Core Principles in Acceptance and Commitment Therapy: An Application to Anorexia
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Acceptance and Commitment Therapy (ACT) views cognition and emotion differently in their roles in psychological problems. Both popular culture and many models of psychopathology conceive of negative thoughts and emotions as states that must be eliminated, reduced, or supplanted. ACT posits that these negative emotional, cognitive, and bodily states may or may not produce behavior problems. Further, ACT suggests that attempts to control these states may actually worsen mental health problems. Strategies to control, eliminate, or suppress negative states, called experiential avoidance, are directly targeted. ACT seeks to treat the functional class of experiential avoidance rather than specific diagnostic categories. However, ACT has been applied to a number of DSM-W disorders. We detail the application of ACT to an adolescent diagnosed with anorexia and comment on the treatment implemented by Heffner, Sperry, Eifert, and Detweiler (2002). We discuss the broad assessment issues necessitated by the type of difficulties a patient with anorexia may have. The general structure of an ACT intervention is elaborated on, including values, exposure, defusion, and empowerment.

ACT Case Conceptualization

ACCEPTANCE AND COMMITMENT THERAPY (ACT) is a principles-driven, rather than procedure-driven, treatment. The "doing" of ACT involves the organization of the therapist's conceptualization around a set of assumptions. Particular interventions are dictated by their consistency with this conceptualization. Because ACT has a fundamentally different view of the role of cognition and emotion in psychological problems, we will begin by providing a brief overview.

Negative Cognition, Emotion, and Bodily States in Popular Culture
Popular culture embraces the notion that positive emotions, cognitions, and bodily states cause good behavior and negative emotions, cognitions, and bodily states cause bad behavior. We expend enormous effort in our schools and workplaces teaching people to feel more confident, to have higher self-esteem, and to be cheerful and optimistic. Confidence, self-esteem, and optimism are our psychological allies, while negative aspects of experience are to be controlled, reduced, or eliminated.

**Negative Cognition, Emotion, and Bodily States in Clinical Science**

Models of psychopathology often accept the assumption that negative thoughts and emotions must be supplanted with positive thoughts and emotions in order that our clients might move on with their lives. In a number of therapies, clients are taught to dispute negative thoughts (Beck, Rush, & Shaw, 1979; Ellis, 1962). Some focus on elimination or reduction of problematic emotional states, such as anxiety, through exposure (for example, Barlow, Craske, Cerny, & Klosko, 1989). In treating substance abuse, attempts are made to reduce conditioned cravings through cue exposure (Monti, Adams, Kadden, & Cooney, 1989). All of these treatments share the view that certain cognitions, emotions, and bodily states lead to bad behavioral outcomes and that in order to improve the behavioral outcomes, an array of problematic private events must be eliminated, or at least reduced.

**Negative Cognition, Emotion, and Bodily States in ACT**

From an ACT perspective, negative cognition, emotion, and bodily states may, but need not, produce bad behavioral outcomes. In addition, at least under some circumstances, attempts to eliminate negative emotion and cognition seem to worsen mental health problems (and physical health problems; see Pennebaker, 1997). The attempt to reduce, eliminate, or decrease the probability of experiencing a variety of avoided private events - including painful thoughts, emotions, memories, and bodily states - has been labeled *experiential avoidance*, and the analysis of the detrimental effects of avoidance on behavioral functioning has been referred to as *acceptance theory* (Hayes, Strosahl, & Wilson, 1999; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). In doing so, ACT takes advantage of a growing body of literature that suggests that attempts to suppress or avoid negative private events may work to reduce those negative states over the short term, but may actually worsen outcomes over the long term. Although evidence is not wholly uniform, there is considerable evidence in the experimental literature on thought suppression (Purdon, 1999, for recent review) and in the coping literature among depressives, survivors of child sexual abuse, alcoholism, and recovery from traumatic events, suggesting that avoidant means of coping predict poorer long-term outcomes (see Hayes et al., 1996, for a review). ACT focuses on the role of experiential avoidance in the exacerbation and maintenance of a number of psychological problems.

