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Acceptance in Behavior Therapy: Understanding the Process of Change

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Acceptance is integral to several cutting-edge behavior therapies. However, several questions about acceptance remain to be clearly answered. First, what does acceptance look like, and can it be observed and measured? Second, what are the behavioral principles involved in the promotion of acceptance? Third, when is acceptance indicated or contraindicated as a therapeutic goal? The current paper attempts to clarify answers to these questions. The goal is to provide a conceptualization of the what, how, and when of acceptance that is accessible to behavior analysts, both to promote our understanding of acceptance as a behavioral phenomenon and to facilitate its empirical study and therapeutic utility.

Key words: acceptance, clinical behavior analysis, behavior therapy

Acceptance is an integral aspect of several cutting-edge approaches to behavior therapy (Hayes, Jacobson, Follette, & Dougher, 1994). For example, promoting greater acceptance is fundamental to integrative couple therapy (ICT; Christensen & Jacobson, 2000; Christensen, Jacobson, & Babcock, 1995; Cordova & Jacobson, 1993, 1997; Cordova, Jacobson, & Christensen, 1998; Jacobson, 1992; Jacobson & Christensen, 1996; Jacobson, Christensen, Prince, Cordova, & Eldridge, 2000), acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999), functional analytic psychotherapy (FAP; Kohlenberg & Tsai, 1991), and dialectical behavior therapy (DBT; Linehan, 1993). These four treatments in particular form the core of the recent emphasis on acceptance by behavior therapists.

Why is acceptance considered a central goal in these treatments, and what does it add to the field of behavior therapy that has previously been missing? First, promoting acceptance appears to be important because many of the difficulties from which psychotherapy clients suffer are not amenable to the types of instrumental change strategies for which behavior therapy originally gained prominence. Second, promoting acceptance appears to add an assortment of useful therapeutic tools to the skills-training techniques that behavior therapy has developed and emphasized. For example, ICT evolved specifically in response to evidence that traditional skills-based behavioral marital therapy was not effective over the long run for approximately half of the couples treated (Jacobson & Follette, 1985; Jacobson, Schmaling, & Holtzworth-Munroe, 1987). With these "treatment-resistant" couples, traditional change strategies were ineffective either because the circumstances in question were genuinely unchangeable (e.g., different priorities regarding money) or because partners had become unwilling to cooperate toward change. It was recognized, therefore, that if therapy was to help these couples, the emphasis would have to shift from promoting instrumental change through skills training to promoting greater acceptance of unchangeable circumstances. Thus, in couple therapy, promoting acceptance became the means by which therapists could help couples create greater intimacy and generally repair the emotional climate of the relationship. ICT notes that "acceptance work is undertaken in order to deal with incompatibilities, irrecon-

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cilable differences, and unsolvable problems" (Jacobson & Christensen, 1996, p. 14). It is also described as "giving up the struggle to change the unchangeable, sitting still with and embracing both the negative and positive aspects of the situation, and actively engaging in healthy behavior despite that which cannot be changed" (Cordova & Jacobson, 1997, p. 313).

Linehan's (1993) DBT is another example of a behavior therapy that specifically promotes acceptance as a healthy response to unchangeable circumstances or ineffective behavior. DBT was developed for a particularly difficult type of client, specifically those individuals who met criteria for borderline personality disorder. Linehan emphasizes that it is often the client's unwillingness to accept the ebb and flow of sometimes painful private experiences that leads to dramatic escape attempts like parasuicide (e.g., cutting or burning). In her description of DBT, Linehan (1994) talks of "radical acceptance" as "the fully open experience of what is just as it is ... without constriction, and without distorting, without judgment, without evaluating, without trying to keep it, and without trying to get rid of it" (p. 80). She further notes that the related goal of distress tolerance is "tolerating distress rather than impulsively acting to remove the pain without thought of whether the act will lead to more distress in the long run" (p. 79).

ACT (Hayes, Strosahl, & Wilson, 1999) also emphasizes acceptance promotion with clients who have had repeated failures in therapy (Hayes, 1987). Hayes (1994a) characterizes acceptance as "experiencing events fully and without defense" (p. 30). He also provides a more technical definition in which acceptance is "making contact with the automatic or direct stimulus functions of events, without acting to reduce or manipulate those functions, and without acting on the basis of their derived or verbal functions" (pp. 30–31). Both Linehan and Hayes describe acceptance as a focused embracing of experience, absent verbal commentary or efforts to change the experience qua experience. However, although these are valuable descriptions of acceptance, they do not describe what the process of acceptance looks like to the observer nor do they describe the basic behavioral principles by which acceptance may be promoted.

FAP has also recommended promoting acceptance for particularly challenging clinical cases (Kohlenberg & Tsai, 1991). In FAP, acceptance is described as experiencing one's emotional reactions to difficult interpersonal situations without acting to escape, avoid, or attack either those feelings or the other person (Cordova & Kohlenberg, 1994). Attempting to avoid unpleasant feelings is believed to lead to even greater suffering. However, again this describes acceptance without explicitly defining when it should be pursued, what it should look like to an observer, or what behavioral principles might be followed toward its achievement.

Acceptance appears to have emerged as a therapeutic goal in behavior therapy in response to those clinical circumstances in which traditional change strategies have been either ineffective or counterproductive. Paradoxically, acceptance strategies seem to affect clients' ability to pursue change. It appears that sometimes the very struggle to change gets in the way of genuine progress (Jacobson & Christensen, 1996). For example, in couple therapy it is often the case that the partners do not lack communication or problem-solving skills (as can be seen by their performance with people other than their spouses), but that their increasingly coercive attempts to change each other have led to a type of emotional standoff that precludes change. In such cases, it is often the abandonment of ineffective change strategies in conjunction with greater acceptance of individual differences that allow partners to successfully use the relationship skills they already possess.

