1

COGNITIVE THERAPY FOR DEPRESSION

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Cognitive therapy (CT) was first named and identified as a distinct type of treatment in an article in 1970 (Beck, 1970), in which Aaron Beck described CT, and distinguished it from behavior therapy, based on the increased attention paid to negative thinking in CT and the importance of core negative beliefs, also seen to be pivotal in the genesis of depression. In the mid-1970s, Beck and colleagues engaged in the first trial of this new form of treatment for depression (Rush, Beck, Kovacs, & Hollon, 1977; Rush, Hollon, Beck, & Kovacs, 1978). In a trial that compared the efficacy of CT relative to antidepressant medication, superior outcomes were reported for CT, particularly at the follow-up assessment. It is fair to say that these results caused a minor sensation in the fields of psychiatry and psychology: first, because the results presented a credible research trial that challenged the "gold standard" of medications for depression, and second, because they provided a manualized treatment that could, in principle, be evaluated and then disseminated. In the wake of the discussion about the research trial, the publication of *Cognitive Therapy of Depression* (Beck, Rush, Shaw, & Emery, 1979) led to widespread interest in CT. Indeed, although the book is now over 25 years old, it is still widely used as a training manual

and stands as the definitive description of this treatment approach to depression.

This chapter provides a description of the fundamental aspects of CT for depression, including its typical course and the prototypical interventions used in this treatment model. Finally, toward the end of this chapter, some of the essential research outcomes associated with CT of depression are presented.

THE COGNITIVE THEORY OF DEPRESSION

CT rests on a theoretical model of human functioning that has been elaborated over the years. This model is based on a Realist epistemology (Dobson & Dozois, 2001; Held, 1995), which asserts that reality exists independent of human experience. At the same time, the model holds that humans are "natural scientists" and seek to make sense of the world and their experiences, through the development of broad, organizational cognitive constructs. The constructs were typically defined as "core beliefs" or "underlying assumptions" in early descriptions of CT, but over the years the term "schema" (Kovacs & Beck, 1978) has come to predominate in the literature. Regardless of the specific term, the general concept imparted is that all individuals, through a combination of forces (personal experience, parenting, peer relations, media messages, popular culture), develop global, enduring representations of themselves, people in their world, and the way that the world functions. These cognitive representations may be accurate or distorted, but for individuals who eventually become depressed, they are characteristically negative. The relationship between negative thinking and depression has been generally supported in research (cf. Clark, Beck, & Alford, 1999), even though there continues to be a discussion about whether or not depressed persons are more "realistic" than nondepressed persons, and that the nondepressed part of the population perhaps distorts perceptions in an unduly positive direction (Ackermann & DeRubeis, 1991; Dobson & Franche, 1989). Negative representations often establish expectations for the self, or the self in relation to others in the world, that increase the risk of depressive ways of thinking and behaving.

The cognitive model is often discussed as a diathesis–stress model (Monroe & Simons, 1991; Robins & Block, 1989), reflecting the idea that negative core beliefs, assumptions, or schemas represent diatheses, or vulnerabilities, that then interact with life stress to eventuate in a process leading to depression (see Figure 1.1). There is consistent evidence that depression often is predicted by significant negative life events (Monroe & Simons,

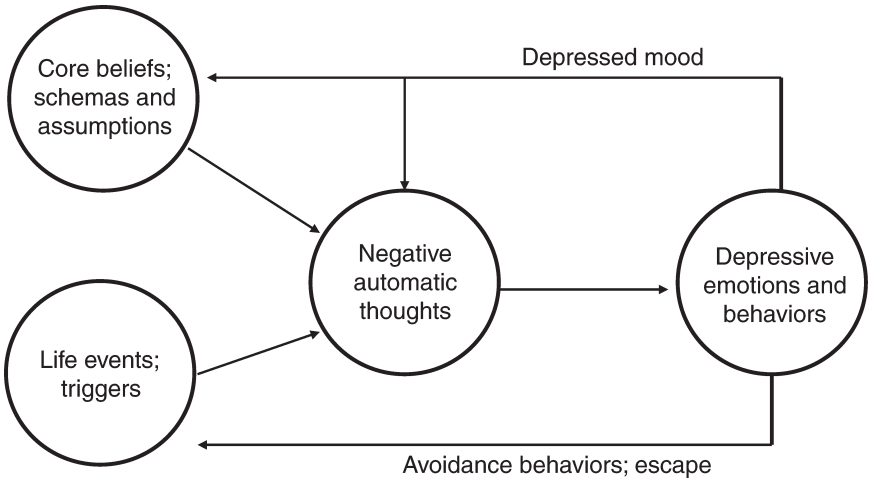

FIGURE 1.1. The cognitive model of depression.

1991). Some of these events are independent of the person's control, such as some interpersonal losses, but others may actually be inadvertently established or maintained by the depressed person him/herself (Davila, Hammen, Burge, Paley, & Daley, 1997; Joiner & Schmidt, 1998). For example, an individual who has developed a core belief of him/herself as a "loser," and as someone who cannot form an intimate relationship, may well avoid social situations or rebuff interpersonal advances. The resulting social isolation then becomes a life event that perpetuates the very negative belief of being an interpersonal "loser" that led to these behaviors in the first instance.

Regardless of whether the life events that interact with or trigger negative beliefs and assumptions are truly exogenous to the person, or whether in some unwitting way these events are the result of the depressed person's own actions, the cognitive model states that once the diathesis and stress have interacted, characteristically negative thinking emerges. This negative thinking may accurately reflect negative life events, but it is quite common in depression for this thinking to become negatively skewed, and possibly even to be at some variance with the actual events in the world. "Cognitive distortions," as they are called (Beck et al., 1979; J. S. Beck, 1995), can take a number of specific forms, including magnification of problems, minimization of success, jumping to conclusions, mind reading, black-and-white or absolutistic thinking, and labeling, among others. These distortion processes in turn lead to negative thinking in specific situations, or what may be termed "automatic thoughts." The term "automatic" refers to this thinking, because it is typified by reflexive and unquestioned appraisals based on

the core beliefs that prompted them. Also, because negative thinking is congruent with depressed mood, these thought patterns are often seen as "reasonable" by the depressed person.

The cognitive model of depression further asserts that the negative automatic thoughts, or interpretations of situations, lead to specific feelings and behaviors. For example, the thought that one cannot take any positive action to solve problems leads to feelings of helplessness and a lack of action. The perception that one's problems will never improve can lead to feelings of hopelessness and escapist behaviors, including suicide. Finally, the model asserts that once a person starts to feel depressed, there is a feedback process, such that negative affect increases the probability of further negative thinking, and also reinforces negative beliefs and schemas. Feedback also occurs because depressive behaviors, such as avoidance and withdrawal, tend to increase the prospect of negative events through processes such as social isolation or social rejection (Coyne, 1976; Joiner, 2000).

The cognitive model of depression helps to explain why the typical complaints of depressed patients relate to their emotional experience and inability to cope with life's demands, because the emotional and behavioral aspects of depression are in some respects the "end" of the process of depression. The role of the cognitive therapist is to translate the problems of the patient who comes to treatment into a case formulation that explains the core beliefs or schemas that have interacted with life events to eventuate in the process leading to depression (Persons, 1989; Persons & Davidson, 2001; see also Whisman & Weinstock, Chapter 2, this volume). This case formulation then becomes the basis for deciding on strategic targets of change, with the goal of solving problems and reducing depression. Choosing which problems to address first in therapy is a matter of clinical experience and skill, but the case conceptualization guides this process.

