Aaron T. Beck is one of the leading clinical theorists of the last half century. Coming of age at a time when dynamic theory was monolithic and psychoanalysis the dominant method of treatment, he began his career by seeking to confirm the primacy of unconscious motivations and ended up formulating a theory of disorder that emphasized the role of inaccurate beliefs and errors in thinking that were largely accessible to conscious introspection. This novel cognitive theory led him to formulate principles of change that he codified into a cognitive therapy that has become one of the most widely practiced and best empirically supported interventions in the field today (DeRubeis & Crits-Christoph, 1998). Beck has been the recipient of numerous honors and is the only psychiatrist to have received research awards from the American Psychological Association, the American Psychological Society, the American Psychiatric Association, and the Institute of Medicine. He has lectured throughout the world and was named one of the most influential psychotherapists of all time by the American Psychologist (July 1989). Perhaps the capstone of his career came when he received the Lasker Award, the nation’s most prestigious medical prize (New York Times, September 17, 2006). In announcing the award, Dr. Joseph L. Goldstein, the chairman of the Lasker
jury, called cognitive therapy “one of the most important advances—if not the most important advance—in the treatment of mental diseases in the last 50 years.”

MAJOR CONTRIBUTIONS

Beck was trained in the psychodynamic model (like most psychiatrists in the middle part of the last century) and embarked on an ambitious program of research designed to test Freud’s notion that depression was a consequence of unconscious anger directed against the self. In a series of experimental and clinical studies, he found little evidence of the retroflected anger posited by dynamic theory in the behavioral performance of his depressed patients or in their dreams and free associations; what he found instead were consistent themes of loss and personal failing. Rather than letting existing theories drive his interpretations, he proposed a major reformulation that held that the core problem in depression was not a product of unconscious drives and defenses but, rather, the consequence of unduly negative beliefs and biased information processing. In so doing he emphasized the causal role of one class of symptoms of depression, a causal role that had been largely overlooked by the major theoretical perspectives of the day.

In retrospect, it is easy to forget just how revolutionary this perspective was or how controversial it proved to be. Psychodynamic theory dating from Freud held that the causes of depression and other types of psychopathology lay in unconscious motivations that could not be directly addressed without triggering defenses in the patient that led them to resist efforts at change and required, instead, years of careful and indirect exploration. Conversely, behavior theory, its major competitor at the time, held that psychopathology was a consequence of outside forces and could best be resolved by reordering the external environment. Neither put much stock in the notion that the things a patient believed, what he or she thought or expected, played a role in the generation of distress and problems in coping. Beck’s cognitive reformulation of psychopathology was truly revolutionary, and his cognitive theory of change paved the way for some of the most efficacious treatments of the modern era. It also was actively resisted at the time, and the larger psychodynamic community regarded his views as heretical at best.

Beck’s monograph on depression, published in 1967, summarized this work and became a classic in the field. In it he proposed that depression was in part a consequence of a systematic tendency to perceive things in a negative and biased fashion. He introduced his concept of the negative cognitive triad—negative views about the self, the world, and the future—and explicated the role of schema, clusters of beliefs, and proclivities with respect to information...
processing that serve to warp the way that information is processed in the direction of existing beliefs. He also introduced the rudiments of an approach to treatment in which he laid out basic strategies for teaching patients how to explore the accuracy of their own beliefs and how to protect themselves from the biasing effects of schema-driven processing. In so doing, he drew heavily on recent advances in cognitive psychology that emphasized the way in which existing beliefs could bias information processing and developed a sophisticated set of clinical procedures to offset those proclivities.

By the early 1970s he had developed a coherent approach to treatment based on the principles that he called cognitive therapy. At this time, there was no evidence that any psychosocial intervention was as efficacious as medications in the treatment of depression or even superior to pill-placebo controls. Before the end of the decade, he and colleagues at the University of Pennsylvania published a randomized controlled trial in which cognitive therapy outperformed medications, the current standard of treatment (Rush, Beck, Kovacs, & Hollon, 1977). Patients in that trial were not only as likely to respond to cognitive therapy as to medications, but they also were considerably more likely to stay well after treatment termination. This was not only the first time that any psychosocial treatment had held its own with medication in the treatment of depression but also the first clear evidence of an enduring effect for psychotherapy, something that had long been claimed but never before demonstrated.

