

# **Cognitive Behavior Therapy**

# Deborah A. Roth

Winnie Eng and Richard G. Heimberg

Center for the Treatment and Study of Anxiety, University of Pennylvania Adult Anxiety Clinic of Temple University

- I. Description
- II. Theoretical Bases
- III. Empirical Studies
- IV. Summary Further Reading

#### **GLOSSARY**

automatic thoughts The self-critical or exaggerated negative self-statements that go through a person's mind and are accepted as true by the person without testing their accuracy. cognitive restructuring A treatment technique that attempts to identify and modify negative or unrealistic thoughts or attributions.

*cognitive triad* A person's view of him- or herself, of the world, and the future, which may lead to depression when negative.

*exposure* A treatment approach in which clients systematically confront their feared objects or situations.

exposure and response prevention An approach to treatment for obsessive—compulsive disorder (and other disorders such as bulimia nervosa) in which the client is systematically and gradually exposed to his or her feared thoughts or situations while compulsive rituals or other behaviors are actively prevented.

schema An enduring and stable belief system that assists in explaining experiences, mediating perception, and guiding response.

self-monitoring A treatment technique in which clients systematically observe and record behaviors or responses and may be used to highlight subsequent changes in patterns of responses.

#### I. DESCRIPTION

Cognitive behavior therapy (CBT) incorporates principles associated with information-processing and learning theories. A basic assumption of CBT is the recognition that there is a reciprocal relationship between clients' cognitive processes (what they think) and their affect (emotional experience), physiology, and behavior. Although CB treatments for individual disorders differ in both their form and application, they all emphasize the importance of changing cognitions and behaviors as a way of reducing symptoms and improving the functioning of the affected person.

CBT clearly defines roles for both the therapist and the client, both of whom are active participants in the therapy. The clinician assumes the role of educator, teaching the client about cognitive models that have been developed to understand the etiology and, more importantly, the maintenance of the client's specific problems. The clinician is also responsible for teaching clients the cognitive and behavioral techniques designed to alleviate their problems. The client is considered to be the expert on his or her personal experiences, and the two of them work together to overcome the client's difficulties.

The stance taken by therapists in CBT is quite different from that taken by therapists who employ different modes of treatment, most notably psychodynamic therapy. In CBT, therapists clearly communicate to clients that they do not have all of the answers and that they

must collaborate to solve the client's problems. For clients to experience symptom relief, they must also actively seek out new experiences and must learn to look at the world in new ways. Clients are, in effect, taught over time to serve as their own therapists, to apply the principles of CBT with decreasing amounts of guidance from the therapist. Encouraging clients to take on this role might be part of the reason why gains experienced over the course of CBT tend to be maintained or even increased once treatment has ended.

A core assumption of cognitive behavioral approaches to understanding and treating mental disorders is that people are active processors of information. In Aaron Beck's original cognitive model of depression, three important concepts were introduced to help to explain the psychological underpinnings of the disorder, and these concepts have greatly informed our understanding of other disorders as well. First, Beck introduced the cognitive triad, a term to describe his contention that depressed people have negative views of themselves, their ongoing experiences, and their futures. The second core component of Beck's model is the schema. Each day, humans are barraged with numerous stimuli from the environment, and it would be impossible to attend to every single one. Furthermore, once a person actually attends to a stimulus, how he or she comes to understand and process it might be very different from how another individual might react to that same stimulus. Beck suggested that our reactions to stimuli are determined by relatively stable cognitive structures called schemas. Once activated, schemas can have effects reaching far beyond the immediate situation. For example, a relationship break-up might trigger a depressive schema (which might relate, for example, to the inevitability of the loss of all things good) and lead the individual to view unrelated events in a similar vein. For example, having an important piece of mail get lost might be interpreted as just one more example of how "no one cares for me," while prior to the break-up (and the activation of the depressive schema), that same event might have been interpreted in a more neutral and less hurtful way.

Finally, Beck also introduced the idea of faulty information processing. Specifically, depressed people tend to erroneously think in an "extreme, negative, categorical, absolute, and judgmental" fashion, not surprisingly leading to negative affect. According to Beck, these thinking errors maintain clients' negative beliefs about the self, their experiences, and the future, even in the presence of contradictory evidence.