ASSESSMENT

Although the focus of this chapter is on basic elements of the treatment of depression using CT, treatment invariably begins with an assessment process. The amount of information included in the assessment, its breadth and complexity, and its duration are determined by a number of factors, but the general features of the assessment plan include a diagnostic evaluation, measurement of the severity of problems, the development of a problem list, evaluation of the history of problems and past efforts to ameliorate these problems, consideration of patient strengths and resources, and assessment of other aspects of functioning that may be critical to develop a case formulation for the patient.

A large number of assessment tools exist for patients who present with a primary problem of depression. Dozois and Dobson (2002) provide an introduction to assessment of depression and the integration of assessment information into case formulation and planning (see also Whisman & Weinstock, Chapter 2, this volume). Another excellent resource is the book by Nezu, Ronan, Meadows, and McClure (2000), which provides a summary of major empirically based measures of depression. Clinicians who work in the general domain need to be conversant with the symptoms of depression and how these might be expressed in various cultural groups or specific populations. In addition, because depression often presents coincidentally with other conditions (e.g., anxiety disorders, substance use, personality disorders, suicide), the clinician who works in this domain should also know how to conduct assessments in these related areas and be ready to intervene or to refer, as appropriate.

GENERAL CHARACTERISTICS OF COGNITIVE THERAPY

Therapeutic Relationship

The therapeutic relationship has long been recognized as an important aspect of CT (Beck et al., 1979; J. S. Beck, 1995). CT is not something that is done *to* patients; it is a treatment that is done *with* them. Thus, CT emphasizes the development of a good working alliance between therapist and patient, and a collaborative partnership as the ideal way of working together. There are several ways in which the CT therapist tries to develop this type of relationship. First, the therapist enters the treatment process with an attitude of empathy and respect. Cognitive therapists recognize that depressed patients often come to treatment with a sense of personal failure and a need for help. The therapist conveys concern and caring, and an optimism that derives from both a general conviction that CT for depression is effective and competence with the approach. At the same time, another common perspective in CT is that the patient is the expert on his/her own life. Thus, though the cognitive therapist has knowledge and expertise, the patient's opinions need to be understood and respected, because it is he/she who has to implement any therapy ideas in the context of his/her life.

Psychoeducation

One important way that cognitive therapists develop a collaborative relationship is through the process of psychoeducation. Cognitive therapists generally want their patients to understand the treatment plan and, as far as they are able, to participate actively in establishing the course of treatment. A

number of educational materials that highlight the model, value, and clinical utility of CT for depression have been developed for patients, including self-help books (Burns, 1980; Greenberger & Padesky, 1995; Young & Klosko, 1994), web-based materials (Academy of Cognitive Therapy, 2006), and computerized programs (Wright et al., 2002). Thus, in addition to the information that the therapist imparts over the course of therapy, a number of other methods exist to provide this information. It is often helpful to ask patients how they optimally learn new ideas (e.g., reading, video or audio materials, or direct experience), so that the therapist can tailor the delivery of psychoeducation to the patient's best advantage.

Psychoeducation is often a particular feature of early CT sessions. It is common during the initial session for the therapist to hear about difficulties or problems that fit fairly well into the CT model. These situations present the opportunity for the therapist to inform the patient about the role of thinking in depression, and possibly even to draw out a model of the patient's problem, using a diagram similar to Figure 1.1. This may also be an appropriate time to ask the patient whether he/she would like to read about the model. I like to assign Chapters 1 to 4 of *Feeling Good* (Burns, 1980) to interested patients, if they believe this is a reasonable task at this stage of therapy and for their level of depression.

Psychoeducation also takes place throughout the course of therapy. One of the defining characteristics of cognitive therapists is that they suggest to their patients what techniques or methods might be helpful to overcome depression, then obtain patients' reactions to these suggestions. Only if both therapist and patient think that the method might be helpful do they then collaboratively figure out how best to implement this idea, and work together to set appropriate homework. Through this process, the therapist needs to be able to describe the rationale for the techniques that he/she is proposing. This process also compels the patient to be more active in the treatment process, because he/she needs to think through what methods will and will not be effective, and to assume a role in the treatment implementation.

Homework

One of the hallmark features of CT for depression is the use of homework (Beck et al., 1979). Cognitive therapists generally believe that what happens between treatment sessions is *more* important than what goes on within the session (Kazantzis & Deane, 1999; Kazantzis, Deane, Ronan, & L'Abate, 2005; Tompkins, 2004). Thus, whereas the sessions are essential for identifying problems and teaching strategies to deal with these problems, it is the

implementation of these strategies in the patient's actual life that represents successful treatment. Certainly, most cognitive therapists would maintain that "insight" attained within a session is relatively meaningless, unless it can be translated into a concrete and specific implementation plan. Furthermore, it has been demonstrated that early completion of homework is a predictor of positive outcome in CT for depression (Startup & Edmonds, 1994), so it is critical to assign homework, to monitor it, and to evaluate its intended and actual outcomes. CT therapists purposely assign some homework in the first session (whether it be reading or other tasks described below), in part for the value of being able to assess the patient's ability to carry through on agreed assignments. This assessment also serves as a model for following up on assigned work, and may also lead to a discussion about how to maximize the chances of homework completion (Detweiler & Whisman, 1999).

THE STRUCTURE OF A TYPICAL SESSION

Although the *content* of CT for depression varies dramatically from patient to patient, the *process* of therapy is relatively similar. Sessions typically last 50 minutes and are scheduled on a weekly basis, although it is not uncommon at the beginning of the treatment process (i.e., the first 3 or 4 weeks) to schedule two sessions a week for more severely depressed patients. Session scheduling and session time frames can be used flexibly, though. With more depressed patients, it may be more productive to have relatively shorter sessions more frequently at the beginning of treatment, then move toward a weekly schedule of sessions as the depression begins to lift. Also, it is fairly common for the assignments between one session and the next to become somewhat more elaborate and to need time for implementation as the treatment develops. In such a case, it may be that scheduling sessions too frequently does not permit the patient enough time to complete homework, and may be somewhat unproductive. Clinical judgment is required to ensure that sessions are frequent enough that positive momentum is maintained, but not so frequent that the patient feels that the steps between one session and the next are too small, or that therapy is too slow. Of course, issues such as holidays, financial considerations, or the limits imposed on therapy by managed care or insurance repayment programs, can also place restrictions on the ability to have regular sessions. Because of these practical considerations, it is important at the outset of treatment to discuss with the patient the approximate length of time that treatment takes (20–24 sessions in research trials, for outpatient depression), as well as the costs associated with treatment.

A typical CT session can be conceptualized as having three phases: a beginning, the "work," and wrapping up. Each part is discussed below, although it should be noted that the therapist might move forward or backward across these phases, if indicated. For example, one part of the beginning of each session is to set the agenda—to identify the topics to be discussed that session—before actually dealing with each in turn. Sometimes it turns out that a given topic is larger than anticipated at the beginning of the session, however, so therapist and patient should both feel comfortable renegotiating the agenda, if it becomes clear that it is not manageable within the available time frame.

