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Psychosocial Treatments for Phobic and Anxiety Disorders in Youth

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Over the past decade, the field has made significant strides in developing and testing psychosocial treatments for phobic and anxiety disorders in children and adolescents. However, treatments vary in the amount of research evidence accumulated supporting their efficacy. The purpose of the present chapter is to report on the evidence-based status of these treatments with the hope of providing a guide for clinical and school psychologists, practitioners, educators, and public mental health system administrators as they make determinations concerning the adoption of treatments for phobic and anxiety disorders in youth.

For this chapter, psychosocial treatments for phobic and anxiety disorders in youth were identified by searching the research literature using PsycINFO and MEDLINE. Selection of treatment studies was narrowed by focusing on psychosocial treatments targeting the most prevalent phobic and anxiety disorders classified in the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1987, 1994) (i.e., DSM-III-R or IV; APA, 1987, 1994), namely, separation anxiety disorder (SAD), social phobia (SOP), generalized anxiety disorder (GAD), and specific phobia (SP). The search and selection led to 30 studies and most used multisource assessments, state-of-the-art diagnostic methods, randomization to conditions, manualized treatment protocols, treatment fidelity checks, reliable and valid outcome assessment measures, and follow-ups. To report on the evidence-based status of the

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psychosocial treatments evaluated in the 30 studies selected, we relied on the criteria of Chambless and Hollon (1998) (described in Chapter 2). Thus, the label names used to classify the psychosocial treatments were *efficacious*, *efficacious and specific,* and *probably efficacious*.

The chapter begins by reporting on the evidence-based status of psychosocial treatments evaluated in the 30 selected studies. Then the chapter briefly describes psychosocial treatments evaluated for youth diagnosed with either SAD, SOP, or GAD as their primary diagnosis. Treatments evaluated in samples of youth with SOP as their primary diagnosis are described next, followed by treatments evaluated in samples of youth with school phobia or school refusal behavior, and then treatments for SP. Our grouping of treatments by these diagnoses is a reflection of the research literature. For each grouping there is a table showing basic details about each study. We conclude the chapter with recommendations and a case example of a child who presented to our clinic due to difficulties with excessive fear and anxiety.

EVIDENCE-BASED STATUS OF PSYCHOSOCIAL TREATMENTS FOR PHOBIC AND ANXIETY DISORDERS IN YOUTH

The criteria of Chambless and Hollon (1998) were used to classify psychosocial treatments evaluated in the 30 identified studies. As shown in Table 1, individual cognitive-behavioral therapy (ICBT), group cognitive-behavioral therapy (GCBT), and two variants of GCBT met Chambless and Hollon's (1998) *efficacious* criteria because at least two experiments showed each of these treatments to be statistically significantly superior to no treatment (waitlist). The remaining psychosocial treatments met criteria for *possibly efficacious*, and no treatment met criteria for *efficacious and specific*. As Table 1 also shows, most *possibly efficacious* treatments received supportive evidence from one study. However, ICBT with parents, ICBT for school refusal behavior, and ICBT for school refusal behavior with parent/teacher training each received supportive evidence from two studies. In the absence of one good experiment per treatment demonstrating its efficacy relative to no treatment, psychological pill placebo, or alternative treatment, each of these treatments was labeled *possibly efficacious*. School-based GCBT also received supportive evidence from two studies, but these studies had significant limitations (e.g., lacked power, used nonequivalent attention controls, reported equivocal findings). Consequently, we believe the efficacy of school-based GCBT necessitates replication. Lastly, as shown in Table 1, two studies are listed with the label name "family cognitive-behavioral therapy" (Bögels & Siqueland, 2006; Wood et al., 2006). Unlike the other paired citations corresponding to the remaining treatments listed in Table 1, these two studies report on two different types of treatment procedures despite both using labels that refer to "family." We thus classified these two variants of family cognitive-behavioral therapy as *possibly efficacious* pending replication (Chambless & Hollon, 1998).

