GENERAL PRINCIPLES AND EMPIRICALLY SUPPORTED TECHNIQUES OF COGNITIVE BEHAVIOR THERAPY

Edited by

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WILEY
John Wiley & Sons, Inc.

2009

6 PSYCHOLOGICAL ACCEPTANCE

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In one form or another, all psychotherapies seek to produce change. Individuals seek consultation from psychotherapists when they are experiencing emotional pain, struggling with life problems, or when they are not functioning well in school, work, or relationships. The explicit goal is to achieve changes that will reduce pain or suffering, resolve outstanding problems, or enhance functioning. There has also been a longstanding recognition that such change requires some sense of self-acceptance, understood as the ability to respond less self-critically and judgmentally, thereby establishing the context for more effective functioning. Prior to the advent of behavior therapy, psychotherapists traditionally focused less on changing distressing symptoms themselves, concentrating instead on modifying other processes on the assumption that changes in such processes would result in more fundamental, profound, and permanent improvements in distress (Sulloway, 1983). Psychoanalysts sought to increase insight into the developmental origins of unconscious conflicts. By rendering the unconscious conscious, unacceptable drives and fantasies become acceptable to the ego. Humanistic therapists likewise sought to increase congruence between different facets of the self, thereby promoting a sense of self-acceptance. Although the ultimate goal was change, the prevailing clinical wisdom was that targeting distressing thoughts, feelings, or behavior directly would be ineffective at best, and possibly even counterproductive.

Early behavior therapists rejected the idea that change required interventions focusing on processes not directly related to actual presenting problems. Instead, they directly targeted their patients' difficulties. Behavior therapists focused on modifying environmental factors thought to be responsible for problematic behavior, broadly conceived to include distressing thoughts and feelings in addition to overt behavior. Although one might need to accept temporary, short-term distress associated with certain interventions, the overall focus was on changing the form or frequency of distressing behaviors rather than accepting them. This approach was dramatically successful. Effective technologies were developed to increase social skills, desensitize fears, and manage disruptive behavior among children, as well as to address many other problems (Bongar & Beutler, 1995; Goldfried & Davison, 1994). As behavior therapy matured through the last decades of the twentieth century, there evolved an increased focus on changing thoughts and beliefs, and the field itself came to be known by the term *cognitive behavior therapy* (CBT). The various clinical strategies and techniques falling under the rubric of CBT all shared a focus on directly targeting problems using instrumental change strategies. Although acceptance of one's distressing experiences was indirectly targeted in some cases (e.g., acceptance of anxious sensations during exposure-based therapies), even then the ultimate goal was change (e.g., anxiety reduction), and the overall focus of clinical interventions remained squarely on direct change.

THE GROWTH OF PSYCHOLOGICAL ACCEPTANCE IN CBT

It is perhaps ironic, then, that the field of CBT currently finds itself at the forefront of a movement that questions the utility of such direct change strategies under certain circumstances and promotes instead the rather paradoxical idea that more pervasive and enduring improvements in suffering and quality of life may result from accepting, rather than attempting to

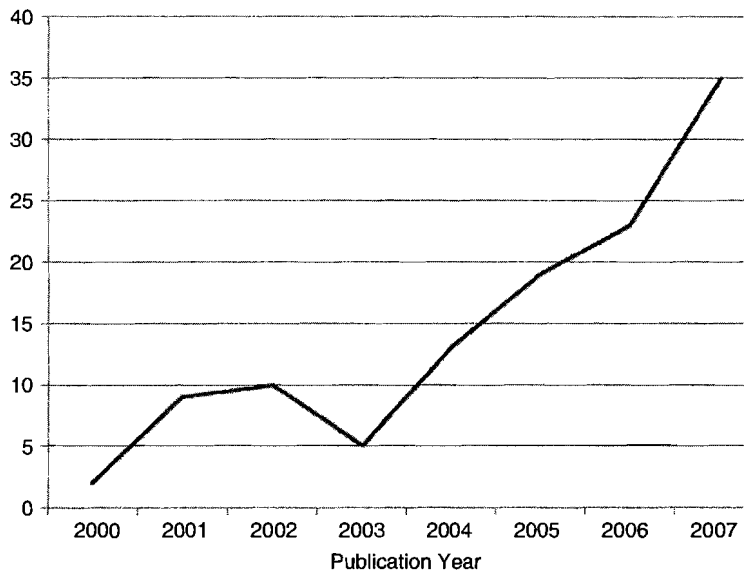

FIGURE 6.1 PsychInfo Citations for Keywords "Experiential Acceptance," "Psychological Acceptance," or "Experiential Avoidance."