In the case of this anorexic adolescent, ACT components were integrated into more traditional behavior therapy techniques (Heffner, Sperry, Eifert, & Detweiler, 2002). Such integration is appropriate, since ACT is, at its heart, a behavioral treatment. Problems can emerge when strategies from alternative
behavioral perspectives contradict an ACT orientation; however, careful analysis can often resolve differences by eliminating or retraining components that might work at cross-purposes with acceptance-oriented strategies.

Consider, for example, the use of relaxation strategies for anxiety problems. A number of ACT experiential exercises involving exposure to troubling thoughts and emotions begin with components aimed at inducing a state of focused relaxation. Relaxation is not pursued as an end in itself. Instead, relaxation is a means to effective exposure. There is good empirical evidence that this should be useful. Borkovec has demonstrated that worry produces autonomic inflexibility, and that individuals show facilitation of habituation when exposure is preceded by a period of relaxation rather than worry (Borkovec & Hu, 1990). In this instance, the relaxation actually facilitates autonomic flexibility (and arousal) in the exposure session and thus makes for a more effective extinction trial. The purpose of the relaxation in ACT is not to produce more relaxation and less arousal in the presence of the avoided event. Instead, relaxation is intended to facilitate flexibility, arousal, and more effective exposure.

**ACT as a Health-Oriented Perspective**

Most of clinical psychology, and most of the mental health professions, have embraced pathology-oriented views of human suffering. Suffering, such as pervasive negative thinking, sad or anxious mood, is considered "abnormal" and "pathological." The job of therapy and therapist is to extract the pathology, leaving a healthy, well-functioning individual. In the instance of the young woman treated by Heffner et al. (2002), "fat thoughts" would be part of the pathology to be removed. From this perspective, the "normal" state for humans is to be free of worry, negative cognition, negative memory, anxiety, and sadness. This version of normality has been called the "assumption of healthy normality" (Hayes et al., 1999). However, there is considerable evidence that suggests that suffering, far from being abnormal, is quite pervasive. The National Comorbidity Study, for example, estimated the 1-year prevalence of DSM Axis I disorders at 29% (Kessler et al., 1994). This prevalence rate does not even take into consideration the many thousands of individuals who are unhappy in their work, marriages, family, and social relations. These and other data suggest that human suffering is in fact quite pervasive.

ACT is not a treatment for DSM categories. ACT does not seek to remove anything. Rather, ACT is a treatment for experiential avoidance and seeks to ameliorate avoidance in the service of increasing the client's capacity to engage in a rich and meaningful life. Regardless of the formal properties of an individual client's difficulties, we focus on the individual's life direction, and interventions are directed and dignified by that agenda. In the case of this young woman, we would assess some quite traditional domains; however, our organization of resulting assessment findings will be in accordance with a health- and development-oriented case conceptualization.

**Diagnostics and Assessment in ACT**

Developers of ACT have been skeptical of the validity of DSM diagnostic categories and have suggested functional diagnostic dimensions as an alternative (for example, experiential avoidance; Hayes et al., 1999; Hayes et al., 1996). The validity of categories aside, however, there are considerable
data suggesting that individuals with problematic eating patterns classified as anorexia often have a variety of other psychosocial and physical difficulties, and these co-occurring difficulties ought to be assessed and included in an ACT case conceptualization. Assessment is done in order to gather evidence of the effects of the client's attempts to control negative private experience.

**Medical Correlates**

Anorexic clients should to be assessed for a variety of medical conditions ranging from cardiovascular disorders to endocrinological dysfunction. Routine medical examination of anorexic clients should include complete physical examination, standard laboratory tests, chemical analysis, blood count, and urinanalysis (Foreyt & Mikhail, 1997). The high lethality, as noted by the authors, indicates the importance and need for a full medical workup prior to treatment (Mehler & Andersen, 1999). Any medical problems that have arisen will be included in the treatment in two ways. First, medical problems will be brought into treatment as examples of the unworkability of control. Mortality is a particularly glaring example of unworkability. Second, medical problems will be examined with respect to their interference with the client's ability to pursue her values.