The authors of the treatment ap-

proaches described here all come out of the behavior therapy tradition, and all discuss their conceptualizations in behavioral terms. Their nearly simultaneous emergence as advocates of acceptance appears to indicate a genuine movement within behavior therapy. However, although these authors have all written about acceptance and its role in their therapies, the available answers to the following questions remain unclear. First, what does acceptance look like when it is achieved, and can it be observed and measured? Second, how is acceptance promoted by behavior therapists, and are there common behavioral principles that can be followed? Third, when is acceptance indicated as a useful therapeutic goal, and when might it be contraindicated? The purpose of the current paper is to try to clarify the answers to these three questions from within a behavioral paradigm. The goal is to provide a conceptualization of the what, how. and when of acceptance that is accessible to behavior analysts, both to promote our understanding of acceptance as a behavioral phenomenon and to facilitate its empirical study and therapeutic utility.

WHAT DOES ACCEPTANCE LOOK LIKE?

What are the key components of those contexts in which acceptance occurs? Although rarely stated explicitly, acceptance becomes a goal primarily in the context of aversive stimulation. Although the general position is that both positive and negative experiences should be accepted, this tends to obscure the simpler observation that the setting for the occurrence of acceptance is a person's suffering from aversive stimulation. Those aversive stimuli may be either public (e.g., a spouse's behavior) or private (e.g., feelings of anxiety). Whether public or private, aversive stimuli are variously described as offensive, blameworthy, unpleasant, incompatible, irreconcilable, problematic, hurtful, fearful, panic inducing, painful, or threatening.

The second characteristic of those circumstances in which acceptance occurs is that the aversive stimulus in question cannot be avoided, escaped, or destroyed without incurring significant aversive consequences. In other words, those behaviors normally occasioned by aversive stimuli such as complaining, struggling, escaping, avoiding, attacking, running away, defending, reducing, manipulating, controlling, changing, disallowing, judging, criticizing, or distorting actually result in significant aversive consequences. For example, the elaborate cleaning rituals of the obsessive-compulsive can create more suffering than whatever dirt is removed or germs avoided. This is an important point, because organisms within free-operant conditions will typically work to remove the presence of aversive stimuli by one of several general tactics, including escape, avoiding contact in the first place, and exhibiting aggression against the source. Escape removes aversive stimuli by creating distance, avoidance prevents contact with the aversive stimuli, and aggression often removes aversive stimuli by removing the source. For the sake of simplicity, these behaviors will be referred to collectively as *aversion.*

Acceptance in this context has been variously described as allowing, tolerating, embracing, experiencing, or making contact with a source of stimulation that previously evoked escape, avoidance, or aggression. Note that the occurrence of acceptance specifically does *not* involve a change in the frequency or presence of the target stimuli. The stimulus that comes to be accepted is no longer avoided, escaped, or destroyed. Instead, *acceptance* might be operationally defined as a change in the behavior evoked by a stimulus from that functioning to avoid, escape, or destroy to behavior functioning to maintain or pursue contact.

This is not a negative definition. In

other words, we are not simply describing the absence of aversion. For example, if at one time a person runs in panic from the sight of a spider and at another time she is able to sit calmly holding a spider, then that process of accepting has involved both a decrease in escape behavior and an increase in approach and contact behavior. Both the decrease in panicked escape and increase in calmly sitting and holding are active, observable, and measurable behaviors. If initially a person reports that she has never told anybody about an early traumatic experience, that she tries hard not to think about it and that thinking about it makes her feel nauseous, and then later that person is able to talk openly and in detail about the incident while appearing calm and relaxed, then talking openly and reporting feelings of calm are measurable instances of acceptance as we have defined it (i.e., behavior functioning to maintain contact with a stimulus that previously evoked aversion). Acceptance can thus be conceptualized as an observable phenomenon available for scientific study.

For example, it should be possible, by this conceptualization, for psychotherapy researchers to observe acceptance as it occurs in the therapy session. Consider a client that enters therapy with a history of avoiding intimate relationships and the behaviors involved in promoting and maintaining intimacy. During therapy, such a client might avoid eye contact, avoid talking about personally meaningful or otherwise vulnerable topics, become distant or angry in response to questions about the therapeutic relationship, and in other ways work to minimize closeness (see Kohlenberg & Tsai, 1991). These could all be seen as behaviors evoked by the aversiveness of close interpersonal situations. Acceptance in this context might be observed (and recorded) as the client increasing the frequency of eye contact, talking more openly and comfortably about personally meaningful material, and actively engaging in discussions about the therapeutic relationship itself. In this case the topography of the situation has not changed (the therapist–client dyad), but the behaviors evoked by the situation from this individual have changed to those that pursue and maintain contact.

The observation and measurement of acceptance depend on a stimulus being avoided initially and on a prior determination of the changes that would be indicative of greater acceptance. For example, within couple therapy, partners might criticize each other's handling of money. One partner may call the other cheap and stingy; the second partner may call the first irresponsible and childish. A change toward acceptance in this case might involve a shift from an angry and critical discussion of the partners' different financial styles to a discussion that avoids blame and acknowledges legitimate differences that are unlikely to change. Observational systems for coding these types of changes toward greater acceptance have been developed and used successfully (Cordova et al., 1998). In addition, changes toward greater acceptance can also be measured using a self-report assessment of the degree of desired change in specific behaviors from pre- to posttherapy (e.g., the areas of change questionnaire; Margolin, Talovic, & Weinstein, 1993). In sum, acceptance can be observed and measured as change from aversion to maintaining or pursuing contact with an identified stimulus. That observation can take the form of clinical observation, observational coding, or self-report.

