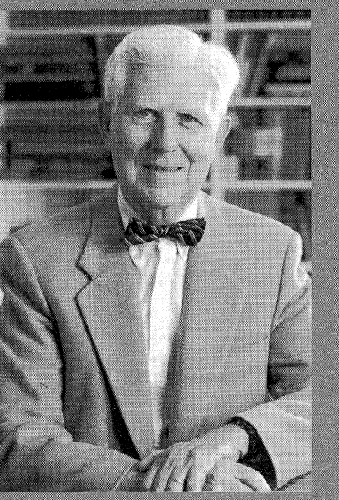

Courtesy of Aaron T. Beck, PhD, University of Pennsylvania

Aaron T. Beck

8 COGNITIVE THERAPY

Aaron T. Beck and Marjorie E. Weishaar

OVERVIEW

Cognitive therapy is based on a theory of personality that maintains that people respond to life events through a combination of cognitive, affective, motivational, and behavioral responses. These responses are based in human evolution and individual learning history. The cognitive system deals with the way individuals perceive, interpret, and assign meanings to events. It interacts with the other affective, motivational, and physiological systems to process information from the physical and social environments and to respond accordingly. Sometimes responses are maladaptive because of misperceptions, misinterpretations, or dysfunctional, idiosyncratic interpretations of situations.

Cognitive therapy aims to adjust information processing and initiate positive change in all systems by acting through the cognitive system. In a collaborative process, the therapist and patient examine the patient's beliefs about himself or herself, other people, and the world. The patient's maladaptive conclusions are treated as testable hypotheses. Behavioral experiments and verbal procedures are used to examine alternative interpretations and to generate contradictory evidence that supports more adaptive beliefs and leads to therapeutic change.

Basic Concepts

Cognitive therapy can be thought of as a theory, a system of strategies, and a series of techniques. The theory is based on the idea that the processing of information is crucial

for the survival of any organism. If we did not have a functional apparatus for taking in relevant information from the environment, synthesizing it, and formulating a plan of action on the basis of this synthesis, we would soon die or be killed.

Each system involved in survival—cognitive, behavioral, affective, and motivational—is composed of structures known as *schemas.* Cognitive schemas contain people's perceptions of themselves and others and of their goals and expectations, memories, fantasies, and previous learning. These greatly influence, if not control, the processing of information.

In various psychopathological conditions such as anxiety disorders, depressive disorders, mania, paranoid states, obsessive–compulsive neuroses, and others, a specific bias affects how the person incorporates new information. Thus, a depressed person has a negative bias, including a negative view of self, world, and future. In anxiety, there is a systematic bias or *cognitive shift* toward selectively interpreting themes of danger. In paranoid conditions, the dominant shift is toward indiscriminate attributions of abuse or interference, and in mania the shift is toward exaggerated interpretations of personal gain.

Contributing to these shifts are certain specific attitudes or core beliefs that predispose people under the influence of certain life situations to interpret their experiences in a biased way. These are known as *cognitive vulnerabilities.* For example, a person who has the belief that any minor loss represents a major deprivation may react catastrophically to even the smallest loss. A person who feels vulnerable to sudden death may overinterpret normal body sensations as signs of impending death and have a panic attack.

Previously, cognitive theory emphasized a linear relationship between the activation of cognitive schemas and changes in the other systems; that is, cognitions (beliefs and assumptions) triggered affect, motivation, and behavior. Current cognitive theory, benefiting from recent developments in clinical, evolutionary, and cognitive psychology, views all systems as acting together as a mode. *Modes* are networks of cognitive, affective, motivational, and behavioral schemas that compose personality and interpret ongoing situations. Some modes, such as the anxiety mode, are *primal,* meaning they are universal and tied to survival. Other modes, such as conversing or studying, are minor and under conscious control. Although primal modes are thought to have been adaptive in an evolutionary sense, individuals may find them maladaptive in everyday life when they are triggered by misperceptions or overreactions. Even personality disorders may be viewed as exaggerated versions of formerly adaptive strategies. In personality disorders, primal modes are operational almost continuously.

Primal modes include primal thinking, which is rigid, absolute, automatic, and biased. Nevertheless, conscious intentions can override primal thinking and make it more flexible. Automatic and reflexive responses can be replaced by deliberate thinking, conscious goals, problem solving, and long-term planning. In cognitive therapy, a thorough understanding of the mode and all its integral systems is part of the case conceptualization. This approach to therapy teaches patients to use conscious control to recognize and override maladaptive responses.

Strategies

The overall strategies of cognitive therapy involve primarily a collaborative enterprise between the patient and the therapist to explore dysfunctional interpretations and try to modify them. This *collaborative empiricism* views the patient as a practical scientist who lives by interpreting stimuli but who has been temporarily thwarted by his or her own information-gathering and integrating apparatus (cf. Kelly, 1955).

The second strategy, *guided discovery,* is directed toward discovering what threads run through the patient's present misperceptions and beliefs and linking them to analogous experiences in the past. Thus, the therapist and patient collaboratively weave a tapestry that tells the story of the development of the patient's disorder.

in an Armenian cooking class where the teacher, who did not speak English well, taught mainly by demonstration. But as hard as he tried, he could never quite make his dishes taste as good as hers. He decided to observe his teacher more carefully, and in one lesson noted that when she finished her preparation she handed her dish to her assistant, who took it into the kitchen to place into the oven. He observed the assistant and was astounded, and edified, to note that that before throwing the dish in the oven, she threw in handfuls of various spices that struck her fancy. These "throw-ins" he likened to the interactions that therapists have with their patients, which, because they are not conceptualized within their theoretical "recipe," go unnoticed. Perhaps, however, these off-the-record extras are the critical ingredients. And perhaps these throw-ins refer to the shared issues of human existence—in short, to existential psychotherapy.

Basic Concepts

Existentialists regard people as meaning-making beings who are both subjects of experience and objects of self-reflection. We are mortal creatures who, because we are self-aware, know that we are mortal. Yet it is only in reflecting on our mortality that we can learn how to live. People ask themselves questions concerning their being: Who am I? Is life worth living? Does it have a meaning? How can I realize my humanity? Existentialists hold that ultimately, each of us must come to terms with these questions and each of us is responsible for who we are and what we become.

Because existentialists are sensitive to the ways in which theories may dehumanize people and render them as objects, authentic experience takes precedence over artificial explanations. When experiences are molded into some preexisting theoretical model, they lose their authenticity and become disconnected from the individual who experienced them. Existential psychotherapists, then, focus on the subjectivity of experience rather than "objective" diagnostic categories.

The Ultimate Concerns

Issues such as "choice," "responsibility," "mortality," or "purpose in life" are ones that all therapists suspect are central concerns of patients. More and more, patients come to therapy with vague complaints about loss of purpose or meaning. But it is often more comfortable for the therapist to reframe these concerns into symptoms and to talk with patients about medication or to prescribe manualized exercises than to engage genuinely with them as they search for meaning in life. Many diagnosable presenting "symptoms" may mask existential crises.

The existential dilemma ensues from the existential reality that although we crave to persist in our being, we are finite creatures; that we are thrown alone into existence without a predestined life structure and destiny; that each of us must decide how to live as fully, happily, ethically, and meaningfully as possible. Yalom defines four categories of "ultimate concerns" that encompass these fundamental challenges of the human condition. These are freedom, isolation, meaning, and death.

Freedom

The term *freedom* in the existential sense does not refer to political liberty or to the greater range of possibilities in life that come from increasing one's psychological awareness. Instead, it refers to the idea that we all live in a universe without inherent design in which we are the authors of our own lives. Life is groundless, and we alone are responsible for our choices. This existential freedom carries with it terrifying responsibility and is always connected to dread. It is the kind of freedom people fear so much that they enlist dictators,

masters, and gods to remove the burden from them. Erich Fromm (1941) described "the lust for submission" that accompanies the effort to escape from that freedom.

Ultimately, we are responsible for what we experience in and of the world. Responsibility is inextricably linked to freedom because we are responsible for the sense we make of our world and for all of our actions and our failures to act. An appreciation of responsibility in this sense is very unsettling. If we are, in Sartre's terms, "the uncontested author" of everything that we have experienced, then our most cherished ideas, our most noble truths, the very bedrock of our convictions are all undermined by the awareness that everything in the universe is contingent. We bear the burden of *knowing* that we are responsible for all of our experience.

The complement to responsibility is our *will.* While this concept has waned lately in the social sciences, replaced by terms such as *motivation*, people are still ultimately responsible for the decisions they make. To claim that a person's behavior is explained (i.e., caused) by a certain motivation is to deny that person's responsibility for his or her actions. To abrogate such responsibility is to live inauthentically, in what Sartre has called *bad faith*. Because of the dread of our ultimate freedom, people erect a plethora of defenses, some of which give rise to psychopathology. The work of therapy is very much about the (re)assumption of responsibility for one's experience. Indeed, the therapeutic enterprise can be conceived of as one in which the client actively increases and embraces his or her freedom: freedom from destructive habits, from self-imposed paralysis of the will, or from self-limiting beliefs, just to name a few.

Isolation

Individuals may be isolated from others (*interpersonal isolation*) or from parts of themselves (*intrapersonal isolation*). But there is a more basic form of isolation, *existential isolation*, that pertains to our aloneness in the universe, which, though assuaged by connections to other human beings, yet remains. We enter and leave the world alone and while we are alive, we must always manage the tension between our wish for contact with others and our knowledge of our aloneness. Erich Fromm believed that isolation is the primary source of anxiety.

Aloneness is different from loneliness, which is also a ubiquitous issue in therapy. Loneliness results from social, geographic, and cultural factors that support the breakdown of intimacy. Or people may lack the social skills or have personality styles inimical to intimacy. But *existential* isolation cuts even deeper; it is a more basic isolation that is riveted to existence and refers *to an unbridgeable gulf between oneself and others.* It is most commonly experienced in the recognition that one's death is always solitary, a common theme among poets and writers. But many people are in touch with their dread of existential isolation when they recognize the terror of feeling that there may be moments when no one in the world is thinking of them. Or walking alone on a deserted beach in another country, one may be struck with a dreadful thought: "Right at this moment, no one knows where I am." If one is not being thought about by someone else, is one still real?

In working with people who have lost a spouse, Yalom was struck not only by their loneliness but also by the accompanying despair at living an unobserved life—of having no one who knows what time they come home, go to bed, or wake up. Many individuals continue a highly unsatisfying relationship precisely because they crave a life witness, a buffer against the experience of existential isolation.

The professional literature regarding the therapist–patient relationship abounds with discussions of encounter, genuineness, accurate empathy, positive unconditional regard, and "I–Thou" relating. A deep sense of connection does not "solve" the problem of existential isolation, but it provides solace. Yalom recalls one of the members of his cancer group who said, "I know we are each ships passing in the dark and each of us is a

Both these strategies are implemented using *Socratic dialogue*, a style of questioning that helps uncover the patient's views and examines his or her adaptive and maladaptive features.

The therapy attempts to improve reality testing through continuous evaluation of personal conclusions. The immediate goal is to shift the information-processing apparatus to a more "neutral" condition so that events will be evaluated in a more balanced way.