Given that negative affect and behaviors are facilitated and maintained by faulty information processing, it makes sense that the main goal of cognitive behavior therapy is to fix errors in thinking. Thoughts can often be changed directly, in which case clients are instructed to be attentive to subsequent changes in their mood, physiology, and behavior. Conversely (as will be discussed in more detail below), clients are also taught that changes in behavior can result in subsequent changes in cognition. These behavioral changes can also have a profound impact on affect and physiology. In short, clients are encouraged to always keep the important reciprocal relationship between cognition and behavior in mind and to remember that alleviation of symptoms can come about via changes in thinking and/or changes in behavior.

An important component of treatment is to make clients aware of their negative automatic thoughts. Often, clients are so accustomed to having negative thoughts, and the thoughts come to them so quickly, that they are not even aware of having them. Furthermore, clients rarely come into treatment having a clear understanding of the ways in which negative thoughts impact affective, physiological, and behavioral processes. Therefore, a first step in treatment is to help clients to become more aware of their thoughts, primarily through selfmonitoring exercises. In line with Beck's cognitive triad, important targets of CBT include beliefs and expectancies about oneself and one's future, about others, and about the world. Once clients become adept at this process, it is essential also to teach them to evaluate their thoughts and to restructure them to be more rational and adaptive, all the while being cognizant of how changing thinking patterns can influence feelings as well as patterns of behavior. Although cognitive restructuring is very effortful at first (and requires the guidance of the therapist), clients gradually become more adept at the process, and many remark that this new style of looking at the world becomes integrated into their internal thought processes.

As noted above, changes in behavior can also have a profound impact on thinking patterns. Behavioral exercises in CBT can take many forms. The client is encouraged to take the stance of a scientist, viewing dysfunctional beliefs as hypotheses that can be tested, rather than as facts. This process of hypothesis testing involves not only cognitive restructuring, but also behavioral exercises. An important assumption behind this scientific stance is that beliefs can only be changed if there is concrete evidence to support the integration of new ways of looking at the self, the world, and the future.

Behavioral techniques used in CBT are also greatly informed by the assumption that psychological difficulties are often maintained by dysfunctional patterns of behavior, including avoidance. As such, an important component of CBT is the use of exercises aimed at changing clients' expectancies about their ability to function in particular situations. For example, the key to treating a specific phobia of spiders is to actually expose the client to spiders. Through this experience, clients learn that their anxiety will habituate over time, that the terrible consequences that they associate with spiders are unlikely to occur (e.g., that the spider will have fangs that result in violent bites), and that they have the skills to deal with their anxiety in this feared situation.

Another behavioral technique used in the treatment of some disorders is exposure and response prevention (EX/RP). Here, clients are encouraged to resist the urge to engage in dysfunctional behaviors while exposing themselves to the stimuli that typically elicit these behaviors (e.g., refraining from bingeing after eating a bit of a fattening food in the case of bulimia nervosa; refraining from washing after touching something perceived by the client as contaminated in the case of obsessive-compulsive disorder). These exercises are again intended to test out the veracity of the client's beliefs (e.g., eating a bit of a forbidden food does not need to invariably result in a binge; touching something dirty will not result in something terrible happening), as well as to teach clients to use more effective coping strategies and to feel more in control of their behaviors.

An important component of CBT is relapse prevention. Throughout treatment, clients are encouraged to integrate CB techniques into their daily lives, with the intention that in doing so, CBT will remain effective after therapy ends. Some interventions, however, are specifically aimed at preventing posttherapy relapse. Specifically, clients are made aware of the fact that they might have difficult times in the future even following successful treatment. In line with cognitive-behavioral principles, they are encouraged not to interpret a single difficult event as a failure. Although the same difficult events might come up pre- and posttherapy, clients are reminded that they have come away from therapy with many useful skills that they did not previously have at their disposal. As already noted, an important goal of therapy should be to ensure that clients can apply cognitive and behavioral techniques on their own, with less reliance on the therapist over time, thus facilitating relapse prevention efforts.