Thirty years of subsequent research have fully supported these early claims. Cognitive therapy is now widely recognized as an empirically supported psychosocial treatment for depression, and the proposition that it has enduring effects not found for medications is well supported in the literature (Hollon, Stewart, & Strunk, 2006). Moreover, evidence of its efficacy is not limited to depression; he has taken the lead in extending the approach to other disorders and many others have followed. There now is clear evidence for its efficacy and enduring effects for nearly all of the nonpsychotic disorders (including panic and the anxiety disorders, somatic disorders such as hypochondriasis, eating disorders such as anorexia and bulimia, substance abuse and addiction, marital distress, and a variety of both internalizing and externalizing childhood disorders), as well as emerging work in the personality disorders (including borderline personality disorder and antisocial personality) and the psychoses (including bipolar disorder and the schizophrenias; Butler, Chapman, Forman, & Beck, 2006).

Beck has been committed to the empirical evaluation of his theories and the therapy that developed from them. He viewed his theories as provisional only and sought to subject them to empirical disconfirmation in as timely a manner as possible. His empirical studies have consistently pitted his preferred intervention against the best existing treatments in the field, and he has shown a keen awareness of the need to balance investigator allegiance...
to be sure that each modality tested has a fair chance at success. The quality and impartiality of these investigations have contributed greatly to his impact on the field, and the ease with which they have been replicated speaks to the generalizability of the approach. Cognitive theory has evolved over the years, and cognitive therapy has been revised on the basis of both experimental findings and clinical insights, allowing it to be generalized to numerous other disorders across a variety of clinical situations. There is even evidence that cognitive therapy can be taught to persons at risk in the service of preventing the emergence of subsequent distress. His commitment to the principles of science and his willingness to subject his beliefs to potential disconfirmation have contributed both to shaping the approach and to the success it has enjoyed.

EARLY BEGINNINGS

Aaron T. Beck was the youngest of five children of parents who both emigrated from Russia (see Weishaar, 1993, for a detailed description of his early life). His father was a printer by trade and an intellectual by nature who was a strong supporter of socialistic principles. His mother was a strong-willed woman who gave up her dream of going to medical school to care for her younger siblings after the untimely death of her own mother. There are indications that his mother became depressed herself following the loss of a daughter during the great influenza epidemic of 1919 and that her distress remitted only after the birth of her youngest son, Aaron (perhaps his first successful cure).

Beck himself nearly died at age seven after a broken bone in his arm became infected and he developed septicemia, an infection of the blood that was nearly always fatal at that time. The surgery itself was traumatic. He was separated from his mother without warning and put under the knife before the anesthetic had taken effect. This experience led to fears of abandonment and health-related phobias that he only mastered later in life by thinking through their cognitive antecedents and testing their accuracy by exposing himself to the situations that he feared (one of his reasons for later going into medicine). Moreover, he missed so much time from school that he was held back a grade, leading him to think of himself as “dumb and stupid,” but he sought help from his older brothers and came to excel in school, leading him to believe that he could overcome misfortune through hard work and use a “never say die” attitude to turn “a disadvantage adversity into an advantage” (Weishaar, 1993, p. 10). In many respects, the seeds of his later theoretical innovations were sown by his own early life experiences; his initial response to these traumatic life events was to develop exaggerated beliefs (reasonable under the circumstances) that overestimated the risk inherent in health-related or educational situations and that underestimated
his own capacity to cope—beliefs he overcame by thinking them through and forcing himself to engage in what he feared, to test their accuracy.

He graduated first in his high school class and followed his older brothers to Brown University. Although he majored in English and political science, he decided to pursue a career in medicine, only to be discouraged by a professor from applying to medical school because of the anti-Semitism of the time. He pursued extra premed course work nonetheless and graduated magna cum laude in 1942, having been elected to Phi Beta Kappa. He applied to only three or four medical schools and was admitted to Yale, in part because he shared an interest in the works of Aldous Huxley with the professor of pediatrics who conducted his admissions interview.

