Major depression during childhood and adolescence is an important clinical problem and a significant social concern. At any given time, 1–3% of children, and 5–7% of adolescents meet the diagnostic criteria for major depression (Essau & Dobson, 1999; Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993). Depression during childhood is associated with significant psychosocial impairment and puts youth at risk for both substance abuse and suicide (Brent, 1995; Shaffer et al., 1996). Moreover, it tends to co-occur with other psychiatric illnesses—comorbidity is the rule rather than the exception—which can complicate the treatment process and is associated with poorer treatment outcomes (Curry et al., 2006). Of particular concern is the fact that depression among children and adolescents is both chronic and recurrent. The median length of a depressive episode during adolescence is 9 months, and it puts youth at risk for repeated episodes of depression during adulthood (Kovacs, Obrosky, Gatsonis, & Richards, 1997; Reinecke & Curry, 2008; Weissman et al., 1999).

In addressing these concerns, a range of pharmacological and psychosocial interventions have been developed for treating depressed youth (Brent, Gaynor, & Weersing, 2002; Curry, 2001). Outcome studies suggest that cognitive-behavioral approaches may be efficacious for treating depression among adolescents (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002; Moore & Carr, 2000; Reinecke, Ryan, & DuBois, 1998; Weisz, McCarty, & Valeri, 2006). Outcome research with depressed prepubertal youth, although more limited, also is encouraging. Cognitive-behavioral therapy (CBT) for depression among youth is active, problem-focused, and collaborative. It involves the strategic use of empirically supported techniques to address cognitive, behavioral, and social factors that underlie and maintain a child’s distress. Based on a cognitive-behavioral formu-
lation (Nezu, Nezu, & Lombardo, 2004; Persons, 1989; Rogers, Reinecke, & Curry, 2005), interventions are selected that address the full range of cognitive, behavioral, somatic, and social symptoms of depression. In the cognitive domain, children and adolescents learn to solve problems more effectively and to apply cognitive techniques to change maladaptive, negatively valenced beliefs, attitudes, and thoughts that contribute to their depression. Within the behavioral domain, they are encouraged to participate in activities that provide them with a sense of accomplishment and enjoyment and to reestablish trusting, supportive relationships with others. Social skills and assertiveness training are used to address behavioral problems that exacerbate and maintain their depression, and direct attempts are made to facilitate the development of close, secure relationships with parents and other family members. Within the physiological domain, anxious and agitated youth are taught to use relaxation imagery, meditation, and other techniques to regulate their moods.

Our goal in CBT with depressed youth is not limited, however, to providing them with tools and techniques for managing negative moods. Rather, it is to provide them, and their caregivers, with feelings of efficacy and hope. Cognitive therapists endeavor to provide them with a rationale for understanding depression, strategies for coping with life's problems, and a sense of optimism. An explicit goal, as such, is to empower both the child and the parent. It is to give them a vision of a more positive future and tools for bringing this about.

In this chapter we review cognitive-behavioral models of depression during childhood, and treatment strategies derived from them. We discuss empirical support for the efficacy and effectiveness of these approaches and briefly review limitations and shortcomings in this literature. We conclude with a discussion of future directions for clinical innovation.

COGNITIVE THERAPY IN PRACTICE: GENERAL PRINCIPLES

Cognitive therapy was initially developed as a treatment for major depression among adults (Beck, 1963, 1983; Beck, Rush, Shaw, & Emery, 1979). Incorporating both cognitive and behavioral strategies, the approach has received a great deal of empirical and clinical interest over the past 30 years. It is a well-supported intervention for treating unipolar depression among adults (Gloaguen, Cottraux, Cucherat, & Blackburn, 1998; Hollon & Najavits, 1988; Hollon, Thase, & Markowitz, 2002), and substantial evidence exists in support of many of the key components of cognitive models of psychopathology (Clark & Beck, 1999; Haaga, Dyck, & Ernst, 1991; Ingram, Miranda, & Segal, 2006). More recently, attempts have been made to apply these models to understanding depression among children and adolescents (Spence & Reinecke, 2004). As Leahy (1988) and Lewinsohn and Clarke (1999) have noted, however, developmental factors need to be taken into account in treating depressed youth.

What are the essential features of CBT in practice? Cognitive therapy with children and adolescents, as with adults, is time limited, problem focused, and strategic. Treatment typically is not open-ended or long-term. Rather, it is brief and attempts to quickly bring about symptomatic improvement. Although no specific number of sessions is set, one endeavors to bring about meaningful change within 12-16 sessions. Treatment is active and highly focused. The cognitive-behavioral therapist directly attempts to rectify cognitive deficits, distortions, and deficiencies that may be contributing to the child's depression, and develops the child's social skills and affect regulation abilities. As in cog-
TABLE 8.1. Characteristics of CBT with Youth

1. Time limited, brief
2. Problem oriented, focused, strategic
3. Collaborative therapeutic rapport
4. Empirically based, “personal scientist”
5. Structured and active (agenda, homework)
6. Clear and consistent focus on cognitive contents and processes, and on developing social and affect regulation skills

Cognitive therapy with adults, the therapeutic relationship in CBT with youth (and their parents) is both supportive and collaborative. Working with the child and his or her parents, the therapist attempts to understand the child’s phenomenal experience, the meanings the child and parents ascribe to events, and how he or she attempts to cope with daily challenges.

Depressed youth tend to demonstrate negative views of themselves, others, and their futures. They see themselves as flawed, unlovable, undesirable, and ineffective and see others as critical, rejecting, and uncaring. At the same time, they view their future as bleak and feel incapable of bringing about desired outcomes. These negative beliefs and attitudes are seen by the therapist as objects to be understood and explored, rather than as facts to be accepted. Working with the child or adolescent, the therapist endeavors to understand the experiences that have led to the development of these beliefs and to test their utility and validity. Beliefs are acquired and function in a social context. With this in mind, child cognitive therapists also work to understand caregivers’ beliefs, attitudes, expectations, attributions, and values and how these influence their caregiving practices and the child’s developing sense of him- or herself and others. As in CBT with adults, sessions with youth are structured and active. Specific concerns or problems are identified, as are cognitive, behavioral, social, and environmental factors that may maintain them. Based on an understanding of the outcome literature, the therapist then selects empirically supported strategies or “modules” (Curry & Reinecke, 2003) to address these factors and introduces them to the child and his or her parents. As in CBT with depressed adults, sessions are organized in accord with an agenda that is developed by the child and the therapist, and every session concludes with a “homework assignment” for the child or parent to practice during the subsequent week. The defining characteristics of CBT with youth are summarized in Table 8.1.

VULNERABILITY FOR DEPRESSION

Studies indicate that a range of cognitive, biological, social, and environmental factors interact in placing youth at risk for depression (Ingram et al., 2006; Spence & Reinecke, 2004). The practice of CBT with depressed youth is based on the assumption that by rectifying factors implicated in vulnerability for depression, one can alleviate dysphoria and reduce the risk of relapse or recurrence. Treatment, then, is formulation-based and prescriptive (Rogers et al., 2005). Interventions are selected based on an understanding of cognitive, social, and environmental variables that are contributing to a child’s distress (Reinecke & Simons, 2005). The techniques and strategies used, as a result, are individually tailored and strategic.
Cognitive models of vulnerability for depression tend to take the form of diathesis-stress formulations. That is, they assume that the onset of a depressive episode is precipitated by the interaction of a stressful life event (typically an interpersonal loss or a failure) and a preexisting cognitive vulnerability. Such cognitive vulnerabilities, however, are not active at all times. Like software on a computer that has not been "booted up," they are seen as latent or dormant much of the time. Vulnerable and nonvulnerable youth, as such, may not be distinguishable unless confronted with a stressful life event. Experimentally, it often is necessary to activate cognitive diatheses by exposing an individual to a "priming" experience (such as listening to sad music) for the specific vulnerability to become apparent (Gotlib & Krasnoperova, 1998). Cognitive vulnerabilities are typically seen as taking the form of depressogenic schemas or tacit beliefs (Beck, 1963, 1983). Schemas are stable, organized cognitive structures that include representations of the self and others and serve to guide the processing of information (including perception, encoding, retrieval, and problem solving). They are based on prior experiences and have an affective valence.