Table 1. Evidence-Based Status of Psychosocial Treatments for Phobic and Anxiety Disorders in Youth

Psychological Treatment	Citation for Efficacy Evidence
Efficacious Treatments	
Individual cognitive-behavioral therapy	Kendall (1994); Kendall et al. (1997); Barrett et al. (1996); Flannery-Schroeder & Kendall (2000)
Group cognitive-behavioral therapy	Barrett (1998); Flannery-Schroeder & Kendall (2000); Mendlowitz et al. (1999)
Group cognitive-behavioral therapy with parents	Barrett (1998); Silverman et al. (1999b); Spence et al. (2006)
Group cognitive-behavioral therapy for social phobia	Spence et al. (2000); Hayward et al. (2000); Gallagher et al. (2004)
Possibly Efficacious Treatments	
Individual cognitive-behavioral therapy with parents	Barrett et al. (1996); Manassis et al. (2002)
Emotive imagery for darkness phobia	Cornwall et al. (1996)
Individual cognitive-behavioral therapy for school refusal behavior with Parent/Teacher Training	King et al. (1998); Heyne et al. (2002)
Individual cognitive-behavioral therapy for school refusal behavior	Last et al. (1998); Heyne et al. (2002)
Group cognitive-behavioral therapy with Parental Anxiety Management for anxious parents	Cobham et al. (1998)
In vivo behavioral exposures for spider phobia	Muris et al. (1998)
Exposures coupled with contingency management for specific phobia	Silverman et al. (1999a)
Exposures coupled with self-control for specific phobia	Silverman et al. (1999a)
Social effectiveness training for children for social phobia	Beidel et al. (2000)
FRIENDS	Shortt et al. (2001)
One-session exposure treatment for specific phobia	Öst et al. (2001)
School-based group cognitive-behavioral therapy for social phobia	Masia et al. (2001)
School-based group cognitive-behavioral therapy	Ginsburg and Drake (2002); Muris et al. (2002)
Parent/Teacher Training for school refusal behavior	Heyne et al. (2002)
Individual cognitive-behavioral therapy with Cognitive Therapy for parents	Nauta et al. (2003)
School-based social effectiveness training for children with social phobia	Baer & Garland (2005)
Parent group cognitive-behavioral therapy	Thienemann et al. (2006)
Family cognitive-behavioral therapy	Bögels & Siqueland (2006); Wood et al. (2006)
Group cognitive-behavioral therapy with parents (face-to-face and Internet delivery)	Spence et al. (2006)

Psychosocial Treatment of Anxiety Disorders

Seventeen studies were identified as reporting on the efficacy of treatment packages for youth with a primary or principal diagnosis of SAD, SOP, or GAD; treatment efficacy was ascertained. Table 2 presents the main characteristics of these 17 treatment studies and key findings. Based on our review of these 17 studies, we found that for youth who present with SAD, SOP, or GAD, ICBT, GBCT, and GCBT with parents are *efficacious* treatments (below we describe the main aspects of the efficacious treatments). *Possibly efficacious* treatments also were identified; namely, ICBT with parents, GCBT with parental anxiety management for anxious parents, FRIENDS, school-based GCBT, ICBT with cognitive therapy for parents, parent-group CBT, and the two variants of family CBT.

The efficacy of the main ICBT program, the Coping Cat (Kendall, 2000), was first examined in Kendall (1994). The Coping Cat program prescribes four key cognitive components: (1) identifying cognitive and somatic-physiological reactions to anxiety; (2) clarifying thoughts in anxiety-provoking situations (e.g., unrealistic, threatening, negative attributions or expectations); (3) developing plans to cope with anxiety-provoking situations (e.g., changing anxious self-statements); and (4) self-evaluation and reward. Additionally, behavioral strategies are used including *in vivo* or imaginary exposures and relaxation. The Coping Cat (Kendall, 2000) has served as a prototype for subsequent treatments.

The publication of Kendall (1994) spurred a number of subsequent trials examining ICBT (Coping Cat) variants (e.g., Barrett et al., 1996; Barrett, 1998). For example, Barrett (1998) in Australia reported on the efficacy of a modified version of the Coping Cat program, the "Coping Koala." Barrett (1998) adapted Kendall's procedures for use in a group format, namely, GCBT as well as GCBT with parents. In Barrett's study, GCBT was delivered by two therapists and involved training youth in cognitive and behavioral strategies as outlined in the Coping Cat/Koala manuals. GCBT with parents involved the same procedures, as well as a Family Anxiety Management (FAM) module. The FAM aspect of the treatment focused on training parents in managing their child's emotional upsets and in communication and problem-solving. Barrett (1998) found both GCBTs to be efficacious, as detailed in Table 2.

