

CHAPTER 1

Historical and Philosophical Bases of the Cognitive-Behavioral Therapies

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Although the earliest of the cognitive-behavioral therapies (CBTs) emerged in the early 1960s (Ellis, 1962), not until the 1970s did the first major texts on “cognitive-behavior modification” appear (Kendall & Hollon, 1979; Mahoney, 1974; Meichenbaum, 1977). The intervening period was one of considerable interest in cognition and in the application of cognitive theory to behavior change. Mahoney (1977), for example, noted that while psychology had generally undergone a “cognitive revolution” in the 1960s, the same theoretical focus was being brought to bear upon clinical psychology only somewhat later. As part the cognitive revolution in clinical psychology, different theorists and practitioners created a number of models for cognitive and behavior change, and a veritable armamentarium of clinical techniques.

This chapter reviews the major developments in the history of CBTs, with a focus on the period from the early 1960s to the present. After briefly defining the current scope of CBTs and the essential nature of the model, CBTs, we review the historical bases of CBT. Six major reasons for the development of CBTs are proposed and discussed. The chapter then summarizes the major philosophical underpinnings of the various forms of CBTs, with a view to both the principles that all of these therapies share and those that vary from approach to approach. The last section of the chapter presents a formal chronology of the major CBT approaches. This section also describes unique contemporary approaches within the overall field of CBT in terms of the historical developments for each approach and the behavior change principles each approach encourages.

DEFINING COGNITIVE-BEHAVIORAL THERAPY

At their core, CBTs share three fundamental propositions:

1. Cognitive activity affects behavior.
2. Cognitive activity may be monitored and altered.
3. Desired behavior change may be effected through cognitive change.

Although using a slightly different title, Kazdin (1978) argued for a similar implicit set of propositions in his definition of cognitive-behavior modification: "The term 'cognitive-behavior modification' encompasses treatments that attempt to change overt behavior by altering thoughts, interpretations, assumptions, and strategies of responding" (p. 337). Cognitive-behavior modification and CBT are thus nearly identical in their assumptions and treatment methods. Perhaps the one area where the two labels identify divergent therapies is with respect to treatment outcomes. While cognitive-behavior modification seeks overt behavior change as an end result (Kazdin, 1978; Mahoney, 1974), some contemporary forms of CBT focus their treatment effects on cognitions *per se*, in the belief that behavior change will follow. Ellis's (1962, 1979a; Dryden, David, & Ellis, Chapter 8, this volume) efforts relative to belief change, for example, constitute a type of therapy that Kazdin's (1978) definition would not incorporate as a form of cognitive-behavior modification. The term "cognitive-behavior therapy," therefore, is broader than *cognitive-behavior modification*, and subsumes the latter within it (see also Dobson, Backs-Dermott, & Dozois, 2000).

The first of the three fundamental propositions of CBT, that cognitive activity affects behavior, is a restatement of the basic mediational model (Mahoney, 1974). Although early cognitive-behavioral theorists had to document the theoretical and empirical legitimacy of the mediational proposition (e.g., Mahoney, 1974), there is now overwhelming evidence that cognitive appraisals of events can affect the response to those events, and that there is clinical value in modifying the content of these appraisals (e.g., Dobson et al., 2000; Dozois & Beck, 2008; Granvold, 1994; Hollon & Beck, 1994). While debate continues about the degree and exact nature of the appraisals an individual makes in different contexts (cf. Coyne, 1999; Held, 1995), the fact of mediation is no longer strongly contested.

The second CBT proposition states that cognitive activity may be monitored and altered. Implicit in this statement is the assumption that we may gain access to cognitive activity, and that cognitions are knowable and assessable. There is, however, reason to believe that access to cognitions is not perfect, and that people may report cognitive activities on the basis of their likelihood of occurrence rather than actual occurrence (Nisbett & Wilson, 1977). Most researchers in the area of cognitive assessment, however, continue to attempt to document reliable and valid cognitive assessment strategies, usually with behavior as the source of validation data (Merluzzi, Glass, & Genest, 1981;

Segal & Shaw, 1988; Dunkley, Blankstein, & Segal, Chapter 5, this volume). Thus, while reports of cognition are often taken at face value, there is reason to believe that in some cases there are biases in cognitive reports, and that further validation of cognitive reports is required (Dunkley et al., Chapter 5, this volume).

Another corollary stemming from the second CBT proposition is that assessment of cognitive activity is a prelude to the alteration of cognitive activity. However, although it makes conceptual sense that once we measure a construct we may then begin to manipulate it, one action does not *necessarily* follow the other. In the area of human change, the measurement of cognition does not necessarily assist change efforts. As has been written elsewhere (Dunkley et al, Chapter 5, this volume; Mischel, 1981; Segal & Cloitre, 1993; Shaw & Dobson, 1981), most cognitive assessment strategies emphasize the content of cognitions and the assessment of cognitive results rather than the cognitive process. Examining the process of cognition, as well as the interdependence among cognitive, behavioral, and affective systems, will most likely advance our understanding of change. This form of cognitive monitoring remains relatively underdeveloped compared to the assessment of cognitive content.

The third CBT proposition is a direct result of the adoption of the mediational model. It states that desired behavior change may be effected through cognitive change. Thus, while cognitive-behavioral theorists accept that overt reinforcement contingencies can alter behavior, they are likely to emphasize that there are alternative methods for behavior change, one in particular being cognitive change.

Due to the statement that cognitive change may influence behavior, a lot of the early effort of cognitive-behavioral researchers was to document the effects of cognitive mediation. In one of the earliest demonstrations of this type, Nomikos, Opton, Averill, and Lazarus (1968) demonstrated that the same loud noise created different degrees of physiological disturbance, based upon the research participant's expectancy for the noise. In a similar vein, Bandura (1977, 1997) employed the construct of self-efficacy to document that a participant's perceived ability to approach a fearful object strongly predicts actual behavior. Many studies have documented the role of cognitive appraisal processes in a variety of laboratory and clinical settings (Bandura, 1986, 1997).

Although the inference of cognitive activity has been generally accepted, it is still extremely difficult to document the further assumption that changes in cognition mediate behavior change. To do so, the assessment of cognitive change must occur, independent of behavior. For example, if a phobic person approaches within 10 feet of a feared object, is treated through a standard type of systematic desensitization (including a graduated approach), and is then able to predict and demonstrate a closer approach to the feared object, making the inference that cognitive mediation of the behavior change is difficult at best and unnecessary or superfluous at worst. On the other hand, if the same phobic person is treated with some form of cognitive intervention

(e.g., imagined approach of the feared object), and then demonstrates the same behavior change, then cognitive mediation of that behavior change is much more plausible. Moreover, if that same phobic person demonstrates changes in his or her behavior toward objects previously feared but not specifically treated, then the cognitive mediation of that behavior change is essential, in that there must be some cognitive "matching" between the treated object and the other object of generalization. Unfortunately, tests of cognitive mediation are often less than methodologically adequate, and many fail to produce compelling results (DeRubeis et al., 1990; Longmore & Worrell, 2007), which renders these models subject to ongoing debate.

WHAT CONSTITUTES COGNITIVE-BEHAVIORAL THERAPY?

A number of treatment approaches exist within the scope of CBT as it was defined earlier. These approaches share the theoretical perspective that assumes internal covert processes called "thinking" or "cognition" occur, and that cognitive events mediate behavior change. In fact, many cognitive-behavioral theorists explicitly state that because of the mediational hypothesis, not only is cognition able to alter behavior, but it must alter behavior, so that behavior change may thus be used as an indirect index of cognitive change. At the same time, these approaches argue that behavioral change does not have to involve elaborate cognitive mechanisms. In some forms of therapy the interventions may have very little to do with cognitive appraisals and evaluations but be heavily dependent on client action and behavior change. The actual outcomes of CBT will naturally vary from client to client, but in general the two main indices used for change are cognition and behavior. To a lesser extent, emotional and physiological changes are also used as indicators of change in CBT, particularly if emotional or physiological disturbance is a major aspect of the presenting problem in therapy (e.g., anxiety disorders, psychophysiological disorders). One of the trends in the development of the CBTs has been a growing interest in how cognitive mediation affects behavioral, emotional, and physiological processes, and how these various systems can reinforce each other in practice.

