Cognitive Therapy
Current Issues in Theory and Practice

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The role of cognition in psychopathology has been the subject of considerable controversy during the past decade (Coyne & Gotlib, 1983, 1986; Segal & Shaw, 1986a,b). Not all theoretical models share the view that cognition is significant in the etiology or maintenance of psychopathology, even though negative thoughts and beliefs are widely recognized as important symptoms in several psychological disorders such as depression and anxiety disorder (American Psychiatric Association, 1987). Cognitive models of psychopathology stand in marked contrast to traditional psychodynamic and behavioral schools of thought in this regard.

Psychodynamic models of depression, for example, assume that the direct reports of patients are of limited importance apart from their value as “stepping stones” to underlying dynamic conflicts (Beck, 1976). From this perspective, negative thoughts may reflect transformed or indirect expressions of underlying conflicts, or they may operate as a form of defense to divert attention away from more significant emotionally distressing issues. Consequently, psychodynamic therapists are likely to treat the negative cognitions of depressed patients as secondary rather than primary symptoms of the disorder. Psychodynamic theorists reason that interventions directed at changing negative cognitions in depression are only effective in treating a symptom of the disorder and not the cause. Hence, they predict that such interventions are unlikely to produce lasting clinical improvement.

Behavioral models of depression (Coyne, 1976; Lewisohn, 1974) also contend that the negative thoughts and beliefs that occur in depression are of limited etiological significance. From the behavioral perspective, the negative cognitions experienced by depressed patients reflect the low rate of response-contingent positive reinforcement in their lives. The reduced rate of positive

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reinforcement experienced by depressed patients is thought to be caused by social maladjustment and social skill deficits (Bothwell & Weissman, 1977; Coyne, 1976; Ferster, 1974; Gotlib & Asarnow, 1979; Lewinsohn, 1974; Rounsaville, Weissman, Prusoff, & Hersch-Beck, 1979; Weissman, Paykel, Siegel, & Kramer, 1977). Psychotherapies that have evolved from this hypothesis focus on depressed patients' poor social skills and interactions as the primary targets of intervention. Although behavioral therapies such as thought-stopping techniques (Campbell, 1975; Hays & Waddell, 1976; Stern, 1976) have been developed to directly treat negative cognitions, these methods are based on the assumption that negative thoughts are simply additional behaviors and hold no etiological significance in and of themselves. Behavioral theorists claim that the effectiveness of interventions directly aimed at changing the negative cognitions that occur in depression is due to changes in behavior—that is, changes in cognition are secondary to behavioral alterations (Beidel & Turner, 1986).

In contrast to the psychodynamic and behavioral positions, cognitive models of depression emphasize the significance of negative beliefs and thoughts in the etiology and maintenance of the disorder. The most influential cognitive model of depression was developed by Aaron Beck primarily on the basis of case study and clinical observation (Beck, 1967, 1976). The pivotal assumption of Beck's cognitive model is that depression results from the development of dysfunctional cognitive representations or schemata about the self, the world, and the future. Once triggered, dysfunctional schemata negatively distort the processing of salient information. This process gives rise to negative thoughts and feelings of dysphoria that maintain and exacerbate the depression (Beck, 1967, 1976). Cognitive therapy aims to alter these negative thoughts and beliefs and to help patients regain control over their thought processes (Beck, Rush, Shaw, & Emery, 1979; Moretti & Shaw, 1989).

In this chapter we present an overview of the theoretical basis for cognitive models of psychopathology, with particular emphasis on depression and anxiety disorder. We then review the application and effectiveness of cognitive therapy techniques for depression and make note of the limitations of current research and practice. We conclude with suggested directions for future research that may best advance our understanding of the etiology and treatment of psychopathology.

**The Cognitive Model: Theoretical Rationale**

You may say you experience the world directly, but in fact what you experience depends on a model of the world. (Johnson-Laird, 1983, p. 403)

Contemporary models of cognition maintain that in order to understand human functioning, we must recognize not only the role of the environment in directing an individual's experiences but also the role of that individual in interpreting environmental stimuli (Johnson-Laird, 1983; Neisser, 1976). This view departs radically from the position of James J. Gibson (1979), who has proposed that individuals are capable of directly encoding information in the environment without transformation or abstraction. It also differs from earlier models of human cognition that tended to overemphasize the role of perceivers in determining the nature of their experiences (e.g., Neisser, 1967). Rather, contemporary perspectives in cognition tend to stress the ongoing interaction between internal mental representations and external events. The individual is viewed as an active agent operating within a complex environmental context.