For example, as a consequence of her parents' and coach's health concerns, Emily had lied about food intake. This incident provides a good example of the cascading of negative events in the service of control. That is, the client starves herself in order to control "fat thoughts." As the client becomes dangerously thin, important adults in her life begin questioning her about her eating.

In order to prevent negative interactions with these adults while retaining control over her diet, she lies to these individuals. Their interpersonal closeness thus cluttered by this obfuscation, the client is now likely to suffer strained social relations. Psychosocial outcomes might include the client feeling less support, more isolated, and not well understood. Her health will continue to deteriorate, precipitating even more conflict. In the context of examining medical consequences, we would carefully explore these psychosocial consequences.

**Psychosocial Correlates**

*Mood and cognition.* A wide variety of psychosocial correlates of anorexia have been found. Obsessional and phobic anxiety symptoms are a prominent, and often overlooked, feature of anorexia (Rasmussen & Eisen, 1994). Studies have demonstrated that 66% of eating disordered clients self-report clinically significant depression (Cumella, Wall, & Kerr-Almeida, 1999). Dancyger, Sunday, Eckert, and Halmi (1997) found that poor outcomes following inpatient treatment for eating disorders were associated with higher self-reported symptomatology. The ACT therapist should note the client's attempts to control negative cognition and affect and all of the various forms control takes. Chief among control strategies with this client will be her attempts to control "fat thoughts" and unfavorable comparisons with peers by self-starvation. Assessment in the domain of mood and cognition will focus on the client's attempts to control these features of experience and whether, over the long
term, these control strategies have worked. We would ask the client whether problems with mood and cognition seem to be getting better or worse over time.

*Weight regulation.* The preoccupation with weight and thinness has been noted as a hallmark symptom of anorexia. The assessment of weight should include data collection on weight history and the preoccupation with weight: for instance, current weight and height, ideal weight, and the range of weight since onset of adolescence. Also important are any changes in weight associated with major life events (Foreyt & Mikhail, 1997). The client's, as well as the family's, attitudes about weight loss are potential sources of pertinent data. Cognitions about weight will be prominent targets for ACT interventions aimed at loosening their control over the client's eating patterns. Exercise has also been shown to be ritualistic in clients with anorexia and may play a role in the development or maintenance of the disorder. Again, the use of exercise to control negative thoughts about weight gain should be explored with regard to long-term workability. That is, have starvation and excessive exercise eliminated these negative thoughts on a long-term basis?

*Body image.* Disturbance in feelings and attitudes toward one's body and a disturbed physical picture of one's body have been show to be predictive of relapse following treatment for eating disorders in adolescents (Fabian & Thompson, 1989). Therefore, the use of either standardized self-report form, professional ratings, or client estimations of physical size can be used to measure body image disturbances.

*Social skills.* Anorexics have long been shown to have difficult interpersonal relationships. Crisp, Hsu, Harding, and Hatshorn (1980) found that clients with anorexia had high rates of excessive shyness as children, difficulties playing with other children, or no friends during childhood. Any social inhibition will be examined, again, with a focus on life goals and workability.

**Treatment From an ACT Perspective**

The general structure of an ACT intervention is as follows:

1. Assessment of relevant contextual, psychological, and behavioral phenomena.
2. Creative hopelessness: exploration of the experience of unworkability in the client's life.
3. Values assessment: exploration of the client's valued life-direction(s).
4. Control as the problem: focus on the ways that control strategies in general can backfire and a special focus on the ways that the dysfunctional control agenda is interfering with the client's ability to live in accord with his or her values.
5. Self-as-context: making contact with a sense of self that is independent of the contents of consciousness.
6. Commitment: making and keeping behavioral commitments that move the client forward in terms of his or her values.
7. Exposure, cognitive defusion, and repertoire building in the service of advancing a valued life direction (including exposure to external events, but especially attending to exposure to private experience such as emotion, cognition, memory, and bodily states, among others).