He was not originally interested in psychiatry or psychotherapy and embarked on a residency in neurology after completing medical school. He was attracted to neurology by its disciplined diagnostic procedures and its capacity to pinpoint the precise location of lesions in the nervous system on the basis of careful clinical observation. It was during the course of a mandatory 6-month rotation in psychiatry that he became fascinated with its subject matter and with psychoanalysis in particular, which he thought would reveal the inner workings of the human mind. He completed a 2-year fellowship at Austin Riggs Center in Stockbridge Massachusetts (supervised by Erik Erikson) before volunteering to serve at the Valley Forge General Hospital, an army hospital near Philadelphia. He was board certified in psychiatry in 1953 and became an instructor in psychiatry at the University of Pennsylvania the following year. He graduated from the Philadelphia Psychoanalytic Institute in 1958 and became an assistant professor at Penn the following year, receiving his first research grant (to study dreams) in the process.

It was during his internship that he met his wife, Phyllis. She was a journalist by training who wrote for *Time* magazine and the *Berkshire Eagle* (Pittsfield, MA) before taking a master’s degree in social work and ultimately going on to law school while raising four children. She enjoyed a long and successful career in the law and became the first woman to be elected a superior court judge in Pennsylvania. Retired from the bench, she is now the chief counsel for the Barnes Foundation.

**ACCOMPLISHMENTS**

**From the Exploration of Dreams to the Identification of Beliefs**

Although Beck became deeply interested in psychodynamic principles, he initially approached them with some ambivalence. He had always had a rebellious streak intellectually, and he found that his pragmatic nature sometimes
made psychoanalytic principles seem counterintuitive. Nonetheless, he decided to suspend his initial disbelief and threw himself into his analysis. He remained troubled by its lack of a scientific basis and came to believe that empirical evidence was necessary to convince the hard-headed skeptic. He came to view psychological research as a way to validate psychoanalytic concepts and make them acceptable to the scientific community.

He decided to focus on depression, the most frequent disorder in his practice, and began a series of studies designed to show that depression was a consequence of unconscious rage against others that became repressed and turned against the self. Adhering to the notion that dreams represented the “royal road to the unconscious,” he began to study the dreams of his depressed patients and to compare them with the dreams of patients who were not depressed. What he found, to his dismay, was that the dreams of his depressed patients actually contained less hostility than those of his nondepressed controls. What they did contain were the same themes of rejection and failure that patients expressed in their waking conscious verbalizations. He considered other more complex interpretations that preserved the primacy of the unconscious (none supported by the data) before coming to what he termed the “simple-minded hypothesis” that the negative way in which patients see themselves is actually the basic process, rather than the derivative of unconscious forces (Beck, 2006, p. 1139). The essence of this formulation was that there was no need to go deeper; a model based on his patients’ internal representations of themselves, their experiences, and their future could account for both their dreams and their symptoms.

Experimental work was crucial to this paradigmatic shift. In an effort to test between the competing interpretations, Beck and colleagues put depressed and nondepressed patients in controlled performance situations and manipulated their success or failure. In opposition to psychodynamic theory, which would have predicted a masochistic worsening of mood in reaction to positive feedback, what he found is that both the mood and performance of his depressed patients improved when they experienced instances of success (Loeb, Beck, & Diggory, 1971; Loeb, Feshbach, Beck, & Wolf, 1964). These studies not only contradicted predictions generated from psychodynamic theory but also pointed to the kind of clear and pragmatic strategies that could be used clinically to disconfirm the patients’ negative beliefs.

Over the next several years, he began to experiment with helping patients recognize their own internal dialogue (often in the form of fleeting negative “automatic thoughts” that consisted of demeaning self-evaluations and distorted misinterpretations of innocuous events) and found that he could guide them to examine the validity of their own beliefs through a process of Socratic questioning and the use of behavioral experiments. He described his approach, which he called cognitive therapy, in a series of case reports that
he presented at the Association for the Advancement of Behavior Therapy (Beck, 1970). John Rush, one of his residents at the time, encouraged him to conduct a randomized controlled trial that found that cognitive therapy was both superior to and longer lasting than medication (Rush et al., 1977).