Depressed youth tend, as a group, to demonstrate many of the same cognitive and perceptual biases and distortions that characterize the thought of depressed adults. Specifically, they demonstrate negative thoughts about themselves, the world, and their future, a tendency to selectively attend to negative events and to recall experiences associated with loss or rejection. Like depressed adults, they demonstrate maladaptive schema (Hammen & Goodman-Brown, 1990; Hammen & Zupan, 1984; Prieto, Cole, & Tageson, 1992; Reinecke & DuBois, 2001; Taylor & Ingram, 1999), which may lead them to attribute negative meanings to their experiences. They tend, for example, to view themselves as unlovable, undesirable, or flawed and to view others as unreliable, unsupported, and uncaring. Depressed youth often anticipate rejection and tend to ruminate about their predicaments. Like depressed adults, depressed youth demonstrate deficits in rational problem solving, as well as deficits in problem-solving motivation. Specifically, they tend to anticipate that their attempts to solve life's problems will not be successful, and consequently avoid addressing problems directly or approach them in an impulsive, careless manner. Many depressed youth maintain perfectionistic standards, which can impede treatment and place them at risk for relapse. Finally, depressed youth tend, as a group, to demonstrate a negative attributional style. That is, they tend to view losses or failures as stemming from personal characteristics that are broad, stable, and unchanging. They may, for example, attribute a failure on a math exam to the fact that they "are just plain stupid," rather than to the fact that did not study sufficiently, that there were other external factors that may have contributed to their poor performance, and that they have specific difficulties with this course (but have done well in other areas). In summarizing the literature on cognitive vulnerability for depression, Ingram et al. (2006) state, "Data from studies examining the cognitive characteristics of children who are at risk for depression support the idea that these children have negative cognitive structures available ... [which take the form of] negative self-schemas that, when accessed, are linked to the appearance of self-devaluing and pessimistic thoughts, as well as to dysfunctional information processing" (p. 79). Each of these cognitive and perceptual factors may be implicated in a child's depression and may serve as a target for clinical intervention; see Table 8.2.

Interpersonal factors also are implicated in the development and maintenance of depression (Hammen, 1992; Ingram et al., 2006). Relationships between depressed youth and their parents often are characterized by conflict, problems with attachment, communications difficulties, and rejection (Barber, 1996; Beardslee, Versage, & Gladstone,
1.- Automatic thoughts (self, world, future) and images
2. Perceptions
3. Cognitive distortions
4. Memories
5. Schemas, assumptions
6. Goals, wishes, plans, standards (perfectionism)
7. Problem solving (rational skills, problem-solving motivation)
8. Attributions

1998; Billings & Moos, 1983; Kenny, Moilanen, Lomax, & Brabeck, 1993; Parker, 1993; Rapee, 1997). At the same time, depressed youth tend to withdraw from others and behave in ways that alienate others and contribute to a loss of social reinforcement. Depressed youth tend, as a group, to demonstrate social skills deficits and experience difficulties with peers (Altmann & Gorlib, 1988; Panak & Garber, 1992; Peterson, Mullins, & Ridley-Johnson, 1985; Rudolph, Hammen, & Burge, 1994). The family and peer environments of depressed youth are often stressful and unsupportive and so serve as a context for the development of negative schemas about themselves and others. In addition, depressed youth often behave in ways that magnify and perpetuate negative social interactions, creating a pernicious feed-forward cycle resulting in additional rejection, loss, and depression. Social learning models of depression (Lewinsohn, 1975) posit that depression stems from a loss of perceived reinforcement. This can result from a loss of positive reinforcement (e.g., being complimented by a coach on a strong performance or receiving a good grade) or an increase in negative outcomes (e.g., being criticized by a parent or failing a quiz). An explicit goal of CBT is to increase the availability and salience of positive reinforcement and decrease negative reinforcement or punishment. Social and behavioral difficulties are an important focus of treatment in CBT with depressed youth (see Table 8.3). Inasmuch as families of depressed youth tend to be characterized by more conflict and less support, cognitive therapists work with both children and parents to break these negativistic cycles and create more positive, supportive relationships.

Finally, studies suggest that depressive episodes are often precipitated by stressful life events (Monroe & Hadjiyannakis, 2002). Children and adolescents are particularly sensitive to social loss, and depressive episodes are often triggered by arguments, conflicts, or loss in relationships with parents or peers. Recent research suggests that there may be associations between major and minor stressful life events and depression among youth.

<table>
<thead>
<tr>
<th>TABLE 8.2. Cognitive Targets of Cognitive-Behavioral Intervention</th>
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<tr>
<td>1. Automatic thoughts (self, world, future) and images</td>
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<td>2. Perceptions</td>
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<td>3. Cognitive distortions</td>
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<td>4. Memories</td>
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<td>5. Schemas, assumptions</td>
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<td>6. Goals, wishes, plans, standards (perfectionism)</td>
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<td>7. Problem solving (rational skills, problem-solving motivation)</td>
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<td>8. Attributions</td>
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<th>TABLE 8.3. Behavioral Targets of Cognitive-Behavioral Intervention</th>
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<tr>
<td>1. Social skills</td>
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<td>2. Communication skills</td>
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<td>3. Conflict resolution, negotiation</td>
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<tr>
<td>4. Maladaptive coping (alcohol or drug use, cutting and parasuicidal behavior)</td>
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<td>5. Attachment difficulties</td>
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</table>
TABLE 8.4. Social and Environmental Targets of Cognitive-Behavioral Intervention

1. Stressors (major and minor)
2. Supports (family, peer, community)
3. Cues, reinforcers

(Compas, Grant, & Ey, 1994; Goodyer, Wright, & Altham, 1988; Goodyer, Herbert, & Altham, 1998). Not all youth who experience a stressful life event, however, become clinically depressed. Responses to negative life events appear to be moderated by the availability of social supports, problem-solving skills, and cognitive factors associated with resilience (e.g., cognitive flexibility, stable self-concept). As noted, contemporary cognitive-behavioral theories of vulnerability to depression (Abramson, Metalsky, & Alloy, 1989; Beck, Rush, Shaw, & Emery, 1979; Gotlib & Hammen, 1992; Spence & Reinecke, 2004) are typically presented in the form of diathesis-stress models in which risk for depression is seen as stemming from the interaction of stressful life events and preexisting cognitive vulnerabilities. Given the prominence of stress in most theories of depression, cognitive-behavioral therapists work with parents of depressed youth to reduce levels of stress at home, to develop social supports, and to support the use of adaptive coping skills (see Table 8.4).

Depression is a complex disorder. As noted earlier, a wide range of factors—intrapsychic, social, environmental, and biological—are implicated in its etiology and maintenance. Moreover, these factors appear to influence one another in complex ways (Gotlib & Hammen, 1992; Harrington, Wood, & Verduyn, 1998). Simple, linear models for understanding mood and adaptation during childhood and adolescence, as a consequence, will likely prove inadequate. With this in mind, we propose that any comprehensive clinical model of depression must account for the full range of vulnerability, risk, and resilience factors that are associated with the disorder, and that clinical interventions may usefully target the full range of factors associated with risk. The goal of CBT, as such, is to help depressed adolescents to become aware of negative beliefs, attitudes, expectations, and attributions and to substitute them with more adaptive beliefs and constructions. Behaviorally, CBT therapists work to assist adolescents to behave in ways that will elicit positive reinforcement, to limit behavior that elicits negative reinforcement, and to reduce the use of maladaptive coping strategies (such as alcohol or substance abuse and avoidant or impulsive problem solving). By flexibly combining cognitive and behavioral strategies, CBT attempts to rapidly facilitate behavioral and emotional change.