Acceptance also appears to involve changes in the person's reported experience of the stimulus situations from noxious to substantially less noxious or even attractive. In other words, not only does the person maintain or pursue contact, but his or her self-reported experience often involves a decrease in the inclination to avoid, escape, or destroy. What has changed? One argument is that the individual's behavior changes because the stimulus functions

of the previously aversive situations have changed. This leads to the next question.

HOW IS ACCEPTANCE PROMOTED BY BEHAVIOR THERAPISTS?

Acceptance appears to be promoted in a number of ways that can be understood by reference to the three-term contingency. Acceptance interventions can be targeted at the discriminative stimulus (S^D), the aversion behavior itself, or the consequence of the aversion behavior.

Targeting the Discriminative Stimulus

Many acceptance techniques specifically target the stimulus function of the aversive stimulus. Although not often discussed in these terms (but see Hayes & Wilson, 1994), one argument is that many techniques for promoting acceptance transform the function of the aversive stimulus through verbal processes that relate aversive stimuli to stimuli evoking behavior incompatible with aversion. As examples, consider the following acceptance techniques used in ICT.

ICT often promotes clients' expressions of the "soft" emotions underlying their expressions of "hard" emotions (e.g., Jacobson & Christensen, 1996). Hard emotional expressions are those that occasion conflict and distance, such as anger, contempt, disgust, and righteous indignation. Soft emotional expressions are those that occasion closeness and compassion such as sadness, concern, loneliness, desire, and love. For example, consider a couple in which the wife is angry that the husband frequently arrives home late and the husband, in turn, is angry that the wife gets upset. Acceptance might be promoted in this case by helping the wife talk about the feelings of loneliness, worry, concern, love, or fear associated with her overt expressions of anger. Consider the following fictionalized transcript.

T: So besides being angry that Bob came home late again without calling, what else were you feeling?
W: I don't know. It just makes me so mad. How am I supposed to know that he's not dead on the road somewhere?
T: So you're angry because when he doesn't show up on time it's hard not to worry that something might have happened to him?
W: Exactly!
T: Could you say some more about that?
W: Well, when he doesn't show up and it's been an hour or more I start to get scared because they've stopped answering the phones at his work and he is usually on time and I just don't know what I'd do if something happened to him. I know I'm being silly and that he's probably alright, but I just can't help imagining "what if . . ."
T: It sounds like it can get pretty scary. (To husband): What are you thinking?
H: I guess I'm thinking that I never really thought about what it's like for Janet to not know where I am.

The treatment rationale is that softer emotions set the stage for positive approach behaviors, whereas angry yelling and condemnation set the stage for retaliatory anger and withdrawal. Acceptance in this example is the change in the stimulus value, for the husband, of the wife's response to his coming home late. Initially, her anger is wholly aversive to him, but after hearing about how scary those times can be for her, the aversive properties of her response shift toward the more positive properties of her concern for him.

Another ICT technique promotes discussion of the understandable reasons for partners' aversive behavior. In the above example, the therapist might help the husband talk about why he at times forgets to call. For example, he might talk about feeling caught between wanting to spend more time with his wife and needing to succeed at work in order to feel that they are both safe financially. The treatment rationale is that these understandable reasons for his behavior set the stage for a more compassionate response from his wife. Thus, on those occasions when he does forget to call, she may be less inclined to become angry and hostile and more inclined to simply tell him she was worried about him.

How do these discussions in the therapy session change the stimulus functions of previously aversive behavior given that the behaviors of interest are not directly available in the session? One potential explanation is provided by relational frame theory (RFT), which posits that "the essence of verbal behavior is the learned ability to relate events bidirectionally and combinatorially, and to transform the stimulus functions of related events in terms of the derived stimulus relations they participate in" (Hayes, 1994b, p. 25). Verbal organisms are uniquely able to bidirectionally relate stimuli whose relationship has been trained in only one direction. For example, when trained to choose B1 (from the group B1, B2, B3) given A1, verbal humans will, without direct training, relate those stimuli in the other direction (i.e., will choose A1 from A1, A2, A3, given B1; e.g., Sidman, 1971; Sidman, Cresson, & Willson-Morris, 1974). This untrained relating is called a derived relation (in this case one of symmetry).

Derived bidirectional relating may be relevant to acceptance promotion because sometimes the functions of one stimulus can be transferred to another stimulus that has not previously served those functions through their bidirectional relations. Further, stimuli such as spoken or written symbols can acquire the functions of other types of stimuli (e.g., Roche & Barnes, 1997). For example, words can function as discriminative stimuli, conditioned evocative stimuli, and consequences (e.g., Newman, Hemmes, Buffington, & Andreopoulos, 1994; Schlinger, 1993). This phenomenon, in which one stimulus acquires the function of another, is called the transformation of function. For example, the vocal stimulus "Snake!" can acquire the same conditioned evocative function as the presence of an actual snake. It can also acquire the same discriminative function in that it can come to occasion similar avoidance behavior. In addition, it may serve a similar consequential function, in that someone else yelling "Snake!" may punish the behavior of walking in the tall grass as effectively as actually seeing a snake. The point is that those stimuli we refer to as words can have the same functions as other stimuli and that these functions can be transferred through their relations with vocal or written counterparts.