A fundamental assumption of cognitive models of psychopathology, then, is that individuals are active information processors. We "construct" our experiences, and these constructions largely determine our emotional reactions to events and future behaviors in similar situations. Our ability to construct internal cognitive representations of our experiences allows us to anticipate events and direct our behavior when confronted with complex environmental circumstances. Thus as Johnson-Laird (1983) points out, the construction of internal representations of the external world has important consequences for survival:

> More advanced organisms . . . do not merely react physically to their immediate environment, but seek to anticipate it since it is advantageous to avoid obstacles before bumping into them. Representations of the world . . . can be used in much the same way that a navigator uses a map to avoid danger and to reach a desired destination in safety. The ricer and the more vertical the internal model, the greater will be the organism's chances of survival. (p. 402)

"Interactive" perspectives of this kind have important implications for understanding how individuals experience themselves and interpret self-referent information. In the same way that it is beneficial to develop mental representations of the environment in order to anticipate events and direct one's behavior, it is also advantageous to develop mental representations of the self. These representations are comprised of memories of behaviors, feelings, and interactions with others. The development of self-representations is influenced by events in our lives but once established, these representations begin to influence how we interpret new experiences that are self-relevant.

Self-representations can be useful in anticipating how we might behave and feel in certain situations and what we can expect in our interactions with others. As Johnson-Laird has suggested, however, the advantages offered by a representation depend upon the degree to which it is veridical. In some cases, individuals may develop distorted internal models of the self that are more dysfunctional than functional (Beck, 1967, 1976). Once established, these dysfunctional self-representations may further lead individuals to negatively distort experiences that are self-relevant.

In the next section of this chapter, we discuss cognitive models of psychopathology, the conditions that give rise to the development of dysfunctional cognitive representations, and the impact of these representations on the interpretation of experiences that involve the self.

**Cognitive Models of Psychopathology**

The concepts of "cognitive schema" and "schema-driven information processing" are central to Beck's model of depression and anxiety (Beck, 1967, 1976, 1986). Beck adopts the term *schema* to refer to an internal mental representation
of information that is relevant to one's understanding of the self, the world, and the future. Self-schemata may contain information about particular events that have occurred in the past, inferences or assumptions that have been made about the self, and rules or beliefs about how one negotiates interpersonal relationships.

Early interpersonal experiences have a direct and powerful impact on the development of self-schemata (Beck, 1987b; Beck & Young, 1985). Because these early experiences form a cognitive filter or guide for the interpretation of subsequent self-relevant experiences, they provide the groundwork for the development of a more elaborate view of the self. Beck (1967, 1976) suggests that if early interpersonal experiences are marked by either real or imagined losses or threats, then negative and dysfunctional schemas regarding the self, the world, and the future are likely to develop. Although these negative self-representations may be relatively inactive and dormant during periods of low stress, they can be primed and become operative during periods of high stress, particularly stress stemming from deprivation, rejection, or threat.

Beck maintains that the activation of negative schemata displaces more appropriate cognitive processes and disrupts processes involved in reality testing and attaining self-objectivity. As a consequence, the processing of self-relevant information is likely to be biased or inaccurate. For example, Beck (1967, 1976) suggests that the activation of negative self-schemata in depression causes depressed patients to negatively bias their interpretation of self-relevant information. These "errors" in cognitive functioning are viewed as distinct from the occasional inaccuracy or inconsistency of everyday cognitive processes because they represent a systematic negative bias with respect to the self.

Beck has identified three classes of cognitive errors that occur in depression: paralogical, stylistic, and semantic. Paralogical errors include drawing conclusions in the absence of evidence, in the face of contradictory evidence, on the basis of irrelevant details interpreted out of context, and on the basis of inadequate or nonrepresentative evidence. Stylistic errors consist of the systematic magnification or minimization of events or information so as to reach negative conclusions. Semantic errors are defined as erroneous or inappropriate labeling of events or outcomes on the bases of affective reactions rather than on the bases of actual importance or frequency of events. These errors in information processing result in extreme and global negative assessments about events that confirm patients' negative expectancies and strengthen their beliefs in the validity of dysfunctional assumptions and attitudes (Beck, 1987b; Beck et al., 1979).

As psychopathology worsens, the processing of self-relevant information becomes increasingly dominated by dysfunctional schemata that have become "hyperactive" (Kovacs & Beck, 1979). Consequently, dysfunctional schemata are evoked in response to more diverse and less logically related information and experiences—that is, "the orderly matching of an appropriate schema to a particular stimulus is upset by the intrusion of these overly active idiosyncratic schemata" (Beck et al., 1979, p. 13). In extreme instances, the processing of information may become dominated by dysfunctional schemata to the extent that patients are insensitive to environmental cues (Beck et al., 1979). In such cases, dysfunctional schemata may be inappropriately used to interpret a wide range of events. Dysfunctional schemata also be applied during early and inappropriate stages of information processing, subsequently giving rise to idiosyncratic, dysfunctional, and inappropriate interpretations of events (Higgins & Moretti, 1988).

It is important to note that the activation of schemata during information processing occurs "automatically" (Moretti & Shaw, 1989). That is, schematic processing can be triggered by environmental stimuli without an individual's intent or awareness. Furthermore, the automatic activation of schemata during information processing may be extremely difficult to inhibit. This is not problematic when schemata are functional and aid in the appropriate interpretation of complex information. However, when dysfunctional schemata are automatically invoked, individuals are likely to be unaware of their operation and the effect that they exert on the interpretation of information. As Moretti and Shaw (1989) have indicated, the automaticity of these processes creates problems for individuals in the detection of error or inaccuracy during information processing. Quite simply, because individuals are unaware of the activation of dysfunctional schemata and their subsequent effects on processing self-relevant information, they are unlikely to doubt the validity of their interpretations.