The beginning part of a CT session itself has several components. Particularly in the earliest phases of CT for depression, therapists typically have patients complete a depression inventory, such as the Beck Depression Inventory—Second Edition (BDI-II; Beck, Steer, & Garbin, 1988); see also Nezu et al., 2000) prior to the start of the session. Thus, the beginning of the session consists of a check-in on functioning. Significant symptom changes are noted, and the causes of these changes might form part of the content of the session agenda, if it seems helpful. Indeed, cognitive therapists often capitalize on happenstance events that have a dramatic effect on the patient's functioning (negative and positive), because understanding these events helps them to develop the case conceptualization, to teach the CT model to the patient, to introduce new techniques, to develop the collaborative relationship, or simply to encourage to reflection about progress made during treatment.

In addition to the use of a questionnaire, CT therapists typically conduct a "mood check" with their patients, which comprises a 0- to 100-point rating of depression, with 0 as *Best ever,* and 100 as *Most depressed ever.* The mood check is a very "quick and dirty" assessment device, but it can be used to track mood across time, even within sessions. Also recommended, especially in the early stages of treatment for depression, is regular assessment of possible hopelessness and suicidality. If the therapist uses BDI-II as a presession measure, items 2 (pessimism) and 9 (suicidal thoughts or wishes) may be quickly reviewed to look for changes on these dimensions. Cognitive therapists who work with depressed patients should know not only local laws and ethical requirements about suicide but also the risk factors for suicidality, how to assess suicide risk, and how to use available resources effectively to mitigate suicide risk.

Following a brief review of the patient's functioning, and in the absence of a suicidal crisis that may warrant attention in its own right, the next part of the beginning phase of a CT session most often deals with the homework. General success or problems with the assigned homework are

reviewed, and the lessons learned may be briefly stated, or the assignment itself might be put on the agenda for further discussion. Certainly, if the homework was not completed, if there were major problems with its implementation, or if there was a major benefit from the homework, it is likely to be put on the formal agenda.

The therapist also inquires whether the patient has brought any particular issue to the session that he/she wants to discuss. This issue might be something learned over the course of therapy, a recent difficulty, or an impending problem. The issue is named, then put on the list of agenda topics. In addition, the therapist may have items that he/she wants to put on the agenda. For example, it may be an appropriate point in the course of therapy for the therapist to introduce a particular technique, and if so, the therapist can introduce this idea at the beginning of the session and formally ask to schedule part of the session for this purpose.

Having identified the possible topics for the agenda, the therapist typically briefly reviews the list out loud, and asks the patient whether the agenda is reasonable for the time available. If not, it may be necessary either to limit discussion of some topics purposely or to drop them from the agenda completely for that session, to permit more time for more important topics. Generally, about two or three items is a good limit for a single session. A topic eliminated from one session is most often carried over to the next session, when the therapist asks the patient if it is a continuing concern. A common strategy used by cognitive therapists is to ask the patient for his/her perception of the most important topic in terms of reducing depression, and to start with that topic. Other topics can be similarly ordered by importance. General principles demonstrated through this strategy include spending the most time where there is likely maximal benefit, working on issues of high import to the patient, and collaboration between therapist and patient.

The second phase of a CT session consists of "the work." This phase involves turning to each agenda item in sequence, examining the issues/problems that are present, and using CT techniques to help the patient to understand better the dynamics of the problem, and to try to overcome the problem. The therapist needs to transition from an assessment mode as each new topic is introduced and discussed, to an intervention mode, once some useful technique becomes apparent. Knowing what to ask about and how to collect useful assessment information are skills that requires considerable experience, just as knowing when to stop the assessment and start the intervention is a matter of skill and practice. Furthermore, a wide range of techniques can, in principle, be employed in CT, and the skillful selection of techniques is perhaps one of the most challenging aspects of CT. Doing all

of these things, while fostering a collaborative and efficient working therapeutic relationship, is a complex endeavor that requires considerable interpersonal skill, knowledge of the CT model, training, and experience.

The actual content of "the work" phase of a CT varies depending on the patient's level of depression; his/her progress in treatment; the case conceptualization; and the presence of acute stressors, comorbid problems, and other factors. Examples of typical content in CT for depression are offered below. From a process perspective, though, it is important to note that as each content issue is discussed, and as therapist and patient come to some resolution, they will most often work together to develop a homework assignment in which the patient implements the ideas discussed in the session in his/her actual life. Important questions for the therapist to consider when assigning homework follow:

1. Is the general nature and purpose of the homework clear to both the therapist and patient?
2. Is the homework planned for a specific time and place?
3. Will it be obvious when the homework is/is not completed?
4. Have possible deterrents or impediments to completing the homework been evaluated and problem-solved, if necessary?
5. Did the patient make an active commitment to attempt the homework?
6. Are the expected benefits of the homework clear to both patient and therapist? (Kazantzis et al., 2005).

Towards the end of the session, the therapist should note that time is winding down (or that the issues put on the agenda have been discussed). With the patient's participation, he/she should review the entire session, including the main themes, as well as the specific homework assignments that have emerged. The therapist may invite the patient to summarize the session, because this process both involves the patient and helps the therapist to ensure that what he/she sees as the key elements are appreciated by the patient. Such reviews can sometimes also identify that the patient has misconstrued or reinterpreted the work done in the session, and so provides an opportunity for the therapist not only to use this information in the case conceptualization but also to correct these misperceptions. For example, if a patient failed to do homework, and the therapist includes the homework on the agenda and further inquires at length about the patient's reasons for not completing the homework, it is possible that in the session review the patient may have the idea, "You are disappointed with me because I didn't

do my homework." The therapist may use this type of misunderstanding (assuming the therapist is in fact not disappointed) to find out whether he/she did something to signal such a reaction to the patient, whether the patient is oversensitive to the issue of criticism, or to show how the patient tends to perceive disappointment or rejection from others based on minimal information.

Sometimes the summary and homework review reveal that the plan is too ambitious. In such cases it is better to reduce the overall homework to maximize the chances for successful completion of those items that are left on the list (Detweiler & Whisman, 1999). One way to accomplish this goal is to keep certain key issues as homework, but place everything else in a "bonus" category, that is clearly conceptualized as extra, and not part of the key homework. It is also often a good idea to have the homework written down, because this action reinforces the activities to the patient. Other benefits of writing include the ability to make sure the homework is clearly understood and to serve as a memory aid to the patient between sessions. Homework can be recorded in lots of different ways, including on index cards, on sheets of paper, on Post-it notes, in a binder, on an electronic organizer, in a computer file, on a voice recorder, or in a therapy notebook. The therapist should ask the patient about his/her preferred method, because it is the one that maximizes chances for him/her to attempt the homework. The therapist should also record the homework in his/her therapy notes, to be able to inquire about this aspect of therapy at the beginning of the next session.

Before the patient leaves, it is helpful to ask briefly if he/she has any other reactions to the session. A positive predictor of treatment response in CT for depression is early completion of homework (Burns & Nolen-Hoeksema, 1991), so if the patient expresses some enthusiasm for attempting the homework, the therapist can reinforce this reaction. Patient reactions to sessions may also be used to gauge whether any therapy relationship issues need to be addressed in future sessions. For example, a recent patient of mine indicated that she was "a control freak" and wanted to be in charge of most relationships. Being in a potentially "one down" position as patient was a challenge to her sense of autonomy and control, so I was careful to involve her fully in all major decisions. Even so, the patient reported discomfort with therapy at the end of one session, because she felt "stupid" and "incompetent" learning about new ways to approach her life issues. This report helped me to build the case conceptualization and also allowed us to discuss the issue openly, and circumvent a potential impediment to treatment.