The positive findings reported by Barrett (1998) have been replicated by other investigators (e.g., Flannery-Schroeder & Kendall, 2000; Manassis et al., 2002; Mendlowitz et al., 1999), including the efficacy of GCBT with parents (e.g., Mendlowitz et al., 1999; Silverman et al., 1999b). Recently, Spence et al. (2006) demonstrated delivery of GCBT with parents using a combined face-to-face and Internet format. In Spence et al. (2006), youth were seen in 10 group treatment sessions, but half of the sessions did not involve face-to-face therapist and group meetings but involved using the Internet to obtain psychoeducational information. Half of the parent sessions in the combined face-to-face and Internet treatment were face to face with a therapist and in group meetings and the other half were done over the Internet at home, including a three-month booster session. Youth Internet sessions focused on identifying physiological symptoms

Table 2. Psychosocial Treatments for Heterogeneous Anxiety Disorders in Children and Adolescents

Study	Sample Characteristics	Treatment	Pre- to Posttreatment Gains (% recovered, rating scales) and Maintenance over Time
Kendall (1994)	*N* = 47, ages 9 to 13 years (19 girls)	ICBT 16 to 20/16 to 20 sessions/weeks	ICBT = 64% improved on youth and parent scales. Teacher ratings did not show improvements. At 1-year follow-up, gains were maintained.
Barrett et al. (1996)	*N* = 70, ages 7 to 14 years (34 girls)	ICBT, ICBT + FAM 12/- sessions/weeks	ICBT = 57.1%, ICBT + FAM = 84%. Both ICBTs improved on youth and parent scales. At 1-year follow-up, gains were maintained.
Kendall et al. (1997)	*N* = 94, ages 9 to 13 years (25 girls)	ICBT 16 to 20/16 to 20 sessions/weeks	ICBT = 71% ICBT improved on youth and parent scales. A father measure of child anxiety/depression did not show improvements. At 1-year follow-up, gains were maintained.
Barrett (1998)	*N* = 50, ages 7 to 14 years (28 girls)	GCBT, GCBT + FAM 12/12 sessions/weeks	GCBT = 55.9%, GCBT + FAM = 70.7%. Both GCBTs improved on youth and parent scales. GCBT + FAM improved more than GCBT on clinician-rated child functioning and on youth fear ratings. At 1-year follow-up, gains were maintained.
Cobham et al. (1998)	*N* = 61, ages 7 to 14 years (33 girls)	GCBT, GCBT + PAM 10/14 sessions/weeks	For youth whose parents were "nonanxious," GCBT = 82%, GCBT + PAM = 80%. For youth whose parents were "anxious," GCBT = 39%, GCBT+PAM = 77%. Both GCBTs improved on youth scales. At 6- and 12-month follow-up, gains were maintained.
Silverman et al. (1999b)	*N* = 41, ages 6 to 16 years (22 girls)	GCBT 10/10 sessions/weeks	GCBT = 64%. GCBT improved on youth and parent scales. At 3-, 6-, and 12-month follow-up, gains were maintained.
Mendlowitz et al. (1999)	*N* = 62, ages 7 to 12 years (39 girls)	GCBT, GCBT + parent, GCBT parent only 12/12 - sessions/weeks	Diagnostic recovery was not reported. Both GCBTs improved on youth and parent scales. Girls improved more than boys on anxiety and social support ratings. GCBT + parent improved more on active coping ratings. No follow-up.
Flannery-Schroeder & Kendall (2000)	*N* = 37, ages 8 to 14 years (18 girls)	ICBT, GCBT -/12 sessions/weeks	ICBT = 73%, GCBT = 50%. Both CBTs improved on youth and parent scales. No improvements were found on social activities or teacher ratings. Only ICBT improved on child-rated state-anxiety. At 3-month follow-up, gains were maintained.

(Continued)