ACT has been described in detail in both book and article form (Hayes et al., 1999; Hayes & Wilson, 1994; Wilson, Hayes, & Byrd, 2000). The above ordering differs somewhat from the ordering originally outlined in Hayes et al.
is consistent with some more recent discussions (for example, Wilson et al., 2000). The major difference in organization involves moving the values component to an earlier position in the order of treatment components. Although no clinical trial has been executed examining different ordering of treatment components, we have varied their order in training and treatment contexts, and our current clinical impressions are that the values components need to be more explicitly implemented early in treatment.

While this impression ought not be given undue weight, there are theoretical reasons to expect that this order might be useful. Valued ends can provide an important motivational factor for treatment. Sometimes treatment is more painful than no treatment. For example, in the short term, exposure is more painful than avoidance. Values components dignify the difficulty of treatment and might reasonably improve treatment retention. The values element originated in the context of a National Institutes on Drug Abuse protocol development grant explicitly because of the difficulties inherent in seeing chronic substance abusers through very painful early phases of detoxification. Developers of ACT have suggested (Hayes et al.) that therapists ought to use the ACT technology with flexibility, depending upon the needs of the individual client, treatment setting, and duration, among other relevant factors. Until these matters are settled empirically, we must proceed with what is theoretically sensible. In what follows, we will not address each of the steps of treatment in order, as described above and elaborated elsewhere. Instead, we will focus on four domains that require attention through all phases of treatment:

- values
- exposure
- delusion
- empowerment

As long as other interventions do not violate these core assumptions, they can be intermixed with ACT-oriented interventions. We will comment on the Heffner et al. (2002) case presentation as we discuss each domain. We will also discuss problems that co-occur in such cases but that were not directly addressed in this particular case study (for example, mood problems and social anxiety).

Values

Although there are phases of treatment in which the exploration of values is the focus of treatment, they ought to be touched upon in every session. During the first few sessions, the values component may be as simple as suggesting to the client that treatment will be directed by the client's values. Even if those values are obscured by a long battle with anxiety, depression, alcoholism, or an eating disorder, the therapist can still suggest that the therapy will be about revealing and moving in the direction of this obscured personal sense of life direction. We suggest that therapists not leave the session without this being clear. The treatment is about the client and advancing a life that is valued.

In the case of Emily, Heffner et al. (2002) show good sensitivity to the centrality of values in ACT-oriented treatment. We were particularly impressed with their use of concrete accompaniments to standard ACT metaphors. The
use of these physical complements, such as the values map and the finger puzzle used in this case, appears to help clients grasp the meaning of the metaphors. Use of these physical metaphors is entirely consistent with the ACT perspective of relying on experiential therapeutic components rather than merely using words.

Moving forward in valued areas of living can provide a context for other sorts of difficulties that may coincide with anorexia. For example, mood problems are helped by behavioral activation (Babyak et al., 2000; Salmon, 2001). Behavioral activation in an area explicitly valued by the client can provide a natural rather than contrived form of activity. The heightened activity should improve mood and is likely to put the individual in contact with other reinforcers that accrue to such activities. Heffner et al. (2002) exploited this young woman’s interest in an eventual career in veterinary medicine. This interest could be pursued even further if the client showed sufficient interest. For example, if this young woman were to be encouraged to volunteer with the local humane society or other organized animal rescue activities, she would likely become involved socially with other like-minded persons. Her contributions might be recognized formally or informally. Such social interactions could also provide the context for exposure to social situations, particularly relevant in the case of anorexics who display shyness. A client is more likely to comply with (and maintain post-treatment) tolerating an uncomfortable social situation in the service of something she cares about than a social situation contrived for its own sake.