CBT is a very versatile treatment, adaptable to both group and individual settings. It has been used with

children, adolescents, and adults across a wide range of cultural and socioeconomic backgrounds. CBT is also a time-efficient treatment, with most uncomplicated cases of anxiety or depression being treated in 4 to 14 sessions. This efficiency comes about for a number of reasons. First, the CBT therapist performs a thorough assessment prior to treatment that is aimed at identifying a principal problem that will be the focus of treatment. The clinician then develops a treatment plan that specifies how long the problem should take to treat and what should be accomplished during each session to meet that goal. This efficiency has been greatly aided by the development of CB treatment manuals, written for a range of psychological disorders. While these manuals help clinicians to structure treatment, they also encourage flexibility in terms of tailoring the treatment to suit the progress of the individual client.

Another factor in the time-limited nature of CBT is its focus on the "here and now." The CB view of symptom maintenance is greatly informed by learning theory. Simply put, difficulties are viewed as maladaptive "habits" that have been learned as a result of the association between certain stimuli and certain responses or as the result of reinforcement of specific responses in specific situations. Rather than looking back on why a particular problem developed (e.g., why a stimulus came to be associated with a particular response), focus is placed on developing new, more adaptive stimulus-response associations through the use of both cognitive and behavioral techniques.

CBT is an effective treatment for a wide range of client groups, although there are some contraindications. CBT is generally not indicated for people with thought disorders, although it should be noted that some researchers have explored the efficacy of CBT for schizophrenia (as reviewed recently by Faith Dickerson) and the research done to date suggests that the approach might be more promising than intuition would suggest. CBT is also not indicated for people with organic brain disorders or for people who do not have a good grasp of the language in which therapy is being conducted. Beyond these limitations, CBT has been used successfully with clients from a broad range of educational backgrounds.

Clients who embark on CBT must also be willing to accept the basic premise of the cognitive—behavioral approach to understanding and treating psychological disorders. Thus, clients who are very wedded to a particular theoretical or therapeutic approach and who are not willing to consider alternative perspectives might not do well in CBT. Furthermore, clients must be willing to

commit time and effort to their treatment. They are expected to work on their own between sessions, and research has suggested that adherence to homework assignments is predictive of good treatment outcome. As such, clients who are so impaired that they are unable to actively engage in treatment might not be good candidates for CBT until they experience some symptom relief from other approaches (e.g., medication).

#### II. THEORETICAL BASES

Cognitive-behavioral theories resulted from a gradual evolution of thought in the field of psychology that began as a reaction to the psychoanalytic theories that dominated clinical psychology and psychiatry in the 1960s. In its classical formulation, Sigmund Freud's psychoanalytic theory rested on the reductive analysis of the psyche, conducted from a scientifically detached posture. The main features of this theory included an emphasis on the unconscious, intrapsychic processes, and early childhood experiences. By its very nature, psychoanalytic constructs were not conducive to empirical investigation or validation. A growing dissatisfaction with the length and expense of psychoanalytic therapy and an ongoing controversy about its relative effectiveness led to a rise in treatments based on behavioral theories of psychotherapy.

Behavioral theories in the 1960s and early 1970s were based on the assumption that behavior develops and is maintained according to the principles of learning. One of the earliest influences on behavioral models of psychopathology was the seminal work of the Russian physiologist Ivan Pavlov on the principles of classical conditioning. His specific findings on animal learning processes, as well as his controlled methods of laboratory investigation, made important contributions to the study of behavior by prompting the view that a particular psychological symptom may be a response triggered by a specific stimulus or event. In one of the most significant investigations of learned behavior, John Watson and his colleagues demonstrated that specific fears could be both conditioned and deconditioned in human beings via the principles of classical conditioning. Using these and his own research findings, Joseph Wolpe developed a treatment for human anxiety referred to as systematic desensitization, wherein deep muscular relaxation is paired with images of anxiety-provoking situations. Over time, clients using this technique would experience less anxiety in response to the feared stimulus because the conditioned relaxation response was incompatible with the physiological response of fear. B.F. Skinner explored another learning principle called operant conditioning. Theories based on operant conditioning rest on the notion that many behaviors are performed spontaneously and are controlled primarily by their consequences. Thus, the removal of a reinforcing consequence should decrease the frequency of an unwanted behavior and conversely, applying a reinforcing consequence should increase the frequency of a desired behavior.