There are three major approaches to treating dysfunctional modes: (1) deactivating them, (2) modifying their content and structure, and (3) constructing more adaptive modes to neutralize them. In therapy, the first and third approaches are often accomplished simultaneously, for the particular belief may be demonstrated to be dysfunctional and a new belief to be more accurate or adaptive. The deactivation of a dysfunctional mode can occur through distraction or reassurance, but lasting change is unlikely unless a person's underlying, core beliefs are modified.

Techniques

Techniques used in cognitive therapy are directed primarily at correcting errors and biases in information processing and at modifying the core beliefs that promote faulty conclusions. The purely cognitive techniques focus on identifying and testing the patient's beliefs, exploring their origins and basis, correcting them if they fail an empirical or logical test, or problem solving. For example, some beliefs are tied to one's culture, gender role, religion, or socioeconomic status. Therapy may be directed toward problem solving with an understanding of how these beliefs influence the patient.

Core beliefs are explored in a similar manner and are tested for their accuracy and adaptiveness. The patient who discovers that these beliefs are not accurate is encouraged to try out a different set of beliefs to determine whether the new beliefs are more accurate and functional.

Cognitive therapy also uses behavioral techniques such as skills training (e.g., relaxation, assertiveness training, social skills training), role playing, behavioral rehearsal, and exposure therapy.

Other Systems

Procedures used in cognitive therapy, such as identifying common themes in a patient's emotional reactions, narratives, and imagery, are similar to the *psychoanalytic method.* However, in cognitive therapy the common thread is a meaning readily accessible to conscious interpretation, whereas in psychoanalysis the meaning is unconscious (or repressed) and must be inferred.

Both psychodynamic psychotherapy and cognitive therapy assume that behavior can be influenced by beliefs of which one is not immediately aware. However, cognitive therapy maintains that the thoughts contributing to a patient's distress are not deeply buried in the unconscious. Moreover, the cognitive therapist does not regard the patient's self-report as a screen for more deeply concealed ideas. Cognitive therapy focuses on the linkages among symptoms, conscious beliefs, and current experiences. Psychoanalytic approaches are oriented toward repressed childhood memories and motivational constructs, such as libidinal needs and infantile sexuality.

Cognitive therapy is highly structured and usually short term, typically lasting from 12 to 16 weeks. The therapist is actively engaged in collaboration with the patient. Psychoanalytic therapy is long term and relatively unstructured. The analyst is largely passive. Cognitive therapy attempts to shift biased information processing through the application of logic to dysfunctional ideas and the use of behavioral experiments to test dysfunctional beliefs. Psychoanalysts rely on free association

and in-depth interpretations to penetrate the encapsulated unconscious residue of unresolved childhood conflicts.

Cognitive therapy and rational emotive behavior therapy (REBT) share an emphasis on the primary importance of cognition in psychological dysfunction, and both see the task of therapy as changing maladaptive assumptions and the stance of the therapist as active and directive. There are some differences, nevertheless, between these two approaches.

Cognitive therapy, using an information-processing model, is directed toward modifying the "cognitive shift" by addressing biased selection of information and distorted interpretations. The shift to normal cognitive processing is accomplished by testing the erroneous inferences that result from biased processing. Continual disconfirmation of cognitive errors, working as a feedback system, gradually restores more adaptive functioning. However, the dysfunctional beliefs that contributed to the unbalanced cognitive processing in the first place also require further testing and invalidation.

REBT theory states that a distressed individual has irrational beliefs that contribute to irrational thoughts and that when these are modified through confrontation, they will disappear and the disorder will clear up. The cognitive therapist, operating from an inductive model, helps the patient translate interpretations and beliefs into hypotheses, which are then subjected to empirical testing. An REBT therapist is more inclined to use a deductive model to point out irrational beliefs. The cognitive therapist eschews the word *irrational* in favor of *dysfunctional* because problematic beliefs are nonadaptive rather than irrational. They contribute to psychological disorders because they interfere with normal cognitive processing, not because they are irrational.

A profound difference between these two approaches is that cognitive therapy maintains that each disorder has its own typical cognitive content or *cognitive specificity.* The *cognitive profiles* of depression, anxiety, and panic disorder are significantly different and require substantially different techniques. REBT, on the other hand, does not conceptualize disorders as having cognitive themes but, rather, focuses on the "musts," "shoulds," and other imperatives presumed to underlie all disorders.

The cognitive therapy model emphasizes the impact of cognitive deficits in psychopathology. Some clients experience problems because their cognitive deficits do not let them foresee delayed or long-range negative consequences. Others have trouble with concentration, directed thinking, or recall. These difficulties occur in severe anxiety, depression, and panic attacks. Cognitive deficits produce perceptual errors as well as faulty interpretations. Further, inadequate cognitive processing may interfere with the client's use of coping abilities or techniques and with interpersonal problem solving, as occurs in suicidal people.

Finally, REBT views patients' beliefs as philosophically incongruent with reality. Meichenbaum (1977) criticizes this perspective, stating that nonpatients have irrational beliefs as well but are able to cope with them. Cognitive therapy teaches patients to *self-correct* faulty cognitive processing and to bolster assumptions that allow them to cope. Thus, REBT views the problem as philosophical; cognitive therapy views it as functional.

Cognitive therapy shares many similarities with some forms of *behavior therapy* but is quite different from others. Within behavior therapy are numerous approaches that vary in their emphasis on cognitive processes. At one end of the behavioral spectrum is applied behavioral analysis, an approach that ignores "internal events," such as interpretations and inferences, as much as possible. As one moves in the other direction, cognitive mediating processes are given increasing attention until one arrives at a variety of cognitive–behavioral approaches. At this point, the distinction between the purely cognitive and the distinctly behavioral becomes unclear.

Cognitive therapy and behavior therapy share some features: They are empirical, present centered, and problem oriented, and they require explicit identification of

problems and the situations in which they occur, as well as of the consequences resulting from them. In contrast to radical behaviorism, cognitive therapy applies the same kind of functional analysis to internal experiences—to thoughts, attitudes, and images. Cognitions, like behaviors, can be modified by active collaboration through behavioral experiments that foster new learning. Also, in contrast to behavioral approaches based on simple conditioning paradigms, cognitive therapy sees individuals as active participants in their environments, judging and evaluating stimuli, interpreting events and sensations, and judging their own responses.

Studies of some behavioral techniques, such as exposure methods for the treatment of phobias, demonstrate that cognitive and behavioral changes work together. For example, in agoraphobia, cognitive improvement has been concomitant with behavioral improvement (Williams & Rappoport, 1983). Simple exposure to agoraphobic situations while verbalizing negative automatic thoughts may lead to improvement on cognitive measures (Gournay, 1986). Bandura (1977) has demonstrated that one of the most effective ways to change cognitions is to change performance. In real-life exposure, patients confront not only the threatening situations but also their personal expectations of danger and their assumed inability to cope with their reactions. Because the experience itself is processed cognitively, exposure can be considered a cognitive procedure.

Cognitive therapy maintains that a comprehensive approach to the treatment of anxiety and other disorders includes targeting anxiety-provoking thoughts and images. Work with depressed patients (Beck, Rush, Shaw, & Emery, 1979) demonstrates that desired cognitive changes do not necessarily follow from changes in behavior. For this reason, it is vital to know the patient's expectations, interpretations, and reactions to events. Cognitive change must be demonstrated, not assumed.

HISTORY

Precursors

Cognitive therapy's theoretical underpinnings are derived from three main sources: (1) the phenomenological approach to psychology, (2) structural theory and depth psychology, and (3) cognitive psychology. The phenomenological approach posits that the individual's view of self and the personal world are central to behavior. This concept originated in Greek Stoic philosophy and can be seen in Immanuel Kant's (1798) emphasis on conscious subjective experience. This approach is also evident in the writings of Adler (1936), Alexander (1950), Horney (1950), and Sullivan (1953).

The second major influence was the structural theory and depth psychology of Kant and Freud, particularly Freud's concept of the hierarchical structuring of cognition into primary and secondary processes.

More recent developments in cognitive psychology also have had an impact. George Kelly (1955) is credited with being the first among contemporaries to describe the cognitive model through his use of "personal constructs" and his emphasis on the role of beliefs in behavior change. Cognitive theories of emotion, such as those of Magda Arnold (1960) and Richard Lazarus (1984), which give primacy to cognition in emotional and behavioral change, have also contributed to cognitive therapy.

Beginnings

Cognitive therapy began in the early 1960s as the result of Aaron Beck's research on depression (Beck, 1963, 1964, 1967). Trained in psychoanalysis, Beck attempted to validate Freud's theory of depression as having at its core "anger turned on the self."

To substantiate this formulation, Beck made clinical observations of depressed patients and investigated their treatment under traditional psychoanalysis. Rather than finding retroflected anger in their thoughts and dreams, Beck observed a negative bias in their cognitive processing. With continued clinical observations and experimental testing, Beck developed his theory of emotional disorders and a cognitive model of depression.

The work of Albert Ellis (1962) gave major impetus to the development of cognitive behavior therapies. Both Ellis and Beck believed that people can consciously adopt reason, and both viewed the patient's underlying assumptions as targets of intervention. Similarly, they both rejected their analytic training and replaced passive listening with active, direct dialogues with patients. Whereas Ellis confronted patients and persuaded them that the philosophies they lived by were unrealistic, Beck "turned the client into a colleague who researches verifiable reality" (Wessler, 1986, p. 5).

The work of a number of contemporary behaviorists influenced the development of cognitive therapy. Bandura's (1977) concepts of expectancy of reinforcement, self and outcome efficacies, the interaction between person and environment, modeling, and vicarious learning catalyzed a shift in behavior therapy toward the cognitive domain. Mahoney's (1974) early work on the cognitive control of behavior and his later theoretical contributions also influenced cognitive therapy. Along with cognitive therapy and rational emotive behavior therapy, Meichenbaum's (1977) cognitive–behavior modification is recognized as one of the three major self-control therapies (Mahoney & Arnkoff, 1978). Meichenbaum's combination of cognitive modification and skills training in a coping skills paradigm is particularly useful in treating anxiety, anger, and stress. The constructivist movement in psychology and the modern movement for psychotherapy integration have been recent influences shaping contemporary cognitive therapy.

Current Status

Research: Cognitive Model and Outcome Studies

Research has tested both the theoretical aspects of the cognitive model and the efficacy of cognitive therapy for a range of clinical disorders. In terms of the cognitive model of depression, negatively biased interpretations have been found in all forms of depression: unipolar and bipolar, reactive and endogenous (Haaga, Dyck, & Ernst, 1991). The cognitive triad, negatively biased cognitive processing of stimuli, and identifiable dysfunctional beliefs have also been found to operate in depression (Hollon, Kendall, & Lumry, 1986). The efficacy of cognitive therapy for depression has been demonstrated in numerous studies summarized by Clark, Beck and Alford (1999). Recently, Beck (2008) has traced the evolution of the cognitive model of depression from its basis in information processing to its incorporation of the effect of early traumatic experiences on the formation of dysfunctional beliefs and sensitivity to precipitating factors in depression. He is presently interested in how genetic, neurochemical, and cognitive factors interact in depression.

For the anxiety disorders, a danger-related bias has been demonstrated in all anxiety diagnoses, including the presumed danger of physical sensations in panic attacks, the distorted perception of evaluation in social anxiety, and the negative appraisals of self and the world in PTSD. Moreover, the cognitive specificity hypothesis, which states that there is a distinct cognitive profile for each psychiatric disorder, has been supported for a range of disorders (Beck, 2005).