CBT WITH CHILDREN AND ADOLESCENTS

Several cognitive-behavioral treatment protocols for treating depressed youth have been developed during recent years (Brent & Poling, 1997; Clarke, Lewinsohn, & Hops, 1990; Stark et al., 2006; Curry & Reinecke, 2003; Treatment for Adolescents with Depression Study (TADS) Team, 2004; Weisz, Southam-Gerow, Gordis, & Connor-Smith, 2003). Each emphasizes the acquisition of cognitive and behavioral skills that can used to manage depressed affect. Based on cognitive-mediation models (Dobson & Dozois, 2001; Reinecke & Freeman, 2003), these protocols are founded on the assumption that cognitive processes, mood, behavior, and environmental factors transactionally influence one
another over the course of development, and that by changing beliefs, attitudes, and thoughts, one can affect a change in one's mood and behavior. To accomplish this, children and adolescents are encouraged to develop specific goals for treatment and learn to monitor their moods. They are encouraged to engage in pleasant activities, to reestablish supportive relationships with peers and family members, and to engage in activities that provide a sense of accomplishment or mastery. Specific skills, including relaxation, conflict resolution and negotiation, identification of cognitive distortions or biases, identification of maladaptive thoughts, rational disputation of maladaptive thoughts, and developing realistic counter-thoughts often are taught. Early treatment manuals tended to be highly structured and encouraged therapists to teach specific skills to all patients in a specific order. Protocols developed during recent years, however, allow for therapists to tailor their interventions to the needs of individuals by including mandatory or standard skills, which all youth are taught, and elective skills, which are introduced when needed. Recently developed "modular" approaches to cognitive-behavioral therapy (Curry & Reinecke, 2003; Rohde, Feeny, & Robins, 2005) are prescriptive in the sense that they permit clinicians to select therapeutic techniques based on the specific cognitive and behavioral vulnerabilities of individual patients. They offer therapists strategies and techniques that can be modified and shaped to meet the needs of youth with different levels of cognitive and emotional development, different presenting concerns, and different family and community contexts.

COGNITIVE THERAPY IN PRACTICE: SPECIFIC STRATEGIES

As discussed earlier, depressed children, like depressed adults, manifest negative views of themselves, their world, and their future. These negative thought patterns increase the probability that they will become depressed when they encounter a stressful life event, such as a loss or a failure. These maladaptive cognitive patterns are acquired and consolidated in a social context. Early experiences of abuse, neglect, or emotional unresponsiveness can lead children to believe that they are undesirable or unlovable, that they cannot count on others to reliably protect or support them, and that others are potentially rejecting and uncaring. These early beliefs or "working models" (Bowlby, 1969, 1970) are subsequently internalized as maladaptive schemas about the self and others (Gotlib & Hammen, 1992; Ingram et al., 2006; Reinecke & Rogers, 2001). A range of strategies are brought to bear to change these beliefs and to develop more adaptive information-processing skills. By working with parents to improve relationships at home, and with youth to improve relationships with peers, cognitive-behavior therapy endeavors to change the social environments that support the development of maladaptive beliefs. A list of specific therapeutic interventions is presented in Table 8.5.

Two cognitive-behavioral paradigms developed for treating depressed adults have been successfully modified for use with children and adolescents and have greatly influenced contemporary clinical practice. Aaron Beck's cognitive therapy tradition focuses on changing maladaptive beliefs, attitudes, and schemas, whereas Peter Lewinsohn's behavioral tradition emphasizes the development of social skills, activity scheduling, and relaxation training as a means of increasing the rate and salience of reinforcements in the child's life.

Beck's cognitive therapy of depression directly endeavors to change maladaptive information-processing strategies and beliefs. Beck (1983) hypothesized that depression-prone individuals possess "dysfunctional attitudes" or schemas about themselves (seeing
TABLE 8.5. Cognitive-Behavioral Interventions

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<td>Rationale</td>
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<td>2.</td>
<td>Goal setting</td>
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<td>3.</td>
<td>Mood monitoring</td>
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<td>4.</td>
<td>Activity scheduling</td>
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<td>a.</td>
<td>Pleasant activities</td>
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<td>b.</td>
<td>Social activities</td>
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<td>c.</td>
<td>Mastery activities</td>
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<td>5.</td>
<td>Problem solving</td>
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<td>a.</td>
<td>Rational problem solving</td>
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<td>b.</td>
<td>Problem-solving motivation</td>
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<td>6.</td>
<td>Automatic thoughts</td>
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<tr>
<td>a.</td>
<td>Rational disputation</td>
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<td>b.</td>
<td>Adaptive self-statements</td>
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<td>7.</td>
<td>Cognitive distortions</td>
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<td>8.</td>
<td>Affect regulation</td>
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<td>9.</td>
<td>Social skills</td>
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<td>10.</td>
<td>Assertiveness</td>
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<td>11.</td>
<td>Negotiation/communication and compromise</td>
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<td>12.</td>
<td>Parent-child interaction</td>
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<tr>
<td>a.</td>
<td>Attachment security</td>
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<td>b.</td>
<td>Parent training</td>
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<td>13.</td>
<td>Taking stock and relapse prevention</td>
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</table>

... themselves as flawed, unlovable, defective), their world (seeing it as dangerous, rejecting, and unsupportive), and their future (seeing it as hopeless, they are unable to bring about desired outcomes). This negativistic belief system, when activated, influences perceptual, memory, and interpretive processes, resulting in a negatively biased understanding of the individual's experiences. Depression-prone children may, for example, be more likely to notice and recall situations in which they had failed at school or not been invited to a sleepover, and to overlook or minimize situations in which they had been successful or enjoyed playing with friends. Interventions based in this tradition attempt to overcome these depressogenic cognitive and perceptual biases.

The Coping with Depression course (Clarke et al., 1990) is a behaviorally based psychoeducational group intervention based on the assumption that depressed youth experience low rates of positive reinforcement and that they behave in ways that may contribute to a loss of social support. In this course, adolescents are taught that thoughts, emotions, and behaviors reciprocally influence one another and that by changing one's thoughts, perceptions, and behaviors, it is possible to influence one's mood. Positive thoughts lead to positive behaviors and positive moods in an “upward spiral,” whereas depressive thoughts lead to negativistic behavior and dysphoric mood in a “downward spiral.” Thus, adolescents are taught cognitive, behavioral, and social skills as a means of facilitating clinical improvement.

In practice, there are important points of contact between these treatment approaches. They are technically similar, differing primarily in emphasis. Beck’s approach, though decidedly cognitive in nature, encourages participation in enjoyable, reinforcing activities and encourages individuals to participate in social activities as a means of changing maladaptive beliefs. At the same time, Lewinsohn’s approach includes many
cognitive components and actively endeavors to develop individuals' ability to recognize and appreciate reinforcers in their environment and how negativistic beliefs can influence their behavior. Here, however, change in cognition is in the service of increasing rates of reinforcement. The cognitive-behavioral protocols we have discussed have many features in common, and an argument can be made that effective treatments flexibly use many of their shared components (Evans et al., 2005). Several of these treatment modules are discussed in turn.

Psychoeducation

Effective treatments tend to be psychoeducational in nature. Children and adolescents typically are referred for treatment by their parents, who are confused by their children's difficulties and are unsure what can be done to solve them. Parents are often frustrated and frightened by the recurring nature of their child's problems, and by their inability to rectify them. With this in mind, CBT therapists typically begin treatment by educating youth and their parents about depression and CBT. Using the child's and the parent's descriptions of their concerns, the therapist presents an integrative model of depression and the cognitive-behavioral model of treatment. The therapist notes how depression is multiply determined, and how cognitive, behavioral, emotional, biological, and environmental factors interact in contributing to the child's distress. Whenever a new technique is introduced, the therapist begins by presenting a rationale. It is important that patients and their parents understand the strategy and how it may be helpful for them. When needed, research findings may be discussed (e.g., benefits of CBT versus medication, suicidal ideations and medications, risk of relapse), and popular books (e.g., More Than Moody, Mind over Mood), websites (e.g., www.cognitivetherapy.com, www.academyofct.org), and workbooks can be recommended.

