located	2
Spending time alone in a room that is on a different floor (e.g., Jackie is upstairs in her bedroom while other family members are in the kitchen; use a timer to gradually increase the amount of time)	3–4
Going to a friend's house to play (have mom or dad leave for a short period of time at first and then gradually increase this length of time)	5
Riding bus to school instead of getting ride from mom or dad	6
Staying home alone while mom and/or dad go out (first for a few minutes, then gradually increasing the amount of time)	6–7
Sleeping in own room	7–8
Sleeping away from home for one night at grandma's house	8
Sleepover at a friend's house for one night	9
Attending a two night weekend sleep away camp	10

Given that Jackie had difficulty separating from her parents for the treatment sessions, coming to treatment and meeting individually with the therapist provided a weekly opportunity for an in vivo exposure task. For homework, the child and parents started working on low-level anxiety situations (e.g., spending time alone in a room at home and using a timer to gradually increase the amount of time, going to a friend's house to play and having mom/dad leave for short periods of time). Each week during the session, a portion of time was devoted to an in-session exposure (e.g., parents leave waiting room for short period of time and gradually increase amount of time, introducing self to adults in nearby offices, asking for directions in the hospital) and the remainder of the session was spent introducing a new CBT skill.

Because Jackie reported several somatic complaints, a tape of progressive muscle relaxation was created so that she could practice these skills at home during the week. Jackie reported using the relaxation tape each night to help her fall asleep more easily. This helped her to accomplish the exposure task of sleeping in her own room at night when she reached this point on the fear hierarchy (see Table 2). Following relaxation, Jackie was taught how to identify anxious thoughts and replace them with coping thoughts. Jackie's anxious thoughts included "My parents may forget about me" "My parents may die in a car accident" and "My parents might not come home." Through a collaborative questioning process (described previously) Jackie generated more realistic counter



thoughts. Her new thoughts were “My parents have never forgotten to pick me up before;” “My parents are safe drivers and it is not very likely that they will die in a car crash” and “My parents have always come home and I will be okay until they get back.” Jackie wrote the coping thoughts on a card and posted this card on the refrigerator. She reviewed it before her baby-sitter arrived and prior to being dropped off at a friend’s house to play. Jackie reported that reviewing the coping card helped her to remember the coping thoughts “in the moment” when she was practicing these exposure tasks.

Next, Jackie was taught the SOLVE problem-solving method. This skill was particularly important for Jackie to learn because she relied heavily on her parents to problem-solve for her and had not developed her own problem-solving skills. Jackie developed a plan to help ease her anxiety when getting ready for school each morning (e.g., set out clothes and backpack the night before, meet best friend and walk together to the school bus, decide on fun activity to do with mom or dad at the end of the school day). Jackie’s parents were encouraged not to “rescue” her when she was faced with an anxiety-provoking situation such as getting ready for school in the morning, but to gently remind her to use her coping plan.

About halfway through the 12 weeks of treatment when the exposure tasks became more challenging it became apparent that Jackie’s mother and father were anxious about allowing their child to complete more challenging exposure tasks (e.g., attending an overnight camp, sleeping over at a friend’s house). For example, the parents would discuss reasons why they did not think that Jackie should complete a sleepover (e.g., they don’t know the friend’s family well enough, they only eat junk food, Jackie isn’t ready to do a sleepover). A parent session was conducted to explore how Jackie’s parents’ own anxiety was interfering with Jackie’s progress in treatment. Jackie’s parents also discussed feeling guilty that they were “bad parents” and caused Jackie’s problems with anxiety. We reviewed the psychoeducation about multiple causes of anxiety and discussed all of the special parenting skills that are required to parent an anxious child. We praised and encouraged Jackie’s parents for practicing the CBT skills at home with Jackie during the week and reviewed the progress that she had made thus far in treatment.

Throughout the remainder of treatment, Jackie completed both imaginal and in vivo exposures based on her fear hierarchy (e.g., went to a friend’s houses to play while mom and dad left for short periods of time at first and gradually increased the amount of time, stayed home alone, started riding the bus to school on a regular basis, completed several sleepovers). Prior to facing a new item on her hierarchy, Jackie would review relevant CBT skills and create a “coping plan” with the assistance of the therapist.

At the end of each session, Jackie would review the plan with her parents so that they could facilitate daily practice of the items on Jackie’s fear hierarchy. Toward the end of treatment, we discussed relapse prevention and generated ideas for challenging separation and social situations that Jackie might face in the near future (e.g., related to the start of a new school year). We scheduled several monthly “booster” sessions to review skills learned in treatment and problem-solve about any “slips” that had occurred.

Jackie’s progress in treatment can be attributed to several factors. First, Jackie and her family were acutely aware of the inconvenience and destructiveness of her anxiety and expressed a desire to be rid of this problem. This motivation facilitated the learning and practice required for positive change. Jackie’s first hand experience facing feared situations that she previously avoided, without incurring the catastrophic consequences that she predicted, ignited confidence in the treatment process as well as her own ability to manage anxiety. The therapist’s and parents’ rewards for facing her fears also reinforced these efforts and heightened Jackie’s self-competence. As Jackie learned other CBT skills, she was able to lower her overall level of anxiety (e.g., by employing relaxation skills, using coping self-talk, and having a coping plan in place). Lowering her overall anxiety contributed to a greater sense of control over her anxiety (rather than the anxiety controlling and overwhelming her). Consequently, Jackie was then able to successfully complete harder exposures (e.g., sleeping away from home) which again reinforced a new sense of self-efficacy and competence. Jackie’s parents also played a critical role in her treatment by reducing their own accommodation or “rescuing” of Jackie, which maintained her elevated anxiety. Taken together, the reduction of avoidance, the acquisition of new skills, and the therapist and parental support, all contributed to Jackie’s successful outcome.

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