THE TYPICAL COURSE OF THERAPY

Although the description of the *process* of CT sessions is important to learn and to use in treating depression, none of the processes I have discussed really address the *content* of the treatment of depression, or what I described earlier as "the work" phase of treatment. Unfortunately, there is no single "cookbook" or formula for treating depression. Every patient is unique and presents with his/her particular history, past efforts to overcome depression, comorbid problems, schemas, and current resources. What is presented below, therefore, is more of an overall guide to typical phases of CT for depression (cf. Beck et al., 1979; J. S. Beck, 1995, 2005; Gilbert, 2001; see also Beutler, Clarkin, & Bongar, 2000).

One way to conceptualize the overall treatment of depression is as a series of three loosely connected phases. These phases tend to have different treatment targets; therefore, they require somewhat different intervention techniques or methods. It is important to note, however, that these are not lockstep phases, because the targets of intervention in one domain may continue for some time into therapy, even while other areas of intervention are introduced. Furthermore, if the course of treatment is not steadily in the positive direction, it may in some cases be necessary to "go back" to issues and interventions used earlier in the process of treatment.

Figure 1.2 is an attempt to show how these phases of treatment roughly relate to symptom change in a "typical" case of depression. Approximately the first one-third of treatment is focused on behavioral change; the middle one-third of treatment, on negative automatic thoughts; and the final one-third of treatment is focused on the assessment and modification of core beliefs and schemas. Typically, the first phase of treatment is associated with the greatest reduction in depressive symptomatology, because over half of the changes in symptomatology takes place within the first six sessions of treatment. The second phase of treatment is usually associated with more gradual but continued reduction in levels of depression. Patients typically transition from meeting the diagnostic criteria for major depression to no longer meeting such criteria during this middle phase of treatment. By implication, the third phase of treatment is largely conducted with a patient whose depression has recently remitted. Here, the focus shifts to understanding the genesis of the most recent or of other, past episodes of depression, examining vulnerabilities for future relapse or recurrence, and providing interventions that emphasize relapse prevention. Each of these phases is described in turn below, along with a description of some of the typical interventions.

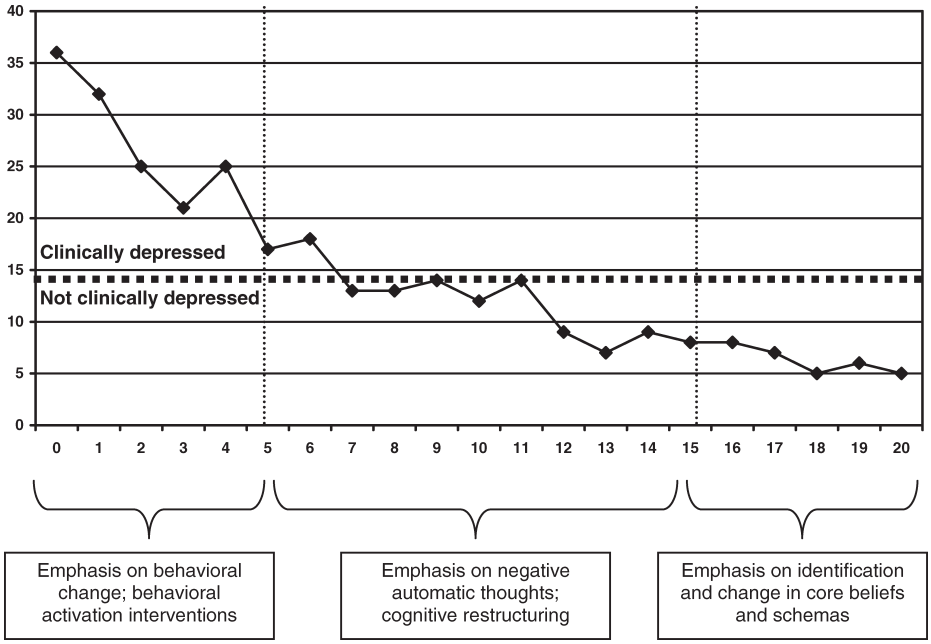

FIGURE 1.2. Hypothetical progress in CT for depression (based on BDI-II scores), and targets of intervention.

The Early Phase of Treatment

The first aspects of CT for depression emphasize increasing the engagement of the patient in his/her environment and restoring functioning as quickly as possible. Decreased motivation, low energy, and tendencies toward avoidance or social withdrawal are all primary features of depression that need to be addressed if other cognitive work is to be effective. The goals of this phase of CT, though, are not only to increase activity and reduce depression levels but also to begin using various activities to generate a CT conceptualization of the case.

Some common methods are used in working with depressed patients in the earliest phase of CT. For example, most therapists want to understand the patient's typical day: how active he/she is during the day; his/her sleep cycles; and any unusual patterns in the patient's arousal or activity patterns. The therapist can gain this information by inquiring about a typical day, or a recent specific day, but such information is subject to presentational biases on the part of the patient, his/her embarrassment about activity patterns,

depression-related distortions, memory problems, or simple forgetting some activities. For these reasons, cognitive therapists commonly ask patients to complete an activity schedule as homework following the first session. This assignment may be used more systematically to record patients' activities, because it requests that they indicate major activity in 1-hour time slots throughout each day. Some therapists also ask patients to indicate activities that are associated with mood changes, so that they can see which activities have positive or negative associations for patients. Another possible strategy is to ask patients to track events associated with mastery (success, accomplishment) or pleasure (fun, enjoyment), both to determine the frequency of such activities in patients' lives and to see whether their occurrence is associated with changes in the patients' moods. Indeed, activity schedules can be used to track any type of event or activity that the therapist and patient think might be related to changes in mood.

In addition to the benefits of monitoring the relationship between activities and mood, use of a more structured activity scheduling exercise offers three other advantages. First, it is an explicit example of the use of homework in CT, which the therapist should have described as a key part of the treatment. Second, it offers an "incidental" way to assess the patient's ability to enact agreed to homework. As described earlier, one of the principles relative to homework is that the therapist should always inquire about it at the start of the next session. As such, the assignment of activity monitoring in the first session can be a fairly easy way to socialize the patient into the process of homework. Third, the evaluation of activities is a natural precursor to scheduling specific activities that use the same activity schedule method.

Activity scheduling is typically done as a graded activity. As such, the first scheduled activities are simple tasks that can be accomplished in fairly discrete time periods. These may be "stand-alone" events or activities (e.g., pay the bills), or they might constitute the first steps in an elaborate, multistage process that needs to be planned over a series of weeks (e.g., systematic financial planning and budget setting). Either way, the activities need to be perceived as relevant to the patient's overall goals. They also need to be sufficiently challenging to the patient, at his/her current level of depression, to be seen as a success experience, but not so daunting as to prove impossible. It is relatively common for depressed patients (especially in the early stages of treatment) to perceive that they need to accomplish a lot, to set unreasonable goals as a consequence, then become frustrated and "give up." The therapist's role is to help the patient set reasonable goals, and to stage activity scheduling to be successful.