Three major classes of CBTs have been recognized, as each has a slightly different class of change goals (Mahoney & Arnkoff, 1978). These classes are coping skills therapies, problem-solving therapies, and cognitive restructuring methods. Since a later section of this chapter details the specific therapies that fall within these categories of CBTs, this topic is not reviewed here. What is important to note, however, is that the different classes of therapy orient themselves toward different degrees of cognitive versus behavioral change. For example, coping skills therapies are primarily used for problems that are external to the client. In this case, therapy focuses on the identification and alteration of the ways the person may exacerbate the influence of negative events (e.g., engaging in anxiety-provoking thoughts and images; using avoid-

ance) or employ strategies to lessen the impact of the negative events (e.g., learning relaxation skills). Thus, the primary markers of success within this form of therapy involve behavioral signs of improved coping abilities, and the concomitant reductions in the consequences of negative events (e.g., less demonstrated anxiety). In contrast, cognitive restructuring techniques are used more when the disturbance is created from within the person him- or herself. Such approaches focus on the long-term beliefs and situation-specific automatic thoughts that engender negative outcomes.

Although CBT targets both cognition and behavior as primary change areas, certain types of desired change clearly fall outside of the realm of CBT. For example, a therapist who adopts a classical conditioning approach to the treatment of self-destructive behavior in an autistic child is not employing a cognitive-behavioral framework; such an approach might instead be called "behavioral analysis" or "applied behavioral therapy." In fact, any therapeutic regimen that adopts a stimulus-response model is not a CBT. Only in instances where cognitive mediation can be demonstrated, and where cognitive mediation is an important component of the treatment plan, can the label "cognitive-behavioral" be applied.

Just as strictly behavioral therapies are not cognitive-behavioral, strictly cognitive therapies also are not cognitive-behavioral. For example, a therapeutic model that states memories of a long-past traumatic event cause current emotional disturbance and consequently targets those memories for change is not a CBT. It should be noted that this example carries the provision that no association between the current disturbance and past trauma is possible. In a case where a past trauma has occurred and a recent event is highly similar to that past event, and the client is experiencing distress as a function of both the past trauma and the current event, cognitive mediation is much more likely, and the therapy may be cognitive-behavioral in nature. Certainly, there do exist CBTs for trauma and its consequences (Resick et al., 2008).

Finally, therapies that base their theories in the expression of excessive emotions, as may be seen in cathartic models of therapy (Janov, 1970), are not cognitive-behavioral. Thus, although these therapies may posit that the emotions derive from extreme or negative cognitive mediational processes, the lack of a clear mediational model of change places them outside the field of CBT.

HISTORICAL BASES OF THE COGNITIVE-BEHAVIORAL THERAPIES

Two historical strands serve as historical bases for the CBTs. The dominant strand relates to behavioral therapies, which is often seen as the primary precursor to CBTs. To a lesser extent, CBTs also have grown out of psychodynamic models of therapy. These two historical themes are discussed in turn in this section.

Behavior therapy was an innovation from the radical behavioral approach to human problems (Bandura, 1986). It drew on the classical and operant conditioning principles of behaviorism, and developed a set of interventions focused on behavior change. In the 1960s and 1970s, however, a shift that began to occur in behavior therapy made the development of cognitive-behavior theory possible, and CBT, more broadly, a logical necessity. First, although the behavioral perspective had been a dominant force for some time, it was becoming apparent by the end of the 1960s that a nonmediational approach was not expansive enough to account for all of human behavior (Breger & McGaugh, 1965; Mahoney, 1974). Bandura's (1965, 1971) accounts of vicarious learning defied traditional behavioral explanation, as did the work on delay of gratification by Mischel, Ebbsen, and Zeiss (1972). Similarly, children were learning grammatical rules well outside the ability of most parents and educators to reinforce discriminatively (Vygotsky, 1962), and behavioral models of language learning were under serious attack. Yet another sign of dissatisfaction with behavioral models was the attempt to expand these models to incorporate "covert" behaviors (i.e., thought; Homme, 1965). Although this approach met with some limited optimism, criticisms from behavioral quarters made it apparent that extensions of this sort were not consistent with the behavioral emphasis on overt phenomena.

A second factor that facilitated the development of CBT was that the very nature of some problems, such as obsessional thinking, made noncognitive interventions irrelevant. As was appropriate, behavior therapy was applied to disorders that were primarily demarcated by their behavioral correlates. Also, for multifaceted disorders, behavioral therapists targeted the behavioral symptoms for change (e.g., Ferster, 1974). This focus on behavior provided a significant increase in therapeutic potential over past efforts but was not fully satisfying to therapists who recognized that entire problems, or major components of problems, were going untreated. The development of cognitive-behavioral treatment interventions helped to fill a void in the clinician's treatment techniques.

Third, the field of psychology was changing in general, and cognitivism, or what has been called the "cognitive revolution," was a major part of that change. A number of mediational concepts were being developed, researched, and established within experimental psychology (Neisser, 1967; Paivio, 1971). These models, the most influential of which was perhaps the information-processing model of cognition, were explicitly mediational and were receiving considerable support from cognition laboratories. One of the natural developments was the extension of information-processing models to clinical constructs (e.g., Hamilton, 1979, 1980; Ingram & Kendall, 1986).

Even beyond the development of general cognitive models, a number of researchers in the 1960s and 1970s conducted basic research into the cognitive mediation of clinically relevant constructs. Lazarus and associates, for example, documented that anxiety involves cognitive mediation in a number of studies during this time period (Lazarus, 1966; Lazarus & Averill, 1972;

Lazarus & Folkman, 1984; Monat, Averill, & Lazarus, 1972; Nomikos et al., 1968). Taken together, the two research areas of general cognitive psychology and what may be termed "applied cognitive psychology" challenged behavioral theorists to account for the accumulating data. In essence, the challenge amounted to a need for behavioral models to redefine their limits and incorporate cognitive phenomena into the models of behavioral mechanisms. Perhaps one of the earliest signs of this attempt at incorporation can be seen in the self-regulation and self-control literature, which developed during the early part of the 1970s (Cautela, 1969; Goldfried & Merbaum, 1973; Mahoney & Thoresen, 1974; Stuart, 1972). All of these various attempts to delineate self-control perspectives on behavioral modification shared the idea that the individual has some capacity to monitor his or her behavior, to set internally generated goals for behavior, and to orchestrate both environmental and personal variables to achieve some form of regulation in the behavior of interest. To develop these self-control models, several cognitive processes had to be hypothesized, including attempts to define self-control strategies largely in terms of internal "cybernetic" components of functioning (e.g., Jeffrey & Berger, 1982).

In addition to behaviorism, the second historical strand that conspired to lead to the cognitive-behavioral field was that of psychodynamic theory and therapy. Just as there was growing dissatisfaction with strict behaviorism, there continued to be a rejection of the strongest alternative perspective, the psychodynamic model of personality and therapy. Early work in the area of CBT (e.g., Beck, 1967, pp. 7-9; Ellis, 1973, 1979a, p. 2) included statements that summarily rejected psychoanalytic emphases on unconscious processes, review of historical material, and the need for long-term therapy that relied on the development of insight regarding the transference-countertransference relationship. It remains an interesting fact, however, that the work of Aaron Beck and Albert Ellis, the two principal figures in the field, whose early training had been psychodynamic in nature, both later develop variants of CBT that emphasized cognitive restructuring, and the need for analysis and potential change of more trait-like and persistent beliefs or schemas.

Beyond the philosophical disagreements with some of the basic tenets of psychodynamic models, reviews of the outcome literature suggested that the efficacy of traditional psychotherapy was not particularly impressive (Eysenck, 1969; Luborsky, Singer, & Luborsky, 1975; Rachman & Wilson, 1971, 1980). Perhaps the boldest evaluative comment about the demonstrated efficacy of psychodynamic therapies comes from Rachman and Wilson (1980), who stated that "there still is no acceptable evidence to support the view that psychoanalysis is an effective treatment" (p. 76). An emphasis on short-term symptom relief and problem solution was one of the themes seen in the early cognitive-behavioral therapists whose work derived from psychodynamic bases.