This belief that psychological disorders arise from an inappropriate conditioning history led to the development of behavioral treatments based on the tenet that symptoms can be reshaped into adaptive behaviors through a program of response-contingent reinforcement. Behavioral therapy was compatible with experimental methodologies, was time-efficient and heralded success in reducing anxiety and overcoming maladaptive avoidance behaviors. However, criticism of strict stimulus-response behaviorism soon followed. Albert Bandura, a social learning theorist, showed that cognitive processes were critical to the acquisition and maintenance of maladaptive behaviors and emphasized a more reciprocal relationship between the person and the environment. Other limitations of strict behavioral therapy, including a neglect of affective processes and a lack of success in the treatment of depression, opened the way for a more cognitive approach to the theory and treatment of psychological disorders.

Albert Ellis has been credited for his pioneering work in formulating the first coherent system of cognitive behavior therapy called rational-emotive therapy (RET). RET uses direct cognitive debate, logical persuasion, and behavioral homework assignments to challenge irrational beliefs and negative thinking. The goal of this therapy was to modify the core cognitive dysfunctions that are the basis of psychological disturbance. Unlike strict behavioral theories, cognitive theories assert that individuals are active participants in their environments, judging and evaluating stimuli, interpreting events and sensations, and appraising their own responses.

As mentioned earlier, Aaron Beck has been a highly influential figure in the history of cognitive therapy. In contrast to earlier theorists, Beck placed a great deal of emphasis on the cognitive aspects of psychopathology, while also advocating the integration of established behavioral techniques.

The marriage of these two approaches provides the foundation for a cognitive-behavioral approach to psychotherapy, wherein overt behavior and covert cognition, along with the interaction between the two, are crucial

for explaining the development and maintenance of emotional distress. This approach attempts to integrate the rigors of a behavioral research methodology and performance-based exercises with the centrality of mediating information-processing factors in cognitive therapy. This therapeutic approach thus offers greater explanatory power through an integration of cognitive, behavioral, emotion-focused, and social aspects of change.

The field of cognitive-behavioral therapy has been increasingly specialized and refined since the early work of Beck and Ellis, and cognitive-behavioral treatments have been applied to a wide range of psychological conditions and problems. However, these treatment programs have a common core that belies their common ancestry.

#### III. EMPIRICAL STUDIES

Studies of the efficacy of CBT for the different disorders have generally sought to answer some common questions. Researchers often begin to explore whether CBT is an effective treatment for a particular disorder through "open-label" trials, wherein all participants in a study receive CBT and change is assessed from before to after treatment. Once it has been demonstrated that CBT is associated with improvement in the problem of interest, other essential questions with respect to its efficacy must be explored. First, is CBT more effective than no treatment? Second, how does CBT compare to other psychological treatments? Third, how does CBT alone compare to either medication alone or a combination of medication and CBT? Finally, if a treatment is shown to be effective, it is also important to establish whether it remains effective in the long term once active interventions (e.g., therapy sessions) have been discontinued.

#### A. Mood Disorders

As noted earlier, CBT was first developed as a treatment for depression. CBT for depression has been shown in numerous studies to be more effective than no treatment at all and more effective than nonspecific treatments (those not specifically targeted at depression). CBT has also been shown to be at least as effective as, or more effective than, other psychological and pharmacological treatments. Also of note, CBT seems to reduce the risk of experiencing subsequent depressive episodes following treatment.

Despite a long and relatively successful tradition of using CBT to treat depression, this approach does not seem to be a "cure-all" and not all research studies have provided strong endorsements. The National Institutes of Mental Health (NIMH) Treatment of Depression Collaborative Research Program compared CBT to interpersonal psychotherapy (IPT) (a treatment developed specifically for depression by Myrna Weissman, Gerald Klerman, and colleagues that focuses on the relationship between mood and life events, particularly those related to interpersonal relationships), the tricyclic antidepressant imipramine, and pill placebo. All three active treatments performed equally well, with a little over 50% of participants who completed all 16 weeks of treatment experiencing a significant response. Although CBT was slightly more effective than the other active treatments for people with less severe cases of depression, it fared less well for people with more severe cases. Furthermore, the three active treatment groups did not differ in terms of relapse rates 18 months after treatment had ended. Although a greater percentage of responders in the imipramine group ended up relapsing as compared to responders in the CBT and IPT groups, it should be noted that these latter two groups relapsed at the same rate as participants in the placebo group.