Table 2. *(Continued)*

Study	Sample Characteristics	Treatment	Pre- to Posttreatment Gains (% recovered, rating scales) and Maintenance over Time
Shortt et al. (2001)	*N* = 64, ages 6 to 10 years (42 girls)	FRIENDS 10/10 sessions/weeks	FRIENDS = 69%. FRIENDS improved on youth and mother scales. Fathers' ratings did not show improvements. At 1-year follow-up, gains were maintained.
Manassis et al. (2002)	*N* = 78, ages 8 to 12 years (36 girls)	ICBT, GCBT (both with parent present) 12/12 sessions/weeks	Diagnostic recovery was not reported. Both CBTs improved on anxiety and depression, but ICBT showed greater improvement. No follow-up.
Muris et al. (2002)	*N* = 20, ages 9 to 12 (20 girls)	GCBT 12/ sessions/weeks	Diagnostic recovery not reported. GCBT improved on youth-rated anxiety. No follow-up.
Ginsburg & Drake (2002)	*N* = 12, ages 14 to 17 years (10 girls)	GCBT 10/10 sessions/weeks	GCBT = 75%. GCBT improved on clinician ratings and youth-rated anxiety. No follow-up.
Nauta et al. (2003)	*N* = 76, ages 7 to 18 years (40 girls)	ICBT, ICBT + CT 12/12 sessions/weeks	ICBT = 68%, ICBT + CT = 69%. Both ICBTs improved on youth and parent ratings. At 3-month follow-up, gains were maintained.
Thienemann et al. (2006)	*N* = 24, ages 7 to 16 years (7 girls)	Parent GCBT 8/8 sessions/weeks	Parent GCBT = 25%. Parent GCBT improved on mother's ratings about the child's anxiety, attitudes toward the child, and clinician's ratings of child functioning. No follow-up.
Bögels & Siqueland (2006)	*N* = 17, ages 8 to 17 years (8 girls)	Family CBT –/– sessions/weeks	Family CBT = 46%. Family CBT improved on youth-rated anxiety and parent ratings. At 3- and 12-month follow-up, gains were maintained.
Wood et al. (2006)	*N* = 38, ages 6 to 13 years (14 girls)	Family CBT, ICBT 12 to 16 sessions/weeks	Family CBT = 78.9%, ICBT = 52.6%. Family CBT and ICBT improved on youth- and parent-rated anxiety. Family CBT improved more than ICBT on parent-rated anxiety. No follow-up.
Spence et al. (2006)	*N* = 65, ages 7 to 14 years (30 girls)	GCBT with parents (face-to-face), GCBT with parents (face-to-face and Internet) 10/10 sessions/weeks	GCBT with parents (face-to-face) = 65%, GCBT with parents (face-to-face and Internet) = 56%. Both GCBTs improved on child and parent ratings. At 6-month follow-up, gains were maintained.

– designates "not reported." *N* = number of completers. CBT = cognitive-behavioral treatment, FAM = family anxiety management, GCBT = group cognitive-behavioral treatment, ICBT = individual cognitive-behavioral treatment, PAM = parental anxiety management.
CT = cognitive therapy for parents. All parent and clinician's ratings are about the child. A table with details about specific improvements on rating scales is available from the second author.

of anxiety, learning about relaxation, problem-solving, self-reinforcement, and the importance of practice. Youth face-to-face group sessions focused on cognitive restructuring, graded exposures, and relapse prevention. Table 2 presents the key findings from Spence et al. (2006).

Psychosocial Treatment of Social Phobia (or Social Anxiety Disorder)

Six studies were identified reporting on the efficacy of treatment packages targeting SOP. Table 3 presents the main characteristics of these six studies and their key findings.

We found that when SOP is the primary or principal diagnosis, GBCT for SOP is an *efficacious* treatment. There also are *possibly efficacious*

Table 3. Psychosocial Treatments for Social Phobia in Children and Adolescents

Study	Sample Characteristics	Treatment	Pre- to Posttreatment Gains (% recovered, rating scales) and Maintenance over Time
Beidel et al. (2000)	*N* = 50, ages 8 to 12 years (30 girls)	SET-C 25/12 sessions/ weeks	SET-C = 67%. SET-C improved on youth and parent scales. At 6-month follow-up, gains were maintained and recovery rose to 85%.
Spence et al. (2000)	*N* = 50, ages 7 to 14 years (19 girls)	GCBT, GCBT + Parent Involvement 12/12 sessions/ weeks	GCBT = 58%, GCBT + parent involvement = 87.5%. Both GCBTs improved on youth and parent ratings. At 6- and 12-month follow-up, gains were maintained.
Hayward et al. (2000)	N = 35, mean age = 15.8 (35 girls)	GCBT 16/16 sessions/ weeks	GCBT = 45%. GCBT improved on youth and parent ratings. At the 1-year follow-up, gains were generally maintained in terms of diagnoses but not on youth social anxiety symptom ratings.
Masia et al. (2001)	*N* = 6, ages 14 to 17 years (3 girls)	Modified SET-C 14/14 sessions/ weeks	Modified SET-C = 50%. Modified SET-C improved on youth and clinician ratings. No follow-up.
Gallagher et al. (2003)	*N* = 23, ages 8 to 11 years (12 girls)	GCBT 3/3 sessions/ weeks	No improvements after treatment. At three-month follow-up, GCBT improved on youth, parent, and clinician ratings.
Baer & Garland (2005)	*N* = 11, ages 13 to 18 years (7 girls)	Modified SET-C 12/sessions/ weeks	Modified SET-C = 36%. Modified SET-C improved on clinician ratings of child functioning and youth depression ratings. No follow-up.