As is true for any social movement, a critical aspect of the early formation of the CBTs was the development and identification of a number of theorists

and therapists who identified themselves as joining this movement. Some of the people who explicitly began this process were Beck (1967, 1970), Cautela (1967, 1969), Ellis (1962, 1970), Mahoney (1974), Mahoney and Thoresen (1974), and Meichenbaum (1973, 1977). The establishment of several key proponents of a cognitive-behavioral perspective clearly had the effect of creating a *zeitgeist* that drew the attention of others in the field. In addition, the creation of a journal specifically tailored to the emerging cognitive-behavioral field helped to further this trend. Thus, the establishment in 1977 of *Cognitive Therapy and Research*, with Michael Mahoney as the inaugural editor, provided a forum "to stimulate and communicate research and theory on the role of cognitive processes in human adaptation and adjustment" (from the cover of the journal). The existence of a regular publication in the area of cognitive-behavior theory and modification allowed researchers and therapists to present provocative ideas and research findings to a wide audience.

A final important historical factor that has contributed to continued interest in the cognitive-behavioral perspective has been the publication of research studies that have found cognitive-behavioral treatment outcomes to be equally or more effective than strictly behavioral approaches. In a critical review of cognitive-behavior modification, Ledgewidge (1978) reviewed 13 studies that contrasted cognitive-behavioral versus behavioral therapies and found no demonstrated superiority for either, although he noted that the studies he reviewed were based upon analogue populations, and that clinical trials were required for a more summative judgment. Ledgewidge's largely critical review prompted a reply that largely dismissed his criticisms as "premature" (Mahoney & Kazdin, 1979). After this early controversy about the efficacy of CBTs, a number of reviews clearly demonstrated that CBTs have a clinical impact (Berman, Miller, & Massman, 1985; Dobson & Craig, 1996; Dush, Hirt, & Schroeder, 1983; Miller & Berman, 1983; Shapiro & Shapiro, 1982). Indeed, the CBTs are notable for their presence among the list of empirically supported therapies (Chambless et al., 1996; Chambless & Hollon, 1998; Chambless & Ollendick, 2001). It is important to note, however, that meta-analyses of therapeutic effectiveness question the extent to which cognitive-behavioral treatments are superior to strictly behavioral treatments (Berman et al., 1985; Gloguen, Cottraux, Cucherat, & Blackburn, 1998; Miller & Berman, 1983). As the database is further enlarged, more definitive statements about the effectiveness of these types of therapy will be possible (Epp & Dobson, Chapter 2, this volume). What we hope will emerge from continued research is specific conclusions about not only the overall efficacy of CBTs but also specific statements about the relative efficacy of different types of CBTs with specific types of clinical problems.

It becomes apparent from this review that a number of compelling reasons have existed and continue to exist for the development of cognitive-behavioral models of dysfunction and therapy. These reasons include dissatisfaction with previous models of therapy, clinical problems that emphasize the need for a cognitive-behavioral perspective, the research conducted into cognitive aspects

of human functioning, the *zeitgeist* phenomenon that has led to an identified group of cognitive-behavioral theorists and therapists, and the growing body of research that supports the clinical efficacy of cognitive-behavioral interventions. With this general trend in mind, we now provide more in-depth summaries of the historical developments behind the large number of specific CBTs that have evolved over the past 40 or so years.

MAJOR COGNITIVE-BEHAVIORAL THERAPIES

CBTs represent the convergence of behavioral strategies and cognitive processes, with the goal of achieving behavioral and cognitive change. However, even a brief review of the therapeutic procedures subsumed under the heading of CBT reveals a diversity of principles and procedures. The diversification in the development and implementation of the cognitive-behavioral approach may be explained in part by the differing theoretical orientations of those who generated intervention strategies based on this perspective. For example, Ellis and Beck, authors of rational emotive behavior therapy and cognitive therapy, respectively, came from psychoanalytic backgrounds. In contrast, Goldfried, Meichenbaum, and Mahoney were trained originally in the principles of behavior modification.

Mahoney and Arnkoff (1978) organized the CBTs into three major divisions: (1) cognitive restructuring, (2) coping skills therapies, and (3) problem-solving therapies. Therapies included under the heading of "cognitive restructuring" assume that emotional distress is the consequence of maladaptive thoughts. Thus, the goal of these clinical interventions is to examine and challenge maladaptive thought patterns, and to establish more adaptive thought patterns. In contrast, "coping skills therapies" focus on the development of a repertoire of skills designed to assist the client in coping with a variety of stressful situations. The "problem-solving therapies" may be characterized as a combination of cognitive restructuring techniques and coping skills training procedures. Problem-solving therapies emphasize the development of general strategies for dealing with a broad range of personal problems, and stress the importance of an active collaboration between client and therapist in the planning of the treatment program. In the sections that follow, we describe the evolution of the major therapies associated with the cognitive-behavioral tradition. This review is not intended to be exhaustive and therefore excludes a number of therapies that have not stimulated a significant amount of research or clinical application.

Rational Emotive Behavior Therapy

Rational emotive behavior therapy (REBT) is regarded by many as the premiere example of the cognitive-behavioral approach. The basic theory and practice of REBT was formulated by Albert Ellis almost 50 years ago. Follow-

ing extensive training and experience in psychoanalysis, Ellis began to question the efficacy and efficiency of the classical analytic method. He observed that patients tended to remain in therapy for considerable periods of time and frequently resisted psychoanalytic techniques, such as free association and dream analysis. Moreover, Ellis questioned whether the personal insight that psychoanalytic theory assumed led to therapeutic change resulted in durable changes in behavior:

Still, however, I was not satisfied with the results I was getting. For, again, a great many patients improved considerably in a fairly short length of time, and felt much better after getting certain seemingly crucial insights. But few of them were really cured, in the sense of being minimally assailed with anxiety or hostility. And, as before, patient after patient would say to me: "Yes, I see exactly what bothers me now and why I am bothered by it; but I nevertheless still am bothered. Now what can I do about that?" (Ellis, 1962, p. 9)

Discouraged by the limitations of the analytic method, Ellis began to experiment with more active and directive treatment techniques. Through a process of clinical trial and error, he formulated a theory of emotional disturbance and a set of treatment methods that emphasized a practical approach to dealing with life problems. Although advocates of analytic theory considered Ellis's methods heretical, the advent of behavior therapy in the 1960s and the growing acceptance of the role of cognitions in understanding human behavior eventually fostered the acceptance of REBT (formerly called rational emotive therapy [RET]) as a potentially valid alternative to the more traditional models of psychotherapy.

At the core of REBT is the assumption that human thinking and emotion are significantly interrelated. According to Ellis's ABC model, symptoms are the consequences (C) of a person's irrational belief systems (B) regarding particular activating experiences or events (A). The goal of therapy is to identify and challenge the irrational beliefs at the root of emotional disturbance. REBT assumed that individuals possess innate and acquired tendencies to think and to behave irrationally. Thus, to maintain a state of emotional health, individuals must constantly monitor and challenge their basic belief systems.

Ellis (1970) identified 12 basic irrational beliefs that take the general form of unrealistic or absolutistic expectations. REBT assumes that by substituting unrealistic, overgeneralized demands with realistic desires, preferences, or wishes, major changes in emotions and behaviors can occur. However, since individuals tend forcefully to preserve their irrational thought patterns, significant and durable changes require forceful methods of intervention.

REBT employs a multidimensional approach that incorporates cognitive, emotive, and behavioral techniques. Nevertheless, the major therapeutic tool remains a "logico-empirical method of scientific questioning, challenging, and debating" (Ellis, 1979a, p. 20) designed to assist individuals in surrendering irrational beliefs. In addition to disputation, REBT therapists selectively

employ a broad variety of techniques, including self-monitoring of thoughts, bibliotherapy, role playing, modeling, rational emotive imagery, shame-attacking exercises, relaxation methods, operant conditioning, and skills training (Ellis, 1979b). The theory and practice of REBT are largely the same as when the approach was first introduced. Thus, Ellis's original conceptualization of RET as outlined in his book *Reason and Emotion in Psychotherapy* (1962) remains a primary reference for this approach. Renaming of RET to become REBT did not represent a change in philosophy or emphasis, so much as it reflected Ellis's desire to reflect more accurately the broad interests of REBT therapists.