change, one's distressing subjective experience. This distinction between direct change efforts and psychological acceptance as a vehicle for change has been described in various ways, including first-order versus second-order change, change in content versus context, and change in form versus function (Hayes, 2001). Regardless of terminology, a number of CBT models have emerged over the past decade that highlight efforts to accept, rather than directly change, distressing experiences, including thoughts, beliefs, feelings, memories, and sensations. These approaches have not abandoned all direct change strategies. Rather, as described later, they suggest that changes in some areas are best facilitated by acceptance in others. It is worth noting that there is no hard-and-fast distinction between traditional change-oriented and acceptance-oriented models of CBT (Orsillo, Roemer, Lerner, & Tull, 2004). A key ultimate goal of both approaches is behavior change (broadly writ), and both draw on technologies that either implicitly or explicitly seek to increase psychological acceptance. Rather, the models differ in the relative degree of emphasis on acceptance versus change processes.

The recent growth of interest in these approaches is undeniable. For example, as illustrated in Figure 6.1, the *PsychInfo* database reveals a steady growth in the hits of the keywords *experiential acceptance,* its synonym *psychological acceptance,* and *experiential avoidance* (which is an antonym for the first two) from 2 in 2000 to 35 in 2007. Parallel increases can be found in related databases (e.g., *Medline*), and in the titles of conference proceedings (e.g., the annual meeting of the Association for Behavioral and Cognitive Therapies).

This increased emphasis on psychological acceptance is the result of several factors (Hayes, 2004; Longmore & Worrell, 2007). First, an accumulating body of experimental research demonstrates that efforts to suppress thoughts generally result in rebound effects in which the frequency and intensity of thoughts increase upon termination of active suppression efforts (Abramowitz, Tolin, & Street, 2001; Wenzlaff & Wegner, 2000). Such findings suggest that CBT interventions such as thought stopping, in which distressing thoughts are deliberately suppressed, might be seriously misguided. In fact, most CBT scholars now disavow this technique (Marks, 1987). Thought suppression

studies (in which individuals who deliberately suppress thoughts demonstrate increased rebound of these thoughts relative to those who do not engage in suppression strategies) have been cited as evidence to suspect the advisability of cognitive restructuring, one of the most commonly used CBT techniques (Hayes, in press). The concern is that attempting to restructure distressing thoughts may lead patients to suppress them, resulting in intensification and elaboration. However, it is not clear that cognitive restructuring is analogous to thought suppression (Arch & Craske, in press; Hofmann & Admundson, 2008). Second, some cognitive therapists have recently challenged on theoretical grounds the idea that directly targeting thoughts can produce cognitive or affective changes (Teasdale, 1997). Third, experimental psychopathology studies have found that instructions to accept experimentally induced distress resulted in better outcomes than instructions to control such distress. For example, acceptance-oriented instructions, relative to distraction or control-oriented instructions, have been shown to result in greater pain tolerance in cold pressor tasks (Hayes et al., 1999), in lower behavioral avoidance and fear response following exposure to CO_2 enriched air among high anxiety–sensitivity women (Eifert & Heffner, 2003) and panic disorder patients (Levitt, Brown, Orsillo, & Barlow, 2004), and in reducing chocolate cravings in food-responsive individuals (Forman, Hoffman, et al., 2007). Fourth, psychotherapy process studies often have failed to support the theorized mechanism of cognitive mediation, raising questions about the centrality of cognitive change as a prerequisite for changes in other areas (Longmore & Worrell). Fifth, although standard CBT strategies have been applied to an increasing number of problems and psychological disorders over the past 30 years, outside of a few specific areas (e.g., panic disorder, Craske & Barlow, 2008; social anxiety disorder, Clark et al., 2006, Herbert et al., 2005) progress has slowed or even stalled in many key areas. For example, it is not clear that recent studies of CBT (e.g., DeRubeis et al., 2005; Dimidjian et al., 2006) for depression produced larger effect sizes than studies conducted two or even three decades ago (see Dobson, 1989, for a review of these older studies). Finally, preliminary component control studies, in which direct cognitive change interventions were extracted from larger CBT protocols, have generally failed to support the incremental effects of such cognitive interventions (e.g., Dimidjian et al., 2006; Hope, Heimberg, & Bruch, 1995; Jacobson et al., 1996).