Activity scheduling provides an opportunity to examine patients' tendencies to predict future outcomes and to judge past ones. A common part of activity scheduling is to ask patients to predict their likely ability to do the assigned activity, as well as the likely outcome if they do so. If the patient makes a negative prediction, the therapist can ask some questions to determine whether this prediction represents a negative bias or might have some factual basis. If there is a good reason for concern, then therapist and patient can scale down or reconsider the homework it in its entirety. Sometimes the exercise of predicting the outcome of homework reveals an impediment to completion of the homework. If so, patient and therapist can problem solve the issues that are implicated, and either reassign or revise the homework. For example, sometimes it becomes clear through these discussions that the patient lacks some required social skill or other behavioral competence to do an assignment, and behavioral coaching or instruction may be necessary as a prerequisite to assigning the activity. Sometimes, a patient may have the apparent skill to complete the homework, but predicts no benefits, even if they exist. In such cases, the therapist can reevaluate with the patient whether this prediction is valid or yet another example of depressive thinking that needs to be evaluated against the experience of actually doing the homework. Another advantage of having the patient predict the likely success of behavioral assignments is that these predictions can then be contrasted with the patient's success with the homework assignment. It is fairly common for depressed patients to succeed with homework (if it is skillfully set), but then to minimize its value or their role in its successful completion. If this tendency toward minimization occurs, it is important for the therapist to ensure that the "facts" are established, so that the patient is compelled to give him/herself the deserved credit for homework completion. Also, if a patient is identified as someone who does not make internal attributions for success, this tendency can be incorporated into the next behavioral assignment, with the therapist acting as a kind of "guard" against minimization or externalization of successes. Importantly, a discovered tendency to minimize can be used as part of the emerging case conceptualization. For example, it is likely that a patient who predicts difficulties in life's tasks and/or minimizes success has some general sense of inadequacy or incompetence. Discovery of the domains in which these issues emerge help to sharpen the therapist's understanding of the patient's particular vulnerabilities and depressive schemas.

In addition to behavioral activation, another general technique in the early phase of CT is problem solving, which is particularly useful when the nature of the problem(s) a patient brings to therapy seem to be based more

on verifiable events and less on negative core beliefs. For example, an immigrant coping with the stresses and strains of life in a new country, who shows signs of depression due to this adjustment, may be better served by a focus on language training and connection with social service agencies than by a focus on negative thinking. Activity scheduling is often a part of the successful treatment of patients with real-life stressors, but the focus on negative thinking is likely to be less than that in patients with fewer objective stressors.

Often specific symptoms or problems commonly associated with depression respond well to focused behavioral interventions. Sleep disturbance, for example, can often be ameliorated with several behavioral rules, such as the development of a regular sleep cycle, a change in bedtime habits, use of the bed only for sleep and sex, not permitting naps, or a change in the sleep environment (e.g., removing televisions or other distractions, ensuring the bedroom is as quiet and dark as possible), but cognitive interventions are also helpful (cf. Harvey, 2005). Low appetite can often be improved by setting regular meals, disallowing snacking, improving the quality of the food ingested (e.g., fewer carbohydrates), and spending more time with food preparation (as opposed to eating fast foods). Low energy can be addressed through a gradual increase in physical activity, recognizing and adjusting to normal diurnal rhythms of the body, planning for improved food and nutrient intake, and better sleep. Paying attention to negative predictions or beliefs in each domain and overcoming these cognitive sets as problem(s) improve often are important parts of treatment.

The Middle Phase of Treatment

Once the patient is more active and involved in his/her environment, the focus of therapy quickly shifts to cognitive assessment and restructuring. The term "cognitive restructuring" refers to a large number of interventions that generally focus on situation-specific (as opposed to underlying, broad, or trait-like) negative thinking. As noted earlier, depressed patients can perceive the world accurately or in a distorted fashion (Beck et al., 1979; J. S. Beck, 1995; Clark et al., 1999), and the identification of a variety of cognitive distortions and the use of clinical tools to challenge distorted *automatic thoughts* (ATs) are hallmark features of CT. As such, a significant part of CT for depression is spent educating patients about this process and helping them to recognize negative ATs and to evaluating them in real time, so that the spiraling effect of these thought patterns is disrupted.

The role of negative ATs in depression is usually discussed in the first session, when the therapist provides a broad overview of CT. Therefore,

when the therapist is prepared to actually identify and work with a specific negative AT, the patient has already been introduced to the concept. At the point in treatment when the therapist begins to work on cognitive restructuring, it is often particularly useful to teach the patient to ask at the time he/she notice a shift in mood, "What was going through my mind?" (J. S. Beck, 1995). This question helps the patient to recognize that ATs mediate emotional and behavioral responses to life events. Some therapists also assign reading, which can help the patient to recognize this process (Burns, 1980; Greenberger & Padesky, 1995). If it seems appropriate, some therapists may also reprint and review with the patient a list of common cognitive distortions (J. S. Beck, 1995, p. 119).

A common intervention in CT for depression is use of the Dysfunctional Thoughts Record (DTR; see Figure 1.3; note that other variations exist). Once the patient has been introduced to the concept of negative ATs and has recognized its possible relevance to him/herself, the therapist suggests a more formal written record of these processes, to help both patient and therapist to examine this process more fully. The therapist introduces the DTR, and encourages the patient to start to write down both events that trigger negative reactions, such as negative ATs, and such as negative emotional and behavioral reactions themselves. After practicing with the DTR in session, the patient is given the homework assignment of completing the DTR between sessions, when he/she notices an increase in depression (or other negative moods). Subsequent sessions are spent reviewing the DTR, including problems with its completion, and helping the patient to increase his/her understanding of the nature of, and associations among, problematic or triggering events, ATs, and changes in mood and behavior.

Once the patient has some fluency with the DTR, and can consistently collect this type of information, it is possible to move to the step of intervening with these thoughts. Interventions generally involve the patient reconsidering his/her negative thoughts based on three sets of questions generally framed as "What's the evidence?," "Is there an alternative?," and "So what?" In some cases, one of these questions has the most utility, but it is useful to introduce each line of questioning, so that the patient has the full set of skills before the end of treatment. Each question is discussed briefly below.

The "What's the evidence?" question requires the patient systematically to evaluate the facts, data, or evidence related to each thought. Implicit in this question is a stance that cognitive therapists do not accept a thought as true simply because it has occurred. The idea that "a thought is not a fact" is in fact itself a metamessage that supports a more detailed analysis of negative thinking. Sometimes a problem has a high degree of evidentiary support,

Date and Time	Situation	Automatic Thoughts	Emotional Responses	Behavioral Responses	Cognitive Distortions	Alternative Thoughts	Alternative Responses

Note. To generate alternative thoughts, consider the following:

1. The evidence that supports or refutes the original automatic thoughts,
2. Whether any other more reasonable or alternative thoughts are possible in the situation, or
3. Whether the original meaning or importance of the situation is the only possible way to think about it.

FIGURE 1.3. The Dysfunctional Thought Record.

which may suggest the need for a more problem-solving orientation relative to these negative thoughts. In depression, though, it is common for patients to exaggerate or overstate the negative aspects of an event, or to minimize the positive aspects. In these cases, examining the evidence that supports and refutes the original negative AT can be very helpful, both to expose patients to this line of inquiry about their thinking and to generate a realistic appraisal of the positive and negative features of an event or situation.