One of the major differences between REBT and other cognitive-behavioral approaches lies in its philosophical emphasis. Ellis's (1980) distinctly philosophical outlook is reflected in what he identified as the major goals of REBT: self-interest, social interest, self-direction, tolerance of self and others, flexibility, acceptance of uncertainty, commitment to vital interests, self-acceptance, scientific thinking, and a nonutopian perspective on life. REBT assumes that individuals who adopt this type of rational philosophy will experience a minimum of emotional disturbance.

REBT has generated a large body of literature (see Dryden et al., Chapter 8, this volume) and is being applied to areas as diverse as leadership and business (Criddle, 2007; Greiger & Fralick, 2007), and schools (Vernon & Bernard, 2006). Unfortunately, the majority of published articles have been authored by REBT advocates rather than researchers concerned with collecting objective data concerning their validity and utility (Mahoney, 1979). Other publications suggest, however, that REBT is beginning to receive the objective empirical scrutiny that has been absent in the past (Haaga & Davison, 1993; Dryden et al., Chapter 8, this volume).

Cognitive Therapy

Aaron Beck, the developer of cognitive therapy, was originally trained in psychoanalysis. Like Ellis, Beck began to question psychoanalytic formulations of the neuroses, and particularly with respect to depression. In 1963, Beck observed that cognitive factors associated with depression were largely ignored in favor of the psychoanalytic emphasis on motivational-affective conceptualizations. However, based on an investigation of the thematic content of the cognitions of psychiatric patients, Beck was able to distinguish consistent differences in the ideational content associated with common neurotic disorders, including depression. He also found that patients exhibited systematic distortions in their thinking patterns. Consequently, he generated a typology of cognitive distortions to describe these systematic errors, which included the now well-known concepts of arbitrary inference, selective abstraction, overgeneralization, magnification, and minimization.

A 5-year research project at the University of Pennsylvania culminated in the 1967 publication of *Depression: Causes and Treatment*. In this volume,

Beck outlined his cognitive model and therapy of depression and other neuroses. A second book, *Cognitive Therapy and the Emotional Disorders* (Beck, 1976), presented in more detail the specific cognitive distortions associated with each of the neuroses and described the principles of cognitive therapy, with special reference to depression. In 1979, Beck coauthored a comprehensive treatment manual for depression that presented cognitive interventions developed over the previous decade of clinical work and inquiry (Beck, Rush, Shaw, & Emery, 1979). This book, *Cognitive Therapy of Depression*, remains a key reference in the field and has served as the treatment manual for a considerable body of outcome research.

From the early emphasis on depression, Beck's model (1970) was extended to other disorders and difficulties, including anxiety (Beck & Emery, 1985), bipolar disorder (Basco & Rush, 2005), marital problems (Beck, 1988), personality disorders (Beck, Freeman, & Associates, 2003; Layden, Newman, Freeman, & Morse, 1993; Linehan, 1993), substance use problems (Beck, Wright, Newman, & Liese, 1993), crisis management (Dattilio & Freeman, 1994), anger (Beck, 1999), and psychosis (Beck, Grant, Rector, & Stolar, 2008). Throughout these developments, the cognitive model has maintained an emphasis on the way distorted thinking and unrealistic cognitive appraisals of events can negatively affect one's feelings and behavior. Therefore, it is assumed that the way an individual structures reality determines his or her affective state. Furthermore, the cognitive model proposes that a reciprocal relation exists between affect and cognition, such that one tends to reinforce the other, resulting in a possible escalation of emotional and cognitive impairment (Beck, 1971).

"Schemas" are defined as cognitive structures that organize and process incoming information. Schemas are proposed to represent the organized thought patterns that are acquired early in an individual's development and develop over the lifespan with accumulated experiences. Whereas the schemas of well-adjusted individuals allow for the realistic appraisal of life events, those of maladjusted individuals result in distorted perceptions, faulty problem-solving, and psychological disorders (Beck, 1976; Dozois & Beck, 2008). For example, the schematic processes of depressed individuals can be characterized by a negative cognitive triad, in which views of the self (the self as a "loser"), the world (the world is harsh and demanding, and leads to helplessness) and the future (the future is bleak and hopeless) are disturbed (Hollon & Beck, 1979).

The principal goal of cognitive therapy is to replace the client's presumed distorted appraisals of life events with more realistic and adaptive appraisals. Treatment is based on a collaborative, psychoeducational approach that involves designing specific learning experiences to teach clients to (1) monitor automatic thoughts; (2) recognize the relations among cognition, affect, and behavior; (3) test the validity of automatic thoughts; (4) substitute more realistic cognitions for distorted thoughts; and (5) identify and alter underly-

ing beliefs, assumptions, or schemas that predispose individuals to engage in faulty thinking patterns (Kendall & Bemis, 1983).

Unlike REBT, Beck's cognitive theory of psychopathology and cognitive techniques have been subjected to a substantial degree of empirical scrutiny (Clark, Beck, & Alford, 1999; Ingram, Miranda, & Segal, 1998). Cognitive therapy of depression is now considered to be a viable alternative to behavioral and biochemical interventions (Hollon & Beck, 1979; Hollon, DeRubeis, & Evans, 1996; Hollon, Stewart, & Strunk, 2006). Cognitive therapy for anxiety disorders, in fact, has superior efficacy to pharmacotherapy. The generalizability of Beck's model and therapy, and treatment efficacy with respect to other mental disorders, requires further research (Clark et al., 1999). Nonetheless, the contributions of Beck and his associates have significantly impacted researchers and clinicians alike, and will in all probability continue to stimulate research for many years to come (Dobson & Khatri, 2000).

Self-Instructional Training

Donald Meichenbaum's clinical interests developed during a period when behavior therapy was flourishing and the then-radical ideas of Ellis (1962), Beck (1970), and other advocates of cognitive treatment approaches were beginning to attract the attention of a new generation of clinicians. In this climate, Meichenbaum (1969) carried out a doctoral research program that investigated the effects of an operant treatment procedure for hospitalized patients with schizophrenia trained to emit "healthy talk." He observed that patients who engaged in spontaneous self-instruction to "talk healthy" were less distracted and demonstrated superior task performance on a variety of measures. This observation provided impetus for a research program that focused on the role of cognitive factors in behavior modification (Meichenbaum, 1973, 1977).

Meichenbaum's research was heavily influenced by two Soviet psychologists, Luria (1961) and Vygotsky (1962), who studied the developmental relation among language, thought, and behavior. They suggested that the development of voluntary control over one's behavior involves a gradual progression from external regulation by significant others (e.g., parental instructions) to self-regulation as a result of the internalization of verbal commands. Consequently, the relation between verbal self-instruction and behavior became the major focus of Meichenbaum's research. He proposed that covert behaviors operate according to the same principles as do overt behaviors, and that covert behaviors are thus subject to modification using the same behavioral strategies employed to modify overt behaviors (Homme, 1965; Meichenbaum, 1973).

Meichenbaum's early attempts to explore the validity of this proposal involved the development of a self-instructional training (SIT) program designed to treat the mediational deficiencies of impulsive children (Meichenbaum & Goodman, 1971). The goals of the treatment program were fourfold:

(1) to train impulsive children to generate verbal self-commands and respond to them appropriately; (2) to strengthen the mediational properties of children's inner speech to bring their behavior under their own verbal control; (3) to overcome any comprehension, production, or mediational deficiencies; and (4) to encourage children to self-regulate their behavior appropriately. The specific procedures were designed to replicate the developmental sequence outlined by Luria (1961) and Vygotsky (1962): (1) A model performed a task of talking aloud, while a child observed; (2) the child performed the same task, while the model gave verbal instructions; (3) the child performed the task, while instructing him- or herself aloud; (4) the child performed the task, while whispering the instructions; and (5) the child performed the task covertly. The self-instructions employed in the program included (1) questions about the nature and demands of the task, (2) answers to these questions in the form of cognitive rehearsal, (3) self-instructions in the form of self-guidance while performing the task, and (4) self-reinforcement. Meichenbaum and Goodman (1971) found that self-instructional training significantly improved the task performance of impulsive children across a number of measures relative to attentional and control groups.