These observations led several psychotherapy innovators to develop approaches that highlight acceptance of distressing experiences. Such innovations include comprehensive psychotherapy models such as acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999), dialectical behavior therapy (DBT; Linehan, 1993a), mindfulness-based stress reduction (MBSR; 1990) and functional analytic psychotherapy (FAP; Kohlenberg & Tsai, 1991), as well as models focused on a particular clinical domain, such as integrative couples therapy (ICT; Jacobson et al., 2000), mindfulnesss-based cognitive therapy (MBCT; Coelho, Canter, & Ernst, 2007; Segal, Williams, & Teasdale, 2002) for recurrent depression, and the work of leading CBT theorists such as Borkovec (1994), Wells (2000), Marlatt and colleagues (2004), and others.

CONCEPTUALIZATIONS OF ACCEPTANCE

No consensus definition of psychological acceptance has yet emerged, although existing definitions share several common themes. Butler and Ciarrochi (2007) define acceptance as "a willingness to experience psychological events (thoughts, feelings, memories) without having to avoid them or let them unduly influence behavior" (p. 608). These authors also note that acceptance is the mirror image of Hayes and colleagues' (1999) concept of experiential avoidance, which is defined as maladaptive attempts to alter the form or frequency of internal experiences even when doing so causes behavioral harm. Cordova (2001), writing from a behavior analytic perspective, defines acceptance as "allowing, tolerating, embracing, experiencing, or making contact with a source of stimulation that previously provoked escape, avoidance, or aggression" (p. 215), and also as "a change in the behavior evoked by a stimulus from that functioning to

avoid, escape, or destroy to behavior functioning to pursue or maintain contact" (p. 215).

These definitions share several common themes. First, they specify that psychological acceptance is relevant in those situations that evoke escape, avoidance, or aggressive behaviors designed to modify or otherwise terminate contact with a stimulus. There is a class of subjective experiences (thoughts, images, feelings, sensations) that are experienced as unpleasant and distressing to the point at which one becomes highly motivated to reduce or eliminate them through either direct mental efforts or through environmental modification such as escape or avoidance. Acceptance is generally not relevant to situations that are not experienced as aversive, which are usually naturally embraced without difficulty. Second, psychological acceptance refers primarily to the internal experience of distress rather than to the situations evoking this distress. In the case of a phobia of heights, for example, acceptance refers to a willingness to experience anxiety—without attempting to control or otherwise change it—in the presence of heights, and not an acceptance that one can never approach heights. Third, the conceptualizations of acceptance implicitly challenge the rule that overt behavior is a direct product of cognition and affect, and that the latter must therefore necessarily be changed in order to produce a change in behavior.

In addition, several additional aspects of psychological acceptance emerge from the literature. On the basis of the literature on thought suppression, experimental psychopathology, and psychotherapy outcome and process described earlier, including the preliminary effectiveness of newer CBT interventions that eschew direct cognitive change, many acceptance-oriented psychotherapists have come to believe that direct efforts to suppress or otherwise change highly distressing internal experiences will often prove ineffective, will result in unacceptable costs, or both (e.g., Eifert & Forsyth, 2005; Segal, Teasdale, & Williams, 2004). This is not to suggest that all such efforts are doomed to failure. DBT, for example, is based on the careful, ongoing balance between acceptance and change and does not abandon the possibility of direct cognitive or affective change efforts. Likewise, the prohibition against experiential avoidance in ACT is neither absolute nor dogmatic, but rather pragmatic. (In fact, while ACT practitioners are skeptical of experiential avoidance, including many cognitive change strategies, their use is explicitly advised when they work without undue costs.) Second, acceptance is conceptualized as an active process, more akin to an embracing of one's ongoing process of experiencing, rather than as passive resignation. Finally, consistent with the historical focus in CBT on change, psychological acceptance is generally viewed as a means to an end rather than an end in-and-of itself. In fact, this last point is one of the key features that distinguishes psychological acceptance in CBT from acceptance in certain spiritual or religious contexts, and even in popular culture. Meditative practices in Eastern religious traditions view acceptance as part of a desired state of consciousness. Within CBT, the value of acceptance is as a tool to reduce overall suffering and especially to foster behavior change that will lead to better functioning.