Following these principles, the functions of aversive stimuli can be transformed in the therapy session by relating words that correspond to those stimuli with words that correspond to stimuli that evoke behavior incompatible with aversion (i.e., behavior that maintains or pursues contact). The change in function that results fits our definition of acceptance because, when successful, stimuli that look the same topographically set the stage for very different behaviors. In our example above, the stimulus function of the husband's coming home late is addressed by vocally relating it in the session to his evocative revelation of how anxious he gets about the financial well-being of his family. As a result of this relating, the wife responds differently to his coming home late, being more likely to express concern than belligerence. According to RFT, such an intervention transforms the stimulus function of his "coming home late" toward stimulus functions involving "anxiety" and "concern." In addition, for the husband, the stimulus function of the wife's anger is transformed toward stimulus functions involving expressions of loneliness, worry, and concern. In lay terms, his coming home late does not mean the same thing to his wife anymore. Similarly, her upset with him for being late does not mean the same thing to him anymore. Each of these previously wholly aversive behaviors no longer serves exactly the same function, and instead each is more likely to evoke closeness and compassion. What is of note is that neither the husband's coming home late nor the wife's anger are directly experienced in the therapy session. In-

stead, the words that have acquired some of the stimulus functions of those events have been related to new stimulus functions by the therapist, and derived stimulus relations change the function of the husband's coming home late and the wife's resultant anger.

The principle to follow appears to involve the therapist vocally relating the words associated with the aversive stimuli to other words associated with stimuli that are not only incompatible with aversion but that promote the healthy maintenance or pursuit of contact (in this case, stimuli that promote behavior beneficial to the relationship). This requires some creativity on the therapist's part in that the therapist must identify some aspect of the situation that is likely to evoke behavior incompatible with aversion and that is a believable aspect of that situation. For example, the identified soft feelings must not only evoke something like compassion or desire but must be acknowledged by the client as a genuine aspect of her anger.

Targeting the Aversion Behavior

Acceptance can also be promoted by targeting the aversion behavior directly. For example, exposure and response prevention in the treatment of compulsive handwashing can be seen as a means of promoting acceptance of the S^D "unwashed hands" and the attendant thoughts and feelings. Note that the results of exposure and response prevention look like acceptance as defined here in that the behavior functioning to escape unwashed hands changes to behavior that maintains contact with unwashed hands in order to pursue healthier, more meaningful goals. Also, the S^D itself does not change topographically. Unwashed hands remain unwashed hands. However, theoretically, preventing the compulsion ultimately changes the stimulus function of unwashed hands because the feared consequence never occurs in the presence of unwashed hands (promoting extinction).

The principle at work here involves determining that exposure to the S^D is not itself harmful and then exposing the client to that S^D while preventing his or her usual attempts to avoid, escape, or destroy it. Exposure plus response prevention have been found effective not only for compulsive behavior (Abramowitz, 1997) but for a range of phobias (e.g., Farkas, 1989), posttraumatic stress disorder (Foa, Rothbaum, Riggs, & Murdock, 1991), and pathological gambling (Echeburua, Fernandez-Montalvo, & Baez, 2000). Notice that this type of intervention is different from those that vocally relate stimuli. Exposure techniques rely on the fact that exposure and response prevention can occur with no subsequent harm, thereby allowing change via extinction of the behavior. The previous techniques, theoretically, rely on transformation of function.

Targeting the Consequences of Aversion

Finally, acceptance can be promoted by targeting the consequence of aversion versus maintaining contact with the target stimuli. This involves providing reinforcement for behavior that maintains contact while suppressing or allowing the extinction of behavior that avoids or diminishes contact. This is an approach advocated within FAP as a treatment for difficulty with intimate relationships. Changes in client behavior that result in more contact with previously avoided interpersonal circumstances (e.g., increased eye contact, increased self-disclosure) are reinforced by the therapist's genuine, nonarbitrary, interpersonal response (see Kohlenberg & Tsai, 1991, for a more detailed discussion). Again, the change fits the definition of acceptance in that the person's behavior changes from avoiding interpersonal stimuli to maintaining and pursuing contact with those stimuli. In addition, the previously aversive stimuli remain the same to-

pographically, but their stimulus function changes dramatically.

The principle here involves identifying the clinically relevant behavior to be reinforced as well as the naturally occurring (vs. arbitrary) reinforcers for that behavior that are available to the therapist. Therapy involves shaping successive approximations of the target behavior over time by noticing occurrences of the relevant behavior and responding in ways hypothesized to increase their frequency.

It should be noted in closing this section that the parsing of acceptance targets into the components of the three-term contingency is not meant to imply that these targets are nonoverlapping. To target any aspect of the three-term contingency is necessarily to affect all three. Directly changing the stimulus function of an aversive stimulus by verbally relating it to some more attractive stimulus will result in different behavior that will in turn result in different consequences. Exposure plus response prevention also changes the stimulus function of the S^D *and* results in the reinforcement of behavior maintaining contact with the S^D. Reinforcing behavior that maintains and pursues contact changes the frequency of that behavior and also changes the stimulus function of the S^D. In the end, targeting any component of the contingency affects the entire behavioral context. It should also be noted that the specific techniques for promoting acceptance discussed here are far from exhaustive. At this point we are only beginning to learn how to effectively promote acceptance. Not only is technique development continuing, but many potentially useful techniques may already exist within other psychotherapy traditions such cognitive or systems therapy.

WHEN IS ACCEPTANCE INDICATED AND CONTRAINDICATED?

When Is Acceptance Indicated?