Encouraged by the results of their initial studies, Meichenbaum and his associates sought to expand and refine SIT. Additional investigations were designed to examine the ability of SIT to generalize in the treatment of a variety of psychological disorders, including schizophrenia, speech anxiety, test anxiety, and phobias (Mahoney, 1974).

The behavioral background of Meichenbaum is evident in the procedural emphasis that SIT places on graduated tasks, cognitive modeling, directed mediational training, and self-reinforcement. SIT provides a basic treatment paradigm that may be modified to suit the special requirements of a particular clinical population. In general, clients are trained in six global skills related to self-instruction: (1) problem definition, (2) problem approach, (3) attention focusing, (4) coping statements, (5) error-correcting options, and (6) self-reinforcement (Kendall & Bemis, 1983). The flexibility of SIT is perhaps one of its most attractive features, and not surprisingly, a large literature has accumulated on the utility of SIT for a variety of psychological disorders (Meichenbaum, 1985).

In recent years, the primary use of SIT appears to be in the treatment of youth, mentally handicapped individuals, and in some areas where specific skills training is needed, such as athletics. It does not appear to serve often as a stand-alone therapy, but SIT is often employed in the context of a broader set of methods to develop and foster a broader sense of self-efficacy and capability. An interesting side note is that Meichenbaum's clinical interests have shifted since the development of SIT. He developed a constructive, narrative approach to the problem of posttraumatic stress disorder (Meichenbaum, 1994), in which more traditional SIT methods do not figure largely. He also maintains an interest and involvement in stress inoculation training (see below).

Self-Control Treatments

A series of interventions have developed within the broad field of CBT that focus on the self and its regulation in various settings. These approaches have employed terms such as "self-efficacy," "self-control," and "self-regulation" to emphasize that these broad interventions can hypothetically be deployed in many different contexts (Kanfer, 1970, 1971).

Marvin Goldfried was among the growing number of clinicians in the early 1970s who challenged the adequacy of learning theory and advocated the incorporation of cognitive processes into conceptualizations of human behavior. He supported the shift in emphasis from discrete, situation-specific responses and problem-specific procedures to a focus on coping skills that could be applied across response modalities, situations, and problems (Mahoney, 1974). In 1971, Goldfried proposed that systematic desensitization be conceptualized in terms of a general mediational model, in contrast to Wolpe's (1958) counterconditioning model. Goldfried interpreted "systematic desensitization" as a means of teaching clients a general self-relaxation skill. In the attempt to transform desensitization into a more comprehensive coping skills training program, emphasis was placed on four components: (1) the description of the therapeutic rationale in terms of skills training, (2) the use of relaxation as a generalized or multipurpose coping strategy, (3) the use of multiple-theme hierarchies, and (4) training in "relaxing away" scene-induced anxiety as opposed to the traditional method of terminating the imaginal scene at the first indication of subjective distress (Goldfried, 1973, 1979).

Goldfried's coping skills orientation eventually led to the development of a technique called "systematic rational restructuring" (SRR; Goldfried, Decenteceo, & Weinberg, 1974). Borrowing from the work of Dollard and Miller (1950) on the development of symbolic thinking processes, Goldfried and Sobocinski (1975) suggested that early social learning experiences teach individuals to label situations in different ways. They argued that emotional reactions may be understood as a response to the way an individual labels situations as opposed to a response to the situation *per se*. The extent to which individuals inappropriately distinguish situational cues as personally threatening determines their subsequent maladaptive emotional and behavioral responses. Goldfried assumed that individuals can acquire more effective coping repertoires by learning to modify the maladaptive cognitive sets that engage automatically when they face anxiety-provoking situations. Thus, the goal of SRR is to train clients to perceive situational cues more accurately in a series of five discrete stages: (1) exposure to anxiety-provoking situations, using imaginal presentation or role playing; (2) self-evaluation of subjective anxiety level; (3) monitoring of anxiety-provoking cognitions; (4) rational reevaluation of these maladaptive cognitions; and (5) observing one's subjective anxiety level following the rational reevaluation. Techniques include relaxation methods, behavioral rehearsal, *in vivo* assignments, modeling, and bibliotherapy (Goldfried & Davison, 1976). As a coping skills approach, the

ultimate goal of SRR is to provide clients with the personal resources to cope independently with future life stresses.

SRR is one of several coping skills training approaches designed and tested by behavioral researchers. Some of these treatment packages have received more research attention than others; many are similar in terms of their underlying rationale and therapeutic strategies, and although SSR has conceptual integrity, it has not been investigated as extensively as other coping skills training programs. Nevertheless, it represents one of the first attempts to design an operational self-control treatment model to enhance treatment generalization through the use of training in the general coping skills that we believe are applicable in a variety of stress-provoking situations.

Suinn and Richardson's (1971) anxiety management training (AMT) program represents another effort at self-control, applied to the problem of anxiety. AMT, a nonspecific approach for anxiety control, was designed to provide clients with a short-term coping skills training program applicable to a wide range of problem areas. The premise of the model that underlies AMT is that anxiety is an acquired drive that has stimulus generalization properties. Autonomic responses associated with anxiety act as cues that facilitate and maintain avoidance behavior. Clients can be conditioned to respond to these discriminative cues with responses that eliminate the anxiety through the process of reciprocal inhibition. Thus, the goal of AMT is to teach clients to use relaxation and competency skills to control their feelings of anxiety.

AMT emphasizes the elimination of anxiety without specific attention to the particular anxiety-provoking stimulus. In the first stage of treatment, clients receive training in deep muscle relaxation. Following this, clients are instructed to visualize anxiety-arousing scenes, then practice their relaxation skills and/or imagine responding to stimuli in a competent fashion (Suinn, 1972). A variety of anxiety-arousing scenes that may be unrelated to clients' specific problems are incorporated into the treatment program.

Empirical data regarding AMT have emerged slowly. AMT has been shown to be superior to a defined control group in a randomized clinical trial (Suinn, 1995). Other data, however, are sparse. Given the lack of research, AMT has remained a less well-developed cognitive-behavioral approach than it might otherwise be.

The trend toward treatment models that promote a philosophy of self-control influenced Rehm's (1977) development of a self-control model of depression. The work of Rehm was guided, to a great extent, by the general model of self-regulation proposed by Kanfer (1970, 1971), which explains the persistence of certain behaviors in the absence of reinforcement in terms of a closed-loop feedback system of adaptive self-control. Kanfer suggested that three interconnected processes are involved in self-regulation: self-monitoring, self-evaluation, and self-reinforcement. Rehm adapted this model to conceptualize the symptoms of depression as the consequence of one or some combination of six deficits in self-control behavior. In the self-monitoring phase,

potential deficits include the selective monitoring of negative events and of immediate versus delayed consequences of behavior. Self-evaluative deficits comprise stringent self-evaluative criteria and inaccurate attributions of responsibility. In the self-reinforcement phase, deficits involving insufficient self-reward and excessive self-punishment may be observed in depressed individuals. According to Rehm (1981), the varied symptom profile in clinical depression is a function of different subsets of these deficits. The occurrence of a depressive episode is postulated to be a joint function of the degree of stress experienced and the self-control skills available for coping with the stressful situation.

Fuchs and Rehm (1977) developed the original treatment package based on Rehm's (1977) model of depression. "Self-control therapy" involves the sequential application of Kanfer's (1970, 1971) three self-regulatory processes as adapted by Rehm: "The assumption is that each may be conceptualized as a therapy module and that self-evaluation builds on self-monitoring, and that self-reinforcement builds on self-evaluation" (O'Hara & Rehm, 1983, p. 69). Each of the six self-control deficits is described over the course of treatment, with an emphasis on how a particular deficit is causally related to depression and what can be done to remedy the deficit. A variety of clinical strategies are employed to teach self-control skills to clients, including therapist-directed group discussion, overt and covert reinforcement, behavioral assignments, self-monitoring, and modeling.

The appeal of Rehm's (1977) self-control model lies in its integration of a range of cognitive and behavioral variables on which other models of depression focus exclusively. In addition, Rehm's framework provides a logical analysis of the manner in which each of the various symptoms of depression is associated with a particular aspect of self-control. From a broader perspective, this self-control model appears to have potential as a general model of psychopathology. Unfortunately, the ability of Rehm's theoretical approach to generalize to other clinical disorders has not been researched (Rehm & Rokke, 1988). However, efforts to develop a comprehensive self-control therapy would seem a worthwhile endeavor.