Sometimes the process of examining the evidence related to a negative thought reveals that the patient clearly does not have much evidence on which to base his/her negative AT. Mind reading and jumping to negative conclusions, two common distortion patterns seen in depression, are typically based on insufficient evidence. Such revelations can lead to the assignment of behavioral experiments as homework to establish more fully the "facts" related to the negative thoughts. Such homework increases the patient's contact with his/her environment and provides a more realistic basis on which to deal with problems.

The second question, "Is there an alternative?" requires the patient to consider whether there is an alternative thought or explanation to the original thought. This alternative sometimes become obvious once the evidence related to an AT has been examined. Thus, if the patient's original negative thoughts can be demonstrated to be out of alignment with the "facts," then a more realistic alternative can be generated (note, however, that the cognitive therapist aims not for an alternative that is distorted in a positive direction, but for one that is in keeping with the available information).

In other cases the situation is ambiguous and open to alternative interpretations, thus making it possible to generate a series of alternative interpretations or ATs. A therapist pointing out the choice of alternative thoughts is itself sometimes revelatory to patients, and the exercise of generating these alternatives often takes the "sting" out of the first, typically depressive, cognition. Some patients report that with the recognition of alternatives, the original thought is just one of many, that has no special priority or valence. In other cases, the patient may benefit from being asked how someone else might interpret the situation. The therapist can also offer some alternative ideas, although he/she must always be sure to evaluate whether patients accept or reject these alternatives, and why. When the interpretation of the event remains unclear, the therapist might design homework to collect the necessary evidence, then weigh these alternative ideas and see which one best fits the facts.

The third question used to explore negative ATs is "So what?" It requires patients to explore the meaning they have assigned to the AT, and to determine whether this is the only possible meaning. For example, a

depressed student who fails an examination might jump to the conclusion that his academic career is doomed, and that this dismal career path confirms his inadequacy. He might be asked to reconsider whether the meaning he has attached to this interpretation is valid, however. In effect, the therapist is asking him to step outside his usual way of viewing things, to say to himself, "So what if I failed this exam?", and to realize that he does not have to jump to the conclusion that because he has failed, he has no academic future or career prospects. It should be recognized that this is a difficult question, though, because it requires the patient to adopt a different perspective on his/her difficult situation. Asking this question is almost like asking the patient to suspend his/her usual beliefs about the world and to determine whether the meanings he/she first applied to the event are valid.

The "So what?" question should not be employed too early in the treatment of depression, because it often exposes the patient's core beliefs or meaning structures. If this work is done too early in therapy, it may confirm for the patient the hopelessness of his/her situation *and* core beliefs. Depressed patients often struggle with accepting alternative thoughts that are not consistent with being depressed, so patients may perceive the "So what?" question as the reflection of an uncaring or misunderstanding therapist, if it is employed before the client–therapist relationship has time to solidify. Even when examining specific negative ATs, the "So what?" question is typically used only after the first two sessions of therapy have been completed, because addressing this question too early can lead to a kind of rigid defense of the original ATs. Also, changing negative ATs based on the first two questions is somewhat more straightforward than an examination of the meanings a patient has assigned to an event.

The Final Phase of Treatment

The cognitive model of depression assumes that individuals who become depressed generally have schemas or core beliefs that make them vulnerable to precipitating events (Young, Klosko, & Weishaar, 2003). More generally, according to the cognitive model, everyone has schemas that are the heritage of early experience, cultural and media messages, peer relationships, a history of mental health or disorder, and other developmental issues. Hypothetically, every person has his/her own areas of schema vulnerability. These vulnerabilities remain "latent," however, unless activated by relevant or matching triggers. For example, a perfectionist is theoretically vulnerable to depression if he/she experiences failure or lack of perfection, but he/she does not demonstrate depression as long as his/her perfectionistic goals are met.

As I noted earlier, by the time that an intervention addressing core beliefs takes place in CT, the patient often is no longer clinically depressed. Rather, he or she is most likely a recently recovered depressed patient, or "in remission" (American Psychiatric Association, 2000). Many patients continue to exhibit residual symptoms (Gollan, Raffety, Gortner, & Dobson, 2005; Paykel et al., 2005), and the gradual elimination of these symptoms remains an important goal of treatment, if possible. At the same time, the focus of therapy often naturally shifts to an examination of broader themes that have emerged over the course of treatment, to the identification of risk factors that led the patient to develop depression, and to a consideration of relapse prevention. Within the CT framework, this work is accomplished through the assessment and intervention addressing core beliefs.

Assessment of core beliefs may be accomplished with a number of methods. Often, patients' beliefs emerge through consideration of the distressful situations they describe. For example, if a patient consistently reports thoughts about being judged harshly by others, it is fairly easy to identify a core belief related to concerns about inadequacy and/or a harsh social environment. Sometimes, patients realize these themes themselves and spontaneously report them to the therapist. Other times, the therapist sees the patient's interpretive consistency across situations and can offer a tentative interpretation of this behavior as a reflection of an underlying or core belief. One strategy to accomplish this type of awareness is through a review of the various types of events that have led to similar distressful reactions over the course of therapy. Patient and therapist can engage in a mental "factor analysis" to look for common meanings ascribed to these events and that bind them together.

A specific technique developed to determine the broader implications that a patient assigns to difficult situations is called the "downward arrow technique" (Burns, 1980). This technique begins with the identification of a set of negative thoughts related to a specific situation. Rather than examining the evidence or generating alternative thoughts to dispute these negative ATs, however, the therapist asks the patient to entertain the thought for the moment that his/her negative thoughts are realistic and that no alternative thoughts exist. The therapist then asks the patient to generate the logical conclusion from this idea; in effect, the therapist asks, "So what if these thoughts were true?," but without any effort to resist negative thoughts that might emerge. For example, a gay male patient wanted to form a new intimate relationship, but after an initial date, the other man refused to provide his phone number. The patient automatically thought, "He has rejected me." The patient was asked to consider what it meant if he was actually rejected, and he quickly responded that he was likely never to see the man

again. When asked to consider the implication of this second "fact," the patient said it meant that he would likely be alone again for a while. He generalized the implication of this "fact" to mean that he likely would never be in another relationship, which meant he could never be fully happy in his life, and that he was probably an unlovable person. Thus, through the examination of the "downward" implications of a single rejection event, it became clear that this patient's underlying belief was one of unlovability, even though part of his prescription for lifetime happiness was being in a loving relationship.

The downward arrow technique can be employed in real-life situations and is effective when used with reference to recent, acutely distressing situations. It can also be employed in hypothetical situations, however: "What would it mean to you if . . . ?" The therapist can also conduct a downward arrow analysis of a real, recent life event, then modify it slightly in the patient's imagination to see whether the same or different implications are generated. The strategy of generating hypothetical circumstances similar to actual events is an efficient way to identify subtle aspects of core beliefs, without waiting for these events to actually occur. Yet another, more risky, strategy for identifying core beliefs is to design homework to test out their possible operation. In the previous example, it might have been possible to get the male patient to agree to attempt another date, while paying attention to any activation of anxiety or fear of rejection that might be underpinned by a belief of unlovability. Through the examination of such repeated events, the activity of core beliefs can be exposed.