Controlled studies have demonstrated the efficacy of cognitive therapy in the treatment of panic disorder (Beck, Sokol, Clark, Berchick, & Wright, 1992; Clark, 1996; Clark, Salkovskis, Hackmann, Middleton, & Gelder, 1992), social phobia (Clark, 1997; Eng, Roth, & Heimberg, 2001), generalized anxiety disorder (Butler, Fennell, Robson,

& Gelder, 1991), substance abuse (Woody et al., 1983), eating disorders (Bowers, 2001; Fairburn, Jones, Peveler, Hope, Carr, Solomon, et al., 1991; Garner et al., 1993; Pike, Walsh, Vitousek, Wilson, & Bauer, 2003; Vitousek, 1996), marital problems (Baucom, Sayers, & Sher, 1990), obsessive–compulsive disorder (Freeston et al., 1997), post-traumatic stress disorder (Ehlers & Clark, 2000; Gillespie, Duffy, Hackmann, & Clark, 2002; Resick, 2001), and schizophrenia (Turkington, Dudley, Warman, & Beck, 2004; Zimmerman, Favrod, Trieu, & Pomini, 2005).

In addition, cognitive therapy appears to lead to lower rates of relapse than other treatments for anxiety and depression (Clark, 1996; Eng, Roth, & Heimberg, 2001; Hollon, DeRubeis, & Evans, 1996; Hollon et al., 2005; Hollon, Stewart, & Strunk, 2006; Strunk & DeRubeis, 2001).

Suicide Research

Beck has developed key theoretical concepts regarding suicide and its prevention. Chief among his findings about suicide risk is the notion of *hopelessness.* Longitudinal studies of both inpatients and outpatients who had suicidal ideation have found that a cutoff score of 9 or more on the Beck Hopelessness Scale is predictive of eventual suicide (Beck, Brown, Berchick, Stewart, & Steer, 1990; Beck, Steer, Kovacs, & Garrison, 1985). Hopelessness has been confirmed as a predictor of eventual suicide in subsequent studies.

A recent randomized controlled trial investigated the efficacy of a brief cognitive therapy treatment for those at high risk of attempting suicide by virtue of the fact that they had previously attempted suicide and had significant psychopathology and substance abuse problems. Results indicate that cognitive therapy reduced the rate of re-attempt by 50% over an 18-month period (Brown et al., 2005).

Psychotherapy Integration

Cognitive therapy has been integrated with other modalities to yield new therapeutic approaches. Schema therapy, developed by Jeffrey Young (Young, Klosko, & Weishaar, 2003), focuses on modifying maladaptive core beliefs that are developed early in life and that can underlie chronic depression and anxiety. Another approach, mindfulness-based cognitive therapy (Segal, Williams, & Teasdale, 2002), uses acceptance and meditation strategies to promote resilience and prevent recurrence of depressive episodes.

Assessment Scales

Beck's work has generated a number of assessment scales, most notably the Beck Depression Inventory (Beck, Steer, & Brown, 1996; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), the Scale for Suicide Ideation (Beck, Kovacs, & Weissman, 1979), the Suicide Intent Scale (Beck, Schuyler, & Herman, 1974), the Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974), the Beck Anxiety Inventory (Beck & Steer, 1990), the Beck Self-concept Test (Beck, Steer, Brown, & Epstein, 1990), the Dysfunctional Attitude Scale (Weissman & Beck, 1978), the Sociotropy-Autonomy Scale (Beck, Epstein, & Harrison, 1983), the Beck Youth Inventories (Beck & Beck, 2002), the Personality Beliefs Questionnaire (Beck & Beck, 1995), and the Clark-Beck Obsessive–Compulsive Inventory (Clark & Beck, 2002). The Beck Depression Inventory is the best known of these. It has been used in hundreds of outcome studies and is routinely employed by psychologists, physicians, and social workers to monitor depression in their patients and clients.

Training

The Center for Cognitive Therapy, which is affiliated with the University of Pennsylvania Medical School, provides outpatient services and is a research institute that integrates clinical observations with empirical findings to develop theory. The Beck Institute in Bala Cynwyd, Pennsylvania, provides both outpatient services and training opportunities. In addition, clinical psychology internships and postdoctoral fellowships offer training in cognitive therapy. Research and treatment efforts in cognitive therapy are being conducted in a number of universities and hospitals in the United States and Europe. The *International Cognitive Therapy Newsletter* was launched in 1985 for the exchange of information among cognitive therapists. Therapists from five continents participate in the newsletter network. Founded in 1971, the European Association for Behavioural and Cognitive Therapies will hold its annual conference in Milan in 2010. The World Congress of Behavioural and Cognitive Therapies, composed of seven organizations from around the world, will hold its next conference in 2010. The International Association for Cognitive Psychotherapy will host the 7th International Congress of Cognitive Psychotherapy in Istanbul in 2011.

The Academy of Cognitive Therapy, a nonprofit organization, was founded in 1999 by a group of leading clinicians, educators, and researchers in the field of cognitive therapy. The academy administers an objective evaluation to identify and certify clinicians skilled in cognitive therapy. In 1999, the Accreditation Council for Graduate Medical Education mandated that psychiatry residency training programs train residents to be competent in the practice of cognitive behavior therapy.

Cognitive therapists routinely contribute to psychology, psychiatry, and behavior therapy journals. The primary journals devoted to research in cognitive therapy are *Cognitive Therapy and Research,* the *Journal of Cognitive Psychotherapy: An International Quarterly,* and *Cognitive and Behavioral Practice.*

Cognitive therapy is represented at the annual meetings of the American Psychological Association, the American Psychiatric Association, the American Association of Suicidology, and others. It has been such a major force in the Association for the Advancement of Behavior Therapy that the organization changed its name in 2005 to the Association for Behavioral and Cognitive Therapies (ABCT).

Because of its efficacy as a short-term form of psychotherapy, cognitive therapy is achieving wider use in settings that must demonstrate cost-effectiveness or that require short-term contact with patients. It has applications in both inpatient and outpatient settings.

Many talented researchers and innovative therapists have contributed to the development of cognitive therapy. Controlled outcome studies comparing cognitive therapy with other forms of treatment are conducted with anxiety disorders, panic, drug abuse, anorexia and bulimia, geriatric depression, acute depression, and dysphoric disorder. Beck's students and associates do research on the nature and treatment of depression, anxiety, loneliness, marital conflict, eating disorders, agoraphobia, pain, personality disorders, substance abuse, bipolar disorder, and schizophrenia.

PERSONALITY

Theory of Personality

Cognitive therapy emphasizes the role of information processing in human responses and adaptation. When an individual perceives that the situation requires a response, a whole set of cognitive, emotional, motivational, and behavioral schemas are mobilized. Previously, cognitive therapy viewed cognition as largely determining emotions

and behaviors. Current thinking views all aspects of human functioning as acting simultaneously as a mode.

Cognitive therapy views personality as shaped by the interaction between innate disposition and environment (Beck, Freeman, & Davis, 2003). Personality attributes are seen as reflecting basic schemas, or interpersonal "strategies," developed in response to the environment.

Cognitive therapy sees psychological distress as being the consequence of a number of factors. Although people may have biochemical predispositions to illness, they respond to specific stressors because of their learning history. The phenomena of psychopathology (but not necessarily the cause) are on the same continuum as normal emotional reactions, but they are manifested in exaggerated and persistent ways. In depression, for example, sadness and loss of interest are intensified and prolonged, in mania there is heightened investment in self-aggrandizement, and in anxiety there is an extreme sense of vulnerability and danger.

Individuals experience psychological distress when they perceive a situation as threatening their vital interests. At such times, their perceptions and interpretations of events are highly selective, egocentric, and rigid. This results in a functional impairment of normal cognitive activity. There is a decreased ability to turn off idiosyncratic thinking, to concentrate, recall, or reason. Corrective functions, which allow reality testing and refinement of global conceptualizations, are attenuated.

Cognitive Vulnerability

Each individual has a set of idiosyncratic vulnerabilities and sensitivities that predispose him or her to psychological distress. These vulnerabilities appear to be related to personality structure. Personality is shaped by temperament and cognitive schemas. Cognitive schemas are structures that contain the individual's fundamental beliefs and assumptions. Schemas develop early in life from personal experience and identification with significant others. These concepts are reinforced by further learning experiences and, in turn, influence the formation of beliefs, values, and attitudes.

Cognitive schemas may be adaptive or dysfunctional. They may be general or specific in nature. A person may have competing schemas. Cognitive schemas are generally latent but become active when stimulated by specific stressors, circumstances, or stimuli. In personality disorders, they are triggered very easily and often so that the person overresponds to a wide range of situations in a stereotyped manner.

Dimensions of Personality

The idea that certain clusters of personality attributes or cognitive structures are related to certain types of emotional response has been studied by Beck, Epstein, and Harrison (1983), who found two major personality dimensions relevant to depression and possibly to other disorders: social dependence (sociotropy) and autonomy. Beck's research revealed that dependent individuals became depressed following disruption of relationships. Autonomous people became depressed after defeat or failure to attain a desired goal. The sociotropic dimension is organized around closeness, nurturance, and dependence, the autonomous dimension around independence, goal setting, self-determination, and self-imposed obligations.

Research has also established that although "pure" cases of sociotropy and autonomy do exist, most people display features of each, depending on the situation. Thus, sociotropy and autonomy are styles of behavior, not fixed personality structures. This position stands in marked contrast with psychodynamic theories of personality, which postulate fixed personality dimensions.

Thus, cognitive therapy views personality as reflecting the individual's cognitive organization and structure, which are both biologically and socially influenced. Within the constraints of one's neuroanatomy and biochemistry, personal learning experiences help determine how one develops and responds.

Variety of Concepts

Cognitive therapy emphasizes the individual's learning history, including the influence of significant life events, in the development of psychological disturbance. It is not a reductive model but recognizes that psychological distress is usually the result of many interacting factors.

Cognitive therapy's emphasis on the individual's learning history endorses social learning theory and the importance of reinforcement. The social learning perspective requires a thorough examination of the individual's developmental history and his or her own idiosyncratic meanings and interpretations of events. Cognitive therapy emphasizes the idiographic nature of cognition, because the same event may have very different meanings for two individuals.

The conceptualization of personality as reflective of schemas and underlying assumptions is also related to social learning theory. The way a person structures experience is based on consequences of past behavior, vicarious learning from significant others, and expectations about the future.

Theory of Causality

Psychological distress is ultimately caused by many innate, biological, developmental, and environmental factors interacting with one another, so there is no single "cause" of psychopathology. Depression, for instance, is characterized by predisposing factors such as hereditary susceptibility, diseases that cause persistent neurochemical abnormalities, developmental traumas leading to specific cognitive vulnerabilities, inadequate personal experiences that fail to provide appropriate coping skills, and counterproductive cognitive patterns, such as unrealistic goals, assumptions, or imperatives. Physical disease, severe and acute stress, and chronic stress are also precipitating factors.

Cognitive Distortions

Systematic errors in reasoning called *cognitive distortions* are evident during psychological distress (Beck, 1967).

Arbitrary inference: Drawing a specific conclusion without supporting evidence or even in the face of contradictory evidence. An example is the working mother who concludes, after a particularly busy day, "I'm a terrible mother."