In summary, a cognitive model of psychopathology such as Beck's emphasizes the interaction between dysfunctional self-schemata and stressful life experiences. Negative interpersonal and self-relevant experiences that occur early in life are seen as the distal causes of vulnerability to psychopathology. These experiences contribute to the development of dysfunctional self-schemata that may subsequently be activated by stressful life experiences. Stressful life experiences that activate dysfunctional schemata are seen as the proximal causes or precipitators of psychopathology (see Alloy, Abramson, Metalsky, & Hartlage, 1988, for a discussion of the notion of distal and proximal causes in psychopathology). Once activated, dysfunctional schemata displace other cognitive processes and lead to distortions in the processing of self-relevant information. Patients do not question the validity of their interpretations and are unaware of their errors or biases in processing self-relevant information because the operation of schemata during processing is automatic and may be triggered without awareness or intent and because the conclusions and interpretations that they reach confirm their original expectancies.

Cognitive models have been proposed for a large range of disorders including depression (Beck et al., 1979), anxiety disorders (Beck & Emery, 1985), and eating disorders (Garner, 1986; Garner & Bemis, 1984). In addition, recent attempts have been made to extend cognitive formulations to the understanding and treatment of stress-related disorders (Beck, 1984), multiple personality disorder (Caddy, 1985), hypochondriasis (Salkovskis & Warwick, 1986), chronic pain, and psychosomatic disorders (Beck, 1987b). In each case, the cognitive model proposes that the particular content of the dysfunctional cognitive schemata gives rise to the specific affective and behavioral symptoms that characterize the disorder (Beck, 1987b; Beck & Emery, 1985). Because it is beyond the scope of this chapter to review the cognitive formulation and treatment of all
these disorders, we have chosen instead to focus on two disorders—depression and anxiety disorder—both of which have received considerable attention from researchers and clinicians adopting a cognitive perspective.

Depression

The essential feature of depression is dysphoric or depressed mood, with a loss of interest and pleasure in almost all activities. Associated symptoms include appetite disturbance, weight fluctuation, sleep disturbance, psychomotor agitation or retardation, energy loss, thinking and concentration difficulties, and recurrent thoughts of death or suicidal ideation (APA, 1987). The cognitive model of depression proposes that many of these symptoms are the result of a chronic negative bias in self-referent information processing (Beck, 1985a). Beck (1967, 1976) has identified three domains of self-referent information processing that are particularly relevant to understanding depression. These include an individual’s view of the self, the world, and the future, known collectively as the “cognitive triad” (Beck et al., 1979). Clinical observations led Beck to conclude that the depressed patient’s processing of information within each of these domains is marked by a strong negative bias. First, Beck (1967, 1976) noted that depressed individuals view themselves as personally inadequate and helpless. Second, he observed that they tend to misinterpret their interactions with others as representing rejection or deprivation. Finally, Beck found that depressed individuals anticipate that their current suffering will continue indefinitely and, as a consequence, they feel hopeless about the future.

Research clearly supports the contention that depressed persons’ self-perceptions are more negative than those of nondepressed persons. Depressed individuals ascribe negative attributes to themselves (Beck, 1967; Derry & Kuiper; Kuiper & Kelly, 1981; Kuiper & Derry, 1982; Kuiper & MacDonald, 1982; Sacco & Hoxton, 1978) and evaluate their performance as evidence of personal inadequacy and social ineptitude. In contrast to nondepressed persons, they are more likely to predict that they will fail in both achievement and interpersonal contexts (Dobson & Shaw, 1981; Gotlib, 1982; Gotlib & Olson, 1983; Lobitz & Post, 1979; Smolen, 1978; Wollert & Buchwald, 1979; Zarantonello, Johnson, & Petzel, 1979), and they are more likely to attribute failure to internal rather than external causes (see Miller & Moretti, 1988, for a review). Furthermore, whereas depressed individuals attribute negative characteristics to themselves, they do not attribute these qualities to others (Hoehn-Hyde, Schlottman, & Rush, 1982; Tabachnik, Crocker, & Alloy, 1982). Depressed persons tend to perceive themselves as unique in their inadequacy and suffering. Conversely, nondepressed individuals estimate that others suffer from more negative experiences and characteristics than themselves.