CLINICAL INTERVENTIONS TO PROMOTE PSYCHOLOGICAL ACCEPTANCE

A number of techniques have been developed to promote psychological acceptance. Although comprehensive review of such techniques is well beyond the scope of this chapter, we provide representative examples of such strategies below.

Barlow and colleagues (1989) introduced the technique of interoceptive exposure in the context of their treatment of panic disorder. Interoceptive exposure refers to the graduated, systematic exposure to somatic sensations associated with panic attacks. Various exercises are used that reliably elicit panic-like symptoms, including cardiovascular exercises, inhalation of carbon dioxide, spinning in an office chair, breathing through a cocktail straw, and shaking one's head vigorously side to side. The patient is instructed to notice the sensations that arise dispassionately. Although not specifically framed as a technique to promote psychological acceptance, interoceptive exposure is consistent with an acceptance focus.

One of the most common approaches to promoting psychological acceptance is mindfulness meditation. The use of meditation was spearheaded by Jon Kabat-Zinn in the context of MBSR, which was initially introduced in 1979 as a complement to medical treatment of a variety of chronic conditions. MBSR incorporates the practice of mindfulness meditation with certain core principles and "key attitudes," such as acceptance, patience, and the "beginner's mind," that is, viewing experiences as though for the first time (Kabat-Zinn, 1990). The typical format through which MBSR is delivered consists of eight weekly classes (often with 30 or more participants), and a "Day of Mindfulness," a full-day retreat focusing on the practice of meditation and yoga. A key technique used in MBSR is "sitting meditation," in which participants practice nonjudgmental awareness and acceptance of their thoughts and other experiences. In addition to meditation and yoga, participants are taught various techniques designed to promote mindfulness, such as the "body scan," which involves gradually shifting awareness throughout the body, taking notice of any feelings and sensations (Tacon, Caldera, & Ronaghan, 2004). Although similar to the traditional behavior therapy technique of relaxation training, in the case of mindfulness meditation relaxation is not the goal, but rather the adoption of a nonjudgmental stance with respect to one's experience as it occurs in real time. Mindfulness meditation is also contrasted with other meditative traditions in which one attempts to narrow the focus of attention to a specific area (e.g., an image or vocal mantra). By fostering the observation of one's experience without reactively attempting to escape from or otherwise change it, mindfulness meditation is believed to interrupt maladaptive behavioral habits and to set the context for more effective responding.

Mindfulness meditation is also a key feature of DBT, developed by Linehan (1993a) as a comprehensive treatment model for borderline personality disorder. DBT proposes that the change-oriented emphasis in traditional CBT can be perceived as invalidating of the experience of patients with borderline personality disorder. Linehan (1993b) describes modules for teaching four key skill areas: mindfulness skills, emotional regulation skills, interpersonal effectiveness skills, and distress tolerance skills. Each module outlines specific clinical techniques. Mindfulness skills are generally taught first, as they are foundational for the other skill areas. The DBT mindfulness module emphasizes observing and labeling emotional states from a detached, nonjudgmental, accepting perspective. Patients are taught to integrate the "emotional mind" and "reasonable mind" into the "wise mind" that can inform decisions from an informed, balanced, holistic perspective.

A potentially unresolved issue with DBT concerns the reconciliation of experiential acceptance and change. DBT explicitly teaches a number of emotion regulation strategies, such as the principle of "opposite action," which refers to attempting to change an emotional state by behaving in a way that is contrary to its usual behavioral manifestation. For example, a phobic who approaches rather than avoids a fear-inducing stimulus is displaying the principle of opposite action. The emphasis on emotion regulation in DBT highlights the dialectic between acceptance and change that is characteristic of the model. However, as discussed above, there may be situations in which attempting to change one's experience only intensifies it. Thoroughgoing acceptance of distressing thoughts or feelings may be precluded if one remains focused on changing such experiences. An obese individual suffering from episodes of binge eating, for example, may not fully accept distressing emotional states that trigger binges, and therefore may not completely disconnect links between such experiences and her behavior, if in the back of her mind she is still struggling with trying to change her experience. As described below, ACT takes a more radical—although arguably more consistent—stance with respect to efforts to control distressing experiences.

