COGNITIVE AND BEHAVIORAL APPROACHES: TO BLEND OR NOT TO BLEND

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ABSTRACT

Practitioners blend cognitive and behavioral approaches to provide effective therapy for many people, but it is often not clear how these approaches are blended for individual client situations. The term cognitive therapy is commonly used interchangeably with cognitive-behavioral therapy (www.beckinstitute.org) because of an evolution of blending cognitive and behavioral techniques. But how are behavioral elements of cognitive-behavioral therapy similar to, or different from, the purely behavioral approaches developed by John Watson and B.F. Skinner? How are cognitive and behavioral
techniques blended across individual client situations? The purpose of this article is to deconstruct cognitive-behavioral therapy by exploring theoretical and historical distinctions between cognitive and behaviorial approaches in order to further clarify when and how to blend these approaches. These comparisons are drawn in the light of research that demonstrates frustrated client outcomes that occur when therapies are mixed or imprecisely administered (Berlin, 1983; Shaw, et al., 1999).

Cognitive-behavioral therapy (CBT) is a blend of cognitive and behavioral approaches, but this blend is rarely the same across client populations and circumstances. Is it important to consider cognitive and behavioral approaches separately in order to understand when to focus more on cognitive, behavioral, or blended approaches?
Research supports the blending of cognitive and behavioral approaches in an array of client situations (Butler & Beck, 1995; Petry, Ammerman, Bohl, Doersch, Gay, & Kadden, 2006; Smith & Perlis, 2006; Temple & Ho, 2005) and on a practical level blending cognitive and behavioral approaches is useful because to many practitioners cognition and behavior have direct and reciprocal relationships (i.e., thoughts and emotion affect behavior and behavior affects thought and emotion) (Berlin, 1983; Beck, 1993; Ellis, 2001). The terms cognitive and behavioral, however, are often used interchangeably as evidenced by cognitive therapy (CT) articles that focus on behavioral processes and behavioral therapy articles that focus on cognitive processes (Butler & Beck, 1995; 2000; Petry, et al., 2006; Smith & Perlis, 2006; Temple & Ho, 2005) and this may lead to confusion.

Practitioners who blend cognitive and behavioral approaches may miss out on effective strategies when a specific cognitive or behavioral approach is implied (Green & Morrow, 1974; Contranx, Notes, Yao, & Lafont, 2001; Skinner, 1975). When should practitioners emphasize cognitive over behavioral processes or vice versa? Should this be an intuitive process or does literature on historical and theoretical roots reveal specific strategies? The purpose of this article is to deconstruct CBT by exploring historical and theoretical distinctions between cognitive and behavioral approaches in order to further clarify when and how to blend cognitive and behavioral approaches.

Behaviorism and Neobehaviorism

Learned behavior is the focus of behaviorism. A basic assumption of normal and abnormal behavior is that the same principle explaining desirable behavior also explains
undesirable behavior (LeBow, 1976). Behaviorism focuses on observable behavior and analyzes external factors involved in learning (Skinner, 1974).

Classical, or respondent, conditioning provides the theoretical and empirical base for behavioral psychology and bears little resemblance to the cognitive or cognitive-behavioral models of today. It is based in Pavlov’s work on stimulus-response and he believed that this reflexive and mechanistic view of behavior, based mostly on glandular reactions, was sufficient for understanding and helping people. Practitioners who read early behavioral literature may feel that behavioral approaches contradict ethical practice.

John Watson, who developed classical behaviorism, wrote (1925):

*Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select – doctor, lawyer, artist, merchant-chief and, yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors (p. 82).*

Although Watson admitted he was overstating his views in this quote, he denied the importance of creative cognitive processes. In opposition to the views of psychoanalysts, he believed that psychology needed only to emphasize behavior and that this emphasis allowed for a much improved standard of empirical research. This view of human experience as reflexive and mechanical contradicts current ethical standards that direct practitioners to take client-centered and empowering approaches, assuming that clients have dignity and a capacity for rational and creative thought (National Association of Social Workers [NASW], 1996). Behaviorism, however, evolved into an approach with less extreme views of human experience.

B. F. Skinner used Watson’s work as a foundation for neobehaviorism, also known as radical and, most commonly, operant conditioning. Skinner used Thorndike’s Law of
Effect to extend behaviorism to include what happens after behavior occurs. Skinner (1989) states, “Behavior is shaped and maintained by its consequences” (p. 18). Skinner wrote that cognitive processes are important, but he still dismissed the creative aspects of cognition, asserting they were learned and therefore a type of weak behavior that could be explained in terms of schedules and reinforcement (Skinner, 1975).