Role of Beliefs in the Etiology and Treatment of Psychopathology

While Beck was developing his cognitive theory and therapy of depression, he also began to ask whether cognitive processes played a role in other disorders and whether he could identify a specific profile of distortions and beliefs that was associated with each. In order to carry out this work, he organized a clinic, called first the Mood Clinic and later the Center for Cognitive Therapy, that enabled him to study individuals with a variety of disorders and to use their clinical materials to probe the nature of their distress and to explore methods of intervention with his colleagues and his students. His treatise on the *Cognitive Therapy of the Emotional Disorders* provided an early road map to this approach (Beck, 1976). The basic strategy that he followed was to collect a large number of clinical observations for a specific disorder (focusing on the automatic thoughts and underlying beliefs), derive a formulation for the particular disorder, and devise inventories and rating scales to measure the specific clinical variables. Then, on the basis of the cognitive profile, he would adapt the generic cognitive model to fit the specific characteristics of the disorder.

He and his colleagues and students would then generate clinical interventions based on these principles and observations that were collated into treatment manuals that could be used in randomized controlled intervention trials. This basic research strategy, first developed in his work on depression (Beck, Rush, Shaw, & Emery, 1979), was subsequently applied to the study and treatment of panic and the anxiety disorders (Beck, Emery, & Greenberg, 1985), personality disorders (Beck, Freeman, & Associates, 1990), and substance abuse (Beck, Wright, Newman, & Liese, 1993).

Beck has had a long-standing interest in suicide and its prevention. Early in his career he and his colleagues constructed a new classification system and developed instruments to validate it (Beck, Resnik, & Lettieri, 1974). He found, for example, that persons with elevated levels of hopelessness were at significant risk of ultimate suicide and that predictors of subsequent risk among suicide attempters included expressions of regret over the failure of their attempt(s) and increasing intensity of ideation across attempts (Beck, Morris, & Beck, 1974). This work culminated in the development of a brief cognitive therapy for suicide that has been shown to cut the frequency of subsequent attempts in half among high-risk patients with a recent history of attempts (Brown et al., 2005).
During the 1970s and 1980s, Beck made a series of extended visits to Britain and particularly Oxford University, where the chairman of psychiatry, Michael Gelder, was strongly supportive of the cognitive therapy approach. There he met with John Teasdale and Mark Williams (joined by Zindel Segal of Toronto) who added meditation to develop a mindfulness-based approach to cognitive therapy. He had a strong influence on David M. Clark and Paul Salkovskis (later joined by Anke Ehlers), who used the systematic approach he applied to depression to adapt cognitive therapy to the treatment of a variety of anxiety disorders, including panic, social phobia, hypochondrias, post-traumatic stress disorder, and obsessive–compulsive disorder, among others. This latter group (who subsequently moved to the Institute of Psychiatry in London) has done some of the most elegant translational work in the field today. Dominic Lam, another former trainee, adapted the approach to the prevention of recurrence in bipolar disorder, and Christopher Fairburn at Oxford and Kelly Bemis Vitousek in Hawaii have been strongly influenced by cognitive therapy in their respective work with eating disorders. David Kingdon and Douglas Turkington in England applied the basic framework to successfully adapt cognitive therapy to the treatment of residual symptoms in schizophrenia (Kingdon & Turkington, 1994). Other research groups in the United Kingdom have found similarly promising results in the treatment of both acute and chronic patients. This work has been slow to be adopted in the United States (where clinical lore has long presumed that you cannot reason with someone who is psychotic) but is beginning to make its way across the Atlantic (Beck & Rector, 2005). In addition to his work on mindfulness, Zindel Segal in Toronto has investigated the neural processes underlying change in treatment in cognitive therapy versus medications, and David A. Clark in Nova Scotia has explored the cognitive process underpinning depression and related anxiety disorders. Much of the work in the United States has focused on depression (including that by Robert J. DeRubeis and Steven D. Hollon), and Martin Seligman at the University of Pennsylvania and Judy Garber at Vanderbilt have each investigated the role of cognitive interventions in the prevention of depression in at-risk children and adolescents.