Therapeutic Collaboration

The therapeutic relationship in CBT is collaborative in nature (Beck et al., 1979). The CBT therapist is neither nondirective (as in Rogerian, supportive, or psychodynamic psychotherapy), nor highly directive (as in behavior therapy). Rather, the therapist is active and works with the patient to understand his or her difficulties and how the youth understands his or her world. The youths' (and their parents') thoughts, attitudes, beliefs, attributions, expectations and assumptions are treated as hypotheses to be examined to determine their validity and utility. It is vitally important for children and their parents to feel that their therapist appreciates their concerns and perspectives. The parental belief that the therapist does not understand them or appreciate their views is a strong predictor of premature termination of treatment. With this in mind, we typically conclude each session by asking parents and children if they feel they have been understood that day and if there is anything important that has been overlooked.

Depressed children and their parents often feel hopeless and helpless. With this in mind, the CBT therapist endeavors to communicate a sense of optimism and confidence. In contrast to dynamic psychotherapy, in which negative transference reactions toward the therapist within the therapy session are accepted and interpreted, in CBT therapists actively attempt to identify and address patients' negative thoughts and expectations about therapy. Patients and parents are encouraged to express any concerns they may have, so that negative feelings about the therapy can be addressed before they undermine the therapeutic rapport. Adolescents (and their parents) are unlikely to participate in
activities that they believe will not be helpful. Inasmuch as feelings of pessimism are a defining characteristic of depression, CBT therapists attempt to model a realistic sense of optimism within the therapy session.

**Goal Setting**

Cognitive-behavioral therapy is strategic and problem focused. *Every* statement, question, and intervention during the therapy session is directed toward gathering information, clarifying or changing a thought or a belief, or developing an adaptive behavioral skill. An important function of the therapist is to maintain the therapeutic focus and provide structure. The therapist, the child, and his or her caregivers begin treatment by discussing their goals for therapy. Establishing treatment goals is no small task, as the objectives of children and those of parents often have little in common. Parents, for example, often want their child to be more polite and compliant, to get along better with siblings, and to improve his or her school performance. Adolescents, in contrast, often feel that they have no problems (other than their parents' nagging them) and want to be left alone. Neither the parent nor the teen, however, may acknowledge that the adolescent is clinically depressed and has been experiencing suicidal ideations. Our initial goal as therapists, then, is to guide the parent and the child in developing a list of goals that all can agree upon. The goals should be meaningful, specific, and concrete (i.e., decrease depressive symptoms, decrease frequency of arguments). The therapist then works with the child and the parents to monitor progress in achieving these goals over the course of treatment.

**Homework**

Patient activity is a strong predictor of therapeutic outcome. It may be argued, then, that homework assignments are a crucial component of CBT. As in CBT with adults, children and adolescents are strongly encouraged to engage in at least one task each week that will allow them to test the validity or utility of a belief, gather information, or develop a new skill. *Every* CBT session concludes with developing a homework assignment. Inasmuch as the term homework often has negative connotations for children and adolescents, one can simply give it another name (e.g., “something to try this week”). Children and adolescents often are not compliant in completing their therapeutic homework assignments. It can be helpful, then, to recruit parents to serve as a “coaches” for completing assignments at home and to identify cognitive or environmental “chocks” or “blocks” that impede completion. If, for example, a teen believes that “it won’t work . . . nothing helps,” he or she will be unlikely to attempt the assignment. The validity of these beliefs can be tested (as one would test any automatic thought), and more adaptive beliefs (e.g., “I haven’t tried this before . . . it’s worth a shot . . . can’t hurt to try”) can be suggested. Providing a rationale for the assignment, collaboratively developing the task, recognizing and rewarding attempts to complete homework assignments, and reflecting on positive outcomes of completing homework assignments can all improve compliance (Friedberg & McClure, 2005; Hudson & Kendall, 2005).

**Mood Monitoring**

CBT is founded on the assumption that, by changing cognitions, it is possible to change one’s mood. Before children and adolescents can understand relations between thoughts
and mood, however, they must be able to monitor their moods. They need to be able to distinguish and label different emotional states, discriminate levels of intensity of mood, and appreciate how moods can change over time. Children and adolescents are taught to track how they are feeling (we recommend monitoring both positive and negative moods), so that they will be able relate these moods to situations that make them feel better or worse and to identify accompanying thoughts. By monitoring positive and negative moods, they come to appreciate that they don’t “always feel bad” and that their moods are “movable” or changeable. Children and adolescents practice rating moods on a 0–10 “feelings thermometer,” with the patient providing anchors for various points on the scale. After a child becomes proficient at rating his or her moods, the child is asked to record situations in which he or she felt this way and the events that led to changes in his or her mood. Finally, children practice recording the thoughts that accompanied each situation. As they come to recognize that there are some activities that lead them to feel worse, and others that are associated with feeling better, they are encouraged to increase the activities that make them feel better. Mood monitoring, then, serves as a foundation for a new clinical skill, activity scheduling.

**Activity Scheduling**

Depressed children, like depressed adults, tend to engage in relatively few activities that give them a sense of pleasure or accomplishment. They tend to withdraw from other people, and often stay in their bedrooms and engage in solitary activities (such as listening to music, watching TV, surfing the Web, or playing videogames). With this in mind, the CBT therapist talks with the parent and child about the importance of participating in activities that are fun and that provide a sense of competence or achievement. Again, this is no small task. Depressed youth often experience difficulty in identifying activities they would enjoy (i.e., “Nothing is fun”), and parents frequently feel it is inappropriate to “reward” their child with pleasant activities before the child’s demeanor and behavior improve. It is thus quite important to share the rationale for the intervention with the family and to keep its primary function (alleviating depression, rather than improving compliance) in mind. The therapist begins by working with the child to develop a list of activities that he or she may enjoy. Activities on the list should be genuinely enjoyable to the child or adolescent, safe, active, inexpensive, readily available, legal, and (preferably) social. If the patient experiences difficulty in identifying potentially enjoyable activities, the therapist can “prime the pump” by giving the child a copy of Peter Lewinsohn’s “Pleasant Activities Checklist.” A copy of this list is available as a pdf file at www.ori.org. Although the list was developed for use with adults and is somewhat dated, teenagers often find it interesting, even amusing, to complete. We simply ask them to read the list and circle any item to which they may respond, “If I did this, I might like it.” From the responses, we collaboratively develop a list of 10 activities they would like to pursue. Once this list has been compiled, we count the number of times they have engaged in these activities over the past week in order to generate a baseline. We also ask them to rank their moods during the days of these activities. The patients, with the support of their parents, are then asked to increase the number of pleasant activities they participate in each day and to note the corresponding change in their moods. A similar approach can be used to increase participation in activities that are associated with feelings of mastery or competence. We typically encourage patients to participate in one or two pleasant and mastery activities per day. Whether it is a cause or consequence of depression, depressed youth tend, as a group, to engage in few activities that are enjoy-
able or that provide a sense of competence. Systematically scheduling and participating in pleasurable activities, and completing tasks that provide a sense of accomplishment, provide a powerful tool for alleviating depression.

**Social Interaction**

Interpersonal factors—including social withdrawal, excessive dependency, social inhibition, and impaired social skills—can put individuals at risk for depression and increase the likelihood of relapse and recurrence (Joiner, 2002). Depressed youth tend to withdraw from others and to behave in ways, both subtle and obvious, that alienate peers and family members. They tend, as a group, to avoid eye contact, seldom smile or laugh, ask few questions, slouch, seek reassurance from others, direct conversations to themselves and their problems, solicit negative feedback from others, and complain. Dysphoric individuals tend, as well, to behave in an obsequious, dependent manner that may cause or maintain their depression. Studies indicate that interpersonal skill deficits such as these can interfere with individuals’ ability to gain positive social reinforcement and can, under some circumstances, put them at risk for depression (Joiner, 2002). Social skills training can be used to help children and adolescents who experience difficulty in making and keeping friends (Clarke et al., 1990). Through modeling, role play, discussion, and guided practice, depressed youth develop skills for meeting, greeting, and talking with others, for maintaining appropriate eye contact, and for entering and leaving conversations. They are encouraged not to excessively seek reassurance from others and to assiduously avoid soliciting negative feedback. Specific negative thoughts that may interfere with social relationships (e.g., “Nobody will like me,” “I have no personality,” “Nobody cares ... they’re all snobs and idiots”) are identified and addressed through rational disputation.