Stress Inoculation Training

Like many of his contemporaries in the 1970s, Meichenbaum developed an interest in the multicomponent coping skills approach as a potentially effective therapeutic strategy. Following a review of the stress literature, Meichenbaum, Turk, and Burstein (1975) incorporated several guidelines into the development of a coping skills treatment program. These included the need for flexibility, sensitivity to individual differences, the need to use provocative stimuli to encourage the use of the skills, and progressive exposure to threatening situations (Meichenbaum, 1977). Meichenbaum emphasized the systematic acquisition of coping skills, and highlighted the importance of learning to

cope with small, manageable amounts of stress as a means of facilitating treatment maintenance and generalization. Stress inoculation training, the behavioral analogue of Orne's (1965) immunization model, incorporated the guidelines that Meichenbaum and his associates gleaned from their review of the stress literature. The rationale underlying this approach assumes that clients who learn ways of coping with mild levels of stress are "inoculated" against uncontrollable levels of stress.

Meichenbaum and Cameron (1973) operationalized stress inoculation training in three stages. The first stage is educational and involves didactic training about the nature of stressful reactions. The second stage involves the presentation of a number of behavioral and cognitive coping skills, including relaxation exercises, coping self-statements, and self-reinforcement. In the final stage of application training, the client is exposed to a variety of stressors to rehearse his or her newly acquired coping skills.

Since its introduction in 1973, researchers have applied the stress inoculation training approach to a variety of problems, including anxiety, anger, and pain (Meichenbaum & Deffenbacher, 1988; Meichenbaum & Jaremko, 1983; Meichenbaum & Turk, 1976). These studies led to a detailed clinical guidebook (Meichenbaum, 1985) and a large body of studies (for reviews, see Meichenbaum, 1993, 2007). However, as Jaremko (1979) has observed, investigations into stress inoculation training have introduced a considerable degree of procedural variation. In this regard, Jaremko proposed a revised procedural model intended to add greater uniformity to the current research, as well as to increase the "usability" of this approach as a therapeutic procedure. As is the case with other multicomponent treatment programs, there remains a need for further empirical investigations to demonstrate the utility of the individual treatment components employed in stress inoculation training. Nonetheless, stress inoculation training has been widely employed as a therapeutic approach for the development of generalized coping skills (Meichenbaum, 2007).

Problem-Solving Therapy

In 1971, D'Zurilla and Goldfried published an article that proposed the application of problem-solving theory and research in behavior modification. With the goal of facilitating "generalized" behavior change, D'Zurilla and Goldfried conceptualized problem-solving therapy as a form of self-control training, emphasizing the importance of training the client to function as his or her own therapist. Its authors summarize the rationale underlying this approach as follows:

Ineffectiveness in coping with problematic situations, along with its personal and social consequences, is often a necessary and sufficient condition for an emotional or behavior disorder requiring psychological treatment; ... general effectiveness may be most efficiently facilitated by training individuals in general pro-

cedures or skills which would allow them to deal independently with the critical problematic situations that confront them in day-to-day living. (p. 109)

According to D'Zurilla and Goldfried (1971) "problem solving" refers to an overt or cognitive process that makes available a variety of effective response alternatives for coping with a problem situation and increases the likelihood of selecting the most effective response available. Drawing on a large body of research regarding the fundamental operations involved in effective problem solving, D'Zurilla and Goldfried identified five overlapping stages as representative of the problem-solving process: (1) general orientation or "set," (2) problem definition and formulation, (3) generation of alternatives, (4) decision making, and (5) verification. Training in problem solving involves teaching clients these basic skills and guiding their application in actual problem situations.

Spivack and Shure (1974) initiated the systematic investigation into the efficacy of a problem-solving treatment approach. The interpersonal cognitive problem-solving (ICPS) model proposed by these researchers involves essentially the same skills outlined by D'Zurilla and Goldfried (1971). According to Spivack, Platt, and Shure (1976), effective interpersonal problem solving involves the ability (1) to recognize the range of possible problem situations in the social environment; (2) to generate multiple, alternative solutions to interpersonal problems; (3) to plan a series of steps necessary to achieve a given goal; (4) to foresee the short-term and long-term consequences of a given alternative; and (5) to identify the motivational elements related to one's actions and those of others. ICPS training has been most commonly used with preschoolers and emotionally disturbed children. In general, ICPS training programs include discussion and structured activities involving hypothetical and actual interpersonal problem situations designed to teach problem-solving skills. Despite numerous methodological problems, the work of Spivack and his colleagues has resulted in the development of a growing interest in the potential of problem-solving therapies.

D'Zurilla and Nezu (1982) conducted an early review of the applications of D'Zurilla and Goldfried's (1971) original model of problem solving in adult clinical populations, and concluded that there is a relation between problem-solving skills and psychopathology.

The clinical intervention objectives recommended by D'Zurilla and Goldfried (1971) stimulated the development of a number of problem-solving therapies (Mahoney & Arnkoff, 1978). Problem-solving therapies have now been developed in several areas, including stress management and prevention (D'Zurilla, 1990), depression (Nezu, 1986), anger management (Crick & Dodge, 1994), and coping with cancer (Nezu, Nezu, Friedman, Faddis, & Houts, 1998). An excellent addition to the list of available clinical procedures was a general problem-solving approach (D'Zurilla & Nezu, 1999). It is likely that the flexibility and pragmatism of these approaches will continue to attract the attention of clinicians in search of comprehensive treatment programs.

Structural and Constructivist Psychotherapy

Guidano and Liotti (1983) introduced a structural approach to psychotherapy. Following an extensive study of numerous literatures, including behavior therapy, social learning theory, evolutionary epistemology, cognitive psychology, psychodynamic theory, and cognitive therapy, Guidano and Liotti concluded that to understand the full complexity of emotional disorder and subsequently develop an adequate model of psychotherapy, an appreciation of the development and the active role of an individual's knowledge of self and the world is critical: "Only a consideration of the structure within which the single elements of an individual's knowledge are placed allows us to understand how these elements rule and coordinate that individual's emotions and actions" (p. 34).

Guidano and Liotti's (1983) structural model of cognitive dysfunction borrowed heavily from Bowlby's (1977) attachment theory. They suggested that relationships with significant others (i.e., parents) determine the development of a child's self-image and provide continuous confirmation and reinforcement of this self-image. The definition of "self" is assumed to coordinate and integrate cognitive growth and emotional differentiation. If the self-concept is distorted or rigid, the individual is unable to assimilate life experiences effectively, which leads to maladjustment and emotional distress, the final product being cognitive dysfunction. Different abnormal patterns of attachment are assumed to correspond to different clinical syndromes.

Guidano and Liotti's original formulation was expanded in subsequent writings by Guidano (1987, 1991). These writings expanded the idea that problem behaviors are believed to be the consequence of an individual's cognitive organization (i.e., the causal theories, basic assumptions, and tacit rules of inference that determine thought content). The patient is perceived as struggling to maintain a particular dysfunctional cognitive organization in the face of a continuously challenging environment. Thus, the ultimate goal of psychotherapy is to modify these cognitive structures. For therapy to be effective, the therapist begins by identifying and modifying superficial cognitive structures that lead in turn to the identification and modification of deeper cognitive structures (i.e., the implicit causal theories held by the patient). This therapeutic strategy bears close resemblance to Beck's cognitive therapy (Beck et al., 1979) that begins with the assessment of the patient's automatic thoughts and subsequently leads to the specification of basic assumptions underlying these thoughts. A major difference between the authors of structural psychotherapy and Beck, however, is the former writers' emphasis on a postrationalist philosophy. Whereas Beck and related authors make a philosophical assumption that there is an external world that can be perceived accurately or distorted, Guidano's later writings in particular make it clear that he was increasingly less concerned with the "truth value" of cognitive structures than with the "validity value" or coherence of these structures:

Adaptation, therefore, is the ability to transform perturbation arising from interaction with the world into information meaningful to one's experiential order. Maintaining an adaptive adequacy essentially means reserving one's sense of self by continuously transforming the perceived world rather than merely corresponding to it. This explains why the notion of the *viability* of knowing processes has become much more important in recent evolutionary epistemology than that of their *validity*. (Guidano, 1991, p. 9, emphasis in original)

In discussing psychotherapy as a strategic process, structural therapists refer to the analogy between the empirical problem-solving approach of the scientist and that of the patient: "Therapists should enable patients to disengage themselves from certain engrained beliefs and judgments, and to consider them as hypotheses and theories, subject to disproof, confirmation, and logical challenge" (Guidano & Liotti, 1983, p. 144). This analogy is similar to that drawn by Mahoney (1977) in his personal science approach. A variety of behavioral experiments and cognitive techniques comprise the therapeutic armory from which the therapist selects a range of suitable tactics for a particular patient. They include techniques such as imaginal flooding, systematic desensitization, assertiveness training, coping skills training, problem-solving procedures, and rational restructuring. The final stage of the therapeutic process is conceptualized in terms of a "personal revolution" (Mahoney, 1980; Guidano, 1991) during which the patient, having rejected his or her old view of self and the world, is in a state of transformation and is establishing a new, more adaptive belief system.