All of these strategies are effective in the assessment or identification of core beliefs that operate across a number of specific situations or events in the patient's life. It is worth noting that the timing of these assessments is a critical clinical decision. It is relatively easy to use the downward arrow, for example, particularly if the patient is already somewhat distressed and the negative automatic thoughts are accessible. Typically, though, the technique ends with the patient recognizing that he/she has a negative core belief. Thus, if this technique is used too early in the course of therapy, before the patient has some resiliency, and/or his or her depression levels have already been ameliorated to some extent, the patient may possibly feel worse after the technique. On the other hand, if the therapist waits until the treatment has progressed too far, the patient may have difficulty accepting the "So what?" question at face value, and may not be able to generate the negative interpretations that might have emerged earlier in the course of therapy. Thus, it is a matter of some skill to use this type of technique early enough in treatment that some of the patient's negative thinking is still accessible, but

not too early to expose a raw belief that might be overwhelming to the patient.

Once negative beliefs have been identified, the therapist needs to help the patient to complete his/her own case conceptualization. This understanding is essential to any belief change that the therapist might attempt. One strategy is for the therapist to share with the patient the case conceptualization that he/she has generated. This model may be drawn in the form of Figure 1.1, if that would be helpful to the patient. Other diagrammatic ways to represent the cognitive case conceptualization (e.g., J. S. Beck, 1995) review early historical factors related to the emergence of core beliefs, the life assumptions that the patient has adopted (typically in the form of conditional assumptions, as in "If I am unlovable, then I need to stay out of relationships"), and the situations seen in therapy that conform to the conceptualization.

In addition to the clinically derived case conceptualization methods described earlier, it is also possible to use questionnaires to identify core beliefs. Three such measures include the Dysfunctional Attitudes Scale (DAS; Beck, Brown, Steer, & Weissman, 1991), the Sociotropy–Autonomy Scale (SAS; Bieling, Beck, & Brown, 2004; Clark & Beck, 1991), and the Schema Questionnaire (SQ; Young & Brown, 1990). The DAS yields endorsements of a series of potentially dysfunctional attitudes, written in the form of conditional statements. It has been factor-analyzed into two main dimensions, related to Performance Evaluation and Approval by Others (Cane, Olinger, Gotlib, & Kuiper, 1986). The SAS was created specifically to assess sociotropic (interpersonally dependent) and autonomy-related (achievement) beliefs, and this factor structure has also been supported in research (Clark & Beck, 1991). The SQ was rationally developed to measure 11 different types of schemas, and is related to Young's schema therapy–focused version of CT (Young & Brown, 1990; Young et al., 2003). The SQ has the clinical utility to differentiate among these schematic dimensions (Schmidt, Joiner, Young, & Telch, 1995). It yields a rich assessment of core beliefs/schemas and can be used as an adjunct to the clinical derivation of schemas to buttress or challenge the emerging case formulation.

Once the conceptualization of the core beliefs has been accomplished, and patient and therapist concur about their roles in the development of dysfunctional thinking, behavior, and emotional patterns, the question shifts to one of change. This process starts with the identification of a reasonable alternative belief to the dysfunctional one that has been identified. It is critical that this alternative belief be one that is attainable and desired by the patient. Therapist and patient can discuss the advantages and disadvantages

of both the original and alternative beliefs from the perspective of short- and long-term consequences. Often this analysis reveals certain historical and/or short-term advantages but long term disadvantages of the dysfunctional beliefs, including increased risk of depression. The alternatives typically have better long-term consequences but often entail short-term discomfort and anxiety, changes in social relations, and even a "personal revolution," if the degree and type of change is dramatic.

If the patient remains committed to change after the discussion of the implications of changing core beliefs, then a number of techniques can be adopted, including public declarations of the intent to change, clarifying the "old" and "new" ways to think and act (or even to dress and talk), or changing relationships and the personal environment so that they are more consistent with the new schema that is being cultivated. One particularly powerful change method, the "as if" technique, involves discussing how a patient would think and act if he/she had truly internalized the new belief, then structuring behavioral homework "as if" the patient had actually done so. This technique potentially allows the patient to discover that he/she can live life using the new beliefs. It also has a reasonable probability of engendering negative reactions from others in the social environment, so these reactions must be anticipated. Part of this planning may include discussion of assertive ways for the patient to communicate his/her desire for change and the need to modify others' cognitions or beliefs about him/her.

Sometimes the discussion of the implications of schema change leads a patient to reconsider the advisability of changing his/her schemas. For example, a patient who has previously seen herself as incompetent and has developed interpersonal relationships that support this belief (i.e., in which others also view her as incompetent) may wish to change this self-schema. Although such a change has definite benefits for her, it also carries the risk of interpersonal stress and rejection from people in her current social circle. Thus, there is a "cost" associated with schema change, even if the long-term benefits are quite positive. From my perspective, it is entirely the patient's right to step away from schema change. The therapist's obligations in such an instance are not only to validate the patient's right to make that decision but also to discuss the implications of this decision, including the risk of relapse. The clinical focus then becomes one of accepting and coping with ongoing negative beliefs. In such cases, it is also important to encourage the patient's continued use of the behavioral activation and cognitive restructuring techniques learned earlier in therapy.

Termination of CT for depression typically involves a review process, as well as a planning phase. The review includes the case conceptualization, and the various techniques that the patient learned and used over the course

of therapy. This review clarifies the extent to which initial treatment goals have been attained, and whether any goals remain. Sometimes, this review leads to the renegotiation of continued therapy for a short period of time, around a discrete goal, but more often it leads to a discussion of how life is an ongoing process that always involves change. Another typical process is planning for the future and anticipation of possible relapse (Bieling & Antony, 2003). This part of the termination process includes discussion about strategies to achieve ongoing goals, how to deal with ongoing or anticipated problems, how to recognize the early warning signs of depression, and how to keep the techniques the patient learned over the course of therapy active in his/her life. In the latter regard, one possible strategy is the use of a "self-session," in which the patient chooses a time to sit down and identify current issues, review cognitive and behavioral strategies to deal with these issues, and assign his/her own homework. Self-sessions also serve as a bridge to treatment termination, if the final sessions are spaced out over time.

It is often helpful to arrange one or more follow-up appointments (i.e., booster sessions) in the weeks following treatment discontinuation to see whether any new issues have emerged and to reinforce the lessons of treatment. Cognitive therapists typically predict risk of relapse or recurrence of depression and often have permissive rereferral policies that are predicated on the idea that learning new techniques takes time and practice, and that their role is not to "cure" the patient but to aid him/her in skills development and use. Because it is also not possible to anticipate all eventualities over the course of a single treatment process, sometimes a few booster sessions can be an effective way to supplement a course of CT for depression.