The validity of the depressed individual’s negative self-evaluations is currently a point of debate. Beck (1967, 1976) asserts that depressed persons are unrealistic and negatively biased in their self-appraisals. In opposition, Coyne (1976) contends that depressed individuals may be more accurate than non-depressed individuals in their self-evaluations. He maintains that the depressed patient’s negative self-evaluations accurately reflect his or her social experiences. That is, the depressed person’s “distortions” and “misconceptions” are congruent with the social system in which the depressed person “finds himself” (Coyne, 1976, p. 36). Although several studies have produced findings suggesting that depressed persons are accurate in their negative self-perceptions (Alloy & Abramson, 1979; Lewinsohn, Mischel, Chaplin, & Barton, 1980), many of these are flawed by conceptual and methodological problems. The most serious flaw in this research is the failure of investigators to rule out the possibility that the apparent “accuracy” of the depressed individual simply reflects a match between the depressive’s negative response bias and the objective rates of negativity in the environment rather than realism or accuracy in perception (for a discussion of this issue, see Coyne & Gotlib, 1983, and Miller & Moretti, 1988).

Regardless of whether the depressed patient’s negative self-perceptions are accurate or inaccurate, the motivational and behavioral consequences of these beliefs are clearly negative. For example, indecisiveness, noncommitment to goals, and “paralysis of will” may result from the depressed patient’s expectation of and unwillingness to risk failure. Similarly, social withdrawal may stem from the belief that one will be rejected by others. Depressed individuals avoid rather than confront these potentially negative experiences. In doing so, they may create situations that confirm their negative expectancies while reducing the likelihood of experiencing disconfirming events. This cycle of negative expectancy, avoidance, and withdrawal maintains and exacerbates the disorder.

Recent theoretical developments of the cognitive model have focused on identifying individual difference factors that increase vulnerability to depression. In an attempt to explain why individuals differ in their reactions to stressful life events, Beck (1983) has described two personality traits—sociotropy and autonomy—that may predispose individuals to depression in response to specific types of life stressors. Sociotropy (or sociality) refers to “the beliefs, attitudes and goals that draw an individual to other persons” (Beck, Epstein, Harrison, & Emery, 1983, p. 1). Sociotropic individuals place a great deal of importance on interpersonal relationships and judge their self-worth according to the amount of acceptance and affection they receive from others. When confronted with a threat to the stability of interpersonal relationships (e.g., separation, threatened rejection) or an interpersonal loss (e.g., the breakup of a love relationship, the death of a loved one), such individuals are at risk for developing depression (Beck, 1963, 1987a). In contrast to sociotropy, autonomy (or independence) refers to beliefs about and attitudes toward achievement, personal freedom, and control over the environment. Autonomous individuals are likely to evaluate their self-worth in terms of personal accomplishments and control over their environment. When confronted with a threat to independence or autonomy (e.g., loss of a job, failure to achieve a desired goal), such individuals are at risk for developing depression (Beck, 1983, 1987a). Beck has observed that individuals who exhibit a strong tendency toward one or the other personality type are more likely than others to become depressed, although a
combination of both types is evident in some depressed individuals. At present, however, it is unclear whether or not these two personality characteristics are causally related to the onset of depression.

In summary, current research investigating the cognitive model of depression supports the contention that the disorder is characterized by a pattern of persistent negative cognitions about the self. It is difficult to determine the veracity of negative self-evaluations in depression, particularly in light of the fact that negatively biased self-evaluations may lead individuals to interact with others in such a way as to elicit responses that confirm their negative expectancies. In addition, even though negative self-cognitions have been shown to co-occur with depression, the role of cognition as a precipitator of depression is less clear (Coyne & Gotlib, 1983). Lewinsohn, Steinmetz, Larsen, and Franklin (1981) investigated the causality of depression-related cognitions over a 1-year period. Contrary to Beck's model, expectations for positive and negative events were not predictive of depression 1 year later. Furthermore, nondepressed individuals with a history of depressive illness were no more likely to show evidence of negative self-cognitions than were nondepressed individuals with no history of the illness. However, depressed individuals who reported negative self-cognitions tended to experience longer depressive episodes than did individuals who did not report these cognitions.

In reviewing these findings, it is important to note Beck's assertions that negative self-schemas remain inactive during periods of low stress. Thus Beck would not necessarily predict that remitted depressed patients would differ from nondepressed individuals in their thoughts and beliefs about themselves. However, it may be the case that remitted depressed patients process self-referent information in a negatively biased manner under conditions that prime or temporarily activate negative self-schemas. For example, cognitive vulnerability to depression may be apparent in self-referent information processing under conditions of real, or imagined, loss or failure. In addition, it is important for researchers and clinicians to recognize that the cognitive model of depression is an interaction model. Cognitive vulnerability is predicted to interact with life stress to produce depression. Further investigations that take these factors into account will be helpful in clarifying the etiological role of cognition in depression.

Anxiety Disorders

Anxiety disorders include a group of syndromes in which individuals experience subjective anxiety and exhibit avoidance behavior (APA, 1987). The cognitive model of anxiety disorder proposes that anxiety symptoms result from dysfunctional cognitive processes. Although depressive symptoms are believed to arise in response to cognitions of loss and failure, anxiety symptoms are thought to arise in response to cognitions of danger and vulnerability.