Selective abstraction: Conceptualizing a situation on the basis of a detail taken out of context, ignoring other information. An example is the man who becomes jealous upon seeing his girlfriend tilt her head toward another man to hear him better at a noisy party.

Overgeneralization: Abstracting a general rule from one or a few isolated incidents and applying it too broadly and to unrelated situations. After a discouraging date, a woman concluded, "All men are alike. I'll always be rejected."

Magnification and minimization: Seeing something as far more significant or less significant than it actually is. A student catastrophized, "If I appear the least bit nervous

in class, it will mean disaster." Another person, rather than facing the fact that his mother is terminally ill, decides that she will soon recover from her "cold."

Personalization: Attributing external events to oneself without evidence supporting a causal connection. A man waved to an acquaintance across a busy street. After not getting a greeting in return, he concluded, "I must have done something to offend him."

Dichotomous thinking: Categorizing experiences in one of two extremes; for example, as complete success or total failure. A doctoral candidate stated, "Unless I write the best exam they've ever seen, I'm a failure as a student."

Systematic Bias in Psychological Disorders

A bias in information processing characterizes most psychological disorders (see Table 8.1). This bias is generally applied to "external" information, such as communications or threats, and may start operating at early stages of information processing. A person's orienting schema identifies a situation as posing a danger or loss, for instance, and signals the appropriate mode to respond.

Cognitive Model of Depression

A *cognitive triad* characterizes depression (Beck, 1967). The depressed individual has a negative view of the self, the world, and the future and perceives the self as inadequate, deserted, and worthless. A negative view is apparent in beliefs that enormous demands exist and that immense barriers block access to goals. The world seems devoid of pleasure or gratification. The depressed person's view of the future is pessimistic, reflecting the belief that current troubles will not improve. This hopelessness may lead to suicidal ideation.

Motivational, behavioral, emotional, and physical symptoms of depression are also activated in the depressed mode. These symptoms influence a person's beliefs and assumptions, and vice versa. For example, motivational symptoms of paralysis of will are related to the belief that one lacks the ability to cope or to control an event's outcome.

TABLE 8.1 **The Cognitive Profile of Psychological Disorders**

Disorder	Systematic Bias in Processing Information
Depression	Negative view of self, experience, and future
Hypomania	Inflated view of self and future
Anxiety disorder	Sense of physical or psychological danger
Panic disorder	Catastrophic interpretation of bodily/mental experiences
Phobia	Sense of danger in specific, avoidable situations
Paranoid state	Attribution of bias to others
Hysteria	Concept of motor or sensory abnormality
Obsession	Repeated warning or doubts about safety
Compulsion	Rituals to ward off perceived threat
Suicidal behavior	Hopelessness and deficiencies in problem solving
Anorexia nervosa	Fear of being fat
Hypochondriasis	Attribution of serious medical disorder

Consequently, there is a reluctance to commit oneself to a goal. Suicidal wishes often reflect a desire to escape unbearable problems.

The increased dependency often observed in depressed patients reflects the view of self as incompetent, an overestimation of the difficulty of normal life tasks, the expectation of failure, and the desire for someone more capable to take over. Indecisiveness similarly reflects the belief that one is incapable of making correct decisions. The physical symptoms of depression—low energy, fatigue, and inertia—are also related to negative expectations. Work with depressed patients indicates that initiating activity actually reduces inertia and fatigue. Moreover, refuting negative expectations and demonstrating motor ability play important roles in recovery.

Cognitive Model of Anxiety Disorders

Anxiety disorders are conceptualized as excessive functioning or malfunctioning of normal survival mechanisms. Thus, the basic mechanisms for coping with threat are the same for both normal and anxious people: physiological responses prepare the body for escape or self-defense. The same physiological responses occur in the face of psychosocial threats as in the case of physical dangers. The anxious person's perception of danger is either based on false assumptions or exaggerated, whereas the normal response is based on a more accurate assessment of risk and the magnitude of danger. In addition, normal individuals can correct their misperceptions using logic and evidence. Anxious individuals have difficulty recognizing cues of safety and other evidence that would reduce the threat of danger. Thus, in cases of anxiety, cognitive content revolves around themes of danger, and the individual tends to maximize the likelihood of harm and minimize his or her ability to cope.

Mania

The manic patient's biased thinking is the reverse of the depressive's. Such individuals selectively perceive significant gains in each life experience, blocking out negative experiences or reinterpreting them as positive, and unrealistically expecting favorable results from various enterprises. Exaggerated concepts of abilities, worth, and accomplishments lead to feelings of euphoria. The continued stimulation from inflated self-evaluations and overly optimistic expectations provides vast sources of energy and drives the manic individual into continuous goal-directed activity.

Panic Disorder

Patients with panic disorder are prone to regard any unexplained symptom or sensation as a sign of some impending catastrophe. Their cognitive processing system focuses their attention on bodily or psychological experiences and shapes these sources of internal information into the conviction that disaster is imminent. Each patient has a specific "equation." For one, distress in the chest or stomach equals heart attack; for another, shortness of breath means the cessation of all breathing; and for another, lightheadedness is a sign of impending unconsciousness.

Some patients regard a sudden surge of anger as a sign that they will lose control and injure somebody. Others interpret a mental lapse, momentary confusion, or mild disorientation to mean that they are losing their mind. A crucial characteristic of people having panic attacks is the conclusion that vital systems (the cardiovascular, respiratory, or central nervous system) will collapse. Because of their fear, they tend to be overly vigilant toward internal sensations and thus to detect and magnify sensations that pass unnoticed in other people.

Patients with panic disorder show a specific cognitive deficit—an inability to view their symptoms and catastrophic interpretations realistically.

Agoraphobia

Patients who have had one or more panic attacks in a particular situation tend to avoid that situation. For example, people who have had panic attacks in supermarkets avoid going there. If they push themselves to go, they become increasingly vigilant toward their sensations and begin to anticipate having another panic attack.

The anticipation of such an attack triggers a variety of autonomic symptoms that are then misinterpreted as signs of an impending disaster (e.g., heart attack, loss of consciousness, suffocation), which can lead to a full-blown panic attack. Patients with a panic disorder that goes untreated frequently develop agoraphobia. They may eventually become housebound or so restricted in their activities that they cannot travel far from home and require a companion to venture any distance.

Phobia

In phobias, there is anticipation of physical or psychological harm in specific situations. As long as patients can avoid these situations, they do not feel threatened and may be relatively comfortable. When they enter into these situations, however, they experience the typical subjective and physiological symptoms of severe anxiety. As a result of this unpleasant reaction, their tendency to avoid the situation in the future is reinforced.

In *evaluation phobias,* there is fear of disparagement or failure in social situations, examinations, and public speaking. The behavioral and physiological reactions to the potential "danger" (rejection, devaluation, failure) may interfere with the patient's functioning to the extent that they can produce just what the patient fears will happen.

Paranoid States

The paranoid individual is biased toward attributing prejudice to others. The paranoid persists in assuming that other people are deliberately abusive, interfering, or critical. In contrast to depressed patients, who believe that supposed insults or rejections are justified, paranoid patients persevere in thinking that others treat them unjustly.

Unlike depressed patients, paranoid patients do not experience low self-esteem. They are more concerned with the *injustice* of the presumed attacks, thwarting, or intrusions than with the actual loss, and they rail against the presumed prejudice and malicious intent of others.

Obsessions and Compulsions

Patients with obsessions introduce uncertainty into the appraisal of situations that most people would consider safe. The uncertainty is generally attached to circumstances that are potentially unsafe and is manifested by continual doubts—even though there is no evidence of danger.

Obsessives continually doubt whether they have performed an act necessary for safety (for example, turning off a gas oven or locking the door at night). They may fear contamination by germs, and no amount of reassurance can alleviate the fear. A key characteristic of obsessives is this *sense of responsibility* and the belief that they

are accountable for having taken an action—or having failed to take an action—that could harm them or others. Cognitive therapy views such intrusive thoughts as universal. It is the meaning assigned to the intrusive thought—that the patient has done something immoral or dangerous—that causes distress.

Compulsions are attempts to reduce excessive doubts by performing rituals designed to neutralize the anticipated disaster. A hand-washing compulsion, for instance, is based on the patients' belief that they have not removed all the dirt or contaminants from parts of their body. Some patients regard dirt as a source of danger, either as a cause of physical disease or as a source of offensive, unpleasant odors, and they are compelled to remove this source of physical or social danger.

Suicidal Behavior

The cognitive processing in suicidal individuals has two features. First, there is a high degree of hopelessness or belief that things cannot improve. A second feature is a cognitive deficit—a difficulty in solving problems. Although the hopelessness accentuates poor problem solving, and vice versa, the difficulties in coping with life situations can, by themselves, contribute to the suicidal potential. Thinking becomes more rigid, and suicide appears as the only alternative in a diminished response repertoire.

Anorexia Nervosa

Anorexia nervosa and bulimia represent a constellation of maladaptive beliefs that revolve around one central assumption: "My body weight and shape determine my worth and/or my social acceptability." Revolving around this assumption are such beliefs as "I will look ugly if I gain much more weight," "The only thing in my life that I can control is my weight," and "If I don't starve myself, I will let go completely and become enormous."

Anorexics show typical distortions in information processing. They misinterpret symptoms of fullness after meals as signs that they are getting fat. And they misperceive their image in a mirror or photograph as being much fatter than it actually is.

Schizophrenia

In schizophrenia, there is a complex interaction of predisposing neurobiological, environmental, cognitive, and behavioral factors. The impaired integrative function of the brain, along with specific cognitive deficits, increases vulnerability to stressful life events and leads to dysfunctional beliefs (e.g., "I am inferior.") and behaviors (e.g., social withdrawal). Excessive psychophysiological reactions occur in response to stress and repeated negative thinking. The release of corticosteroids activates the dopaminergic system, which contributes to the development of delusions and hallucinations. Cognitive disorganization is a result of neurocognitive deficits such as attentional problems, impaired executive function and working memory. These impairments interact with heightened rejection sensitivity to produce communication deviance and intrusive, inappropriate thoughts. Delusions stem from the interplay of cognitive biases like external attributions and the cognitive shortcut of jumping to conclusions. A tendency to perceptualize combines with negative self-schemas to generate auditory hallucinations, which are exacerbated by beliefs that the "voice" is uncontrollable, powerful, infallible, and externally generated. Engagement in social, vocational, and pleasurable activity is compromised by neurocognitive impairment that is magnified by dysfunctional attitudes such as social indifference, low expectancies for pleasure, and defeatist beliefs regarding task performance. Low expectations for performance and success further contribute to negative symptoms.

PSYCHOTHERAPY

Theory of Psychotherapy

The goals of cognitive therapy are to correct faulty information processing and to help patients modify assumptions that maintain maladaptive behaviors and emotions. Cognitive and behavioral methods are used to challenge dysfunctional beliefs and to promote more realistic adaptive thinking. Cognitive therapy initially addresses symptom relief, but its ultimate goals are to remove systematic biases in thinking and modify the core beliefs that predispose the person to future distress.