**Problem Solving**

Depressed children and adolescents often demonstrate poor problem-solving skills and low problem-solving motivation. They view their problems as unsolvable and so either avoid addressing them or approach them in an impulsive, careless manner. Depressed youth often experience difficulty in identifying problems, generating possible solutions, evaluating them, and implementing them. Problem-solving training can be quite helpful in addressing these difficulties. Youth are taught strategies for confronting and resolving problems that would otherwise lead them to feel depressed and powerless. The CBT therapist begins by acknowledging that everyone has problems and suggesting that the only thing that discriminates the easily solvable from the overwhelming is the availability of strategies for managing them. The therapist then presents problems that other children and adolescents might encounter (e.g., lost or broken toy, poor grades, curfew, problems with friends, chores, a lost dog), and the patient is encouraged to identify a specific problem and to generate a range of possible solutions that might be tried. The therapist and the patient then discuss the pros and cons of the various solutions (including short- and long-term consequences) and select the best course of action. Once the child becomes comfortable with generating and evaluating solutions for others’ problems, a formal model of problem solving is introduced. Using the acronym RIBEYE, youth are taught to approach problems in a thoughtful, systematic manner. RIBEYE stands for Relax, Identify the problem, Brainstorm possible solutions, Evaluate their strengths and weaknesses, say Yes to one (or two), and Encourage yourself for success. Beginning with simple problems, the therapist guides the child through the process of solving problems in his or her
life. As this is accomplished, the patient is encouraged to address more significant problems and to practice using RIBEYE at home and at school. It is important to keep in mind that problem solving training is designed to teach youth how to think about problems and stressful life events, rather than what to think. The focus is not on rectifying maladaptive beliefs, but on providing skills for managing life's challenges. As Frauenknecht and Black (2004) note, our goal is to teach problem-solving skills that can be used in a range of settings. This is done by providing the child with graduated experiences in therapy (using modeling and role play) and integrating this with in vivo practice. The generalization of skills is most likely to occur when explicit attempts are made to bring it about.

**Affect Regulation**

Clinically depressed youth frequently manifest deficits in the ability to modulate negative moods. When confronted by events that would, for many, lead to mild feelings of sadness, vulnerable youth can rapidly become severely despondent. They lack the requisite cognitive, behavioral, and social skills needed to effectively regulate their moods. As a consequence, they are often described by parents and others as “moody” or “volcanic.” Such depressed youth are taught specific strategies for coping with emotionally arousing situations. Using a blank emotions thermometer, the therapist asks the adolescent to describe his or her feelings when he or she is “about to lose it... When your feelings are going out of control.” The patient is then asked to identify thoughts, physiological sensations, and behavioral cues that occur just before his or her mood escalates to this level. These cues are typically feelings of agitation, tension, and thoughts such as “I can’t take this!” As anchors are placed on the thermometer, the patient comes to identify cues indicating that his or her mood is beginning to escalate and that he or she will need to take action to prevent an outburst. The therapist and the teen then work collaboratively to develop a list of cognitive, behavioral, and social strategies that can be introduced before the mood escalates. Such strategies include performing relaxation exercises, leaving the situation, using adaptive self-statements (e.g., “It’s no big deal, there’s nothing here I can’t handle”), seeking social support, and using distraction. Many depressed youth, when they experience mild feelings of sadness, tend to reflect on their emotions and their predicaments. This perseverative process of self-focused attention and tendency to ruminate can magnify their feelings of dysphoria and can place individuals at risk for longer and more severe depressive episodes (Nolen-Hoeksema, 1991; Nolen-Hoeksema & Morrow, 1991). Therefore, ruminative youth are taught to direct their attention away from their inner emotional states and to engage in solution-focused thinking. Using rational problem-solving skills, they learn to cope more effectively with stressful life events and challenges that are contributing to their distress. By anticipating situations that may lead to an emotional outburst, an adolescent can prepare for them.

**Automatic Thoughts and Cognitive Distortions**

In CBT for depression, a great deal of emphasis is put on teaching adolescents to identify and change maladaptive thoughts and to challenge errors in thinking. Certain cognitive distortions (i.e., perfectionism) are particularly troubling in that they can exacerbate feelings of depression and put individuals at increased risk for relapse. It is important, then, to teach youth to recognize and change these thought patterns.

Before individuals can change what they think, however, they must become aware of what they are thinking. Beck et al. (1979) recommended using a process of guided discovery
to assist depressed adults to identify negative thoughts and cognitive errors. Similar procedures can be used with children and adolescents. Based on Socratic questioning, guided discovery is a process by which a therapist, by patiently asking a series of gentle questions, guides the patient to recognize errors in his or her logic and to see how maintaining a particular belief may be maladaptive. By avoiding direct confrontation, the therapist maintains a collaborative rapport and demonstrates how, through careful questioning, the patient can come to a new, more adaptive way of thinking about his or her predicament. The therapist is doing more, however, than working to change a specific maladaptive belief or cognitive distortion. Rather, the therapist is modeling a rational way of thinking and a systematic way of approaching life's problems. Maintaining a Socratic, collaborative stance is particularly important with children and adolescents, as direct attempts to challenge a belief may be taken as a reprimand and may lead children to defensively attempt to "prove they are right." Simply pointing out a child's maladaptive thoughts and cognitive distortions (e.g., "Nobody likes me," "I'm too stupid to do anything") and suggesting alternative, more positive, thoughts is not likely to be effective. Rather, the child or teen must recognize that his or her negative beliefs are, in fact, untrue, and develop skills for evaluating the validity of his or her thoughts that can be used in a range of situations. To promote the generalization of these skills to new settings, the CBT therapist encourages children and adolescents to apply cognitive techniques, learned in the therapy session, to problems they encounter at home and at school as part of their homework.

Building on the patient's understanding of mood monitoring, we ask the patient to recall thoughts that he or she has experienced in depressing situations in the past. Most youth have little difficulty with this and readily share why they are upset by events in their lives. One need only ask, "What was going through your mind then?" or "What was the most upsetting thing about this?" Should difficulties arise in identifying negative thoughts, they can be asked to complete objective rating scales of common negative thoughts. The Children's Automatic Thoughts Questionnaire can be quite helpful with school-age children, and the Young-Brown Schema Questionnaire is useful with older adolescents in identifying possible maladaptive beliefs. In a similar manner, teens can be provided with a list of common cognitive distortions and, after reviewing it, be given a set of brief hypothetical vignettes illustrating them. This provides the adolescents with an opportunity to identify cognitive distortions and maladaptive thoughts in others' lives and to reflect on how they may experience them in their own lives. As they become adept at identifying maladaptive thoughts during sessions, teens are asked to complete a three-column mood log at home as a homework task.

**Developing Adaptive Counter-Thoughts**

Once adolescents have an understanding of negative thoughts and cognitive distortions, and of how these can maintain negative moods, they are taught how to change them by "talking back" to their thoughts. As in CBT with adults, depressed children and adolescents are encouraged to view their thoughts and beliefs as hypotheses to be tested, rather than as facts. They learn to pay particular attention to information that may be inconsistent with these beliefs and to revise their thoughts based on new information.

Once teenagers have become aware of their negative thoughts and recognize how they may influence their moods, they are taught to evaluate them though rational disputation. This is an advanced cognitive skill, and the argument has been made that it is necessary for youth to possess hypothetico-deductive reasoning (formal operational thought) before they can use it effectively. Briefly, the therapist and the adolescent subject auto-
matic thoughts to logical analysis by (1) examining evidence for and against the belief, (2) determining if there is another, more adaptive, way of understanding the experience that is more consistent with the evidence, and (3) identifying alternative courses of action or possible solutions for remaining problems.