As Beck (1986) points out, the accurate detection of threat and danger in the environment has important implications for survival. To facilitate the efficient detection of danger, humans have developed a variety of mechanisms, includ-
nant symptom in phobic disorders and in obsessive-compulsive disorder is avoidance behavior. There has been relatively little attention directed toward understanding the relation between the specific content of vulnerability schemata and the manifestation of one anxiety disorder versus another. It may be that patients who suffer from panic disorder misperceive internal sensations as dangerous and threatening, whereas patients who suffer from generalized anxiety disorder overestimate their vulnerability to many external events. In contrast, people who suffer from phobias may be concerned with their vulnerability to circumscribed, specific external events (Beck, 1986).

Recent theoretical developments have focused on increasing the specificity of the cognitive model for understanding obsessive-compulsive disorder. Beck’s (1986) cognitive model of obsessional disorders views pathology as resulting from obsessional thoughts with themes involving danger and vulnerability. A modification to this viewpoint has been forwarded by Salkovskis (1985). He argues that intrusive thoughts with disturbing content, usually involving harm to the self or to others, occur frequently in the experience of normal individuals without leading to serious and long-lasting mood disturbances or obsessive behaviors. Salkovskis further contends that these thoughts lead to severe distress and pathological behavior only when individuals assume personal responsibility for having these thoughts. This perspective is, in many ways, consistent with the notion of “magical thinking,” a type of ideation that commonly appears to maintain these disorders. In short, when intrusive thoughts with disturbing content are accompanied by beliefs of personal responsibility, patients are likely to experience feelings of guilt. As a consequence, patients feel responsible for the harm that may come to the self or to others. Because obsessive patients view intrusive thoughts as abnormal and equivalent to engaging in unacceptable behavior, they are led to engage in behaviors that compensate for or undo the imagined consequences of their acts. Salkovskis’s view of obsessive patients represents a theoretical reconceptualization of obsessive-compulsive disorder and may have important treatment implications.

Cognitive Therapy

Cognitive therapy adopts a time-limited and highly structured approach to the treatment of emotional disorders. Typically, patients are seen individually on a weekly basis over a period of 20 weeks. However, this basic format has been modified to meet the needs of patients with problems other than depression or anxiety (e.g., Cady, 1985; Garner, 1986) and to develop other treatment formats such as group therapy (see Beck et al., 1979). Because cognitive therapy adopts a time-limited approach to treatment, it is important that patient characteristics be reviewed prior to initiation of therapy in order to establish a “fit” between patient needs, strengths, and weaknesses, and the cognitive therapy approach. It is also important that therapists establish clear therapy goals at the outset of therapy and work consistently toward these goals in each session. The following discussion focuses on the relevance of these two factors in the cognitive therapy of depression.

Patient Selection

A number of patient factors have been identified as potentially important outcome predictors in cognitive therapy (Safran, Shaw, Segal, & Vallis, 1988). Two factors are the patient’s awareness of and ability to report his or her intrusive negative thoughts and the patient’s awareness of fluctuations in his or her emotions. To the extent that these thoughts are identifiable by the patients, they will be more readily available for review and evaluation during therapy. On the other hand, patients who are overwhelmed by negative feelings and relatively unaware of internal cognitive processes will be hindered in the process of therapy. For example, a patient, who reports that her feelings of depression are stronger when she thinks about her failings as a mother will be more likely to benefit from cognitive therapy than a patient who reports that feelings of depression fluctuate independently of his, or her, thoughts or life events. Patients who are aware of fluctuations in their feelings can use their feelings as cues to underlying dysfunctional thought processes. That is, they will be able to learn to stop and take notice of their thoughts as their moods fluctuate. These patients are more likely to benefit from cognitive therapy than are patients who are unaware of fluctuations in their emotional state and who may have difficulty identifying the relation between their thought processes and exacerbated negative moods.

These two factors—the ability to identify intrusive negative thoughts and the awareness of emotional fluctuations—will influence the extent to which patients can understand their experiences within a cognitive therapy framework. The greater the congruence between patients’ psychological experiences and the rationale for understanding emotional distress provided in cognitive therapy, the more likely they are to benefit from therapy.

There are several additional factors that should be considered in selecting patients for cognitive therapy. One factor is for patients’ understanding and acceptance that the focus of cognitive therapy is on contemporary rather than historical factors as precipitators of emotional distress. Although dysfunctional beliefs may stem from experiences in the past, cognitive therapy maintains that an understanding of the source of dysfunctional beliefs is neither necessary nor sufficient to produce change. Patients wishing to focus on issues in their past are more likely to benefit from long-term dynamic psychotherapy than from cognitive therapy. This rule need not be rigidly enforced, however, as a very brief exploration of historical issues may sometimes elucidate a patient’s current dysfunctional beliefs.