– designates "not reported." *N* = number of completers. GCBT = group cognitive-behavioral treatment, SET-C = social effectiveness training for children. All parent and clinician's ratings are about the child. A table with details about specific improvements on rating scales is available from the second author.

treatments: namely, social effectiveness training for children (SET-C), school-based GCBT, and school-based modified SET-C.

GCBT for SOP consists of key CBT components (i.e., cognitive challenging and graded exposures, relaxation), but emphasis is placed on social skills training, including handling socially challenging situations. SET-C (Beidel et al., 2000) targets social anxiety and fear as well as interpersonal skills and includes child and parent education, social skills training, *in vivo* exposures, and peer generalization experiences. Social skills training and peer generalizations are conducted in small-group sessions, and *in vivo* exposures are conducted in individual sessions.

Since the publication of Beidel et al. (2000), SET-C variants have been evaluated in a small number of studies (see Table 3). Baer and Garland (2005), for example, modified SET-C by excluding Beidel et al.s peer generalization sessions and contingent reinforcement procedures, resulting in less positive findings than Beidel et al. (2000). See Table 3 for a summary of the key findings of these studies.

Psychosocial Treatment of School Phobia or School Refusal Behavior

Three studies were identified as reporting on the efficacy of treatment packages targeting school phobia or school refusal behavior. Table 4 presents the main characteristics of these three studies and their key findings.

Based on our review of these three studies, we found that for youth who present with school phobia or school refusal behavior as the primary principal problem, no treatment met the *efficacious* criteria. However, three treatments did meet the *possibly efficacious* criteria: namely, ICBT for school refusal behavior or school phobia, ICBT for school refusal behavior with Parent and Teacher Training, and Parent and Teacher Training.

In Last et al. (1998), ICBT for school refusal behavior or school phobia consisted of graduated *in vivo* exposure and coping self-statements training. With the graduated *in vivo* exposures, the focus was on returning the child to school. Coping self-statements training focused on identifying maladaptive thoughts when anticipating and confronting anxiety-provoking situations and replacing those thoughts with more adaptive coping self-statements.

In King et al. (1998), youth received ICBT with parent/teacher training (referred by authors as "CBT"). In the ICBT with parent/teacher training, a modified version of the Coping Cat was administered. Specifically, youth were trained to use relaxation and recognize and assess self-talk during anxiety-provoking situations, particularly anxiety-producing and anxiety-reducing self-talk. Youth were then required to apply these skills during imaginary or *in vivo* or exposures along with self-evaluation and reward. The treated youth received ICBT; parents (in five sessions) and teachers (in one session) were trained to use child behavior management strategies such as establishing routines, ignoring somatic complaints, and delivering reinforcement to increase school attendance.

In Heyne et al. (2002), youth with school refusal behavior received ICBT, ICBT with parent and teacher training (ICBT plus PTT), or parent and teacher training (PTT). Heyne et al. described the ICBT condition as incorporating relaxation training, social skills training, cognitive therapy, and desensitization (emotive imagery and *in vivo* exposures). In ICBT plus PTT and PTT, parents received cognitive therapy to highlight their role in influencing child change. Parents and teachers received training in behavior management strategies (e.g., reinforcement). See Table 4 for a summary of the key findings of these studies.

Psychosocial Treatment of Specific Phobias

Four studies were identified as reporting on the efficacy of treatment packages or procedures targeting specific phobia or simple phobia. Table 5 presents the main characteristics of these four studies and their key findings. Based on our review of these four studies, we found that for youth who present with specific phobia or simple phobia as the primary or principal diagnosis, no psychosocial treatment met the *efficacious* criteria, but emotive imagery for darkness phobia, *in vivo* exposures for spider phobia, exposures with contingency management or self-control, and a one-session *in vivo* exposure (and with parent) did meet criteria for *possibly efficacious*. Because each study involved the use of graded behavioral exposures in various formats/approaches, each is briefly described below.

Table 4. Psychosocial Treatments for School Phobia or School Refusal Behavior in Children and Adolescents

Study	Sample Characteristics	Treatment	Pre- to Posttreatment Gains (% recovered, rating scales) and Maintenance over Time
Last et al. (1998)	*N* = 41, ages 6 to 17 years (28 girls)	ICBT 12/12 sessions/ weeks	ICBT = 65%. ICBT improved on mean percentage of hours spent in the classroom and on youth-rated anxiety and depression. At 4-week follow-up, gains were maintained.
King et al. (1998)	*N* = 34, ages 5 to 15 years (16 girls)	ICBT + PTT 6/4 sessions/ weeks	Diagnostic recovery not reported. ICBT + PTT improved on number of full days present at school and on youth, parent, and teacher ratings. At 3-month follow-up, gains were maintained.
Heyne et al. (2002)	*N* = 61, ages 7 to 14 years (28 girls)	ICBT, ICBT + PTT, PTT 8/16 session/ weeks	Diagnostic recovery not reported. All treatments improved on number of full days present at school and on youth ratings. At 2-week follow-up, gains were maintained.