We introduce the concept of rational disputation to youth with an analogy—"Contrasting Coaches." Most children and adolescents have participated in a sport, and we inquire which they would prefer after they have made a mistake: Coach A, who yells and berates them for their failure, and who admonishes them not to make such a bonehead mistake again, or Coach B, a supportive coach who notes what led to the mistake, demonstrates how to overcome it, encourages them not to get down about it, and reinforces their efforts to improve? Children invariably select Coach B, allowing us to discuss how we "coach ourselves" through losses, failures, and problematic situations. Are we self-punitive, negative, perfectionistic, and self-critical; or positive, balanced, and solution focused? If you were to adopt a more positive, solution-focused stance, how would you feel? How would you act?

Using automatic thoughts that the adolescent has identified, the CBT therapist then teaches the adolescent specific strategies for rectifying maladaptive thoughts. The child learns that evaluating evidence is the key to resolving life's problems. Upsetting thoughts are seen as questions or hypotheses to be tested, and evidence is sought to ascertain their validity and utility. Specifically, the child is taught to ask:

1. What is the evidence that supports the thought?
2. Is there any contradictory evidence? Is there any evidence I have overlooked, or anything that might lead me to think the thought may not be true?
3. Is there another way of looking at the situation?
4. If the negative thought is true, is it really such a big deal?
5. What is the solution? What can be done to handle this?

Through role playing and role reversal, the therapist can model getting "stuck" in a negative automatic thought and seek the patient's help in thinking about the problem in new ways. Difficulties most often occur at two points in this sequence—at Question 3, when adolescents are asked to develop an alternative, more adaptive, understanding of events, and at Question 5, when they are asked to consider new courses of action and how adopting a new perspective would influence their behavior and to reflect on how new ways of behaving would affect their mood. In light of these considerations, homework assignments center on developing helpful counter-thoughts and on listing ways in which they can be applied in daily life. It can be helpful, as well, to examine whether maintaining a negative belief may be functional in the child's life. Several years ago we worked with a depressed young woman who, whenever she was complimented, would negate the compliment and criticize herself. If complimented on her clothes, for example, she would respond "No, it's really ugly, my clothes are terrible," leading her to feel worse. Interestingly, her self-criticisms were often followed by additional compliments from her friends (e.g., "No, it really is a cool sweatshirt, I like it!"), reinforcing the patient's statement and initiating yet another round of self-criticism. When asked why she did this, she commented, "Mom always told me not to get too proud ... If I'm hard on myself, it keeps other people from doing it." Her depressogenic self-criticism was, from her perspective, reasonable and adaptive. Moreover, it was being reinforced by her peers and her mother. These ancillary beliefs—that one should "never act proud" and "others will criticize me"—became the focus of additional rational disputation.
It is worth noting that cognitive therapists are not simply encouraging youth to think positively or to adopt a “positive mental attitude.” Rather, our goal is to develop their ability to think flexibly and adaptively and to use newly developed capacities for hypothetico-deductive reasoning in ways that allow for greater freedom of action as well as a sense of efficacy and hope. Adaptive counter-thoughts, as such, must not only be positive; they must be reasonable.

**Relaxation Training**

Depressed children and adolescents often become tense and anxious when confronted with stressful life events or social situations. These feelings of anxiety and tension can reduce their awareness of reinforcers and can interfere with their ability to use the cognitive and behavioral skills they have learned. Relaxation training can be particularly helpful, then, for children or adolescents who report feeling tense or “stressed out” or who have a history of a comorbid anxiety disorder. Treatment begins by asking children to monitor situations in which they feel anxious and the thoughts they are experiencing in those settings. As they become aware of anxiety-provoking situations, they are asked to note how their anxiety is manifested physically. Do they, for example, experience feelings of tension, headaches, sweating, or stomachaches? They are then taught simple relaxation techniques, including controlled breathing, guided imagery (e.g., relaxing on a warm beach), muscle relaxation, and adaptive self-statements (e.g., “No problem here...nothing I can’t handle”). The techniques can be audiotaped so that a teen can practice them at home. As in CBT for anxiety disorders, youth are encouraged not to avoid anxiety-provoking situations, but to confront them. Through guided practice, they come to see that exposure and mastery are the keys to overcoming one’s fears. As one anxious teenager succinctly noted, “If you’re afraid of dogs, sooner or later you’ve got to pet the puppy!”

**Taking Stock and Relapse Prevention**

The final phase of CBT with depressed youth focuses on consolidating the skills they have learned over the course of treatment and preventing relapse. The therapist, the patient, and his or her parents review the gains that have been made and determine which cognitive and behavioral skills have been most helpful. There is an emphasis on identifying associations between the use of these skills and the positive changes that have been observed. The specific problems and concerns that precipitated the referral for therapy are reviewed, and ways of coping with similar events, should they occur, are discussed. Because depression is a recurrent disorder and feelings of sadness are a normal part of every life, the possibility that the patient will experience feelings of dysphoria at some point in the future is discussed. Strategies for managing these feelings are reviewed, as are ways of managing “high-risk” situations he or she may encounter. Maintenance therapy sessions to prevent relapse and follow-up booster sessions are scheduled.

**IS CBT EFFECTIVE WITH DEPRESSED YOUTH?**

Controlled outcome studies completed over the past 25 years indicate that individual and group CBT can be useful in treating depression among children and adolescents, and that these gains may be maintained over time (for thoughtful reviews, see Curry, 2001;
Fonagy et al., 2002; Harrington, Whittaker, Shoebridge, & Campbell, 1998; Lewinsohn & Clarke, 1999; Moore & Carr, 2000; Reinecke et al., 1998; Weisz et al., 2006).

The first controlled trial of CBT with depressed youth was completed by Butler, Mezitis, Friedman, and Cole (1980), who assigned 54 depressed youth to group CBT, a social skills group, a support group (which served as an attention-placebo control), or a waiting-list control. Youth in the two active treatment groups showed clinically significant gains relative to those in the two control groups. Interestingly, participants in the social skills group fared better than those receiving CBT.

Several years later, Reynolds and Coats (1986) completed a study in which 30 moderately dysphoric adolescents were randomly assigned to group CBT, relaxation training, or a waiting-list control condition. Youth receiving one of the active treatments demonstrated a significant reduction in depressive symptoms relative to those in the control condition. These gains were maintained over a brief (5-week) follow-up period. Differences were not observed, however, between adolescents who had received CBT and those who had received relaxation training.

Shortly thereafter, Stark, Reynolds, and Kaslow (1987) published the results of a study of 28 depressed adolescents. Youth were assigned to self-instructional training (SIT), a problem-solving skills training (PSST) group, or a waiting-list control condition. Adolescents who received active treatment demonstrated significantly greater reductions in severity of depression than did controls. These gains were maintained over an 8-week follow-up period.

Several years later, Lewinsohn, Clarke, Hops, and Andrews (1990) evaluated the efficacy of the Coping with Depression (CWD) course, a group CBT protocol that emphasizes the development of social skills, relaxation, and maintaining social relationships as a means of alleviating depression among adolescents. Fifty-nine high school students meeting the criteria for a depressive disorder were randomly assigned to either group CBT, group CBT supplemented by parent training, or a waiting-list control condition. Adolescents who received CBT demonstrated significant reductions in depression relative to those in the control condition. These gains were maintained over a 2-year follow-up period. Clinical improvement was similar in the two CBT conditions. The addition of a parent training component, then, did not appear to facilitate clinical improvement. The Coping with Depression Course has been refined over the past 15 years and can be quite effective for treating mild to moderate depression. A copy of the CWD protocol can be obtained from the authors at www.kpchr.org/public/acwd/acwd.html.

That same year, Lerner and Clum (1990) published the results of a comparative outcome study examining the relative efficacy of group social problem-solving therapy and supportive psychotherapy for treating adolescents who were suicidal. They found that problem-solving therapy was more effective than supportive psychotherapy for reducing severity of depression, alleviating feelings of pessimism, and reducing feelings of loneliness at posttreatment and at 3-month follow-up.