In a more recent study, Steven Hollon and his colleagues compared the efficacy of 12 weeks of CBT alone, imipramine alone, a combination of CBT and imipramine, and 12 weeks of imipramine followed by another year of active drug treatment. After 12 weeks, the groups did not differ. At 2-year follow-up, the participants who had taken only 12 weeks of imipramine fared worse than all of the other groups. This study also demonstrated that CBT worked well, and its efficacy was not improved by the addition of imipramine. In contrast to the NIMH Treatment of Depression Collaborative Research Program described above, more severely depressed participants responded as well to CBT in this study as did the less depressed participants.

Although the use of CBT as the sole treatment for unipolar depression has certainly been advocated, CBT is viewed as an adjunct to pharmacotherapy in the treatment of bipolar disorder. At the current time, very few studies have been conducted, but researchers are taking a greater interest in the application of CBT to this disorder. Monica Ramirez Basco and John A. Rush have published a CBT treatment manual for bipolar disorder that should facilitate research. Furthermore, a federally funded, multisite study is currently under way that is exploring the relative efficacy of CBT, IPT, and family-focused therapy for bipolar disorder.

### **B.** Anxiety Disorders

CBT, or components of it, have also been used for many years in the treatment of anxiety disorders. In general, CBT has been shown to be effective across the anxiety disorders. CBT is generally seen as *the* treatment of choice for specific phobia and has been used for this disorder for many years. Medication has not been shown to be effective for the treatment of specific phobias, nor have alternate psychological therapies.

Another successful application of CBT in the realm of anxiety disorders has been in the treatment of panic disorder. David M. Clark and his colleagues compared the efficacy of CBT, applied relaxation, and imipramine. Clients placed on a wait-list served as an additional comparison group to ascertain whether changes could be attributable to the simple passage of time. At the end of treatment, clients in all three active treatment groups were doing better than clients assigned to the wait-list control group, and CBT clients fared better than those who received applied relaxation or imipramine. Furthermore, at 15-month follow-up, the CBT group was still doing better than the other two treatment groups. The most notable finding was that between 6 and 15 months following treatment, 40% of the imipramine group relapsed, compared to only 5% of the CBT group.

In another large-scale study of the treatment of panic disorder, David H. Barlow, Katherine Shear, Jack M. Gorman, and Scott Woods compared the efficacy of CBT alone to imipramine alone and to a combined treatment (CBT and imipramine). The results of their study suggested that CBT and imipramine were both superior to pill placebo. Although imipramine produced a somewhat better quality of response than CBT, the latter was better tolerated and proved to be more effective in the long term. The combination of CBT and imipramine was not as promising as the investigators had expected. In fact, participants in the combination group experienced the highest relapse at follow-up, suggesting that the addition of CBT to drug therapy did not protect against the relapse that has been associated with withdrawl from drug therapy in past studies of panic disorder clients. It is interesting to note, however, that there are studies suggesting that CBT can be very useful in helping clients to withdraw from benzodiazepines, antianxiety drugs commonly used in the treatment of panic disorder. In short, CBT has been shown to be very effective in the treatment of panic disorder, particularly in terms of long-term efficacy. Recent studies have also suggested that a shorter course of CBT for panic disorder using

self-study modules may be as effective as longer courses of treatment.

CBT has also been shown to be as effective as alternative treatments for social phobia, when delivered in either individual or group format. Richard G. Heimberg, Michael R. Liebowitz, and their colleagues have compared the efficacy of cognitive behavioral group therapy (CBGT) to that of the monoamine oxidase inhibitor phenelzine. For comparison, some participants in this study were assigned to either pill placebo or to a psychotherapy control condition (educational supportive group therapy). The general finding from their study was that clients taking phenelzine improved more quickly than did clients who received CBGT, but CBGT seemed to be more effective in terms of longterm efficacy once treatment had ended. The same research team is now exploring the efficacy of combined treatment (CBGT and phenelzine) for social phobia.