Cognitive therapy fosters change in patients' beliefs by treating beliefs as testable hypotheses to be examined through behavioral experiments jointly agreed upon by patient and therapist. The cognitive therapist does not tell the client that the beliefs are irrational or wrong or that the beliefs of the therapist should be adopted. Instead, the therapist asks questions to elicit the meaning, function, usefulness, and consequences of the patient's beliefs. The patient ultimately decides whether to reject, modify, or maintain all personal beliefs, being well aware of their emotional and behavioral consequences.

Cognitive therapy is not the substitution of positive beliefs for negative ones. It is based in reality, not in wishful thinking. Similarly, cognitive therapy does not maintain that people's problems are imaginary. Patients may have serious social, financial, or health problems as well as functional deficits. In addition to real problems, however, they have biased views of themselves, their situations, and their resources that limit their range of responses and prevent them from generating solutions.

Cognitive change can promote behavioral change by allowing the patient to take risks. In turn, experience in applying new behaviors can validate the new perspective. Emotions can be moderated by enlarging perspectives to include alternative interpretations of events. Emotions play a role in cognitive change, for learning is enhanced when emotions are triggered. Thus, the cognitive, behavioral, and emotional channels interact in therapeutic change, but cognitive therapy emphasizes the primacy of cognition in promoting and maintaining therapeutic change.

Cognitive change occurs at several levels: voluntary thoughts, continuous or automatic thoughts, underlying assumptions, and core beliefs. According to the cognitive model, cognitions are organized in a hierarchy, each level differing from the next in its accessibility and stability. The most accessible and least stable cognitions are voluntary thoughts. At the next level are automatic thoughts, which come to mind spontaneously when triggered by circumstances. They are the thoughts that intercede between an event or stimulus and the individual's emotional and behavioral reactions.

An example of an automatic thought is "Everyone will see I'm nervous," experienced by a socially anxious person before going to a party. Automatic thoughts are accompanied by emotions and at the time they are experienced seem plausible, are highly salient, and are internally consistent with individual logic. They are given credibility without ever being challenged. Although automatic thoughts are more stable and less accessible than voluntary thoughts, patients can be taught to recognize and monitor them. Cognitive distortions are evident in automatic thoughts.

Automatic thoughts are generated from underlying assumptions. For example, the belief "I am responsible for other people's happiness" produces numerous negative automatic thoughts in people who perceive themselves as causing distress to others. Assumptions shape perceptions into cognitions, determine goals, and provide interpretations and meanings to events. They may be quite stable and outside the patient's awareness.

Core beliefs are contained in cognitive schemas. Therapy aims at identifying these absolute beliefs and counteracting their effects. If the beliefs themselves can be changed, the patient is less vulnerable to future distress. In Schema therapy, these core beliefs are called Early Maladaptive Schemas (EMSs; Young, Klosko, & Weishaar. 2003).

The Therapeutic Relationship

The therapeutic relationship is collaborative. The therapist assesses sources of distress and dysfunction and helps the patient clarify goals. In cases of severe depression or anxiety, patients may need the therapist to take a directive role. In other instances, patients may take the lead in determining goals for therapy. As part of the collaboration, the patient provides the thoughts, images, and beliefs that occur in various situations, as well as the emotions and behaviors that accompany the thoughts. The patient also shares responsibility by helping to set the agenda for each session and by doing homework between sessions. Homework helps therapy to proceed more quickly and gives the patient an opportunity to practice newly learned skills and perspectives.

The therapist functions as a guide who helps the patient understand how beliefs and attitudes interact with affect and behavior. The therapist is also a catalyst who promotes corrective experiences that lead to cognitive change and skills acquisition. Thus, cognitive therapy employs a learning model of psychotherapy. The therapist has expertise in examining and modifying beliefs and behavior but does not adopt the role of a passive expert.

Cognitive therapists actively pursue the patient's point of view. By using warmth, accurate empathy, and genuineness (see Rogers, 1951), the cognitive therapist appreciates the patient's personal world view. However, these qualities alone are not sufficient for therapeutic change. The cognitive therapist specifies problems, focuses on important areas, and teaches specific cognitive and behavioral techniques.

Along with having good interpersonal skills, cognitive therapists are flexible. They are sensitive to the patient's level of comfort and use self-disclosure judiciously. They provide supportive contact, when necessary, and operate within the goals and agenda of the cognitive approach. Flexibility in the use of therapeutic techniques depends on the targeted symptoms. For example, the inertia of depression responds best to behavioral interventions, whereas the suicidal ideation and pessimism of depression respond best to cognitive techniques. A good cognitive therapist does not use techniques arbitrarily or mechanically but applies them with sound rationale and skill—and with an understanding of each individual's needs.

To maintain collaboration, the therapist elicits feedback from the patient, usually at the end of each session. Feedback focuses on what the patient found helpful or not helpful, whether the patient has concerns about the therapist, and whether the patient has questions. The therapist may summarize the session or ask the patient to do so. Another way the therapist encourages collaboration is by providing the patient with a rationale for each procedure used. This demystifies the therapy process, increases patients' participation, and reinforces a learning paradigm in which patients gradually assume more responsibility for therapeutic change.

Definitions

Three fundamental concepts in cognitive therapy are collaborative empiricism, Socratic dialogue, and guided discovery.

Collaborative Empiricism. The therapeutic relationship is collaborative and requires jointly determining the goals for treatment, eliciting and providing feedback, and thereby demystifying how therapeutic change occurs. The therapist and patient become co-investigators, examining the evidence to support or reject the patient's cognitions. As in scientific inquiry, interpretations or assumptions are treated as testable hypotheses.

Empirical evidence is used to determine whether particular cognitions serve any useful purpose. Prior conclusions are subjected to logical analysis. Biased thinking

is exposed as the patient becomes aware of alternative sources of information. This process is conducted as a partnership between patient and therapist, with either taking a more active role as needed.

Socratic Dialogue. Questioning is a major therapeutic device in cognitive therapy, and Socratic dialogue is the preferred method. The therapist carefully designs a series of questions to promote new learning. The purposes of the therapist's questions are generally to (1) clarify or define problems, (2) assist in the identification of thoughts, images, and assumptions, (3) examine the meanings of events for the patient, and (4) assess the consequences of maintaining maladaptive thoughts and behaviors.

Socratic dialogue implies that the patient arrives at logical conclusions based on the questions posed by the therapist. Questions are not used to "trap" patients, lead them to inevitable conclusions, or attack them. Questions enable the therapist to understand the patient's point of view and are posed with sensitivity so that patients may look at their assumptions objectively and nondefensively.

Young, Rygh, Weinberger, and Beck (2008, p. 274) describe how questions change throughout the course of therapy:

> In the beginning of therapy, questions are employed to obtain a full and detailed picture of the patient's particular difficulties. They are used to obtain background and diagnostic data; to evaluate the patient's stress tolerance, capacity for introspection, coping methods and so on; to obtain information about the patient's external situation and interpersonal context; and to modify vague complaints by working with the patient to arrive at specific target problems to work on.
>
> As therapy progresses, the therapist uses questioning to explore approaches to problems, to help the patient weigh advantages and disadvantages of possible solutions, to examine the consequences of staying with particular maladaptive behaviors, to elicit automatic thoughts, and to demonstrate EMSs and their consequences. In short, the therapist uses questioning in most cognitive therapeutic techniques.

Guided Discovery. Through guided discovery, the patient modifies maladaptive beliefs and assumptions. The therapist serves as a guide who elucidates problem behaviors and errors in logic by designing new experiences (*behavioral experiments*) that lead to the acquisition of new skills and perspectives. Guided discovery implies that the therapist does not exhort or cajole the patient to adopt a new set of beliefs. Rather, the therapist encourages the patient's use of information, facts, and probabilities to obtain a realistic perspective.

Process of Psychotherapy

Initial Sessions

The goals of the first interview are to initiate a relationship with the patient, to elicit essential information, and to produce symptom relief. Building a relationship with the patient may begin with questions about feelings and thoughts about beginning therapy. Discussing the patient's expectations helps put the patient at ease, yields information about the patient's expectations, and presents an opportunity to demonstrate the relationship between cognition and affect (Beck, Rush, et al., 1979). The therapist also uses the initial sessions to accustom the patient to cognitive therapy, establish a collaborative framework, and deal with any misconceptions about therapy. The types of information the therapist seeks in the initial session include diagnosis, past history, present life situation, psychological problems, attitudes about treatment, and motivation for treatment.

Problem definition and symptom relief begin in the first session. Although problem definition and collection of background information may take several sessions, it is often critical to focus on a very specific problem and provide rapid relief in the first session. For example, a suicidal patient needs direct intervention to undermine hopelessness immediately. Symptom relief can come from several sources: specific problem solving, clarifying vague or general complaints into workable goals, or gaining objectivity about a disorder (e.g., making it clear that a patient's symptoms represent anxiety and nothing worse, or that difficulty concentrating is a symptom of depression and not a sign of brain disease).

Problem definition entails both functional and cognitive analyses of the problem. A functional analysis identifies elements of the problem: how it is manifested; situations in which it occurs; its frequency, intensity, and duration; and its consequences. A cognitive analysis of the problem identifies the thoughts and images a person has when emotion is triggered. It also includes investigation of the extent to which the person feels in control of thoughts and images, what the person imagines will happen in a distressing situation, and the probability of such an outcome actually occurring.

In the early sessions, then, the cognitive therapist plays a more active role than the patient. The therapist gathers information, conceptualizes the patient's problems, socializes the patient to cognitive therapy, and actively intervenes to provide symptom relief. The patient is assigned homework beginning at the first session.

Homework, at this early stage, is usually directed at recognizing the connections among thoughts, feelings, and behavior. For example, patients might be asked to record their automatic thoughts when distressed. Thus, the patient is trained from the outset to self-monitor thoughts and behaviors. In later sessions, the patient plays an increasingly active role in determining homework, and assignments focus on testing very specific assumptions.

During the initial sessions, a problem list is generated. The problem list may include specific symptoms, behaviors, or pervasive problems. These problems are assigned priorities as targets for intervention. Priorities are based on the relative magnitude of distress, the likelihood of making progress, the severity of symptoms, and the pervasiveness of a particular theme or topic.

If the therapist can help the patient solve a problem early in treatment, this success can motivate the patient to make further changes. As each problem is approached, the therapist chooses the appropriate cognitive or behavioral technique to apply and provides the patient with a rationale for the technique. Throughout therapy, the therapist elicits the patient's reactions to various techniques to ascertain whether they are being applied correctly, whether they are successful, and how they can be incorporated into homework or practical experience outside the session.

Middle and Later Sessions

As cognitive therapy proceeds, the emphasis shifts from the patient's symptoms to the patient's patterns of thinking. The connections among thoughts, emotions, and behavior are chiefly demonstrated through the examination of automatic thoughts. Once the patient can challenge thoughts that interfere with functioning, he or she can consider the underlying assumptions that generate such thoughts.

There is usually a greater emphasis on cognitive than on behavioral techniques in later sessions, which focus on complex problems that involve several dysfunctional thoughts. Often these thoughts are more amenable to logical analysis than to behavioral experimentation. For example, the prophecy "I'll never get what I want in life" is not easily tested. However, one can question the logic of this generalization and look at the advantages and disadvantages of maintaining it as a belief.

Often such assumptions outside the patient's awareness are discovered as themes of automatic thoughts. When automatic thoughts are observed over time and across situations, assumptions appear or can be inferred. Once these assumptions and their power have been recognized, therapy aims at modifying them by examining their validity, adaptiveness, and utility for the patient.