Kahn, Kehle, Jenson, and Clark (1990) published the results of a study of the effectiveness of group CBT, relaxation training, and self-modeling interventions for treating depressive symptoms among 10- to 14-year-old students. Participants were randomly assigned to one of the three active treatment groups, or to a waiting-list control. Youth who received an active treatment demonstrated a significant reduction in severity of depression relative to those in the control condition. These gains were maintained at 1-month follow-up. Few differences were observed, however, between outcomes for the three active treatments.
Several years later, Wood, Harrington, and Moore (1996) examined the relative effectiveness of brief (6-session) individual CBT and relaxation training for treating clinically depressed adolescent outpatients. At the conclusion of the acute treatment phase, youth receiving CBT were more likely to have remitted than those in the control condition. These differences were not apparent at 3-month follow-up, though, owing to the continued improvement of youth who had received relaxation training.

In a second study, Kroll, Harrington, Jayson, Fraser, and Gowers (1996) found that depressed adolescents who continued to receive CBT after remission demonstrated lower rates of relapse and recurrence than did those in a control group who discontinued CBT after their depression had lifted.

Based on earlier work by Beck and colleagues (1979), Brent and Poling (1997) developed a CBT protocol emphasizing rational disputation of maladaptive beliefs. The effectiveness of this treatment was examined in a randomized controlled trial comparing CBT, systemic behavioral family therapy (SBFT), and nondirective supportive therapy (NST) for treating clinically depressed adolescents (Brent et al., 1997). One hundred and seven adolescents were randomly assigned to one of the three active treatments. Adolescents who received CBT demonstrated higher rates of remission from depression than did youth who received either SBFT or NST (60% versus 38% or 39%, respectively). Moreover, youth who received CBT evidenced a more rapid response than those in the other two groups.

Clarke, Rohde, Lewinsohn, Hops, and Seeley (1999) replicated earlier findings reported by Lewinsohn et al. (1990) in an investigation of the efficacy of two versions of the CWD cognitive-behavioral group intervention. One hundred and twenty-three adolescents (ages 14–18) meeting the criteria of the Diagnostic and Statistical Manual of Mental Disorders, third edition, revised (DSM-III-R) for major depressive disorder and/or dysthymia were randomly assigned to one of three conditions—adolescent-only group therapy, adolescent group therapy supplemented by a parent treatment component, or a waiting-list control group. At the conclusion of the acute treatment phase, adolescents in both treatment groups improved significantly more than controls in depressive symptomatology reported on the self-report Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), though not on the clinician-rated Hamilton Rating Scale for Depression (HAM-D; Hamilton, 1960). Although the magnitude of the difference between active treatments and the waiting-list control was smaller than had been observed in the original (Lewinsohn et al., 1990) study, adolescents in both active treatment groups recovered from episodes of depression at a significantly higher rate than did controls. At 2-year follow-up, the authors also found that booster sessions did not reduce the rate of recurrence for depression, but appeared to accelerate recovery among adolescents who were still depressed at the end of the acute phase. The possibility exists, then, that youth who remain mildly depressed at the conclusion of acute treatment may benefit from additional outpatient CBT.

Finally, Rossello and Bernal (1999) evaluated the efficacy of cognitive-behavioral therapy and interpersonal psychotherapy (IPT) for treating depressive symptoms in a sample of Puerto Rican adolescents (13–18 years of age) meeting DSM-III-R criteria for major depressive disorder and/or dysthymia. Seventy-one participants were randomly assigned to one of the active, individual treatments or a waiting-list control group. In comparison with controls, adolescents in both treatment conditions reported significant reductions in depressive symptoms. These gains were maintained at 3 months post-treatment. No differences in rates of improvement were apparent for adolescents in the...
two active treatment groups. IPT and CBT appear, as such, to have been equally effective in this trial.

Taken together, results from 11 early randomized controlled trials suggested that CBT may be efficacious for treating depression among adolescents. CBT was uniformly found to be more effective than a waiting-list or attention control, and therapeutic gains tended to be maintained over time. These findings were congruent with the results of research completed with dysphoric prepubertal children (e.g., Weisz, Thurber, Sweeney, Proffitt, & LeGagnoux, 1997).

Subsequent trials of CBT with depressed youth have tended to differ from earlier studies in several important ways. Recent studies have tended to use larger samples and have included adolescents who are more difficult to treat. Participants in recent studies generally report higher levels of depression and have a larger number of comorbid diagnoses than did participants in earlier trials. Recent studies have also tended to use more rigorous controls (e.g., pill placebo or medication management, rather than a waiting-list control). It is also noteworthy that the percentage of female participants in these studies has been somewhat higher than in earlier investigations, and that participants in recent studies have tended to be clinically referred outpatients rather than high school students or community participants. Furthermore, in each of these studies, analyses were conducted in accordance with intent-to-treat strategies, in contrast to several earlier studies in which analyses were limited to treatment completers.

A study by Clarke and colleagues (2002) is representative of more recent investigations of outcome. Briefly, they evaluated the effectiveness of a cognitive-behavioral intervention for treating depressed adolescents receiving services in a health maintenance organization (HMO). Eighty-eight participants (13–18 years old) who met DSM-III-R criteria for major depression and/or dysthymia were randomly assigned to receive typical HMO care or usual care plus a group cognitive-behavioral intervention. Participants in the usual care condition were permitted to receive mental health services provided by either the HMO or by outside health care providers. Participation in the CBT intervention did not yield a significant advantage in reducing symptoms of depression relative to usual care at posttreatment, or at 12- and 24-month follow-up assessments. Similarly, there was no difference between conditions in depression recovery rates.

Rohde, Clarke, Mace, Jorgensen, and Seeley (2004) compared a cognitive-behavioral group treatment with a life skills tutoring intervention for the treatment of depressed adolescents (ages 13–17 years). Ninety-one participants meeting DSM-IV criteria for major depressive disorder and conduct disorder were randomly assigned to either the cognitive behavioral intervention or the life skills tutoring group. Major depression recovery rates were significantly higher for adolescents in the cognitive-behavioral group, as compared with those receiving the life skills tutoring intervention, and youths in the cognitive-behavioral condition reported significantly greater reductions in depressive symptomatology. At both 6- and 12-month follow-up, recovery rates did not differ significantly between groups, however.

The Treatment for Adolescents with Depression Study Team (TADS; 2003, 2004, 2005) investigated the efficacy of cognitive-behavioral therapy, fluoxetine, and their combination for treating symptoms of depression among adolescents (12–17 years) with a primary DSM-IV diagnosis of major depressive disorder. Four hundred and thirty nine participants at 13 sites were randomly assigned to one of four conditions: CBT, medication management with fluoxetine (FLX), a combination of CBT with FLX (Combo), or matched pill placebo (PBO). Intent-to-treat (ITT) analyses of patients at 12 weeks
postrandomization indicated that the combination of cognitive-behavioral therapy with FLX produced the greatest improvement in depressive symptoms, followed by treatment with FLX alone (TADS, 2004). The rate of response after 12 weeks of treatment for the combination of CBT and FLX was 71%, whereas for FLX alone it was 60.6%, for CBT alone it was 43.2%, and for PBO it was 34.8%. At 12 weeks, treatment with CBT alone was less effective than FLX alone and was not significantly more effective than PBO. Moreover, the remission rate was significantly higher for youth receiving a combination of FLX and CBT relative to either treatment alone or to PBO (Kennard et al., 2006), and youth receiving a combination of CBT and FLX demonstrated higher levels of functional improvement, global health, and quality of life than did youth receiving either monotherapy (Vitiello et al., 2006). Analyses of time-to-response indicate that the probability of an early, sustained treatment response was approximately three times greater for youth receiving Combo treatment than PBO, and two times greater for FLX than PBO (Kratochvil et al., 2006). Taken together, these findings indicate that a combination of CBT and FLX may offer a greater opportunity for rapid alleviation of depressive symptoms and improvement of functioning for moderately to severely depressed youth than FLX or CBT alone (March, Silva, Vitiello, & the TADS Team, 2006).