Even though Skinner’s work opens the door for blending behavioral approaches with cognitive models by acknowledging that responses are too complicated to be understood through purely reflexive concepts, neither Watson nor Skinner found “even the minimally mentalistic concept of habit” necessary for understanding (Maddi, 1980, p 596). This attempt to develop a whole psychology suggests that the early behaviorists would not approve of blending cognitive and behavioral approaches.

**Behavior Modification**

**Assessment**

Behavioral assessment should occur before behavior modification is attempted, and can be observed by the practitioner or accounted for through client report. Objectives of assessment are to first identify the baseline (frequency) of the problem behavior and then identify connected stimulus antecedents and consequences of the problem behavior (Thomas, 1971). Determining the baseline before intervention has two purposes. First, determining the baseline lets the practitioner know the depth and pervasiveness of the problem behavior. Second, it provides a contrast for post-intervention evaluation. A thorough assessment of environmental causes should then be done. This includes controlling antecedents and consequences. Behaviorists recommend the use of tape recorders, notepads, and a number of other recording techniques to account for baseline
frequency, duration, and intervals of past, current, and future behavior (Bloom, Fischer, & Orme, 2006). The baseline is used for practice and evaluation purposes. Behavior can be observed by the practitioners in analog situations, such as reenactment or role play, but in most cases, especially with covert behavior, the client will record his or her behavior. It is recommended that recording procedures are standardized in terms of time, place, and method to avoid confusion and to ensure that recordings are representative of the client’s full experience.

Techniques of Behavior Modification

Operant behavior is one of two classes of behavior to be modified. The other is respondent. Though the practitioner will also find great use for respondent techniques to address involuntary behaviors (i.e., desensitizing to phobias), in many mental health practice settings operant techniques are more widely useful because it is something a client can engage in terms of identifying effective reinforcements and acting on behavioral schedules and strategies. Operant behavior describes voluntary actions of the skeletal-muscular system (i.e., gambling, exercising) (Thomas, 1971). Such voluntary actions, or responses, are thought to be governed by consequences. Operant techniques are named for specific operations known to produce identifiably different consequences (Thomas, 1971). Classical behaviorist concepts include (un)conditioned stimulus, (un)conditioned response, generalization, extinction, and spontaneous recovery (Watson, 1930). Key concepts of operant conditioning include primary reinforcers, aversive stimuli, and avoidance learning (Skinner, 1975).

Reinforcement
Reinforcement is a key concept in operant behavior modification and includes both positive and negative types. Both positive and negative reinforcement are intended to strengthen and maintain behaviors, increasing a future rate of response (Thomas, 1971). With positive reinforcement the practitioner helps the client identify indigenous and pleasurable reinforcers to be introduced as productive behaviors ensue. With negative reinforcement the practitioner helps the client identify and enact a negative stimulus that is removed only when productive behaviors ensue. The client seeks relief by choosing alternative behavior (Thyer & Myers, 1997). Oftentimes the practitioner finds secondary reinforcers, such as verbal behaviors (i.e., verbalized approval of client behavior), items of exchange, and privileges, more useful than primary reinforcers, which create a state of deprivation (i.e., food, water, sex) (Green & Morrow, 1974; Thomas, 1971). It is important to understand that effective reinforcers are highly individualized to clients’ personal experiences.

Extinction

Extinction is a technique used to bring a behavior back to its original level by withholding reinforcement (Thomas, 1970). This comes up in practice when clients are rewarded in their social environment for unproductive or destructive behaviors. For example, when a female client drinks excessively only with approving peers, peer approval may reinforce excessive drinking. Extinction occurs when the client removes herself from these situations and her drinking returns to a normal level. The decrease in behavior may happen quickly or slowly, depending on the behavior and the maintenance schedule. A resurgence of behavior, or spontaneous recovery, sometimes occurs, but will again diminish if reinforcement continues to be withheld (Thyer & Myers, 1997).
Punishment

Punishment seeks a decrease or cessation in behavior and includes positive and negative processes. Positive punishment, perhaps the most recognizable, occurs when a punitive consequence follows a problem behavior (Thomas, 1970). In the practice setting, an example of positive punishment is a precise expression of disapproval. Another example of positive punishment is when a client agrees to perform a difficult household chore (i.e., scrubbing baseboards) every time the problem behavior occurs. Negative punishment occurs when a pleasurable reinforcement is withheld when a productive behavior is not exhibited and is usually expressed in practice as the withdrawal of privilege. An example of negative punishment is when a client opts out of regular evening entertainment (i.e., watching t.v.) until the problem behavior is terminated. With both forms of punishment, immediacy is critical.