Those who are familiar with the work of Beck et al. (1979), Ellis (1962), Mahoney (1977), and other advocates of the cognitive-behavioral perspective will recognize the many parallels between their writings and the structural approach to therapy. The distinction between rational and postrational approaches, however, is important and has been further amplified in the work of individuals who refer to their work as constructivist psychotherapy (Mahoney, 1991; 1995; Neimeyer, 1993, 1995; Neimeyer & Mahoney, 1995). Constructivist therapy takes the view of the individual as an imperfect personal scientist, who uses cognitive constructs to make sense out of experiences and to order choices in the world. From this perspective, a key feature of treatment involves identifying preferences in behavior, and understanding how meaning is attached to experience. There is less focus on the *content* of what is being thought about (e.g., as opposed to Beck's [1976] work, in which a typology of cognitions is associated with different emotional states), and more focus on the *process* of making meaning and connections among experiences. Consequently, therapy is less involved with corrective exercises about what is being thought, and more about facilitative exercises that emphasize the process of thinking and the generation of meaning.

Constructivist therapy has a close affinity to the philosophical schools of hermeneutics, and narrative and discourse approaches to psychology. Nonetheless, there are more or less "radical" approaches within constructivism (see

Neimeyer & Mahoney, 1995). At the extreme perspective in constructivist therapy, which has been referred to as discursive critique or "radical constructivism" (Efran & Fauber, 1995), the epistemological position that reality exists *only* in the mind of the individual, and that its only criterion for mental health is the coherence of that mind-set. Individuals are viewed as contextual, and as temporally, culturally, sexually, and otherwise positioned with respect to other persons. As such, predetermined concepts of health and illness, such as the diagnostic nomenclature traditionally associated with mental disorders, lose their meaning, and treatment is no longer a process of helping people to recover from their diagnosed disorders. At this extreme, the relationship between constructivist therapies and other CBTs begins to break down. Some have even questioned the extent to which constructivist therapies are conceptually compatible with CBTs: "We suspect that the full integration of cognitive and constructivist models advocated by some authors . . . will encounter conceptual obstacles" (Neimeyer & Raskin, 2001, p. 421). Other authors (e.g., Held, 1995) who have critiqued the movement toward constructivist schools of thought in psychotherapy have suggested that therapies need to turn "back to reality."

Clearly, the final chapter of the constructivist approaches to psychotherapy has yet to be written. It is not lost upon us, however, that many former advocates of traditional cognitive and CBTs have later advocated, in whole or in part, the use of treatments that draw on constructivist principles (Mahoney, 1991; Meichenbaum, 1994; Young, 1994). The extent to which these therapies will be considered a part of the cognitive-behavioral movement, or will move off into antithetical and alternative approaches to therapy, remains to be seen.

"Third-Wave" Cognitive-Behavioral Therapy

A recent trend within the field of CBT has been that of the "third wave." This group of therapies is most often associated with acceptance and commitment therapy (ACT; Hayes & Strosahl, 2004). ACT and related models focus not so much on the accuracy of perception as on the functional utility of different ways to think and behave. As in the structural psychotherapies, the emphasis is on the process of interacting with the world rather than on the content of what is being thought about or done. That said, the originator of ACT, Steven Hayes would argue that this approach is radically behavioral, in that it emphasizes taking action to maximize mental health and adaption in the world (Hayes, 2004a). Thus, there is a focus on both thought and action, as is true for the other CBTs.

One of the ways in which ACT differs from many of the other CBTs is that the cognitive focus is not only on specific situations, or the appraisal and meaning attached to different experiences, but also the process of appraisal itself. There is thus a focus on the "metacognitive" processes, such as worry about worry, or distress about depression. Associated with this focus on meta-

cognition is a concomitant focus on “mindfulness,” being aware of the process of appraisal for events, emotions, and other thoughts (Hayes, 2004b; Roemer & Orsillo, 2003).

Another aspect of the model that underlies some of the third-wave models is that the process of change can take place in different ways. Thus, whereas problem-solving, self-control and cognitive restructuring approaches to CBT emphasize the need to assess cognition and behavior, and to correct these phenomena when they are associated with emotional distress or problems, the third-wave approach suggests that sometimes the “change” that is needed is to recognize that the metacognitive processes are at fault; thus, there is no need for direct cognitive or behavioral change; rather, the focus shifts to acceptance of the current distress or situation, and a change in the metacognition from something like “This experience is intolerable; I must do something about this problem” to “This experience is a part of life; I can watch this experience, but I do not have to try to change it directly.” This latter way of thinking about experience, it is argued, reduces the pressure on patients to try to solve chronic or repetitive problems, and frees them to make purposeful and creative choices in their lives. The ACT therapist explicitly reinforces the processes of acceptance of difficult situations, even while making a commitment to do what the patient wants to fulfill his or her life. A common question is “What would you do if you were not _____?”, followed by the therapist’s assistance to help the patient do just that. It is further argued that the positive and adaptive behavior that is encouraged will be positively reinforced by the patient’s experience, and that the need to change “the problem” is eliminated through this process.

As described by Hayes (2004a) and others (e.g., Fruzzetti & Murphy, Chapter 11, this volume), the third-wave therapies are a part of the cognitive-behavioral tradition due to their emphases on cognitive appraisal and behavioral change. It is clear, however, that the approach these treatments take to symptoms, distress, and problems is radically different than that of other CBTs, and so their relationship to “mainstream” CBT remains to be discerned. Furthermore, the evidence base related to outcome for these treatments, while encouraging, is relatively sparse. It will be interesting to see whether the evidence substantiates the interest in this approach (see Fruzzetti & Murphy, Chapter 11, this volume; Öst, 2008).

SIMILARITY AND DIVERSITY AMONG THE COGNITIVE-BEHAVIORAL THERAPIES

As the preceding chronology of cognitive-behavioral models of psychopathology and therapy suggest, there are a large number of cognitive-behavioral approaches. The bases of all these approaches share the three fundamental assumptions we discussed earlier in this chapter related to the mediational position. Briefly stated, the “mediational position” is that cognitive activity

mediates the responses the individual has to his or her environment, and to some extent dictates the degree of adjustment or maladjustment of the individual. As a direct result of the mediational assumption, the CBTs share a belief that therapeutic change can be effected through an alteration of idiosyncratic, dysfunctional modes of thinking. Additionally, due to the behavioral heritage, many of the cognitive-behavioral methods draw upon behavioral principles and techniques in the conduct of therapy, and many of the cognitive-behavioral models rely to some extent upon behavioral assessment of change to document therapeutic progress.

Beyond these central assumptions regarding the mediated nature of therapeutic change, a number of commonalities occur between limited sets of CBTs. Kendall and Kriss (1983), for example, have suggested that five dimensions can be employed to characterize CBTs: the theoretical orientation of the therapeutic approach and the theoretical target of change, various aspects of the client-therapist relationship, the cognitive target for change, the type of evidence used for cognitive assessment, and the degree of emphasis on self-control on the part of the client. The scheme that they have proposed is a useful one for the identification of both similarities and differences between the various CBTs. Notwithstanding the coverage of the topic by Kendall and Kriss, it also appears that other commonalities between the approaches that are not theoretically central can be identified. For example, one commonality among the various CBTs is their time-limited nature. In clear distinction from longer-term psychoanalytic therapy, CBTs attempt to effect change rapidly, and often with specific, preset lengths of therapeutic contact. Many of the treatment manuals written for CBTs recommend treatment in the range of 12-16 sessions (Chambless et al., 1996).