N = number of completers. ICBT = individual cognitive-behavioral treatment, PTT = parent and teacher training. All parent and teacher's ratings are about the child. A table with details about specific improvements on rating scales is available from the second author.

Table 5. Psychosocial Treatments for Fears and Specific Phobias in Children and Adolescents

Study	Sample Characteristics	Type of Fear/Phobia(s)	Treatment	Pre- to Posttreatment Gains (% recovered, rating scales) and Maintenance over time
Cornwall et al. (1996)	*N* = 24, ages 7 to 10 years (number of girls not reported)	Darkness	EI 6/6 sessions/weeks	Diagnostic recovery not reported. EI improved on youth and observer ratings. At 3-month follow-up, gains were maintained.
Muris et al. (1998)	*N* = 26, ages 8 to 17 years (26 girls)	Spiders	EMDR, *in vivo* exposures, CE. All followed by *in vivo* exposures. 1/1 session/week	Diagnostic recovery not reported. EMDR improved on state anxiety. *In vivo* exposures improved on state anxiety, youth-rated fear, and observer ratings. CE did not improve. After these treatments were followed by *in vivo* exposures, there were improvements on youth and observer ratings. No follow-up.
Silverman et al. (1999a)	*N* = 81, ages 6 to 16 years (50 girls)	Nighttime fears, small animals, school, thunder/lightening, doctors, blood/injections, planes, camera flashes, loud noises, swimming/water, costumed characters	Exposures with self-control (SC), exposures with contingency management (CM) 10/10 sessions/weeks	SC = 88%, CM = 56%. SC and CM improved on youth, parent, and clinician ratings. At 3-, 6-, and 12-month follow-up, gains were maintained.
Öst et al. (2001)	*N* = 60, ages 7 to 17 years (37 girls)	Small animals, blood injections, enclosed spaces, thunderstorms, deep water, loud noise, mummies, yogurt	One-session behavioral exposure treatment, one-session behavioral exposure treatment with parent 1/1 session/week	Diagnostic recovery not reported. Both treatments improved on youth and clinician ratings. At one-year follow-up, gains were maintained.

N = number of completers. EI = emotive imagery. EMDR = eye movement desensitization and reprocessing. CE = computerized exposures. All parent and teacher ratings are about the child. A table with details about specific improvements on rating scales is available from the second author.

Emotive imagery prescribes the child to think of situations that evoke positive imagery while engaging in graded exposures to fear-provoking stimuli (e.g., darkness in the study of Cornwall et al., 1996). In Muris et al. (1998), youth with a specific phobia of spiders were assigned to one of three 2.5-hour conditions: eye movement desensitization and reprocessing (EMDR; Shapiro, 1995), *in vivo* exposures, or computerized exposures. *In vivo* exposures consisted of graded confrontations with the phobic stimulus (e.g., looking at a spider from a distance, letting the spider walk on one's arm). Computerized exposures consisted of graded confrontations with the phobic stimulus on a computer screen (e.g., looking at a static cartoon spider and then a moving tarantula). After completing one of these conditions, youth participated in *in vivo* exposures lasting 1.5 hours.

Silverman et al. (1999a) also investigated the efficacy of exposure for the treatment of phobias. Youth with various phobias received one of two exposure treatments (administered *in vivo* or in imagination depending on the type of phobia). In one condition, exposures were coupled with cognitive therapy, referred to as "self-control" (SC), and in the other condition exposures were coupled with behavior therapy, referred to as "contingency management" (CM). Youth also were randomized to an active credible psychological control condition, education support (ES).

Lastly, Öst et al. (2001) reported on a single-session exposure treatment for phobias. Specifically, youth received one-session behavioral exposure treatment (child-alone) or one-session behavioral exposure treatment with parent participation (parent-present). In child-alone, graded *in vivo* exposures were conducted. In parent-present, in addition to graded *in vivo* exposures, the parent observed the child conducting exposures, modeled handling the phobic stimulus/event, and provided comfort to the child when experiencing high anxiety. See Table 5 for a summary of the key findings of these studies.