In later sessions, the patient assumes more responsibility for identifying problems and solutions and for creating homework assignments. The therapist takes on the role of advisor rather than teacher as the patient becomes better able to use cognitive techniques to solve problems. The frequency of sessions decreases as the patient becomes more self-sufficient. Therapy is terminated when goals have been reached and the patient feels able to practice his or her new skills and perspectives independently.

Ending Treatment

Length of treatment depends primarily on the severity of the client's problems. The usual length for unipolar depression is 15 to 25 sessions at weekly intervals (Beck, Rush, et al., 1979). Moderately to severely depressed patients usually require sessions twice a week for 4 to 5 weeks and then weekly sessions for 10 to 15 weeks. Most cases of anxiety are treated within a comparable period of time.

Some patients find it extremely difficult to tolerate the anxiety involved in giving up old ways of thinking. For them, therapy may last several months. Still others experience early symptom relief and leave therapy early. In these cases, little structural change has occurred, and problems are likely to recur.

From the outset, the therapist and patient share the expectation that therapy is time limited. Because cognitive therapy is present centered and time limited, there tend to be fewer problems with termination than in longer forms of therapy. As the patient develops self-reliance, therapy sessions become less frequent.

Termination is planned for, even in the first session as the rationale for cognitive therapy is presented. Patients are told that a goal of the therapy is for them to learn to be their own therapists. The problem list makes explicit what is to be accomplished in treatment. Behavioral observation, self-monitoring, self-report, and sometimes questionnaires (e.g., the Beck Depression Inventory) measure progress toward the goals on the problem list. Feedback from the patient aids the therapist in designing experiences to foster cognitive change.

Some patients have concerns about relapse or about functioning autonomously. Some of these concerns include cognitive distortions, such as dichotomous thinking ("I'm either sick or 100% cured") or negative prediction ("I'll get depressed again and won't be able to help myself"). It may be necessary to review the goal of therapy: to teach the patient ways to handle problems more effectively, not to produce a "cure" or restructure core personality (Beck, Rush, et al., 1979). Education about psychological disorders, such as acknowledging the possibility of recurrent depression, is done throughout treatment so that the patient has a realistic perspective on prognosis.

During the usual course of therapy, the patient experiences both successes and setbacks. Such problems give the patient the opportunity to practice new skills. As termination approaches, the patient can be reminded that setbacks are normal and have been handled before. The therapist might ask the patient to describe how prior specific problems were handled during treatment. Therapists can also use cognitive rehearsal prior to termination by having patients imagine future difficulties and report how they would deal with them.

Termination is usually followed by one to two booster sessions, usually 1 month and 2 months after termination. Such sessions consolidate gains and assist the patient in employing new skills.

Mechanisms of Psychotherapy

Several common denominators cut across effective treatments. Three mechanisms of change common to all successful forms of psychotherapy are (1) a comprehensible framework, (2) the patient's emotional engagement in the problem situation, and (3) reality testing in that situation.

Cognitive therapy maintains that the modification of dysfunctional assumptions leads to effective cognitive, emotional, and behavioral change. Patients change by recognizing automatic thoughts, questioning the evidence used to support them, and modifying cognitions. Next, the patient behaves in ways congruent with new, more adaptive ways of thinking.

Change can occur only if the patient experiences a problematic situation as a real threat. According to cognitive therapy, core beliefs are linked to emotions, and with affective arousal, those beliefs become accessible and modifiable. One mechanism of change, then, focuses on making accessible those cognitive constellations that produced the maladaptive behavior or symptomatology. This mechanism is analogous to what psychoanalysts call "making the unconscious conscious."

Simply arousing emotions and the accompanying cognitions are not sufficient to cause lasting change. People express emotion, sometimes explosively, throughout their lives without benefit. However, the therapeutic milieu allows the patient to experience emotional arousal and reality testing simultaneously. For a variety of psychotherapies, what is therapeutic is the patient's ability to be engaged in a problem situation and yet respond to it adaptively. In terms of cognitive therapy, this means to experience the cognitions and to test them within the therapeutic framework.

APPLICATIONS

Who Can We Help?

Cognitive therapy is a present-centered, structured, active, cognitive, problem-oriented approach best suited for cases in which problems can be delineated and cognitive distortions are apparent. It was originally developed for the treatment of Axis I disorders but has been elaborated to treat Axis II disorders as well. It has wide-ranging applications to a variety of clinical and nonclinical problems. Though originally used in individual psychotherapy, it is now used with couples, families, and groups. It can be applied alone or in combination with pharmacotherapy in inpatient and outpatient settings.

Cognitive therapy is widely recognized as an effective treatment for unipolar depression. Beck, Rush, et al. (1979, p. 27) list criteria for using cognitive therapy alone or in combination with medication. It is the treatment of choice in cases where the patient refuses medication, prefers a psychological treatment, has unacceptable side effects to antidepressant medication, has a medical condition that precludes the use of antidepressants, or has proved to be refractory to adequate trials of antidepressants. Recent research by DeRubeis, Hollon, et al. (2005) indicates that cognitive therapy can be as effective as medications for the initial treatment of moderate to severe major depression.

Cognitive therapy is not recommended as the exclusive treatment in cases of bipolar affective disorder or psychotic depression. It is also not used alone for the treatment of other psychoses, such as schizophrenia. Some patients with anxiety may begin treatment on medication, but cognitive therapy teaches them to function without relying on medication.

Cognitive therapy produces the best results with patients who have adequate reality testing (i.e., no hallucinations or delusions), good concentration, and sufficient memory functions. It is ideally suited to patients who can focus on their automatic thoughts,

accept the therapist–patient roles, are willing to tolerate anxiety in order to do experiments, can alter assumptions permanently, take responsibility for their problems, and are willing to postpone gratification in order to complete therapy. Although these ideals are not always met, this therapy can proceed with some adjustment of outcome expectations and flexibility of structure. For example, therapy may not permanently alter schemas but may improve the patient's daily functioning.

Cognitive therapy is effective for patients with different levels of income, education, and background (Persons, Burns, & Perloff, 1988). As long as the patient can recognize the relationships among thoughts, feelings, and behaviors and takes some responsibility for self-help, cognitive therapy can be beneficial.

Treatment

Cognitive therapy consists of highly specific learning experiences designed to teach patients (1) to monitor their negative, automatic thoughts (cognitions), (2) to recognize the connections among cognition, affect, and behavior, (3) to examine the evidence for and against distorted automatic thoughts, (4) to substitute more reality-oriented interpretations for these biased cognitions, and (5) to learn to identify and alter the beliefs that predispose them to distort their experiences (Beck, Rush, et al., 1979).

Both cognitive and behavioral techniques are used in cognitive therapy to reach these goals. The technique used at any given time depends on the patient's level of functioning and on the particular symptoms and problems presented.

Cognitive Techniques

Verbal techniques are used to elicit the patient's automatic thoughts, analyze the logic behind the thoughts, identify maladaptive assumptions, and examine the validity of those assumptions. Automatic thoughts are elicited by questioning the patient about those thoughts that occur during upsetting situations. If the patient has difficulty recalling thoughts, imagery or role playing can be used. Automatic thoughts are most accurately reported when they occur in real-life situations. Such "hot" cognitions are accessible, powerful, and habitual. The patient is taught to recognize and identify thoughts and to record them when upset.

Cognitive therapists do not interpret patients' automatic thoughts but, rather, explore their meanings, particularly when a patient reports fairly neutral thoughts yet displays strong emotions. In such cases, the therapist asks what those thoughts mean to the patient. For example, after an initial visit, an anxious patient called his therapist in great distress. He had just read an article about drug treatments for anxiety. His automatic thought was "Drug therapy is helpful for anxiety." The meaning he ascribed to this was "Cognitive therapy can't possibly help me. I am doomed to failure again."

Automatic thoughts are tested by direct evidence or by logical analysis. Evidence can be derived from past and present circumstances, but, true to scientific inquiry, it must be as close to the facts as possible. Data can also be gathered in behavioral experiments. For example, if a man believes he cannot carry on a conversation, he might try to initiate brief exchanges with three people. The empirical nature of behavioral experiments allows patients to think in a more objective way.

Examination of the patient's thoughts can also lead to cognitive change. Questioning may uncover logical inconsistencies, contradictions, and other errors in thinking. Identifying cognitive distortions is in itself helpful, for patients then have specific errors to correct.

Maladaptive assumptions are usually much less accessible to patients than automatic thoughts. Some patients are able to articulate their assumptions, but most find it difficult.

Assumptions appear as themes in automatic thoughts. The therapist may ask the patient to abstract rules underlying specific thoughts. The therapist might also infer assumptions from these data and present these assumptions to the patient for verification. A patient who had trouble identifying her assumptions broke into tears upon reading an assumption inferred by her therapist—an indication of the salience of that assumption. Patients always have the right to disagree with the therapist and find more accurate statements of their beliefs.

Once an assumption has been identified, it is open to modification. This can occur in several ways: by asking the patient whether the assumption seems reasonable, by having the patient generate reasons for and against maintaining the assumption, and by presenting evidence contrary to the assumption. Even though a particular assumption may seem reasonable in a specific situation, it may appear dysfunctional when universally applied. For example, being highly productive at work is generally reasonable, but being highly productive during recreational time may be unreasonable. A physician who believed he should work to his top capacity throughout his career may not have considered the prospect of early burnout. Thus, what may have made him successful in the short run could lead to problems in the long run. Specific cognitive techniques include decatastrophizing, reattribution, redefining, and decentering.

Decatastrophizing, also known as the "what if" technique (Beck & Emery, 1985), helps patients prepare for feared consequences. This is helpful in decreasing avoidance, particularly when combined with coping plans (Beck & Emery, 1985). If anticipated consequences are likely to happen, these techniques help to identify problem-solving strategies. Decatastrophizing is often used with a time-projection technique to widen the range of information and broaden the patient's time perspective.

Reattribution techniques test automatic thoughts and assumptions by considering alternative causes of events. This is especially helpful when patients personalize or perceive themselves as the cause of events. It is unreasonable to conclude, in the absence of evidence, that another person or single factor is the sole cause of an event. Reattribution techniques encourage reality testing and appropriate assignment of responsibility by requiring examination of all the factors that impinge on a situation.

Redefining is a way to mobilize a patient who believes a problem to be beyond personal control. Burns (1985) recommends that lonely people who think, "Nobody pays any attention to me" redefine the problem as "I need to reach out to other people and be caring." Redefining a problem may include making it more concrete and specific and stating it in terms of the patient's own behavior.

Decentering is used primarily in treating anxious patients who wrongly believe they are the focus of everyone's attention. After they examine the logic behind the conviction that others would stare at them and be able to read their minds, behavioral experiments are designed to test these particular beliefs. For example, one student who was reluctant to speak in class believed his classmates watched him constantly and noticed his anxiety. By observing them instead of focusing on his own discomfort, he saw some students taking notes, some looking at the professor, and some daydreaming. He concluded that his classmates had other concerns.

The cognitive domain comprises thoughts and images. For some patients, pictorial images are more accessible and easier to report than thoughts. This is often the case with anxious patients. Ninety percent of anxious patients in one study reported visual images before and during episodes of anxiety (Beck, Laude, & Bohnert, 1974). Gathering information about imagery, then, is another way to understand conceptual systems. Spontaneous images provide data on the patient's perceptions and interpretations of events. Other specific imagery procedures used to modify distorted cognitions are discussed by Beck and Emery (1985) and by Judith Beck (1995).