Given these results, the question naturally arises—is CBT alone effective for treating more severely depressed youth? After receiving 12 weeks of acute TADS treatment, the blind was broken on the two pill conditions (FLX and PBO), and treatment non-responders were offered a choice of treatments. Full- and partial- treatment responders in the three active treatment arms then received 6 weeks of consolidation treatment, followed by 18 weeks of maintenance treatment. At this point all treatments were discontinued and participants entered a 1-year follow-up phase. Data collected at the conclusion of Stage III (maintenance phase) indicated that treatment gains were maintained over time for all three active treatments. Moreover, CBT alone, FLX, and their combination yielded equivalent levels of clinical improvement in depressive symptomatology at 36-week follow-up. CBT alone appears, then, to be as effective as FLX or Combo treatment for alleviating depression among adolescents, but takes longer to bring this about.

Interestingly, youth receiving CBT demonstrated a somewhat greater and more rapid reduction in suicidal ideations than did youth receiving FLX. Although suicidal thinking improved in all TADS treatment arms, these improvements were greatest in the two CBT conditions (CBT alone and Combo; TADS Team, 2004; Emslie et al., 2006). Suicidal events were twice as common among adolescents receiving FLX alone than among those receiving CBT alone or Combo treatment, indicating that CBT may protect against suicidality in youth. These findings are potentially quite important and are worthy of replication. They suggest that when suicidal ideations or a history of suicidal gestures are present, careful monitoring of suicidality and a referral for CBT would be appropriate.

Taken together, these findings suggest that CBT can be effective for treating mild to moderate depression in adolescents and that treatment gains tend to be maintained over time (at least over the short term). The mean acute posttreatment effect size in the Reinecke et al. (1998) meta-analysis of CBT with depressed adolescents was 1.02 (a large effect), whereas the mean acute treatment effect size of non-TADS studies in the Weisz et al. (2006) meta-analysis was .48 (a moderate effect). It is not yet clear why the TADS CBT protocol appeared to yield lower short-term effectiveness than had been observed in other studies. This may have stemmed from design characteristics of the study (such as the use of a more stringent control group or the relatively short time frame for the acute treatment phase), sample characteristics (e.g., more severe, higher levels of functional
impairment, significant comorbidity), treatment characteristics (i.e., the TADS CBT protocol introduced a broad range of techniques over a short period of time, potentially reducing the potency of any one intervention), or a combination of factors. That said, controlled outcome studies indicate that CBT appears to be more effective than doing nothing, is more effective than an attention control, and is more effective than empathic and supportive encouragement. It has not been found, however, to be consistently more effective than other active, empirically supported treatments, such as IPT or treatment with antidepressant medications.

SHORTCOMINGS AND LIMITATIONS

Although the results of research completed to date are promising, there are important limitations and shortcomings that should give one pause. First, although a number of well-designed studies have been completed with depressed adolescents, few have compared CBT with other empirically supported treatments and only one has compared CBT with medication management. Moreover, controlled outcome research with clinically depressed prepubertal youth is almost entirely lacking, as are data on the effectiveness of CBT in community settings. Studies to date have, for the most part, been conducted in university or medical center settings and have used highly skilled clinicians. What we have, then, is an understanding of the efficacy of CBT under optimal conditions. What is needed are large, well-controlled studies of the effectiveness of CBT in community settings with heterogeneous clinical samples.

Although the acute treatment effect sizes reported in all but one of the published outcome studies are statistically significant, it appears that a substantial percentage of youth who receive CBT continue to experience significant depressive symptomatology and functional impairment after 12–18 weeks of treatment. Relatively few youth in any of the three TADS treatment conditions, for example, achieved full remission during the acute treatment phase. Although many youth benefit from CBT, many others demonstrate a less than optimal response. However good our treatments may be, they clearly are not good enough. There is a possibility that children and adolescents who have partially remitted may benefit from additional time in CBT. There is also a possibility that they may benefit from additional treatments (i.e., therapeutic augmentation) or more intensive treatment (i.e., a dose effect).

As noted, early-onset depression may be a particularly malignant subtype of major depression and may be conceptually similar to chronic depression in adults (Reinecke & Curry, 2008). Thus, combining CBT with medications may make some sense. Research with chronically depressed adults indicated that a combination of an interpersonally focused form of CBT and medications (in this case, nefazodone) was more effective than either treatment alone (Keller et al., 2000). Inasmuch as only one controlled trial has been completed examining the efficacy of combined CBT and medications with clinically depressed youth, further research on combined treatment is needed.

Although research suggests that CBT can be effective in reducing the risk of relapse in depressed adults, the effect of CBT on relapse and recurrence rates among depressed youth has not been established. Given the chronic, recurring course of early-onset depression, any intervention that can reduce the risk of relapse and improve the developmental trajectory of depressed youth would be of enormous clinical and social benefit. Additional research on the utility of maintenance CBT, and on strategies for targeting social
and cognitive factors that appear to be associated with relapse (including perfectionism, negative attributional style, family conflict, and excessive reassurance seeking), is warranted.

The most important question for clinicians typically is not "Does this treatment work?" but "Which treatment for which patient under which conditions?" Although we can say with some confidence that CBT can, under some circumstances, be effective for treating depressed youth, our understanding of predictors and moderators of treatment response is rudimentary (Brent et al., 1998; Curry et al., 2006). As Curry and colleagues (2006) noted, "For the practicing clinician, moderators are more helpful ... because they suggest directions for differential treatment selection and planning" (p. 1428). At present there is a paucity of data on patient characteristics that predict response to CBT treatment protocols or, at a finer-grained level, which patients will respond most strongly to which specific interventions. Modular CBT (Curry & Reinecke, 2003) is founded on the assumption that specific clinical interventions can be selected based on the individual needs of specific patients. The utility of matching interventions to patients based on an assessment of vulnerability factors, however, has not been demonstrated. A great deal of additional research will be needed before we can confidently match individual patients with specific empirically supported treatments. Most contemporary CBT protocols take the form of omnibus packages and include an array of techniques and interventions. Relatively little is known about which specific components of these programs are most strongly associated with a positive outcome and which strategies are necessary, sufficient, or supportive of clinical improvement. Although some dismantling studies have been conducted with depressed adults (Jacobson, Dobson, & Truax, 1996), relatively little work has been done using this strategy with depressed children and adolescents (Kazdin, 2001).

CONCLUSIONS

Early-onset depression is a serious condition that can severely damage the lives of children and their families. Fortunately, effective treatments, including CBT, are available. Taken together, the results of randomized controlled trials completed over the past 25 years allow us to propose tentative guidelines for treating depressed adolescents. Although we are not advocating the dissemination of any one CBT protocol, the body of existing evidence suggests that, for mildly to moderately depressed youth, 12–18 sessions of CBT (either individual or group) can be effective for reducing levels of depression and improving psychosocial adjustment. Medications can also be effective, but may be associated with a slight increase in suicidal ideations relative to placebo. Individual CBT has not consistently been found to be effective for the acute treatment of moderate to severe depression. Thus, a combination of CBT and fluoxetine appears to offer the best opportunity for rapid symptomatic and functional improvement for more severely depressed youth. Relapse rates after the discontinuation of antidepressant medications are unacceptably high, whereas relapse rates after CBT are substantially lower. Research completed with depressed adults suggests that CBT may be helpful for reducing the risk of relapse and that continuation of CBT with partially remitted patients may also be of benefit. Methodological problems with long-term follow-up studies make it difficult, however, to draw firm conclusions. With this in mind, we suggest that adolescents may wish to consider continuing with maintenance medications or to receive a trial of adjunctive CBT so that they can then be weaned from their medications. Finally, CBT is recommended whenever suicidal ideations or a history of suicidal gestures is apparent. It is
worth noting, as well, that there are significant risks associated with not treating early-onset depression. Although depressive episodes wax and wane in intensity and tend to spontaneously remit, major depression among youth is a chronic and recurrent disorder and is associated with significant impairment and mortality.

REFERENCES


Treatment for Adolescents with Depression Study (TADS) Team. (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents with Depression Study (TADS) randomized controlled trial. *Journal of the American Medical Association, 292*, 807-820.