REVIEW OF EFFICACY RESEARCH

The Place of CT as an Empirically Supported Therapy for Depression

CT for depression has been subjected to a large number of investigations, some of which have examined CT in its own right, whereas others have compared CT to alternative treatments. The earliest comparative trial contrasted the efficacy of CT and that of tricyclic medication, and found that the two treatments had roughly equivalent outcomes (Rush et al., 1977, 1978). This early success lead to a number of trials, the most notable of which was the Treatments of Depression Comparative Research Program (TDCRP; Elkin et al., 1989) sponsored by the National Institute of Mental Health (NIMH). This large, multisite study compared CT to another

short-term psychotherapy, interpersonal therapy (IPT; Klerman, Weissman, Rounsaville, & Chevron, 1984), and to tricyclic medications. Whereas the overall treatment outcomes were roughly equivalent, patients with higher initial depression severity who were assigned to CT did relatively less well than patients assigned to either IPT or medication. This "treatment × severity interaction" has led to the popular idea that CT is mostly effective for mild-to-moderate levels of depression, and to treatment guidelines that also reify this idea, such as those by the American Psychiatric Association (*www.psych.org/psych_pract/treatg/pg/mdd2E_05-15-06.pdf*).

The conclusion regarding the treatment equivalency of CT and other treatments, and the recommendation that CT be used only for mild-to-moderate depression are both called into question by other, more recent data. Two meta-analyses of CT for depression have now been completed (Dobson, 1989; Gloaguen, Cottraux, Cucherat, & Blackburn, 1998). Both analyses used the BDI as an outcome measure and compared CT to four other types of treatments: waiting list/no treatment; behavior therapy, pharmacotherapy, and other psychotherapies. The absolute effect size for CT compared to no treatment was 1.86 in the Dobson (1989) study, and the approximate average effect size for the other comparisons was 0.50, indicating that patients treated with CT were half a standard deviation lower on the BDI at posttest compared to other treatments. Gloaguen et al. (1998) reported that the comparison between CT and no treatment remained large, and that whereas CT still demonstrated a statistically significant advantage over both pharmacotherapy and other psychotherapies, the effect size was smaller than earlier reported. Notably, the comparison between CT and behavior therapy failed to show an advantage for either treatment. Finally, Gloaguen et al. presented the follow-up data for the comparisons between CT and pharmacotherapy, and concluded that naturalistic follow-up relapse rates over approximately a 1- to 2-year follow-up period were about half the rates reported for medication conditions.

The treatment × severity interaction effect discussed earlier was subjected to a further "mega-analysis" (DeRubeis, Gelfand, Tang, & Simons, 1999). This study combined the raw data from four independent comparative trials of CT and pharmacotherapy (including the NIMH TDCRP data), and despite several ways of examining the data, failed to find the interaction effect. DeRubeis et al.'s argument, based on their analyses with more statistical power and more sophisticated data methods, was that the treatment × severity interaction did not in fact exist, and that these treatments were equally efficacious in both less and more severely depressed patients. These predictions have subsequently been borne out in two recent studies. One of these studies was completed at two sites and only employed more

severely depressed patients (DeRubeis et al., 2005; Hollon et al., 2005). Results indicated roughly equivalent outcomes between CT and selective serotonin reuptake inhibitor (SSRI) medications in the short term, but significantly better survival (i.e., less depression relapse/recurrence) in the group previously treated with CT as opposed to that treated with antidepressant medication. These results have been replicated in a more recent trial (Dimidjian et al., 2006; Dobson et al., 2007).

Mechanisms of Change and Predictors of Outcome in CT for Depression

Given the success of CT for depression, a number of ancillary questions arise, including questions related to how CT exerts its influence and whether the treatment is more or less appropriate for clients with known characteristics. The first of these questions was examined by mediational analyses and the examination of therapy processes related to outcome. Results of these studies include the observation that early completion of homework is associated with better clinical outcome (Startup & Edmonds, 1994); that attention to the specific techniques of CT are associated with more change than are the nonspecific aspects of treatment (DeRubeis & Feeley, 1990; Feeley, DeRubeis, & Gelfand, 1999); and that patients with a sudden but sustained decrease in depression severity scores tend to have better long-term outcomes than patients with more gradual but equal outcomes (Tang & DeRubeis, 1999; Tang, DeRubeis, Beberman, & Pham, 2005). These studies, as well as many others that explore the assumptions of the cognitive model of depression (Clark et al., 1999), reveal aspects of how to optimize treatment outcomes.

Experimental analyses of the effective components of CT of depression are rare. The major study to date used an incremental dismantling strategy and randomly assigned depressed outpatients to receive 20 sessions of behavioral activation (BA) interventions, 20 sessions of BA and cognitive restructuring interventions, or 20 sessions of the full CT treatment (Gortner, Gollan, Dobson, & Jacobson, 1998; Jacobson et al., 1996). All three conditions had equal outcomes in this study, both in the acute phase of treatment, and in the 2 years of follow-up. Taken literally, the results of this study indicate that adding cognitive interventions to the BA components of therapy do not enhance short-term outcome or reduce relapse; in other words, they call into question the clinical utility of the cognitive interventions in CT! Although these results raise provocative questions about the mechanisms of change in CT for depression, replication is needed to understand the full implications of these results.

The other approach that has explored clinically relevant questions about CT has examined predictors of outcome. It has generally been demonstrated that patients with more severe initial depression, as well as those with more chronic depression, do worse than less severely or less chronically depressed patients in CT for depression (Hollon & Beck, 1994; Hollon, Thase, & Markowitz, 2002), but other patient predictors of outcome have been notoriously difficult to establish (Hamilton & Dobson, 2002). It has also been difficult to establish therapist predictors of outcome (Hollon & Beck, 1994). Although therapist adherence to CT techniques appears to predict outcome, the rated competence of CT therapists has only been demonstrated to have a positive relationship to outcome in a few studies (Jacobson et al., 1996; Shaw et al., 1999; Trepka, Rees, Shapiro, Hardy, & Barkham, 2004). Further study of these questions, and perhaps improved instrumentation, is needed to understand more fully these issues.

CONCLUSIONS

This chapter has provided a description of the cognitive model of depression and the typical process of CT for depression. The typical behavioral, cognitive restructuring, and assumptive interventions employed in CT are associated with clinical outcomes that are as strong as those in any other treatment in depression, and potentially with stronger long-term effects that pharmacotherapy (Hollon, Stewart, & Strunk, 2006). It also appears that CT is effective across the range of depression severity, so it can be used in different clinical settings. Furthermore, given the concerns about side effects of some antidepressant medications, some treatment guidelines now recommend the use of CT or related models as the preferred treatment in less severe cases of depression (National Institute for Clinical Excellence, 2006). Despite the overall value of CT and the fact that it is generally recognized as an empirically supported therapy (Chambless & Ollendick, 2001), about one-third of patients fail to respond to this treatment model. Furthermore, relapse rates of about 25% at 1 year following treatment suggest that there is more to learn about treatment failure and relapse.

I concluded the chapter with a brief description of some of the research related to the CT model and therapy. Much remains to be known about CT for depression. We still do not know as much as would be ideal about the treatment factors associated with positive outcome in CT for depression. Additional dismantling and process studies are needed to explore these dimensions. Finally, we know relatively little about patient predictors of outcome in CT for depression. Although higher levels of initial depres-

sion severity, more chronicity, and more comorbidity are predictors of more negative outcomes, much more research is needed to explore factors such as depression subtypes or other factors that may affect patients' short- and long-term responses to this treatment model. Also, the field desperately needs studies that examine the predictors of outcome in CT relative to other evidence-based treatments. In summary, the field has at this point in the history of established its overall efficacy, but it now needs to address issues related to its effectiveness (Nathan, Stuart, & Dolan, 2000), and its efficacy relative to other empirically supported treatments for depression.

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