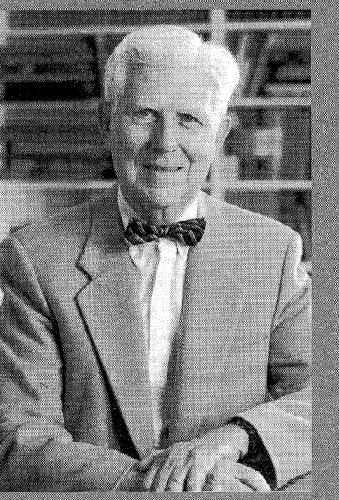

Courtesy of Aaron T. Beck, PhD, University of Pennsylvania

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.