Cognitive Theory

Cognitive theory emerged in 1965 when Harold Werner described the applications of Albert Ellis’ work on rational emotive therapy (RET) (Thyer & Myers, 1997). Terminology includes cognitive structures, processes, schemas, and products (Beck, 1970). Structures provide the information for the individual to interpret reality and engage in problem-solving behavior. Processes are mechanisms used to perceive, organize, remember, and evaluate available information. Schemas are “idiosyncratic cognitive patterns” that are activated by stress. Products refer to the outcomes of cognitive processes.
Blending Cognitive and Behavioral Approaches

Based in Stoic philosophy, cognitive theory stems from a belief that people are disturbed not by things, but by the views they take of them (Ellis, 2001). The Stoic, Epictetus wrote:

> But, in the first place, do not allow yourself to be carried away by its intensity: but say, ‘Impression, wait for me a little. Let me see what you are, and what you represent. Let me test you.’ Then afterwards, do not allow it to draw you on by picturing what may come next, for if you do, it will lead you wherever it pleases. But rather, you should introduce some fair and noble impression to replace it, and banish this base and sordid one. If you become habituated to this kind of exercise, you will see what shoulder, what sinews and what vigour you will come to have. But now you have mere trifling talk, and nothing more (Epictetus, Discourses 2.18.24-6) (Hard, 1995).

In contrast to the early behaviorists, Ellis asserts that people create self-defeating emotions by building distorted beliefs, which is a purely cognitive issue (Ellis & Harper, 1975). He listed eleven categories of irrational beliefs, which have since grown to several hundred specific types (Thyer & Myers, 1997). All forms of distortion come from three core irrational beliefs (Kendall, Haaga, Ellis, Bernard, DiGiuseppe, & Kassinove, 1995, p. 172):

1. I must be thoroughly competent, adequate, achieving, and lovable at all times, or else I am an incompetent worthless person.
2. Other significant people in my life must treat me kindly and fairly at all times, or else I can’t stand it and they are bad, rotten, evil persons who should be severely blamed, damned, and vindictively punished for their horrible treatment of me.
3. Things and conditions absolutely must be the way I want them to be and must never be too difficult or frustrating. Otherwise, life is awful, terrible, horrible, catastrophic, and unbearable.

A primary assumption in cognitive theory is that humans are information processing beings who actively engage the social environment and that dysfunction in interactions with the social environment are determined by the way we process information through
our thinking and emotions (Beck, 1970; Ellis, 2001). Cognitivists assume that learning, emotions, and behavior are all cognitively mediated and that forms of cognition can be monitored and altered. Problems like depression are seen as originating with misconceptions. The conceptual meaning we attach to situations, rather than the situation, precedes our emotional response. The assumption that emotions are based in interpretations suggests that people do not share experiences. A depressed person will likely have processing biases that lead to experiences that are inconsistent with others. These varying interpretations account for wide variations in emotional responses. There is also an assumption that people are disturbed by their vulnerability as well as by the disturbance itself.

Unlike the behaviorists who believe that behavior should be the entire focus of psychotherapy, the early cognitivists, such as Albert Ellis and Aaron Beck, blend cognitive and behavioral principles. Ellis’ rational emotive therapy (RET) was later adapted to rational emotive behavior therapy (RE(B)T) because of what he believed was an obvious and logical relationship between cognition and behavior (Ellis, 2001). Beck’s research of cognitive therapy’s effects on panic, eating, and obsessive-compulsive disorders, each having behavioral components, is evidence that Beck assumes that behavior can be affected through cognitive approaches (Beck, 1993). Additionally, the Beck Institute for Cognitive Therapy and Research website (www.beckinstitute.org) asserts in the About Cognitive Therapy statement, “[Cognitive] Therapists help clients to overcome their difficulties by changing their thinking, behavior (emphasis added), and emotional responses.”

Cognitive Therapy
Assessment

The goal of assessment in cognitive therapy is to identify major maladaptive patterns (Beck, 1970). Cognitive assessment includes a life history, focusing on major patterns and sequences that can be organized into seven categories, including assessment of imagery, attributions, beliefs, self-efficacy expectations, cognitive style, self-statements, and in vivo thought-sampling (Kendall and Korgeski, cited in Segal and Shaw, 1988). Assessment ranges from formal to informal, based on concurrence with the therapeutic session. Assessment techniques become more structured when the account is retrospective. These techniques include spontaneous private speech, free association, thinking-aloud, random sampling of thoughts, self-monitoring procedures, videotape thought reconstruction, self-statement inventories, thought-listing, and clinical interviews (Segal and Shaw, 1988).