A highly successful approach to treating obsessive-compulsive disorder (OCD) is through the use of exposure plus response prevention (EX/RP, described earlier). Since the utility of EX/RP was first explored in the late 1960s, the approach has gained ample empirical support, with the combination of exposure and response prevention proving to be more effective than either component alone. Although certain medications [particularly clomipramine and some of the serotonin reuptake inhibitors (SRIs)] seem to be modestly effective in the treatment of OCD, continued success depends on continued use, suggesting (as in other anxiety disorders) that CBT might be a more effective treatment than medication in the long term. Isaac M. Marks and his colleagues have explored the efficacy of combined treatments (clomipramine and EX/RP) for OCD. In general, his studies have suggested that EX/RP is a more powerful, and a more long-lasting treatment than clomipramine and that the combination of the two treatments has only a small and short-lived additive effect. The issue of the combined treatments in OCD is also being explored in an ongoing study by Michael Liebowitz, Edna Foa, and Michael Kozak. In line with Marks's findings, preliminary data suggest that EX/RP is superior to medication alone and the combination of medication and EX/RP does not seem to be superior to EX/RP alone.

In contrast to the other anxiety disorders, treatment for generalized anxiety disorder (GAD) is still in its infancy and furthermore, while treatment for GAD (including CB-type treatments) is more effective than no treatment at all, comparative studies have failed to find differences between active treatments. Many factors have contributed to the relative slowness in the development of treatments for GAD. First, the diagnostic criteria for GAD have changed a great deal over time. Uncontrollable and excessive worry was not specified as the core feature of the disorder until 1994. As such, past treatments have included nonspecific interventions, such as relaxation training and biofeedback, rather than interventions specific to treating uncontrollable and excessive worry. In line with changes in the diagnostic criteria, there have also been major changes in the way that people understand the etiology and maintenance of GAD. Newer treatments place greater emphasis, for example, on the important role of emotion in GAD. These developments are greatly informed by current cognitive models of the disorder, like that of Tom Borkovec and his colleagues, which suggests that worry functions as a means of avoiding more emotionally laden, painful thoughts. Over the next few years, continued research into the nature of GAD may lead to the development of exciting new treatments for this disorder.

There have also been few controlled studies of CBT as a treatment for posttraumatic stress disorder (PTSD). However, various approaches based on CBT have been used to treat the disorder with encouraging results. These approaches have included stress inoculation training (SIT), a treatment originally developed by Donald Meichenbaum. In SIT, clients are first helped to make sense of the trauma that they endured and to understand the responses that they are experiencing to their trauma (in terms of cognition, behavior, and physiology). Clients are then taught coping skills to increase their sense of efficacy and to help them to feel that they have gained mastery over their fears. Coping skills are targeted at alleviating physiological symptoms (e.g., through muscle relaxation), cognitive symptoms (e.g., through guided self-dialogue), and behavioral avoidance (e.g., through modeling and role playing). Dean G. Kilpatrick and his colleagues found SIT to be effective in uncontrolled case studies but since this initial work, it has not been found to be superior to other treatments, particularly in the long term where exposure therapy seems to show greater efficacy.

Edna Foa and her colleagues have explored the use of exposure therapy for PTSD with particular focus placed on treating rape-related trauma. Their treatment, referred to as prolonged exposure, is premised on the assumption that PTSD occurs when people do not adequately process their rape experience. As such, treatment must involve processing the trauma by, in effect, exposing the client to the memories of the trauma until a fear response is no longer elicited. Foa and her col-

leagues have found that clients enrolled in prolonged exposure do better than clients on a wait-list and that prolonged exposure is more effective than SIT in terms of long-term efficacy. Patricia A. Resick and Monica K. Schnicke have also used a CB approach to treating PTSD in victims of sexual assault. Their cognitive processing therapy (CPT) involves both exposure and cognitive-restructuring techniques, with the latter based on the assumption that the experience of sexual assault is incongruent with schemas that were held prior to it. As such, CPT involves dealing with thoughts pertaining to such issues as danger, safety, intimacy, and competence. Studies have shown that clients enrolled in CPT do better than those on a wait-list, and CPT seems to have good long-term efficacy.