Acceptance as a therapeutic goal appears to be indicated when the behavior involved in attempting to escape from, avoid, or destroy a source of aversive stimulation results in significantly aversive consequences. For example, it has been argued that attempts to suppress unpleasant thoughts and feelings often create more suffering than they resolve (e.g., Dougher, 1994; Hayes, 1994a). Supporting that argument, there is a growing body of evidence demonstrating that suppressing thoughts and feelings, particularly those that are unpleasant, does indeed result in an increase in their occurrence or a rebound effect (Becker, Rinck, Roth, & Margraf, 1998; McNally & Ricciardi, 1996; Wegner, 1990; Wegner, Schneider, Knutson, & McMahon, 1991). In addition, making contact with unpleasant thoughts and feelings is unlikely, in and of itself, to cause substantial harm, and again there is evidence that doing so is often the most effective means of resolving the associated problems. For example, in the case of posttraumatic stress disorder "many victims . . . mistakenly view the process of remembering their trauma as dangerous, and therefore devote much effort to avoiding thinking or processing the trauma" (Foa & Rothbaum, 1998, p. 52). These attempts to avoid remembering the trauma appear to actually impede recovery. Conversely, efforts to help clients accept these memories (through prolonged exposure) rather than suppress them appear to be remarkably effective treatments (e.g., Foa et al., 1991). Note that the general principle is not that it is impossible to suppress, avoid, or attack the source of aversive stimulation, but that doing so ultimately produces more suffering than that caused by the stimulus the person was attempting to escape. In addition, increased contact not only diminishes the suffering caused by avoidance but places the individual in a position to be affected by other available contingencies, allowing the shaping of more effective behaviors.

When is Acceptance Contraindicated?

When might acceptance promotion be contraindicated? In short, accep-

tance is unnecessary in those circumstances in which aversion works or does no substantial harm. Proponents of ICT assert that acceptance does not mean resignation to the male-dominated status quo, to physical or emotional abuse, or to any other clearly destructive or demeaning situation (Jacobson & Christensen, 1996). Although acceptance in some contexts may sound like giving up, giving in, hopeless resignation, or learned helplessness, they are not equivalent phenomena. They may look similar in some circumstances, but ultimately acceptance involves a change in the stimulus value from more aversive to more attractive. The negative connotations of acceptance imply that the stimulus remains unremittingly noxious, while any inclination to escape, avoid, or destroy is suppressed. However, genuine acceptance involves a change in the stimulus function of the situation toward that which inclines the person to seek or remain in contact.

The current conceptualization suggests that for the clinician deciding whether or not to promote acceptance in a given case, assessment involves determining with the client whether attempts to remove or avoid are creating more suffering than they resolve, and whether accepting the situation would be less harmful in the long run. Acceptance as a treatment option can be considered in all cases in which an individual is suffering from contact with aversive stimuli. Those stimuli can span the range from chronic pain, to aversive behaviors by the partner, to painful thoughts and feelings, physical ailments, mortality, loneliness, loss, and so on. The question to answer is, "Can the problematic stimulus be effectively removed or avoided without substantial harm?" If the answer is no, then promoting acceptance of the stimulus is warranted. If the answer is yes, then acceptance is contraindicated, and first-order change strategies can be implemented.

For example, a patient during the course of treatment for interpersonal difficulties reveals that she was sexually assaulted very early in her adult life and that she has had difficulty establishing a satisfying intimate relationship since. Assessment finds that she has never discussed the trauma with anyone and has worked hard to not think about or remember it. Is this an appropriate situation for promoting acceptance? First, the presenting problem does appear to be related to aversion against a source of noxious stimulation. The trauma literature suggests that difficulty with intimacy frequently follows traumatic sexual experiences (e.g., Foa & Rothbaum, 1998). The literature also suggests that these symptoms tend to diminish over time, but that suppression of the thoughts and feelings associated with the trauma can delay recovery, sometimes for years (Foa & Rothbaum, 1998). Although this particular client has been quite successful much of the time in her efforts to suppress her feelings about the event, hide it from those around her, and avoid thinking or talking about it, those thoughts and feelings remain noxious and distracting. Ultimately her attempts to remove or avoid these memories have failed, and it is unlikely that alternative strategies will be any more successful. Further, her avoidance has had the unintended side effect of dramatically diminishing her ability to form the intimate partnerships that she desires. Therapeutic efforts to promote acceptance of her thoughts and feelings in this context appear to be warranted.

Another example involves a client coming to therapy complaining of spousal abuse. Her husband, although frequently charming, is also quite frequently verbally and emotionally abusive and increasingly physically abusive. This client feels both controlled by her husband and frightened for her safety. Although it may seem so, in this case the decisions about acceptance promotion are not necessarily straightforward. On one hand, there are successful means for escaping the abusive relationship. On the other hand,

this client may be putting herself at substantial risk by doing so, because wives in abusive relationships remain at risk for being seriously injured or killed during the period when they are leaving and shortly after having left the relationship (Saltzman & Mercy, 1993). However, although leaving is risky, staying may ultimately place her at even greater risk both physically and psychologically. There are a range of escape options specifically designed to be effective and to minimize the risk of leaving. Thus, the promotion of acceptance in this circumstance would be contraindicated. Although escape may be difficult and risky, the probability of dramatically negative consequences is frequently deemed lower than that incurred by not attempting removal and avoidance.

However, even in this circumstance acceptance has a role to play. For her to be able to leave the relationship, the client must accept that her partner is unlikely to change and that she is in serious danger. This speaks to the point that acceptance often precedes change even in circumstances in which dramatic change is clearly warranted.