Other Contributions

Beck was a driving force in establishing the journal Cognitive Therapy and Research. He served on its executive board for many years and published his classic comparison of cognitive therapy versus medication in the treatment of depression in its inaugural issue (Rush et al., 1977). He is an active participant in and regularly attends the Association for Behavior and Cognitive Therapies (ABCT), the Society for Psychopathology Research, and the Society for Psychotherapy Research. He was the driving force in establishing
the Academy of Cognitive Therapy, an organization that certifies competence in cognitive therapy based on actual tape ratings, and has founded both the Center for Cognitive Therapy at the University of Pennsylvania and the Beck Institute in nearby Bala Cynwyd.

Dr. Beck has authored over 450 articles in peer-reviewed journals and 17 books and treatment manuals. Many of these publications (on depression, anxiety, personality disorders, and other clinical problems) have become classics in the field (e.g., Beck, 1967, 1976; Beck et al., 1979, 1985; Beck, Freeman, & Associates, 1990). In addition, Beck and his colleagues and students have written a number of treaties and self-help manuals for the public (Beck, 1988; Burns, 1980; Greenberger & Padesky, 1995). Beck has developed a number of major self-report and clinical rating instruments. The Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is the most widely used self-report instrument in the field and the Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) has been shown to be a better predictor of risk of suicide than depression (Beck, Brown, Berchick, Stewart, & Steer, 1990). The Dysfunctional Attitudes Scale is widely used as a measure of beliefs and attitudes conferring risk for depression (Weissman & Beck, 1978) and the Cognitive Therapy Scale is widely used as a measure of competence with cognitive therapy (Young & Beck, 1980). He also developed the Suicide Intent Scale (Beck, Morris, & Beck, 1974) and the Scale for Suicide Ideation for work in the assessment of suicide and the prediction of risk (Beck, Brown, & Steer, 1997).

INFLUENCES

Beck was strongly influenced by Freudian theory in his early professional years, although he was restless and dissatisfied with its lack of scientific basis (Weishaar, 1993). He longed to provide the kind of empirical evidence necessary to convince a hard-headed scientist, and he numbered Seymour Feshbach and Marvin Hurvich, experimental psychologists on faculty in the Department of Psychology at Penn, among his early collaborators. His personal analyst, Leon Saul, who wrote about conscious processes, strongly influenced his interest in dream research. He also was greatly influenced by the writings of George Kelly and Albert Ellis, who were starting to challenge the dominance of psychodynamic thought in psychotherapy and were subsequently joined by colleagues like Donald Meichenbaum and Michael Mahoney, who introduced cognitive principles into conventional behavior therapy. Beck has mentored a number of students and junior collaborators, many of whom have gone on to distinguish themselves in independent careers. These include A. John Rush, one of the preeminent biological psychiatrists in the field.
today; Marika Kovacs, a noted developmental psychopathologist who does longitudinal research on the development of risk for depression in children; and David M. Clark, one of the most innovative and highly regarded anxiety researchers of his generation. Others greatly influenced by Beck include his daughter, Judith Beck (a major theorist in her own right), David Burns, Robert J. DeRubeis, Arthur Freeman, Steven D. Hollon, Christine Padesky, Jackie Persons, Brian F. Shaw, Kelly Bemis Vitousek, and Jeffrey Young, among others, three of whom have gone on themselves to become presidents of ABCT.

CONCLUSION

Aaron T. Beck has had a major impact on what the field thinks about psychopathology and the nature of treatment for the mental disorders. He is the architect of one of the most widely used and efficacious psychotherapies in the field today. His work has been prodigious and his influence profound, in part because of his insistence on subjecting his ideas to the stiffest possible empirical tests. His theoretical notions about the role of cognition in the etiology and maintenance of psychopathology have revolutionized the field, and the clinical innovations he developed have coalesced into one of the most widely practiced and best empirically supported interventions of the day. He is truly a giant in the field.

REFERENCES