Working from a cognitive perspective, Wells (2000) proposes that psychopathology is related to problematic self-regulation of attentional control, resulting in rumination, increased threat monitoring (including self-focused attention), and coping behaviors that fail to provide corrective experiences. The roots of these self-regulatory attentional problems are

dysfunctional metacognitive beliefs, or beliefs about beliefs. For example, a person with generalized anxiety disorder might hold a metabelief such as "if I review things over and over again it will reduce the chances of something bad happening." Wells distinguishes such metacognitions from the conscious, propositional beliefs that are the typical targets of standard cognitive therapy. He suggests intervention efforts to target such metacognitions, while simultaneously accepting the stream of one's ongoing conscious thoughts and feelings. Unlike traditional CBT approaches, such change is not accomplished by questioning the beliefs directly, but by encouraging greater attentional control while simultaneously encouraging a heightened sense of awareness of, and an accepting stance toward, one's thoughts as mere mental events. As part of his metacognitive therapy, Wells describes a procedure known as the attention training technique (ATT), in which various sounds are presented as distractions while subjects remain focused on a visual fixation point, accept whatever thoughts enter consciousness without struggling with them, and attempt to direct their attention in various ways as directed by the therapist. ATT has been shown in preliminary studies to result in changes in distressing thoughts and symptoms, despite not directly targeting them, as well as in increases in metacognitive awareness (for a recent review, see Wells, 2007).

ACT makes use of a variety of metaphors and experiential exercises in order to promote acceptance. A great number of such exercises have been developed, and clinical innovations in this area continue apace. One technique has the patient precede discussions of distressing thoughts or feelings by verbally (and subsequently subvocally) inserting the phrase "I'm having the thought [or feeling] that ... " before thoughts. For example, an individual who imagines that he might suddenly shout out a profanity-laced, heretical statement in church would be highly motivated to suppress the urge to do so as well as the linked thoughts and images. Attempts to suppress thoughts or images of such behavior would likely only increase their salience and intensity, thereby further increasing distress. Instead, this person could simply observe his urge, and say to himself, "I'm having the thought of shouting out right now. That's an interesting thought." The idea is to help the patient to achieve distance from his experience and to accept the thought as simply a mental event, rather than as necessarily reflecting anything whatsoever about his world.

Another example derived from ACT is the "cards" exercise. In one variation of this exercise, the patient is instructed to carry on a conversation with the therapist. As she does so, the therapist tosses index cards, on each of which is written one of the patient's typical distressing thoughts, one-by-one at the patient, who is then instructed either to deflect them away, or to gather them and stack them neatly together, all while continuing the conversation. Needless-to-say, this is a difficult task, and the conversation is inevitably negatively impacted. The exercise is then repeated, this time with the patient instructed simply to let the cards fall where they may, without trying to catch or organize them. Following the exercise, the therapist and patient note how much more difficult the conversation was to maintain in the first scenario, and the effort to gather and organize the cards is framed as analogous to the effort to control one's distressing thoughts. The ACT model is rich with similar exercises designed to promote psychological acceptance.

Roemer and Orsillo (2002) utilize the ACT framework to develop an acceptance-based intervention for generalized anxiety disorder. Their model draws on the work of Borkovec (1994), who conceptualizes worry as an avoidance method that serves to reduce the perceived likelihood of feared future events, as well as to distract the worrier from distressing internal anxiety. Worry, in turn, is negatively reinforced by the resulting decrease in distress. According to Roemer and Orsillo, by learning to accept unpleasant internal events rather than struggling with them, individuals can reduce their experiential avoidance of perceived future threats. Roemer and Orsillo's treatment incorporates various techniques to promote mindfulness, acceptance, and behavior change. For example, the "mindfulness of sound" exercise, borrowed from Segal and colleagues (2002), encourages patients to notice aspects of

sound without labeling and judgment (Orsillo, Roemer, & Holowka, 2005).

Marlatt and colleagues have incorporated mindfulness and acceptance into their work on substance abuse treatment (Leigh, Bowen, & Marlatt, 2005; Marlatt et al., 2004; Witkiewitz, Marlatt, & Walker, 2005). Marlatt's relapse-prevention model involves mindful acceptance of urges and cravings. A key intervention of their program is known as "urge surfing," in which the patient is instructed to imagine a craving as an ocean wave (Larimer, Palmer, & Marlatt, 1999). Rather than allowing urges to overwhelm them, patients are taught that cravings surge to a peak relatively quickly and will then subside. By focusing on the idea that distressing emotions will eventually subside, they are more readily tolerated while at their most intense. The patient is encouraged to observe the craving as though detached from it, and to practice mindful acceptance of the urge until it dissipates.