RECOMMENDATIONS AND CASE EXAMPLE

Based on the 30 studies selected for review, we recommend clinical and school psychologists, practitioners, educators, and public mental health system administrators consider using treatments found to be *efficacious* based on Chambless and Hollon's (1998) criteria: namely, ICBT, GCBT, GCBT with parents, and GCBT for SOP. Service providers interested in delivering these CBTs should engage in similar therapist training procedures used in the trials evaluating these psychosocial treatments. For instance, in some trials, therapist training consisted of 5 to 12 hours of didactic instruction using CBT manuals, weekly case supervision, or both (see Bögels & Siqueland, 2006; King et al., 1998; Muris et al., 1998; Nauta et al., 2003; Silverman et al., 1999b; Wood et al., 2006). To illustrate how we have used some of these CBT procedures, we describe a case example of a 9-year-old boy who presented with his mother to our clinic.

Case Example

On the basis of child and parent interview data (i.e., Anxiety Disorders Interview Schedule for DSM-IV—Child and Parent versions, Silverman & Albano, 1996; Silverman et al., 2001), a 9-year-old European-American boy was found to meet DSM-IV criteria for SAD. The problem began when the boy was 5 years old, in kindergarten, when his mother did not pick him up from school on time. He described the situation in which he ran out of the class, his mother was not there to pick him up, and he was asked to wait at the school's main office. While he waited for his mother, the school's assistant principal tried to reach his mother over the telephone. The assistant principal was unable to reach the boy's mother. The boy described the experience of waiting for his mother as distressful, and since then both the boy and his mother have reported that his avoidance of being alone continually increased. At first, his avoidance of being alone did not present many difficulties, but as time progressed, it became more difficult for him to be separated from his mother. This led to several areas of interference for the boy and his family, such as difficulties attending or staying in school, and difficulties concentrating in school due to excessive preoccupation with not being picked up. Outside school, he avoided taking showers and using the bathroom alone and had difficulties sleeping alone and attending sleepovers. When the boy and his mother presented to the clinic, the duration of the separation anxiety problems was four years.

The child was treated with an exposure-based treatment involving cognitive and behavioral procedures. Table 6 shows a session-by-session description of the exposure-based CBT program. Treatment sessions lasted about 45 minutes with the boy and 15 minutes with the mother. Table 7 shows the fear hierarchy devised in sessions 2 and 3 along with the boy's subjective ratings of distress (on a 9-point scale) using the Feelings Thermometer (Silverman & Albano, 1996). The treatment involved first using a contingency management plan in which positive reinforcement was provided contingent on the child's successful completion of gradual exposures to being alone. The most difficult situation was not being picked up from school on time, which he rated 8. By the end of session 6, the boy successfully completed *in vivo* exposure tasks 1 to 5 listed on Table 7, and his subjective ratings of distress had decreased to 0 by the end of the exposures. Figure 1 shows an example of a contingency management contract used to facilitate implementation of one of his exposures.

Sessions 7 to 10 involved exploring with the boy the various things about being alone that he found scary (e.g., "when I am home with a sitter and mom is late arriving from work, I worry that she is badly hurt from being in a car accident") and using specific self-control/cognitive strategies (e.g., a four-step coping plan). For example, he was prompted to imagine Mom was late and to elaborate on how this situation made him feel. Then he was prompted to come up with alternative outcomes to his mother being late ("other things that might be happening") and alternative solutions (e.g., "things I can do while I wait for Mom to get home"). Figure 2 shows

Table 6. Cognitive and Behavioral Treatment of Phobic and Anxiety Disorders

Session-by-Session Description
1. Begin building rapport, discussion of presenting problem, emphasize importance of skills training, behavioral and cognitive strategies, and the idea of using a hierarchy. Explain out-of- session activities and the importance of practice (STIC jobs; Kendall, 2000; STIC = Show That I Can).
2. Review treatment rationale and goals using a fear/anxiety hierarchy and rewards.
3. Finalize hierarchy and specific rewards with the child. Explain home-based contingency contracting program (e.g., contingency management, CM). Devise first contract; assign first STIC (starting with low anxiety-provoking situation).
4. Review STIC. Conduct in-session exposure and provide feedback, modeling, and reinforcement for exposure. For STIC, devise contract for child exposure.
5. Review STIC. Conduct in-session exposure and provide feedback. For STIC, devise contract for child exposure.
6. Review STIC. Devise contract for child exposure.
7. Review STIC. Introduce cognitive component of program (e.g., self-control, SC). Specifically, teach the identification of faulty cognitions, generation of incompatible self-statements, explore alternatives, etc. For STIC, devise contract for child exposure.
8. Review STIC; continue SC. Conduct in-session exposure. Explain fading of rewards (to begin next session). For STIC, devise final contract
9. Review STIC. Present four-step coping plan ("STOP"). S = Scared?, T = Thoughts, O = Other[*thoughts*], P = Praise. For STIC, use the four-step plan for next exposure.
10. Review STIC. Conduct in-session exposure using coping plan. For STIC, use four-step plan for next exposure.
11. Review STIC and progress. Continue to practice four-step plan. Discuss relapse prevention strategies. For STIC, use four-step plan for next exposure.
12. Review STIC, progress, and relapse prevention.