EMPIRICAL EVIDENCE

Is there any empirical evidence for the utility of acceptance-based interventions? The empirical study of acceptance promotion in therapy is only beginning, and most evidence that does exist is embedded within studies of multicomponent treatment packages. For example, two empirical studies of ICT have been published to date. In the first (Cordova et al., 1998), evidence was found that the communication of ICT couples changed in predicted ways and to a greater degree than that of couples who received traditional behavioral marital therapy with no emphasis on acceptance. Specifically, ICT couples increased their acceptance of unchangeable relationship problems. They also increased the frequency with which they disclosed soft as opposed to hard emotions and decreased the frequency with which they engaged in destructive problem behavior. The second study (Jacobson et al., 2000) provided evidence suggesting that ICT may be a more effective treatment for marital distress than traditional behavioral marital therapy. In addition to providing evidence that husbands and wives who received ICT showed greater increases in marital satisfaction and greater clinical improvement and recovery than those who received traditional marital therapy, Jacobson et al. also showed that traditional behavioral marital therapy involved almost no use of acceptance interventions compared to ICT. Thus, the presence or absence of acceptance strategies clearly differentiated the two treatments and increased confidence that differential outcomes might be attributable to those strategies.

Hayes and his colleagues have also presented evidence that ACT is a promising treatment (Strosahl, Hayes, Bergan, & Romano, 1998; Zettle & Raines, 1989). In their innovative effectiveness study, Strosahl et al. (1998) demonstrated that ACT-trained therapists increased their clients' acceptance, coping, and treatment completion. In addition, Bond and Bunce (2000) compared ACT strategies to traditional change strategies in a study of work-related stress and found that although both interventions outperformed a wait-list control condition, only changes in the ACT condition were mediated by the acceptance of undesirable thoughts and feelings. Linehan has also provided evidence for the effectiveness of DBT as an acceptance therapy (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991). Kohlenberg and Tsai (1994) have provided preliminary evidence for the utility of FAP. Finally, there is a great deal of evidence supporting the effectiveness of exposure and response-prevention treatments (e.g., Foa, Steketee, Grayson, Turner, & Latimer, 1984). Although none of these studies specifically addresses the promotion of acceptance outside the context of a more

comprehensive treatment package, they do suggest that treatments constructed to promote acceptance can be useful.

Analogue studies of acceptance strategies have also been conducted. In one study, subjects who were provided with an acceptance rationale demonstrated greater pain tolerance in a cold-pressor task than did subjects who were provided with a control rationale (Hayes, Bissett, et al., 1999). In a similar study, subjects who were told to pay close attention to their hand during a cold-pressor task recovered more quickly and were less likely to rate a second task as unpleasant than those who were told to either distract themselves or suppress the sensation (Cioffi & Holloway, 1993). Thus, in addition to preliminary evidence that acceptance-based behavior therapies are promising treatments as a whole, there is evidence of specific effects on measures of acceptance (Bond & Bunce, 2000; Cordova et al., 1998) and when compared to control strategies, acceptance strategies promote greater tolerance and quicker recovery from painful experiences (Cioffi & Holloway, 1993; Hayes, Bissett, et al., 1999).

Work remains, however, to conclusively demonstrate that acceptance strategies are the key active ingredients in acceptance-based treatments. Such work first requires the development of reliable measures of acceptance. The current definition lends itself to such development because it defines acceptance as an observable phenomenon. Researchers can define the targeted aversive stimuli and what the shift from aversion to acceptance should look like, allowing them to construct observational measurement systems and train reliable observers (including self-observers). In addition, target stimuli can be allowed to vary from subject to subject, facilitating idiographic study without sacrificing comparability between groups of subjects. With the development of psychometrically sound measures of acceptance, psychotherapy process research can be conducted to determine if acceptance is indeed the primary mechanism of change in acceptance-based therapies and whether the techniques of acceptance promotion accomplish what they are intended to accomplish.

Several other questions also remain to be answered. For example, do acceptance techniques work by promoting acceptance, or are there other processes at work? Do acceptance interventions result in increases in related adaptive behaviors? Are acceptance strategies more effective than control strategies in some contexts and not others? Are some acceptance strategies more effective than others? Would the inclusion of acceptance strategies increase the effectiveness of existing empirically supported therapies? In short, empirical work in this area is only beginning, and much work remains to be done in terms of testing the current theory, validating the process and utility of acceptance, and developing and refining acceptance promotion strategies.

SUMMARY

In summary, several frequently raised issues have been addressed regarding acceptance as it is currently being promoted in behavior therapy. Perhaps most frequent is the issue of when acceptance is to be considered a legitimate therapeutic goal. It has been noted that many things are simply unacceptable and should remain so (e.g., spousal abuse). It has also been noted that unabated contact with some aversive stimuli can result in negative physical and emotional consequences. As noted above, it is clear that acceptance is not warranted in every circumstance because often the removal or avoidance of aversive stimuli not only is achievable but is also the healthiest response. Acceptance does appear to be warranted, however, when aversion causes substantial harm either in the short or long run. In addition, the potentially negative physical and emotional consequences of maintained contact may be ameliorated if the func-

tion of that stimulus is transformed such that it is no longer wholly aversive but acquires nonaversive or attractive functions.

The issue remains, however, that a judgment must be made about the relative harm caused by aversion versus maintaining or pursuing contact. In some circumstances (e.g., compulsive handwashing) that judgment appears to be relatively noncontroversial. In other circumstances, however, the judgment call is not necessarily straightforward or clear, and in such circumstances the client and therapist will need to collaboratively consider the pros and cons of acceptance versus continued avoidance or escape efforts.