Regardless of approach, the ultimate goal of each of these techniques is the promotion of acceptance toward one's experience on an ongoing basis in real time.

WHEN IS ACCEPTANCE RECOMMENDED, AND WHEN IS IT LIKELY TO BE LESS EFFECTIVE?

As noted above, efforts to exert direct control over one's experience can be considered adaptive when they work and do not result in excessive costs. Of course, this begs the question of how one might ascertain when direct control efforts are likely to be effective and when psychological acceptance is instead indicated. Several theorists have addressed this question, although a clear consensus has yet to emerge. Cordova (2001) suggests that the decision is a judgment call, made collaboratively by the patient and therapist, on whether aversion behavior (escape, avoidance, or aggression toward a stimulus) is more likely to be effective, or lead to excessive negative consequences, over the long term. Of course, this begs the question of exactly what factors should determine such a judgment. Hayes (2001) distinguishes maladaptive overt behavior from acceptance of one's subjective experiences, noting that acceptance is rarely appropriate for the former but almost always for the latter. For example, an individual suffering from depression can distance herself from and accept feelings of dysphoria and thoughts of worthlessness and suicide, but without accepting her behavior of staying in bed all day. Historically important memories (e.g., one's memories of a traumatic experience) are especially important to accept, as considerable research suggests that avoidant coping strategies are problematic for such memories (Folette et al., 1998; Hayes et al., 1996). Likewise, one's ongoing stream of thoughts, feelings, and sensations also tend to be appropriate targets for acceptance. For example, Hayes and Pankey (2003) note that a pedophile's sexual behavior toward children should be directly targeted for change, whereas his associated feelings and urges are unlikely to be amenable to direct change, and should therefore be accepted. It is in fact precisely this decoupling of subjective experiences from overt behavior that is at the heart of acceptance-based CBTs.

It is critical to distinguish psychological acceptance of a thought from belief in the literal truth of that thought. Acceptance implies the willingness to experience a thought while simultaneously refraining from evaluating its truth value. This distinction is critical when considering the patient's personal narrative, or what Hayes et al. (1999) term the *self-as-content*. Given the powerful human drive to make sense of one's experience, we inevitably construct narratives that tie together important historical events, and that crystallize into broad personality descriptors. The problem with such narratives is that once formed, they tend to be taken literally and strongly defended from question, which can in turn lead to a narrowing of one's behavioral repertoire. For example, a college student may recall academic successes in school, attribute these to her intelligence and strong work ethic, and develop an identity as an "exceptionally smart, hardworking student." Imagine that she then finds herself in a difficult class and not understanding the lecture material. If she holds strongly to her personal narrative, she may refrain from asking a question because doing so would conflict with her self-identity as an exceptionally bright

student. As verbal animals, humans have evolved to seek patterns in the ongoing barrage of sensory input (Shermer, 2002), and as part of this process, we construct stories that weave key details of our lives into a seamless narrative. Once constructed, there is a natural tendency to believe such narratives and to defend them from challenge. Psychological acceptance in this context means accepting one's personal narrative as an inevitable product of an active, pattern-seeking mind without either believing or disbelieving it.

Farmer and Chapman (2008) propose three principles in deciding if psychological acceptance is indicated. First, is acceptance "justified"? A justified response is one that is warranted by the situation, such as a fear response in the presence of a phobic stimulus. If the response is justified, then acceptance is in order; if the response is not justified, then one either attempts to change the response or at least to change the behavior elicited by the response (consistent with the DBT principle of "opposite action"). For example, distressing thoughts about being overweight are justified in an obese individual, but the same thoughts are unjustified in a woman suffering from anorexia. Of course, determination of whether a thought is justified requires at least some degree of analysis of the truth value of the thought, which runs the risk of interfering with attempts to accept it. Second, is the reaction or situation changeable or unchangeable? Obviously, acceptance is indicated for unchangeable experiences. Finally, are the patient's responses effective or ineffective? Effective responses are conceptualized as those that are consistent with valued goals, whereas ineffective responses are inconsistent. When responses are ineffective in this sense, they call for acceptance.