Another factor to be considered in patient selection concerns the patient’s ability to establish a trusting and collaborative relationship with his or her therapist and their ability to assume personal responsibility for change. Patients who require a lengthy period to establish a working relationship with their therapist
and have difficulty accepting their role in the change process are unlikely to derive maximal benefit from a brief therapy such as cognitive therapy. Diagnostic factors also warrant consideration in the process of patient selection. As Beck et al. (1979) point out, the efficacy of cognitive therapy has been established only for unipolar, nonpsychotic, depressed outpatients. Hence, patients suffering from bipolar illnesses or personality disorders that are accompanied by periods of depression (e.g., borderline disorders) may be inappropriate for cognitive therapy treatment. In addition, the therapist should carefully consider the need for pharmacotherapy in conjunction with cognitive therapy in the treatment of severe depressive illness.

Therapeutic Techniques and Goals

A fundamental goal of cognitive therapy is to help the depressed or anxious patient regain control over his or her thought processes (Beck & Emery, 1985; Beck et al., 1979). In order to achieve this goal within 20 sessions, therapists are advised to structure each session by constructing an agenda with the aid of the patient. The first 3 to 4 sessions should focus on assessing the central problems, establishing therapeutic rapport, and explaining the rationale for cognitive therapy to the patient. Following this, therapy should increasingly focus on the identification and modification of dysfunctional thought processes (Beck et al., 1979). The first step in this process is to increase the patient's awareness of his or her dysfunctional thought processes. This can be achieved by asking patients to use their negative feelings as a “cue” to underlying thought processes. For example, depressed patients can be asked to take note of any fluctuation in their feelings, to record external events that occurred at the time of the fluctuation, and to record their own thoughts about the events. This information can be recorded on the Daily Record of Dysfunctional Thoughts (see Beck et al., 1979).

The patient’s monitoring of his or her thought processes will often reveal that idiosyncratic and dysfunctional interpretations of life events are important precipitators of negative mood. For example, one patient reported feeling confused and depressed when she came in for her therapy session. The therapist asked the patient to recall when she had first noticed these feelings. The patient reported that she had become extremely dysphoric and confused on the previous day following a friend’s compliment on her “informal and easygoing” manner of interacting with others. Initially, her feelings of increased depression and confusion were difficult to reconcile with the objectively positive nature of this interaction. Her feelings made sense, however, when she recalled her thoughts at the time of the “compliment.” This patient had interpreted her friend’s compliment as a disguised criticism of her lack of social etiquette and sophistication—audacities the patient feared she possessed. Once she became aware of her interpretation of this event, the patient was able to discuss her more general belief that she needed to interact with others in a “sociably appropriate” way in order to be accepted. This, in turn, led to a discussion of the validity of the patient’s rigid beliefs and of what was implied by the term socially appropriate. Not only did the patient reconsider her interpretation of the event that led her to feel distressed, but she also began to reconsider her beliefs about the type of person she needed to be in order for others to accept her. As a result of this process, her feelings of dysphoria and confusion decreased. Her feelings of helplessness and hopelessness were alleviated because she was now able to identify the precipitants of her negative feelings. She could understand the relation between her thoughts and feelings.

Once patients become aware of their self-relevant thoughts and beliefs, they are encouraged to evaluate the accuracy or validity of these cognitions rather than simply inhibit or replace them. Sometimes merely becoming aware of underlying beliefs and thoughts is sufficient for patients to recognize their lack of evidence and rationality. However, therapists are advised to fully explore the meaning of a patient’s dysfunctional belief and the relation of this belief with other self-evaluative beliefs. Whenever possible, patients should be encouraged to “check out” or “test” the validity of their interpretations by setting up “experiments” outside of the therapy session. These experiments should be co-designed by the therapist and the patient, with the former displaying sensitivity to the latter’s level of functioning.

As Moretti and Shaw (1989) have suggested, many patients experience difficulties in interrupting dysfunctional thought processes and reviewing their interpretations and beliefs. This problem frequently arises when patients are overwhelmed by emotional distress. In such situations, patients report that although they know their interpretations are biased and inaccurate, they are unable to inhibit or alter them. When this happens, it is important for therapists to help patients understand that the alteration of chronic cognitive processes requires time and practice. Even if patients are unable to identify and alter dysfunctional thought processes as they occur, they are often able to review them shortly thereafter. This can provide relief from negative feelings and the opportunity for patients to consider alternative and more adaptive interpretations of self-relevant events.

In light of the time-limited approach to treatment adopted by cognitive therapy, it is imperative that patients continue to practice techniques during and following the termination of therapy. Patients should be advised that fluctuations in mood are to be expected following termination and that the skills they have learned during therapy can be used to understand and cope with stressful events and periods of dysphoria. “Booster” sessions (Beck et al., 1979) several weeks following termination, and at 3 or 6 months follow-up, can provide patients with useful opportunities to review coping strategies for stressful life events. Such sessions help patients maintain the gains that they have made in therapy.