Another issue that has been raised involves the direction of the transformation of function when the S^D is targeted directly. Given the bidirectional transformation of function, how does the therapist insure that the stimulus function of the aversive stimuli shifts toward the attractive stimulus and not vice versa? For example, how does the therapist insure that the wife's anger becomes less aversive rather than the alternative outcome, that her desire for companionship becomes more aversive? Given the principles of RFT, the functions should shift in both directions. It may be that one particular direction is emphasized in therapy, thus perhaps strengthening the intended transformation of function over the unintended. Alternatively, the transfer of function may indeed be bidirectional, and the previously nonaversive stimulus may acquire some aversive properties. If this is the case then such interventions may indeed complicate clients' lives, for example by making the wife's anger about the husband's coming home late a more complicated stimulus with both aversive and attractive properties. However, even if this speculation is correct, complicating the nonaversive stimulus may be a worthwhile price to pay to gain greater overall acceptance.

Another question involves how to distinguish between acceptance and hopeless resignation. Acceptance appears to be distinguished from less favorable outcomes by the final stimulus value of the target stimuli. If the original target aversive stimuli remain wholly aversive and do not acquire any nonaversive or attractive properties and yet change efforts cease, then acceptance as defined here has not occurred. This pattern is instead more akin to hopeless resignation because although escape and avoidance have ceased, the inclination to escape, avoid, or destroy remains. In other words, the person still suffers from the contact made with the aversive stimulus and is still inclined to remove or avoid it, but simply has no remaining effective behavior in his or her repertoire.

How can this be assessed? Because we are primarily concerned with psychotherapy clients, the most straightforward means of assessing hopeless resignation is to simply ask the person to report their experience of the target stimulus. If their change efforts have stopped and yet the function of the stimulus remains wholly aversive, then the situation is rightly identified as hopelessness. This raises another issue, however, in that a continuum can be conceived from hopeless resignation to active embracing, depending on the totality of the shift in stimulus function from aversive to attractive. An outcome in which there was no shift in function would lie on the hopeless resignation end of the continuum. A shift in function resulting in a more equal mix of aversive and nonaversive properties might best be recognized as an increase in tolerance for the previously wholly aversive stimuli. A shift in function resulting in a complete transformation from aversive to attractive functional properties would hold down the other end of the continuum, an embracing acceptance (see Jacobson & Christensen, 1996).

In summary, this paper has attempted to clarify answers to the what, how, and when questions about acceptance from a behavior-analytic perspective. It is hoped that this attempt at a behav-

ioral conceptualization of acceptance will promote further empirical study of this important clinical phenomenon.

REFERENCES

Abramowitz, J. S. (1997). Effectiveness of psychological and pharmacological treatments for obsessive-compulsive disorder: A quantitative review. *Journal of Consulting and Clinical Psychology, 65,* 44–52.

Becker, E. S., Rinck, M., Roth, W. T., & Margraf, J. (1998). Don't worry and beware of white bears: Thought suppression in anxiety patients. *Journal of Anxiety Disorders, 12,* 39–55.

Bond, F. W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology, 5,* 156–163.

Christensen, A., & Jacobson, N. S. (2000). *Reconcilable differences.* New York: Guilford Press.

Christensen, A., Jacobson, N. S., & Babcock, J. C. (1995). Integrative behavioral couple therapy. In N. S. Jacobson & A. S. Gurman (Eds.), *Clinical handbook of couple therapy* (pp. 31–64). New York: Guilford Press.

Cioffi, D., & Holloway, J. (1993). Delayed costs of suppressed pain. *Journal of Personality and Social Psychology, 64,* 274–282.

Cordova, J. V., & Jacobson, N. S. (1993). Couples distress. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (2nd ed., pp. 481–512). New York: Guilford Press.

Cordova, J. V., & Jacobson, N. S. (1997). Acceptance in couple therapy and its implications for the treatment of depression. In R. J. Sternberg & M. Hojjat (Eds.), *Satisfaction in close relationships* (pp. 307–334). New York: Guilford Press.

Cordova, J. V., Jacobson, N. S., & Christensen, A. (1998). Acceptance vs. change in behavioral couples therapy: Impact on client communication processes in the therapy session. *Journal of Marital and Family Therapy, 24,* 437–455.

Cordova, J. V., & Kohlenberg, R. J. (1994). Acceptance and the therapeutic relationship. In S. C. Hayes, N. S. Jacobson, V. M. Follette, & M. J. Dougher (Eds.), *Acceptance and change: Content and context in psychotherapy* (pp. 125–142). Reno, NV: Context Press.

Dougher, M. J. (1994). The act of acceptance. In S. C. Hayes, N. S. Jacobson, V. M. Follette, & M. J. Dougher (Eds.), *Acceptance and change: Content and context in psychotherapy* (pp. 37–46). Reno, NV: Context Press.

Echeburua, E., Fernandez-Montalvo, J., & Baez, C. (2000). Relapse prevention in the treatment of slot-machine pathological gambling: Long-term outcome. *Behavior Therapy, 31,* 351–364.

Farkas, G. M. (1989). Exposure and response prevention in the treatment of an okeanophobic triathlete. *Sport Psychologist, 3,* 189–195.

Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: Cognitive-behavioral therapy for PTSD.* New York: Guilford Press.

Foa, E. B., Rothbaum, B. O., Riggs, D., & Murdock, T. (1991). Treatment of post-traumatic stress disorder in rape victims: A comparison between cognitive-behavioral procedures and counseling. *Journal of Consulting and Clinical Psychology, 59,* 715–723.

Foa, E. B., Steketee, G., Grayson, J. B., Turner, R. M., & Latimer, P. (1984). Deliberate exposure and blocking of obsessive-compulsive rituals: Immediate and long-term effects. *Behavior Therapy, 15,* 450–472.