A common rule of thumb among acceptance-oriented CBT clinicians is that psychological acceptance is indicated for any distressing personal experiences, such as painful memories, disturbing thoughts, and difficult feelings or sensations, as well as for personal narratives. By contrast, direct change efforts should be reserved for overt behaviors, that is, things involving one's hands, feet, mouth, and so on. Although superficially appealing, such a distinction becomes more difficult upon closer examination. It assumes that all cognitive and affective control efforts are necessarily doomed to failure, which may not be the case. Some experiences are neither fully voluntary (like hand/feet movements) nor involuntary (such as heart rate). Attention is a prime example. In fact, a number of experiences (e.g., thought contents, muscle tension) are on a continuum of controllability. Psychological acceptance can be understood as gentle attempts to influence such experiences where possible, while acknowledging without struggle the inevitable limitations of this influence.

Consider the case of test anxiety. As with other anxiety disorders, it is easy to appreciate how an accepting stance with respect to catastrophic thoughts and anxious sensations evoked by tests could be beneficial. However, to be successful it is not enough to accept one's subjective distress; one must also focus one's attention in order to orient toward the test itself. Approaches such as Wells' (2000) attentional training technique, in which flexible attentional control is targeted without attempting to change ongoing thoughts or feelings, may provide a useful approach to such cases.

Finally, consistent with Farmer and Chapman's (2008) notion of justified responses, there are situations in which the literal truth of a thought or belief is, in fact, critical to evaluate. A man with tachycardia, shortness of breath, and chest pains needs to know whether he is dying of a heart attack or simply having a panic attack. A woman who believes that she is being stalked by an ex-boyfriend must evaluate the evidence for this belief before simply accepting her feelings dispassionately. In such cases, psychological acceptance becomes relevant after an objective evaluation of the relevant evidence (e.g., a medical workup for the individual with chest pains, consultation with appropriate law enforcement authorities for the woman who believes she is being stalked). In many other cases, however, one may be tempted to evaluate the truth of thoughts when doing so may not be necessary. An individual with public speaking anxiety will almost certainly have thoughts concerning negative evaluation by the audience in anticipation of a speech. An objective evaluation of the evidence for such beliefs would not only be difficult to achieve, but is not necessary. The individual can

learn simply to notice his catastrophic thoughts and associated feelings of anxiety and to give the speech anyway. The issue of determining when to evaluate versus when to accept distressing thoughts is discussed further below.

UNRESOLVED ISSUES AND DIRECTIONS FOR FUTURE RESEARCH

Given the relatively recent emphasis of acceptance-based therapies within CBT, there remain a number of unresolved questions and directions for future research and clinical innovations. First, there is a need for new technologies to promote psychological acceptance. Given the pervasiveness of psychological change-oriented strategies in Western culture, the notion of fully accepting one's experience while simultaneously engaging in behavior that is seemingly inconsistent with that experience can be counterintuitive. A range of clinical strategies and techniques are needed to foster psychological acceptance. It is likely that there is untapped clinical wisdom among both practicing cognitive behavior therapists and those from other theoretical orientations that would be helpful in promoting acceptance. Similarly, the best methods of training practitioners in acceptance-based technologies require further development. Many leading innovators, including Kabat-Zinn, Linehan, and Teasdale, all stress the importance of therapists cultivating their own mindfulness practice (Lau & McMain, 2005). Likewise, Hayes incorporates various experiential exercises in his training workshops with the purpose of developing a deeper appreciation of ACT principles. Although there is clear logic to the notion that such efforts will be helpful in therapists' efforts to understand and transmit acceptance-based strategies, the importance of such training strategies is not known empirically.

Second, the development of more explicit guidelines is needed in order to distinguish when psychological acceptance is likely to be helpful, and conversely, when direct change strategies are indicated. As discussed above, there are situations in which a certain level of attentional control and evaluation of the truth value of cognitions is clearly necessary. Although at first glance such efforts may appear incompatible with experiential acceptance, acceptance may actually *enhance* one's efforts along these lines. Many existing acceptance-based innovations have not attended sufficiently to the integration of change and acceptance strategies, and the reconciliation of these apparently inconsistent themes.