In some cases, imagery is modified for its own sake. Intrusive imagery, such as imagery related to trauma, can be directly modified to reduce its impact. Patients can change

aspects of an image by "rewriting the script" of what happened, making an attacker shrink in size to the point of powerlessness or empowering themselves in the image. The point of restructuring such images is not to deny what actually happened but to reduce the ability of the image to disrupt daily functioning.

Imagery is also used in role-plays because of its ability to access emotions. Experiential techniques, such as dialogues between one's healthy self and one's negative thoughts, are used to mobilize affect and help patients both believe and feel that they have the right to be free of harmful and self-defeating patterns.

Behavioral Techniques

Cognitive therapy uses behavioral techniques to modify automatic thoughts and assumptions. It employs behavioral experiments designed to challenge specific maladaptive beliefs and promote new learning. In a behavioral experiment, for example, a patient may predict an outcome based on personal automatic thoughts, carry out the agreed-upon behavior, and then evaluate the evidence in light of the new experience.

Behavioral techniques are also used to expand patients' response repertories (skills training), to relax them (progressive relaxation) or make them active (activity scheduling), to prepare them for avoided situations (behavioral rehearsal), or to expose them to feared stimuli (exposure therapy). Because behavioral techniques are used to foster cognitive change, it is crucial to know the patient's perceptions, thoughts, and conclusions after each behavioral experiment.

Homework gives patients the opportunity to apply cognitive principles between sessions. Typical homework assignments focus on self-observation and self-monitoring, structuring time effectively, and implementing procedures for dealing with concrete situations. Self-monitoring is applied to the patient's automatic thoughts and reactions in various situations. New skills, such as challenging automatic thoughts, are also practiced as homework.

Hypothesis testing has both cognitive and behavioral components. In framing a "hypothesis," it is necessary to make it specific and concrete. A resident who insisted, "I am not a good doctor" was asked to list what was needed to arrive at that conclusion. The therapist contributed other criteria as well, for the physician had overlooked such factors as rapport with patients and the ability to make decisions under pressure. The resident then monitored his behavior and sought feedback from colleagues and supervisors to test his hypothesis, coming to the conclusion "I am a good doctor *for my level of training and experience.*"

Exposure therapy serves to provide data on the thoughts, images, physiological symptoms, and self-reported level of tension experienced by the anxious patient. Specific thoughts and images can be examined for distortions, and specific coping skills can be taught. By dealing directly with a patient's idiosyncratic thoughts, cognitive therapy is able to focus on that patient's particular needs. Patients learn that their predictions are not always accurate, and they then have the data to challenge anxious thoughts in the future.

Behavioral rehearsal and *role playing* are used to practice skills or techniques that are later applied in real life. Modeling is also used in skills training. Often role playing is videotaped so that an objective source of information is available with which to evaluate performance.

Diversion techniques, which are used to reduce strong emotions and to decrease negative thinking, include physical activity, social contact, work, play, and visual imagery.

Activity scheduling provides structure and encourages involvement. Rating (on a scale of 0 to 10) the degree of mastery and pleasure experienced during each activity of the day achieves several things: Patients who believe their depression is at a constant

level see mood fluctuations; those who believe they cannot accomplish or enjoy anything are contradicted by the evidence; and those who believe they are inactive because of an inherent defect are shown that activity involves some planning and is reinforcing in itself.

Graded-task assignment calls for the patient to initiate an activity at a nonthreatening level while the therapist gradually increases the difficulty of assigned tasks. For example, someone who has difficulty socializing might begin interacting with one other person, interact with a small group of acquaintances, or socialize with people for just a brief period of time. Step by step, the patient comes to increase the time spent with others.

Cognitive therapists work in a variety of settings. Patients are referred by physicians, schools and universities, and other therapists who believe that cognitive therapy would be especially helpful. Many patients are self-referred. The Academy of Cognitive Therapy maintains an international referral list of therapists on its Web site (www.academyofct.org).

Cognitive therapists generally adhere to 45-minute sessions. Because of the structure of cognitive therapy, much can be accomplished in this time. Patients are frequently asked to complete questionnaires, such as the BDI, before the start of each session. Most sessions take place in the therapist's office. However, real-life work with anxious patients occurs outside the therapist's office. A therapist might take public transportation with an agoraphobic, go to a pet store with a rodent phobic, or travel in an airplane with someone afraid of flying.

Confidentiality is always maintained, and the therapist obtains informed consent for audiotaping and videotaping. Such recording is used in skills training or as a way to present evidence contradicting the patient's assumptions. For example, a patient who believes she looks nervous whenever she converses might be videotaped in conversation to test this assumption. Her appearance on camera may convince her that her assumption was in error or help her to identify specific behaviors to improve. Occasionally, patients take audiotaped sessions home to review content material between sessions.

Sessions are usually conducted on a weekly basis, with severely disturbed patients seen more frequently in the beginning. Cognitive therapists give their patients phone numbers at which they can be reached in the event of an emergency.

Whenever possible, and with the patient's permission, significant others, such as friends and family members, are included in a therapy session to review the treatment goals and to explore ways in which the significant others might be helpful. This is especially important when family members misunderstand the nature of the illness, are overly solicitous, or are behaving in counterproductive ways. Significant others can be of great assistance in therapy, helping to sustain behavioral improvements by encouraging homework and assisting the patient with reality testing.

Problems may arise in the practice of cognitive therapy. For example, patients may misunderstand what the therapist says, and this may result in anger, dissatisfaction, or hopelessness. When the therapist perceives such a reaction, he or she elicits the patient's thoughts, just as with any other automatic thoughts. Together the therapist and client look for alternative interpretations. The therapist who has made an error accepts responsibility and corrects the mistake.

Problems sometimes result from unrealistic expectations about how quickly behaviors should change, from the incorrect or inflexible application of a technique, or from lack of attention to central issues. Problems in therapy require that the therapist attend to his or her own automatic thoughts and look for distortions in logic that create strong affect or prevent adequate problem solving.

Beck, Rush, et al. (1979) provide guidelines for working with difficult patients and those who have histories of unsuccessful therapy: (1) avoid stereotyping the patient as *being* the problem rather than *having* the problem; (2) remain optimistic; (3) identify

and deal with your own dysfunctional cognitions; (4) remain focused on the task instead of blaming the patient; and (5) maintain a problem-solving attitude. By following these guidelines, the therapist is able to be more resourceful with difficult patients. The therapist also can serve as a model for the patient, demonstrating that frustration does not automatically lead to anger and despair.

Evidence

Evidence-based practice in psychology (EBPP) advocates the application of empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention in the delivery of effective psychological care (APA Presidential Task Force on Evidence-Based Practice, 2006). The evidence base for any psychological treatment is evaluated in terms of its efficacy, or demonstrated causal relationship to outcome, and its utility or generalizability and feasibility—in other words, its internal and external validity. The best available research is then combined with clinical expertise in the context of patient characteristics, culture, and preferences to promote the effective practice of psychology and public health.

A fundamental component of evidence-based practice is empirically supported treatments, those demonstrated to work for a certain disorder or problem under specified circumstances. Randomized controlled trials (RCTs) in psychology, as in other health fields, are the standard for drawing causal inferences and provide the most direct and internally valid demonstration of treatment efficacy. Meta-analysis, a systematic way to synthesize results from multiple studies, is used to quantitatively measure treatment outcome and effect sizes. Other research designs, such as qualitative research and single-case experimental designs, are used to describe experiences, generate new hypotheses, and examine causal relationships for an individual, but RCTs and meta-analysis are best suited for examining whether a treatment works for a number of people.

Cognitive therapy (CT) and cognitive–behavior therapies (CBT, the atheoretical combination of cognitive and behavioral strategies) are based on empirical studies. Individual RCTs, reviews of the literature of outcome studies for a range of disorders, and meta-analyses all document the success of CT and CBT in the treatment of depression and anxiety disorders in particular (Beck, 2005; Butler, Chapman, Forman, & Beck, 2006; DeRubeis & Crits-Christoph, 1998; Gloaguen, Cottraux, Cucherat, & Blackburn, 1998; Gould, Otto, & Pollack, 1995; Wampold, Minami, Baskin, & Callen Tierney, 2002). The recent review of 16 methodologically rigorous meta-analyses by Butler et al. (2006) found large effect sizes for unipolar depression, generalized anxiety disorder, panic disorder with or without agoraphobia, social phobia, and childhood depressive and anxiety disorders. Moderate effect sizes were found for marital distress, anger, childhood somatic disorders, and chronic pain. Relatively small effect sizes were found for adjunctive CBT for schizophrenia and for bulimia nervosa. Other studies have found that CT/CBT yields lower relapse rates than antidepressant medications (Hollon, DeRubeis, Shelton, et al., 2005) and reduces the risk of symptoms returning following treatment termination for depression and anxiety disorders (Hollon, Stewart, & Strunk, 2006).

One criticism of the reliance on RCTs in psychotherapy research is that the samples studied are so carefully screened to eliminate comorbidity or other threats to experimental control that they do not represent real groups in the community, who often have multiple problems. However, a recent study by Brown et al. (2005) showed success for cognitive therapy for the prevention of suicide attempts among people at high risk for suicide. The participants in this study had more than one psychiatric diagnosis, and 68% had substance abuse problems. A study by DeRubeis et al. (2005) similarly included participants with comorbidity.

In addition to best available research, another component of evidence-based practice is clinical expertise—the advanced clinical skills to assess, diagnose, and treat disorders. The importance of clinical expertise is demonstrated in the study by DeRubeis et al. (2005), which concluded that CT can be as effective as medications for the initial treatment of depression, but the degree of effectiveness may depend on a high level of therapist experience or expertise.

The generalizability of CT/CBT has been examined in a few studies. Stirman and colleagues (Stirman, DeRubeis, Crits-Cristoph & Rothman, 2005) found that clinical characteristics of subjects in RCTs matched those of patients in clinical settings. Similarly, Persons and associates (Persons, Bostrom, & Bertagnolli, 1999) found that clinic patients treated with CT for depression improved comparably to those in RTCs. In addition, studies of schizophrenic patients at National Health Service clinics in the U.K. found improved symptoms using CT as an adjunct to pharmacotherapy (Tarrier, 2008).

Because training in evidence-based therapies has been mandated by the Accreditation Council for Graduate Medical Education, CT/CBT is being taught in psychiatry residency programs in the United States. As the number of professionals with expertise in cognitive therapy increases, research may be further directed both toward refining the therapy for more populations in need and toward exploring ways to make it cost-effective and available in community settings.

Psychotherapy in a Multicultural World

Cognitive therapy begins with an understanding of the patient's beliefs, values and attitudes. These exist within a cultural context, and the therapist must understand that context. Cognitive therapy focuses on whether these beliefs are adaptive for the patient, and whether they pose difficulties or lead to dysfunctional behavior. Cognitive therapy does not work on changing beliefs in an arbitrary way, nor is it an attempt to impose the therapist's beliefs on the patient. Rather, it helps the individual examine his or her own beliefs and whether they foster emotional well-being. Sometimes people's personal beliefs are at odds with the cultural values around them. Other times, a person's beliefs may be changing with culture change, as in rapid modernization or migration to a new country, and discrepancies may cause distress. In these cases, cognitive therapy may help patients think flexibly in order to reconcile their beliefs with environmental constraints or empower them to find solutions.