Hayes, S. C. (1987). A contextual approach to therapeutic change. In N. S. Jacobson (Ed.), *Psychotherapist in clinical practice: Cognitive and behavioral perspectives* (pp. 327–387). New York: Guilford Press.

Hayes, S. C. (1994a). Content, context, and the types of psychological acceptance. In S. C. Hayes, N. S. Jacobson, V. M. Follette, & M. J. Dougher (Eds.), *Acceptance and change: Content and context in psychotherapy* (pp. 13–33). Reno, NV: Context Press.

Hayes, S. C. (1994b). Relational frame theory: A functional approach to verbal events. In S. C. Hayes, L. J. Hayes, M. Sato, & K. Ono (Eds.), *Behavior analysis of language and cognition* (pp. 11–30). Reno, NV: Context Press.

Hayes, S. C., Bissett, R. T., Korn, Z., Zettle, R. D., Rosenfarb, I. S., Cooper, L. D., & Grundt, A. M. (1999). The impact of acceptance versus control rationales on pain tolerance. *The Psychological Record, 49,* 33–47.

Hayes, S. C., Jacobson, N. S., Follette, V. M., & Dougher, M. J. (1994). *Acceptance and change: Content and context in psychotherapy.* Reno, NV: Context Press.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change.* New York: Guilford Press.

Hayes, S. C., & Wilson, K. G. (1994). Acceptance and commitment therapy: Altering the verbal support for experiential avoidance. *The Behavior Analyst, 17,* 289–303.

Jacobson, N. S. (1992). Behavioral couple therapy: A new beginning. *Behavior Therapy, 23,* 493–506.

Jacobson, N. S., & Christensen, A. (1996). *Integrative couple therapy: Promoting acceptance and change.* New York: Norton.

Jacobson, N. S., Christensen, A., Prince, S. E., Cordova, J. V., & Eldridge, K. (2000). Integrative behavioral couple therapy: An acceptance-based, promising new treatment for marital discord. *Journal of Consulting and Clinical Psychology, 68,* 351–355.

Jacobson, N. S., & Follette, W. C. (1985). Clinical significance of improvement resulting

from two behavioral marital therapy components. *Behavior Therapy, 16,* 249–262.

Jacobson, N. S., Schmaling, K. B., & Holtzworth-Munroe, A. (1987). Component analysis of behavioral marital therapy: Two-year follow-up and prediction of relapse. *Journal of Marital and Family Therapy, 13,* 187–195.

Kohlenberg, R. J., & Tsai, M. (1991). *Functional analytic psychotherapy: Creating intense and curative therapeutic relationships.* New York: Plenum.

Kohlenberg, R. J., & Tsai, M. (1994). Improving cognitive therapy for depression with functional analytic psychotherapy: Theory and case study. *The Behavior Analyst, 17,* 305–319.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder.* New York: Guilford Press.

Linehan, M. (1994). Acceptance and change: The central dialectic in psychotherapy. In S. C. Hayes, N. S. Jacobson, V. M. Follette, & M. J. Dougher (Eds.), *Acceptance and change: Content and context in psychotherapy* (pp. 73–87). Reno, NV: Context Press.

Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48,* 1060–1064.

Margolin, G., Talovic, S., & Weinstein, C. D. (1993). Areas of change questionnaire: A practical approach to marital assessment. *Journal of Consulting and Clinical Psychology, 51,* 944–955.

McNally, R. J., & Ricciardi, J. N. (1996). Suppression of negative and neutral thoughts. *Behavioural and Cognitive Psychotherapy, 24,* 17–25.

Newman, B., Hemmes, N. S., Buffington, D. M., & Andreopoulos, S. (1994). The effects of schedules of reinforcement on instruction-following in human subjects with verbal and nonverbal stimuli. *The Analysis of Verbal Behavior, 12,* 31–41.

Roche, B., & Barnes, D. (1997). A transformation of respondently conditioned stimulus function in accordance with arbitrarily applicable relations. *Journal of the Experimental Analysis of Behavior, 67,* 275–301.

Saltzman, L. E., & Mercy, J. A. (1993). Assaults between intimates: The range of relationships involved. In A. V. Wilson (Ed.), *Homicide: The victim/offender connection* (pp. 65–74). Richmond, KY: Anderson.

Schlinger, H. D. (1993). Separating discriminative and function-altering effects of verbal stimuli. *The Behavior Analyst, 16,* 9–23.

Sidman, M. (1971). Reading and auditory-visual equivalence. *Journal of Speech and Hearing Research, 14,* 5–13.

Sidman, M., Cresson, O., & Willson-Morris, M. (1974). Acquisition of matching-to-sample via mediated transfer. *Journal of the Experimental Analysis of Behavior, 43,* 21–42.

Strosahl, K. D., Hayes. S. C., Bergan, J., & Romano, P. (1998). Assessing the field effectiveness of acceptance and commitment therapy: An example of the manipulated training research method. *Behavior Therapy, 29,* 35–64.

Wegner, D. M. (1990). *White bears and other unwanted thoughts: Suppression, obsession, and the psychology of mental control.* New York: Penguin.

Wegner, D. M., Schneider, D. J., Knutson, B., & McMahon, S. R. (1991). Polluting the stream of consciousness: The effect of thought suppression on the mind's environment. *Cognitive Therapy and Research, 15,* 141–152.

Zettle, R. D., & Raines, J. C. (1989). Group cognitive and contextual therapies in treatment of depression. *Journal of Clinical Psychology, 45,* 436–445.