In REBT, Ellis (2001) suggests less formal assessment procedures, viewing therapy itself as a process of revealing and assessing irrational beliefs. This revealing process includes a search for absolutistic and unconditional “shoulds, oughts, musts, demands, commands, and expectations.” Ellis developed a number of labels for illogical overgeneralizing including awfulizing, which is viewing happenings as awful and terrible, and masturbating, which is placing unreasonable demands on oneself, others, or the broader society.

One method for collecting data on cognitive schema includes the Dysfunctional Attitudes Schedule (DAS). The DAS was constructed to tap disturbing underlying assumptions exemplified in the following statement: “If I am not the best student then it is not worth pursuing and I am worthless.” The DAS is based in a factor analysis that
yields eight interpretable factors (Riskind, Beck, and Smucker, cited in DeRubeis and Beck, 1988):

1. Vulnerability, “If a person asks for help, it is a sign of weakness.”
2. Attraction/Rejection, “I am nothing if a person I love doesn’t love me”
3. Perfectionism, “My life is wasted unless I am a success.”
4. Imperatives, “I should be happy all of the time.”
5. Approval, “I do not need other people’s approval in order to be happy”
6. Dependence, “A person cannot survive without the help of other people.”
7. Autonomous attitudes, “My own opinions of myself are more important than others’ opinions of me.”
8. Cognitive philosophy, “Even though a person may not be able to control what happens to him or her, he or she can control how he or she thinks.”

Techniques of Cognitive Therapy

Neutralizing automatic thoughts is a central theme for cognitive therapy (Beck, 1970). The practitioner focuses on pinpointing disturbing cognitions and identifying idiosyncratic content. The client is generally aware only that an event is upsetting. He or she must be trained to recognize that cognition occurs between the event and the mood product. The client must also recognize where he or she perseverates in several repetitive interpretations. The practitioner also focuses on recognizing formal characteristics of cognition while distinguishing ideas from facts and weighing alternative explanations. Cognitive processes, though not visible, are identifiable. The client learns to attend to their higher- and lower-level types of thinking as well as the automatic and involuntary quality of cognitions that are unscrutinized. The client then learns to evaluate the validity of his or her cognitions. In this way the client develops a level of objectivity about themselves and their cognitions.

Disputing irrational beliefs is a central feature of cognitive therapy. Practitioners avoid “lukewarm disputing” that results in “light” philosophies that are accurate but weak (Ellis, 2001). The technique of disputing is based on the logico-empirical method, or
scientific thinking, and occurs when the practitioner asks the client to logically and empirically defend their irrational beliefs (Ellis & Harper, 1975; Dryden & Ellis, 1988). This is preferred over the practitioner imposing new beliefs. It also has the benefit of building scientific, flexible, and non-absolutistic thinking. Disputing is similar to Beck’s Socratic questioning which is where the practitioner answers questions with questions (Beck, 1993) in order to get at causes underlying thoughts. For example, the client asks, “Why am I depressed?” and the practitioner answers, “Why are you depressed?” or “Why do you think you are depressed?” These responses elicit rational responses from the client.

The Daily Record of Dysfunctional Thoughts (DRDT) is a commonly used instrument in cognitive therapy. The DRDT is an inventory template that includes columns for disturbing situations, irrational beliefs, and emotional consequences (DeRubeis and Beck, 1988). Used for homework, the DRDT helps the client develop a habit of examining disturbing situations and, more importantly, the cognitive processes that yield disturbing emotional consequences. It may also include columns for behaviors and preferred rational responses. Eventually, the client learns to attach rational responses to disturbing situations.

Additional techniques for identifying schema include the three questions method and downward arrow. Using the three questions method, the practitioner asks the client to provide evidence for their irrational beliefs, alternative interpretations, and implications if the belief happens to be accurate (DeRubeis and Beck, 1988). With this method, the client simultaneously seeks to replace irrational with rational cognitions and faces the worst case scenario. As Ellis (2001) points out, clients may be upset, inconvenienced, or
even devastated by circumstances, but absolutistic beliefs that there can be no happiness or contentedness without specific circumstances in place is irrational. Similarly, practitioners use the downward arrow technique to help clients examine why they are upset, implications if their beliefs are true, and meaning of the experience.