Related to the time-limited nature of CBT is the fact almost all applications of this general therapeutic approach are to specific problems. While this commonality is in no way a criticism of the various CBTs, and although there has also been some recent interest in transdiagnostic approaches to psychopathology and treatment (Allen, McHugh, & Barlow, 2008; Dozois, Seeds, & Collins, in press), the problem-focused nature of cognitive-behavioral interventions does in part explain the time limitations that are commonly set in these approaches to therapy. Indeed, the use of these therapies for specific disorders and problems is a heritage from behavior therapy's emphasis on the collection of outcome data, and the focus on the remediation of specific, pre-defined problems. Thus, rather than being a limitation of CBTs, the application of these therapies to specific problems serves as a further demonstration of the continuing desire for the complete documentation of therapeutic effects. Also, the focus on specific problems allows for the measurement of the therapeutic limits of these various approaches, and the potential to select the most efficacious therapy for a given patient's problem.

A third commonality among cognitive-behavioral approaches is the belief that clients are, in a sense, the architects of their own misfortune, and that they therefore have control over their thoughts and actions. This assumption

is clearly reflected in the type of patient problems that have been identified for cognitive-behavioral interventions. The most frequently cited appropriate problems include the "neurotic" conditions (e.g., anxiety, depression, and anger problems), self-control problems (e.g., overeating, behavioral management difficulties, child dysfunction), and general problem-solving abilities. These types of problems make the assumption of patient control tenable. Even in general approaches to treatment, such as the constructivist models, the emphasis on the individual as the active agent in his or her own life is a predominant focus.

Related to the assumption of patient control is another element shared by a number of CBTs. This commonality has to do with the fact that many CBTs are by nature either explicitly or implicitly educative. Many of the therapeutic approaches include the therapist teaching the therapeutic model to the patient, and many also involve the explication of the rationale for any interventions that are undertaken (Dobson & Dobson, 2009). This type of educative interaction between the therapist and patient is one facet that the various CBTs share, and that, again, sets them apart from other schools of therapy. Compare traditional psychoanalytic therapy, in which the therapist offers interpretations to the client (Blanck, 1976; Kohut, 1971), or strategic family therapy, in which the therapist may even dictate that the client do the opposite of what the therapeutic goal is in a "paradoxical" intervention (Minuchin & Fishman, 1981).

Directly related to the educative process often seen in CBTs is the implicit goal set by many cognitive-behavioral therapists: that the patient will not only overcome the referral problem during the course of therapy but also learn something about the process of therapy. In the event that the patient suffers a recurrence of the problem, he or she will therefore have some therapeutic skills to deal with the problem themselves. In some of the CBTs the desire to have patients learn about the process of therapy is taken to its logical conclusion, and time in therapy is spent reviewing the therapeutic concepts and skills that patients have learned over the course of therapy, so that they may later employ them in a maintenance or preventive manner (Beck et al., 1979; Dobson & Dobson, 2009).

It may appear that CBTs have so many commonalities that distinctions between them are more illusory than real. In fact, however, Kendall and Kriss (1983) have provided an excellent framework for the identification of differences between the specific approaches. Furthermore, even the brief overview of the various CBTs provided in this chapter demonstrates a very real diversity of models and techniques developed by cognitive-behavioral therapists. It is thus no more appropriate to state that there is really a single cognitive-behavioral approach than to state that there is one monolithic psychoanalytic therapy. As the chapters in this volume demonstrate, many different facets of the cognition-behavioral processes may be attended to, identified, and altered within the overarching definition of the cognitive-behavioral approach. The diversity of the CBTs, while undeniably present, does argue for further defi-

nitional and technical discussion between the proponents of the various approaches. There are at least two areas where further theory and research are required to further differentiate the different therapies labeled as "cognitive-behavioral" the targets of therapeutic change, and the modality specificity of intervention techniques.

Although CBTs share the mediational approach and therefore all target "cognitions" for change the variety of different specific labels and descriptions of cognitions seen in the cognitive-behavioral literature is truly overwhelming. A partial list of the various terms that have applied to cognitive constructs and processes includes "cognitions," "thoughts," "beliefs," "attitudes," "ideas," "assumptions," "attributions," "rules for living," "self-statements," "cognitive distortions," "expectancies," "notions," "stream of consciousness," "script," "narratives," "ideation," "private meanings," "illusions," "self-efficacy predictions," "cognitive prototypes," and "schemas." Adding further to the confusion is that a number of these constructs have been developed in a purely clinical context (e.g., self-efficacy predictions) and therefore have relatively clear definitions, but many other terms are employed in other areas of psychology. Where terms are shared across disciplines of psychology the usage may not be identical, and semantic confusion may be the end result. The use of the "schema" notion, for example, is fraught with potential difficulty, since the concept was first developed within cognitive psychology (Neisser, 1967) and later applied to social cognition (Markus, 1977), then also applied to clinical problems (Clark et al., 1999; Dobson, 1986; Dozois & Dobson, 2001; Goldfried & Robins, 1983; Ingram et al., 1998; Turk & Speers, 1983). Even a quick reading of the various applications of the term reveals that while the essence of the "schema" concept is intact throughout its various uses, there are several idiosyncratic applications. Thus, while the elaboration of various specific cognitive processes and constructs is useful, it is important for theorists to define constructs precisely, and for others in the field to subscribe to these definitions. This increase in precision would help to clarify the terrain of cognitive-behavioral theory and may also assist the efforts of researchers whose interest is cognitive assessment (Meichenbaum & Cameron, 1981; Merluzzi et al., 1981). In this latter regard, it is clear that cognitive assessment is severely hampered by a lack of clear definitions of cognitive phenomena (e.g., Genest & Turk, 1981; Glass & Merluzzi, 1981; Shaw & Dobson, 1981), and it is equally clear that further efforts in the area of cognitive assessment are required to fully document the nature and process of change during CBT (Clark, 1997; Segal & Shaw, 1988; Sutton-Simon, 1981).

A second area where the further delineation of different approaches to CBT may be possible is with respect to modality-specific techniques. Cognitive-behavioral therapists have been extremely innovative in the development of techniques, and have thereby added to the clinical armamentarium in numerous ways. In doing so, however, it is not always clear what manner of technique is being developed (i.e., whether it is a generic and nonspecific technique or a modality-specific method). While it may be reasonably argued

that such distinctions are not important at a practical level, from a theoretical perspective it is important to know what limits different theorists place upon their models of therapy. Process research that actually records and analyzes therapeutic interventions espoused by various therapeutic models, while often suggested (DeRubeis, Hollon, Evans, & Bemis, 1982; Mahoney & Arnkoff, 1978; Prochaska, 2000), has not yet become well advanced. This type of research has the potential of adding greatly to our knowledge of the extent to which different descriptions of therapies translate themselves in different clinical practice.

Finally, another area of research that may profitably be expanded is that which investigates applications of various modes of CBT to different presenting problems (Harwood, Beutler, & Chervat, Chapter 4, this volume). By contrasting different approaches in the context of different problems, it may become possible to suggest preferred treatment methods for specific patient problems. This matching of problems to therapies would not only represent a practical advantage over current clinical practice, but it would also enable a better understanding of the mechanisms of change within each type of intervention, and within different types of patient problems.

Clearly, the field of CBT has developed dramatically since its inception in the 1960s and 1970s. There are now a number of identifiable models of a cognitive-behavioral nature, and the demonstrated efficacy of these methods is generally strong (Chambless et al., 1996; Dobson et al., 2000; Epp & Dobson, Chapter 2, this volume). The continuing emphasis on the outcome research has enabled cognitive-behavioral theorists and therapists to make steady progress in research and practice, and will certainly lead to continued improvements in the future. Some of the most pressing areas that require further conceptualization and research include the definition of cognitive phenomena (both at construct and process levels), and the procedural overlap among the variety of CBTs that currently exist. Another emerging area for the field is that of dissemination. The next decade is likely to see considerable advances in the field.

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