Efficacy of Cognitive Therapy

Rush, Beck, Kovacs, and Hollon (1977) conducted the first study comparing the efficacy of cognitive therapy for treating depression with that of pharmacotherapy in a clinical outpatient sample. This study randomly assigned patients with clear diagnoses of depression (of at least moderate severity) to 12
weeks of either cognitive therapy or pharmacotherapy (Imipramine up to 250 mg per day). At the end of the 12-week treatment period, the patients who received cognitive therapy had improved significantly more than the patients who received Imipramine. Although the two groups did not significantly differ at 1-year follow-up, patients treated with medication were twice as likely to have relapsed during the year than were patients treated with cognitive therapy (Kovacs, Rush, Beck, & Hollon, 1981). This finding is particularly intriguing given the recurrent nature of major depression (see Keller, Shapiro, Lavori, & Wolfe, 1982).

Since this initial investigation, other studies have examined the relative efficacy of cognitive therapy as compared with other types of psychotherapies and pharmacotherapy. McLean and Hakstian (1979) compared the relative effectiveness of a modified cognitive therapy approach to short-term psychotherapy, pharmacotherapy (Amitriptyline at 150 mg per day), and a relaxation training control group. Their evaluation of 178 patients given primary diagnoses of severe depression revealed a clear-cut advantage of cognitive therapy over the other treatments for depression. Because this study controlled for the amount of therapist contact in each type of treatment, alternative explanations for the greater efficacy of cognitive therapy were ruled out.

Teasdale, Fennel, Hibbert, and Amies (1984) evaluated the addition of cognitive therapy to patients’ usual treatment, which consisted primarily of their doctors’ choices of antidepressant medication. By the completion of treatment, clinical ratings of symptom severity and self-report measures of depression indicated that patients receiving the combination of cognitive therapy and their usual treatment were significantly less depressed than were those who received only their usual treatment. At a 3-month follow-up, there were no significant differences between the two groups, due mainly to the continued improvement of the usual-treatment group. The most important finding in this study, then, was that the addition of a psychotherapeutic program such as cognitive therapy can have a substantial effect on the rate of recovery of patients with major depressive disorder. Similar results have been reported by Beck, Hollon, Young, Bedrosian, and Budenz (1985) in a 12-week protocol comparison of cognitive therapy alone with a cognitive therapy–amitriptyline combination.

Blackburn, Bishop, Glen, Whalley, and Christie (1981) studied two groups of unipolar, depressed outpatients who received either cognitive therapy alone, or medication alone, or a combination of both. These researchers found that general practice patients treated with cognitive therapy, either alone or in combination with medication, showed a markedly superior outcome to those patients receiving only pharmacotherapy. In their hospital outpatient sample, they found that the combination of cognitive therapy and medication was the most effective treatment, with cognitive therapy alone proving to be only minimally more effective than the pharmacotherapy. Although these results suggest that the effectiveness of cognitive therapy alone or in combination with pharmacotherapy depends on the patient population, they should be interpreted with caution because of several methodological weaknesses in the study. First, there were low numbers of patients receiving pharmacotherapy in the general practice sample. Second, the therapists in the two settings differed, thereby introducing the possibility that the results found were due to differences in therapist, not treatment, efficacy. Hence, the findings of Blackburn et al. do not allow us to draw clear conclusions about the relative efficiency of cognitive therapy alone and in combination with other treatments for different patient populations.

Murphy, Simons, Wetzel, and Lustman (1984) conducted a study similar to that of Blackburn et al. (1981) but included an additional group receiving a combination of cognitive therapy with a placebo. In contrast to Blackburn et al.’s results, Murphy et al. (1984) found no differences between their four treatment groups. That is, all patients benefitted to an equal degree, whether they received cognitive therapy alone, cognitive therapy in combination with pharmacotherapy (Nortriptyline prescribed according to carefully monitored blood levels), cognitive therapy in combination with a placebo, or pharmacotherapy alone. Although the patients receiving different treatments did not differ at the end of the treatment period, intriguing results emerged during the follow-up period. Murphy et al. reported that, by 1-month follow-up, all treatment groups had maintained their improvements. However, by 1-year follow-up, patients who had received cognitive therapy were significantly less likely to have relapsed than were those treated with Nortriptyline alone (relapse was defined as a return to symptoms or a return to treatment following success in the initial trial). There was no difference in the relapse rates of patients receiving cognitive therapy alone versus those receiving cognitive therapy combined with Nortriptyline. This latter finding is comparable to that found by Beck et al. (1985).

Blackburn, Eunson, and Bishop (1986) recently reported a 2-year follow-up of patients from their original 1981 study. Within 6 months of treatment termination, there were significantly more relapses in the pharmacotherapy group as compared with the cognitive therapy groups. Moreover, the number of patients who relapsed within the 2-year period was significantly higher in the pharmacotherapy group than in the cognitive therapy groups. This result suggests again that cognitive therapy has an important prophylactic effect with respect to relapses.