Table adapted from Silverman et al. (1999b).

Table 7. Fear Hierarchy with Child's Ratings of Distress

Situation	Distress Ratings (0–8)
1. Playing video games while being alone in his bedroom	2
2. Watching TV while being alone in his bedroom	3
3. Playing with his toys while being alone in a room of the house	3
4. Using the toilet while being alone in the bathroom	4
5. Taking showers while being alone in the bathroom	5
6. Mom being late from work while he is home with sitter	6
7. Sleeping over at other kids' houses	7
8. Being alone in a room (e.g., at home or our clinic)	7
9. Sleeping alone in his bedroom	8
10. Not being picked up from school on time	8

Date August 11, 2006

Contract Number 5
Session Number 6

Child-Parent Contract

Let it be known that on this Friday (day of week) day, the 11 (date) of

August (month) in the year 2006, a contract between

John (Child's name) and the parents Ms. Smith (Parents' names)

concerning the child's anxiety about taking shower alone was signed, witnessed

by Dr. Silverman (therapist's name).

The above parents and child hereby agree that if John (Child's name)

successfully Goes into the bathroom at 5:00pm, with his towel and clean clothes,

then takes a shower that lasts at least 15 minutes, without calling on mom (or anybody else),

ends his shower after a timer goes off (set at 15 minutes), and gests dressed in the bathroom

then Mom will take John to buy a basketball trading card of no more than $5.00 (reward child will receive).

This task is to be done by the child Saturday, 12 (when), and the parents are

to give child the above mentioned reward Saturday, 12 (when).

Child's signature John Smith

Parents' signatures Ms. J. Smith

Therapist's signature Dr. Silverman

Figure 1. Example of a contract for conducting an *in vivo* exposure and administering a reward.

an example of the four-step coping plan used to implement the cognitive strategy. By the end of the fear-related imagery exposure and use of the four-step coping plan shown in Figure 2, the child had successfully reduced his subjective ratings of distress. That is, the boy's rating (on the 9-point scale) decreased from 6 (initial rating of distress) to 4 (midway through the procedure) to 1 (after the procedure). This cognitive strategy was used in treatment (and prescribed for use out of treatment) for the remaining sessions, coupled with *in vivo* behavioral exposures. At the posttreatment and 12-month follow-up assessment sessions, the ADIS-C/P was readministered. At both assessment points, the boy reported minimal distress about

S = Scared?
Situation: Mom is late from work while I am home with a sitter.

T = Thoughts
What are your thoughts? Mom was in a car accident and she is badly hurt.

O = Other (*thoughts*)
What can happen instead? If there would have been an accident someone would had called. Mom is stuck in traffic, stopped to buy food for dinner, or at the food market.

P = Praise (*yourself*)
What can you tell yourself? I did a good job at changing my thoughts. I am proud of myself. I am able to stop myself from panicking when mom is late.

Figure 2. Example of the four-step coping plan.

being separated from his mother (or being alone); he no longer met DSM-IV criteria for SAD; and both the boy and his mother reported improved functioning. He now stayed in school with no difficulties, had no difficulties concentrating in school, took showers/used the bathroom alone, and attended sleepovers and even summer camp, on a regular basis.

SUMMARY AND CONCLUSIONS

This chapter provided a review of the current status of evidence-based psychosocial treatments. Our hope is that this review will serve as a useful guide for practitioners and program administrators in making determinations about the adoption of treatments for phobic and anxiety disorders in youth. Our search of the treatment research literature led to 30 studies that met the criteria for robustness suggested by the American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures (1995, 2000). Specifically, we found that ICBT, GCBT, GCBT with parents, and GCBT for SOP met the *efficacious* treatment criteria of Chambless and Hollon (1998). The remaining treatments met the *possibly efficacious* criteria; and no treatment met the *efficacious and specific* criteria. Based on this review, practitioners should consider training and then delivering the CBT programs labeled *efficacious* to children and adolescents who present to their clinics. We concluded the chapter with a case example to illustrate how we have used CBT to reduce SAD in a 9-year-old boy who presented with his mother to our clinic.

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