#### C. Bulimia

Bulimia nervosa has been treated with CBT for many years, beginning with the work of Christopher G. Fairburn in the 1970s. CBT has been associated with reductions in frequency of binge eating and purging, levels of dietary restraint, and concern over shape and weight. Furthermore, CBT for bulimia has been shown to improve general functioning (including social functioning) and to increase self-esteem. As in the case of the anxiety disorders, CBT for bulimia seems to be effective in the long term, suggesting that clients learn skills that they can continue to apply on their own once treatment has ended. In comparison studies, CBT has been shown to be more effective than alternative therapies, drug therapies or a combination of drug therapy and CBT. The one treatment besides CBT that seems to hold particular promise for individuals with bulimia is IPT (described above). Fairburn and his colleagues compared CBT and IPT and found that although CBT seemed to work more quickly than IPT, the efficacy of the two treatments evened out during the follow-up period. It is interesting to note that IPT in that study was (as in the treatment of depression) focused on interpersonal relations, not on the eating disorder, suggesting that there is more than one way to foster improvement in eating disorder symptomatology.

#### D. Alcohol Use Disorders

CBT has also been applied to the treatment of alcohol problems. Alcohol use is viewed as a learned behavior that can be modified once a clear understanding is reached of the antecedents and consequences of its use. Several successful treatments have been developed

with roots in CBT. Behavior self-control training (BSCT) is a treatment aimed at teaching clients self-regulation strategies. Although the goal of BSCT can be abstinence, the more common goal is moderation. Focus is placed on engaging in self-monitoring as a means of understanding motives underlying drinking, learning ways to cut back on drinking, and developing more adaptive coping skills with which to replace drinking. BSCT has been shown to be more effective than no treatment and at least as effective as treatments aimed at complete abstinence. William R. Miller and his colleagues also found that BSCT had good long-term efficacy for individuals with moderate drinking problems.

As mentioned earlier, RP is an essential part of CBT for all disorders, but the strategy was initially developed for the treatment of people with alcohol use problems by G. Alan Marlatt. Drawing from research on self-efficacy, RP is based on the premise that the probability of relapse can be predicted by client's perceptions of their abilities to handle difficult situations. RP can be easily integrated into other treatments. Over the course of RP, clients are taught to identify high-risk situations and to use cognitive and behavioral coping strategies when they find themselves in such situations. Furthermore, cognitive techniques are used to help clients deal with inevitable lapses. Clients are taught to view a lapse as a one-time mistake, rather than a sign that they have failed or that they are failures. If clients come to view lapses in this way, a single lapse will be unlikely to evolve into a full-blown relapse. James R. McKay and his colleagues explored the efficacy of RP in a sample of clients who had completed behavioral marital therapy, a CB treatment for alcohol abuse that includes the client's spouse. Their study showed that low self-efficacy at the end of behavioral marital therapy was related to a greater likelihood to relapse—but only in the group of clients that did not receive RP treatment as an adjunct to therapy.

## E. Other Applications

Treatments based on CB approaches have also been demonstrated effective in the treatment of other psychological disorders (e.g., other substance use disorders, borderline personality disorder, sexual dysfunction) as well as other problems with living (e.g., couples distress). Interested readers can find more detailed information in books included in the Further Reading list.

#### **IV. SUMMARY**

Cognitive behavioral therapy is an integrative therapeutic approach that assumes that cognitions, physiology, and behaviors are all functionally interrelated. This model posits that client's emotional or behavioral distress is influenced by the manner in which they perceive, manipulate, and respond to information within their cognitive system. Treatment is aimed at identifying and modifying baised or distorted thought processes, attitudes and attributions, as well as problematic behaviors via techniques that actively involve the client's participation, such as self-monitoring, cognitive restructuring, and hypothesis testing. As such, the treatment goal is to develop a more rational and adaptive cognitive structure, which in turn is seen as a pathway to improving both affect and maladaptive patterns of behavior.

## See Also the Following Articles

Anxiety Disorders: Brief Intensive Group Cognitive Behavorial Therapy Behavior Rehearsal Behavior Therapy:
Historical Perspective and Overview Cognitive Appraisal Therapy Cognitive Behavior Group Therapy Eating Disorders Exposure Matching Patients to Alcoholism Treatment Mood Disorders Post-Traumatic Stress Disorder Schizophrenia and Other Psychotic Disorders

# **Further Reading**

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