It is important to note that the follow-up studies cited above were “naturalistic” in design and were therefore plagued with methodological difficulties. Such difficulties include the follow-up of patients who are successfully treated, the definition of relapse, and the issue of maintenance medication (i.e., whether or not medication is continued beyond the point of symptom remission). A number of studies have attempted to control for some of these problems, and their results suggest that treatment with cognitive therapy is at least equally effective to treatment with antidepressant drugs (see Cov, Lipman, Roth, Patterson, Smith, & Lasseter, in press; Hollon, Tuason, Weiner, DeRubeis, Evans, & Garvey, 1983; Rotzer, Nabit, Koch, & Pflug, 1982). The follow-up results of Hollon, Evans, and DeRubeis (1988) are particularly informative in this respect. Although limited by a relatively small sample size (approximately 10 observations per cell), Hollon et al. found that patients given cognitive therapy had a 2-
year relapse rate of 20%, whereas those given Imipramine with no maintenance dose had a relapse rate of 50%. These investigators also included a 1-year maintenance Imipramine group and found that providing a maintenance dosage of antidepressant reduced the relapse rate to 30%. This rate of relapse was not significantly different from that of the cognitive therapy group. A relapse rate of 23% was found for those patients given a combination of the two treatments.

There have also been several summary and meta-analytic reviews of the efficacy of cognitive therapy for the treatment of depression. For example, Dobson (in press) completed a meta-analytic review of 20 studies evaluating the efficacy of cognitive therapy for depression. The results of this review indicated that depressed patients treated with cognitive therapy showed greater improvement than did patients treated with behavior therapy or pharmacotherapy or patients who received no treatment. Cognitive therapy also tended to be more effective than other forms of psychotherapy (e.g., interpersonal therapy, nondirective therapy), although not significantly so. These findings are generally consistent with the results of other meta-analytic reviews (Hollon & Beck, 1986; Miller & Berman, 1983; Nietzel, Russell, Hemmings, & Greter, 1987; Steinbreuck, Maxwell, & Howard, 1983; Weissman, 1979; Williams, 1984) indicating that cognitive therapy is significantly more effective in treating unipolar, nonpsychotic, mild-to-moderately depressed patients than is pharmacotherapy (primarily tricyclic antidepressants) alone. There remains some question, however, as to the efficacy of cognitive therapy for the treatment of unipolar depression relative to that of other forms of psychotherapy (e.g., Klerman, Weissman, Rounsaville, & Chevron, 1984).

The overall results of this research support the efficacy of cognitive therapy in the treatment of unipolar, nonpsychotic, depressed outpatients. More recent work has extended these findings to demonstrate the efficacy of cognitive therapy for elderly depressed patients (see Thompson, Gallagher, & Breckenridge, 1987) and as an adjunctive treatment to the usual inpatient programs (see Miller, Bishop, Norman, & Keitner, 1985; Wright, 1987). Although the research to date generally provides support for the contention that cognitive therapy is effective in treating depression, there are a number of unresolved issues that qualify this support. First, the results indicate that the conclusions investigators reach regarding the effectiveness of cognitive therapy depend on whether they evaluate outcomes immediately following therapy or at follow-ups of 1 or 2 years. Second, researchers need to consider the impact of patient therapy-modality preference on the efficacy of treatment. For example, in the Rush et al. (1977) study, there was a marked difference between the dropout rates for patients receiving cognitive therapy (5%) and those for patients receiving pharmacotherapy (32%). This is clearly a significant factor in evaluating the efficacy of different treatments. Finally, it is important that future research address the question of whether or not particular types of treatments are more effective for particular types of patients. An increased understanding of any or all of these factors would be helpful to clinicians in determining the cost-effectiveness of cognitive therapy as opposed to, or in conjunction with, other types of treatments.

Cognitive Therapy

Summary

The development of cognitive representations of information pertaining to the self and the environment has important implications for adaptive functioning. Such representations or schemata can help individuals to anticipate environmental and interpersonal events and to activate strategies for coping with stressful or threatening events should they arise. For most individuals, a schematic representation of the self leads to efficient, automatic processing of information and to adaptive responding. However, when schematic representations embody dysfunctional beliefs regarding the self and inaccurate information about the environment, they may produce distortions in the processing of self-relevant information. In the depressed patient these distortions include pervasive negative self-evaluations and perceptions of rejection and disappointment in interpersonal relationships. The activation of dysfunctional schemata in the anxious patient results in exaggerated or magnified estimates of threat and self-perceptions of vulnerability and helplessness.

Cognitive therapy adopts a time-limited and highly structured approach to the treatment of these disorders. Patients who are able to access automatic thoughts and to identify and differentiate their emotional states are most likely to benefit from cognitive therapy. Therapeutic improvement is also more likely to occur for patients who accept personal responsibility for change without self-blame and criticism and are able to establish a trusting and collaborative relationship with their therapist.

The fundamental goal of cognitive therapy is to help patients identify, and change, underlying or core beliefs about the self and dysfunctional patterns of processing self-relevant information. Current research indicates that cognitive therapy is at least as effective as antidepressant medication in the treatment of depression. Moreover, follow-up studies suggest that relapse rates are considerably lower for patients receiving cognitive therapy than for patients receiving pharmacotherapy alone. Although the efficacy of cognitive therapy is clearly supported by treatment trials to date, further research is necessary to overcome methodological flaws of earlier studies and to further establish the role of patient factors as outcome predictors.

References