When cognitive products prove too difficult for these methods and techniques, Beck (1970) recommends validating basic premises. He states, “Often, however, the ideas are so strong that the patient cannot even contemplate the possibility that they could be inaccurate.” In such cases, Beck asserts that the practitioner should deconstruct the system of underlying assumptions rather than concentrate on neutralizing negative thoughts. For example, a client who is suicidal because they are approaching the age when their mother died from cancer may be depressed because they feel they are becoming ill. Rather than focusing on the cognitive product (e.g., fear of dying from cancer), the practitioner emphasizes and challenges the basic premise that the client is destined to some intolerable fate. In this case, the practitioner directs the client to identify similarities and differences between his or her circumstances and those of his or her mother’s circumstances.

In cognitive therapy, the practitioner-client relationship is active and directive (Ellis, 2001). The active-directive relationship emphasizes a direct approach that zeroes in on what the practitioner believes are irrational core self-disturbances (Ellis, 2001). From the beginning, the practitioner bypasses social pleasantries, such as passively listening for long periods of time, and will instead interrupt clients and challenge expressions that evidence irrationality as they come up. Though this approach may bypass social formalities and even seem rude and confrontational to some, there is an emphasis on
unconditional acceptance. The practitioner says, “I will be hard on your irrationality but I will always accept you for who you are.” The practitioner may say, “If I’m going to be useful, I will need to stop you, abruptly at times, and challenge your assertions.”

The active-directive approach is used for several reasons. Ellis (2001) asserts that habits of thought need to be hit hard and consistently and that the active-directive approach actively shows clients how to function better. In-vivo desensitization occurs when the practitioner elicits thoughts and emotions that the client encounters in daily life. The client and their irrationality are engaged in the meeting with the practitioner and the practitioner demonstrates how irrationality can be actively confronted in the absence of negative self-statements. Research asserts that the active-directive approach leads to briefer treatment and lasting change (Alford & Beck, 1997). It is also widely held that more passive approaches may help clients feel better but not get better.

Cognitive Behavioral Blending Continuum

When assessing clients and determining the best course of treatment, it may be helpful to conceptualize cognitive and behavioral concepts on a continuum. The continuum is characterized on one end by problems that can be addressed with cognitive approaches. This occurs when the presenting problems are limited to disturbances in perception, thought processing, belief systems, and emotional responses (i.e., mood dysphoria). The other end is characterized by problems that can be addressed by applying purely behavioral approaches. This occurs when the client’s presenting problems are limited to disruptive or destructive behaviors that appear to be habitual, reflexive, compulsive, or otherwise unregulated by thought and emotion (e.g., smoking, gambling).
In the mid-section of the continuum there is a large gray area of problems with many variations of complex interplays between thought, emotion, and behavior. We must examine the problems stemming from the configuration of thought, emotion, and behavior-based problems in order to determine just what kind of cognitive behavioral blend is appropriate. We may find that clients demonstrate cognitive and behavioral problems that span this continuum. For instance, a young divorcee is deeply troubled by waves of depression and is finding she cannot perform basic work responsibilities. Additionally, she develops the “nervous habit” of rubbing her neck until it is raw. In this case cognitive therapy addresses depression-causing systematic distortions, stemming perhaps from her divorce. This becomes a cognitive behavioral approach when we focus this effort toward improving work performance (behavior). In this case we may also find that improved work performance provides proof against depression-causing systematic distortions. Finally, a schedule of reinforcement, purely a behavioral approach, addresses neck rubbing. This example demonstrates the need for practitioners to competently structure therapy according to unique client situations.

Conclusion

Research strongly supports the efficacy of both cognitive and behavioral approaches, as well as blends of both (Butler & Beck, 1995; Petry, et al., 2006; Smith & Perlis, 2006; Temple & Ho, 2005). Proficiency should be tied to the historical and empirical base of cognitive and behavioral approaches because the literature provides insight into their use. Upon exploration of these models in their separate and blended forms the practitioner
finds a more precise, efficacious, and purposeful way of blending and applying techniques of each model.

When used with competence, cognitive and behavioral approaches become powerful tools for ethical practice (Green & Morrow, 1974; Skinner, 1975; Shaw, et al., 1999) which is an imperative across mental health disciplines. Ethical Standard 1.04 (Competence) in the NASW Code of Ethics states that practitioners “should provide services in substantive areas or use intervention techniques or approaches that are new to them only after engaging in appropriate study, training, consultation, and supervision from people who are competent in those interventions or techniques” (NASW, 1996). Ethical Standard 2.01 (Competence) from the American Psychological Association Ethics Code states, “Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience” (American Psychological Association [APA], 2002). These ethical standards underpin the need for increasing clarity and competence related to the use of cognitive and behavioral approaches.

References


Pennsylvania Press.


Blending Cognitive and Behavioral Approaches