It may in fact be the case that even the most staunch acceptance-oriented therapists covertly or implicitly do evaluate the validity of their patients' thoughts, and then promote acceptance only when thoughts are inaccurate. In the case of the man with chest pains described earlier, for example, no acceptance-based therapist would suggest that he simply acknowledge and accept the pain without first referring him for an appropriate medical evaluation to rule out cardiac disease. We propose that the determination of whether acceptance versus engagement with thoughts is indicated is best made on the strength of one's knowledge that (1) one has already systematically evaluated a thought before, and/or (2) one's mind routinely emits this exact thought without good cause. An example of a workable strategy along these lines would be to reach an agreement with patients to undertake a thorough evaluation of a troubling thought once and only once, after which the thought is simply noticed and accepted without further elaboration.

In addition to clinical developments, there remain a number of unresolved conceptual issues. For example, is acceptance best conceptualized as an overt behavior that can be directly assessed, as suggested by Cordova (2001), or as a private experience that is only indirectly reflected in overt behavior? An individual with social anxiety disorder may attend a party but may engage in a variety of covert "safety behaviors" that render her not fully engaged in the experience. A purely behavioral assessment of the topography of her behavior would erroneously conclude that she was highly accepting of her anxiety. The quality of one's experience with respect to a distressing stimulus is also unclear. Cordova (2001) argues that "genuine" acceptance involves a "change in the stimulus function from aversive to more attractive" and similarly as " ... change in stimulus function

of a situation toward that which inclines the person to seek or remain in contact" (p. 221). According to this analysis, if one remains in contact with an aversive stimulus without the stimulus losing its aversive properties, one is effectively in a state of hopeless resignation rather than true acceptance. It is noteworthy that this perspective effectively requires that the stimulus be experienced as less aversive to qualify as "genuine" acceptance. Yet it seems entirely plausible that one could learn to remain in psychological contact with an aversive stimulus without requiring that one's reactions to it necessarily change. For example, a patient with chronic pain may learn to accept rather than fight his pain. This may or may not result in a change in his pain perception, but it is not clear that the degree of perceived pain should distinguish "real" acceptance from mere resignation. What seems important instead is his abandoning ineffective struggles with the pain and his simultaneously pursuing other activities that will enrich his life.

There also remains confusion about how the construct of psychological acceptance differs from related constructs such as mindfulness. Some theorists view acceptance as a necessary feature of mindfulness. Brown and Ryan (2003), for example, propose that mindful awareness necessarily involves a nonjudgmental, accepting stance toward one's experience. However, this perspective fails to acknowledge that acceptance does not always accompany awareness, as in the case of heightened awareness of one's physiological arousal in panic disorder. This has led other theorists to deconstruct the concept of mindfulness such that acceptance is only one aspect. For example, Herbert and Cardaciotto (2005) argue that mindfulness is best viewed bidimensionally as consisting of ongoing awareness of one's experience and nonjudgmental acceptance of that experience, and that these two components are in fact conceptually and empirically distinct (Cardaciotto, Herbert, Forman, Moitra, & Farrow, in press). This conceptual and terminological confusion stems in part from the fact that investigators are approaching these questions from diverse theoretical perspectives, resulting in conceptual and terminological confusion (Zvolensky, Feldner, Leen-Feldner, & Yartz, 2005).

A review of the outcome research on acceptance-based CBTs is beyond the scope of this chapter; several reviews of the literature are now available (e.g., Brantley, 2005; Coelho et al., 2007; Hayes et al., 2006; Öst, 2008). In general, the status of this body of evidence can be summarized as preliminary but promising. Acceptance-based methods tend to fare at least as well as traditional change-oriented approaches, although only a handful of direct head-to-head comparisons have been conducted to date (e.g., Forman, Herbert, et al., 2007; Lappalainen et al., 2007). Clearly, more outcome research utilizing larger samples and more sophisticated methodological controls is needed (see Öst, 2008, for a detailed discussion of methodological controls within published studies on ACT and DBT). Likewise, much more psychotherapy process research is needed to evaluate the extent to which psychological acceptance mediates changes in acceptance-based models of CBT, as well as perhaps even in more traditional models of CBT. Although initial studies are encouraging (Hayes, Levin, Yadavaia, & Vilardaga, 2007), much more work remains to be done.

CONCLUSION

The field of CBT has recently witnessed an increased interest in theoretical and technological developments related to psychological acceptance. Acceptance-based models of CBT are quickly growing in popularity. Preliminary data not only support the efficacy of such approaches, but also support the conclusion that changes in psychological acceptance may mediate more general changes produced by psychotherapy, although much more work remains to be done with respect to both outcome and process. In addition, a number of theoretical and practical issues remain outstanding and await further development.

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