Beck's work has been translated into more than a dozen languages, and cognitive therapists are represented by organizations worldwide. Research in cognitive therapy has been conducted in many countries, primarily industrial economies. There is a need to expand cognitive therapy research further into developing nations.

CASE EXAMPLE

This case example of the course of treatment for an anxious patient illustrates the use of both behavioral and cognitive techniques.

Presenting Problem

The patient was a 21-year-old male college student who complained of sleep-onset insomnia and frequent awakenings, halting speech and stuttering, shakiness, feelings of nervousness, dizziness, and worrying. His sleep difficulties were particularly acute prior to exams or athletic competitions. He attributed his speech problems to his search for the "perfect word."

The patient was raised in a family that valued competition. As the eldest child, he was expected to win all the contests. His parents were determined that their children should surpass them in achievements and successes. They so strongly identified with the patient's achievements that he believed, "My success is their success."

The patient was taught to compete with other children outside the family as well. His father reminded him, "Never let anyone get the best of you." As a consequence of viewing others as adversaries, he developed few friends. Feeling lonely, he tried desperately to attract friends by becoming a prankster and by telling lies to enhance his image and make his family appear more attractive. Although he had acquaintances in college, he had few friends, for he was unable to self-disclose, fearing that others would discover he was not all that he would like to be.

Early Sessions

After gathering initial data regarding diagnosis, context, and history, the therapist attempted to define how the patient's cognitions contributed to his distress (T = Therapist; P = Patient).

T: What types of situations are most upsetting to you?
P: When I do poorly in sports, particularly swimming. I'm on the swim team. Also, if I make a mistake, even when I play cards with my roommates. I feel really upset if I get rejected by a girl.
T: What thoughts go through your mind, let's say, when you don't do so well at swimming?
P: I think people think much less of me if I'm not on top, a winner.
T: And how about if you make a mistake playing cards?
P: I doubt my own intelligence.
T: And if a girl rejects you?
P: It means I'm not special. I lose value as a person.
T: Do you see any connections here, among these thoughts?
P: Well, I guess my mood depends on what other people think of me. But that's important. I don't want to be lonely.
T: What would that mean to you, to be lonely?
P: It would mean there's something wrong with me, that I'm a loser.

At this point, the therapist began to hypothesize about the patient's organizing beliefs: that his worth is determined by others, that he is unattractive because there is something inherently wrong with him, that he is a loser. The therapist looked for evidence to support the centrality of these beliefs and remained open to other possibilities.

The therapist assisted the patient in generating a list of goals to work on in therapy. These goals included (1) decreasing perfectionism, (2) decreasing anxiety symptoms, (3) decreasing sleep difficulties, (4) increasing closeness in friendships, and (5) developing his own values apart from those of his parents. The first problem addressed was anxiety. An upcoming exam was chosen as a target situation. This student typically studied far beyond what was necessary, went to bed worried, finally fell asleep, woke during the night thinking about details or possible consequences of his performance, and went to exams exhausted. To reduce ruminations about his performance, the therapist asked him to name the advantages of dwelling on thoughts of the exam.

P: Well, if I don't think about the exam all the time I might forget something. If I think about the exam constantly, I think I'll do better. I'll be more prepared.
T: Have you ever gone into a situation less "prepared"?

P: Not an exam, but once I was in a big swim meet and the night before I went out with friends and didn't think about it. I came home, went to sleep, got up, and swam.
T: And how did it work out?
P: Fine. I felt great and swam pretty well.
T: Based on that experience, do you think there's any reason to try to worry less about your performance?
P: I guess so. It didn't hurt me not to worry. Actually, worrying can be pretty distracting. I end up focusing more on how I'm doing than on what I'm doing.

The patient came up with his own rationale for decreasing his ruminations. He was then ready to consider giving up his maladaptive behavior and risk trying something new. The therapist taught the patient progressive relaxation, and the patient began to use physical exercise as a way to relieve anxiety.

The patient was also instructed in how cognitions affect behavior and mood. Picking up on the patient's statement that worries can be distracting, the therapist proceeded.

T: You mentioned that when you worry about your exams, you feel anxious. What I'd like you to do now is imagine lying in your bed the night before an exam.
P: Okay, I can picture it.
T: Imagine that you are thinking about the exam and you decide that you haven't done enough to prepare.
P: Yeah, OK.
T: How are you feeling?
P: I'm feeling nervous. My heart is beginning to race. I think I need to get up and study some more.
T: Good. When you think you're not prepared, you get anxious and want to get up out of bed. Now, I want you to imagine that you are in bed the night before the exam. You have prepared in your usual way and are ready. You remind yourself of what you have done. You think that you are prepared and know the material.
P: OK. Now I feel confident.
T: Can you see how your thoughts affect your feelings of anxiety?

The patient was instructed to record automatic thoughts, recognize cognitive distortions, and respond to them. For homework, he was asked to record his automatic thoughts if he had trouble falling asleep before an exam. One automatic thought he had while lying in bed was "I should be thinking about the exam." His response was "Thinking about the exam is not going to make a difference at this point. I did study." Another thought was "I must go to sleep now! I must get eight hours of sleep!" His response was "I have left leeway, so I have time. Sleep is not so crucial that I have to worry about it." He was able to shift his thinking to a positive image of himself floating in clear blue water.

By observing his automatic thoughts across a variety of situations—academic, athletic, and social—the patient identified dichotomous thinking (e.g., "I'm either a winner or a loser") as a frequent cognitive distortion. Perceiving the consequences of his behavior as either totally good or completely bad resulted in major shifts in mood. Two techniques that helped with his dichotomous thinking were reframing the problem and building a continuum between his dichotomous categories.

Here the problem is reframed:

T: Can you think of reasons for someone not to respond to you other than because you're a loser?
P: No. Unless I really convince them I'm great, they won't be attracted.

T: How would you convince them of that?
P: To tell you the truth, I'd exaggerate what I've done. I'd lie about my grade point average or tell someone I placed first in a race.
T: How does that work out?
P: Actually, not too well. I get uncomfortable and they get confused by my stories. Sometimes they don't seem to care. Other times they walk away after I've been talking a lot about myself.
T: So in some cases, they don't respond to you when you focus the conversation on yourself.
P: Right.
T: Does this have anything to do with whether you're a winner or a loser?
P: No, they don't even know who I am deep down. They're just turned off because I talk too much.
T: Right. It sounds like they're responding to your conversational style.

The therapist reframed the problem from a situation in which something was inherently wrong with the patient to one characterized by a problem of social skills. Moreover, the theme "I am a loser" appeared so powerful to the patient that he labeled it as his "main belief." This assumption was traced historically to the constant criticism from his parents for mistakes and perceived shortcomings. By reviewing his history, he was able to see that his lies prevented people from getting closer, reinforcing his belief that they didn't want to be close. In addition, he believed that his parents made him whatever success he was and that no achievement was his alone. This had made him angry and lacking in self-confidence.

Later Sessions

As therapy progressed, the patient's homework increasingly focused on social interaction. He practiced initiating conversations and asking questions in order to learn more about other people. He also practiced "biting his tongue" instead of telling small lies about himself. He monitored people's reactions to him and saw that they were varied, but generally positive. By listening to others, he found that he admired people who could openly admit shortcomings and joke about their mistakes. This experience helped him understand that it was useless to categorize people, including himself, as winners and losers.

In later sessions, the patient described his belief that his behavior reflected on his parents, and vice versa. He said, "If they look good, it says something about me and if I look good, they get the credit." One assignment required him to list the ways in which he was different from his parents. He remarked, "Realizing that my parents and I are separate made me realize I could stop telling lies." Recognizing how he was different from his parents freed him from their absolute standards and allowed him to be less self-conscious when interacting with others.

Subsequently, the patient was able to pursue interests and hobbies that had nothing to do with achievement. He was able to set moderate and realistic goals for schoolwork, and he began to date.

SUMMARY

Cognitive therapy has grown quickly because of its empirical basis and demonstrated efficacy. Borrowing some of its concepts from cognitive theorists and a number of techniques from behavior therapy and client-oriented psychotherapy, cognitive therapy

consists of a broad theoretical structure of personality and psychopathology, a set of well-defined therapeutic strategies, and a wide variety of therapeutic techniques. Similar in many ways to rational emotive behavior therapy, which preceded but developed parallel to cognitive therapy, this system of psychotherapy has acquired strong empirical support for its theoretical foundations. A number of outcome studies have demonstrated its efficacy, especially in the treatment of depression. The related theoretical formulations of depression have been supported by more than 100 empirical studies. Other concepts, such as the cognitive triad in depression, the concept of specific cognitive profiles for specific disorders, cognitive processing, and the relationship of hopelessness to suicide, have also received strong support.

Outcome studies have investigated cognitive therapy with major depressive disorders, generalized anxiety disorder, dysthymic disorder, drug abuse, alcoholism, panic disorder, anorexia, and bulimia. In addition, cognitive therapy has been applied successfully to the treatment of obsessive–compulsive disorder, hypochondriasis, and various personality disorders. In conjunction with psychotropic medication, it has been used to treat delusional disorders and bipolar disorder.

Much of the popularity of cognitive therapy is attributable to strong empirical support for its theoretical framework and to the large number of outcome studies with clinical populations. In addition, there is no doubt that the intellectual atmosphere of the "cognitive revolution" has made the field of psychotherapy more receptive to this new therapy. A further attractive feature of cognitive therapy is that it is readily teachable. The various therapeutic strategies and techniques have been described and defined in such a way that one year's training is usually sufficient for a psychotherapist to attain a reasonable level of competence as a cognitive therapist.

Although cognitive therapy focuses on understanding the patient's problems and applying appropriate techniques, it also attends to the nonspecific therapeutic characteristics of the therapist. Consequently, the basic qualities of empathy, acceptance, and personal regard are highly valued.

Because therapy is not conducted in a vacuum, cognitive therapists pay close attention to patients' interpersonal relations and confront patients continuously with problems they may be avoiding. Further, therapeutic change can take place only when patients are emotionally engaged with their problems. Therefore, the experience of emotion during therapy is a crucial feature. The patient's reactions to the therapist, and the therapist's to the patient, are also important. Excessive and distorted responses to the therapist are elicited and evaluated just like any other type of ideational material. In the presence of the therapist, patients learn to correct their misconceptions, which were often derived from early experiences.

Cognitive therapy may offer an opportunity for a rapprochement between psychodynamic therapy and behavior therapy. In many ways it provides a common ground for these two disciplines. At the present time, the number of cognitive therapists within the behavior therapy movement is growing. In fact, many behavior therapists view themselves as cognitive–behavior therapists.

Looking to the future, it is anticipated that the boundaries of the theoretical background of cognitive therapy will gradually expand to encompass or penetrate the fields of cognitive psychology and social psychology. There is already an enormous amount of interest in social psychology, which provides the theoretical background of cognitive therapy.

In an era of cost containment, this short-term approach will prove to be increasingly attractive to third-party payers as well as to patients. Future empirical studies of its processes and effectiveness will undoubtedly be conducted to determine whether cognitive therapy can fulfill its promise.

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