**Exposure**

ACT is a behavioral treatment and relies on an understanding of basic behavioral processes. One can think of experiential avoidance as a sort of "experience phobia" (Wilson, 1997). The behavioral prescription for phobic avoidance is exposure. Behavior therapists have focused on two aspects of exposure that are important, but not sufficient, in understanding the role of exposure in ACT. Classical conditioning analogues of phobias emphasize conditioned elicitation and conditioned avoidance. Suppose, for example, we expose a rat to a tone followed by a shock on repeated trials. Two outcomes are likely. First, the rat will show conditioned elicitation in the presence of the tone. The rat may show increased autonomic arousal. It may freeze, defecate, and urinate. Second, the rat will work to avoid the tone. Experimental work on exposure and its effects have carefully examined decrements in conditioned elicitation and conditioned avoidance over repeated unreinforced trials. As a result of unreinforced trials, elicitation and avoidance dissipate in an orderly fashion.

In ACT we focus less on reducing these particular outcomes, however, and more on the client’s range and flexibility in responding.

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In addition to avoidance and elicitation going up, the rat’s behavioral repertoire becomes very narrow with respect to the conditioned stimulus (the tone). Similarly, people can become quite narrow in their range and flexibility in response to aspects of their own experience such as "negative" thoughts, emotions, memories, and bodily states, among others. The sexual abuse survivor may become distressed and dissociate when memories of abuse occur.
during sex. The drug addict may engage in very rigid patterns of drug seeking and use drugs in response to aversive withdrawal states and cravings. In this case, the client engages in a rigid pattern of self-starvation in order to alleviate unpleasant thoughts regarding her body. The issue from an ACT perspective is the lack of flexibility in response to these aversive thoughts and feelings associated with weight gain and body image, not their presence.

In ACT we are not so much interested in eliminating an unhealthy response from the client's repertoire as we are interested in broadening the array of potential responses. We don't want the snake phobic to be unable to flee the presence of a snake. We do want to be able to impact the fact that they must flee. Similarly, we do not want to rid the anorexic of the capacity to refuse food when she has thoughts about being fat — we all do that at times. Rather, we hope to broaden her repertoire with respect to these thoughts. We would like to alter the fact that she must refuse food.

Psychological content that emerges in the context of the pursuit of valued life goals, and which precipitates unhealthy avoidance, should be targeted for exposure. The nature of the exposure work will not merely be remaining in the presence of the feared psychological content, but in building more elaborated response repertoires with respect to that content, the latter of which is an operant approach to avoidance. A variety of therapeutic strategies, including metaphors, experiential exercises, and verbal conventions, can make avoidance one among an array of responses to painful or frightening aspects of the client's experience. Experiential exercises involving exposure to "fat thoughts" would be appropriate, and importantly, arc always framed in terms of building flexibility in the service of taking a valued direction in life. As described in the previous section, other difficult emotional content, such as depressed mood, food obsessions, or shyness, ought also be targeted for exposure-based interventions.

**Defusion**

Delusion refers to a set of techniques, but also to a general posture adopted by the therapist. Although a full discussion is beyond the scope of this article, according to the theory of verbal behavior underlying ACT, verbal functions so dominate our responding that no other functions of a stimulus are available (Hayes & Wilson, 1993; Wilson & Blackledge, 2000; Wilson & Hayes, 2000; Wilson, Hayes, Gregg, & Zettle, 2001). Thus, we respond to words about some event as if we were responding to the actual event the words describe. For example, a thought may be responded to as what it says it is, but it can also be responded to as a thought. To provide a concrete example, if this client had the thought, "I can't stand being fat," and responds only to the literal content of that thought, they must do something to alter that state of affairs. This means starving oneself to alleviate the insufferable state. However, in session, the client could be coached to restate the sentence as, "I am having the thought that I can't stand being fat." Such locutions, while awkward, highlight the fact that "I can't stand being fat" is a thought. The thought could also be experienced and noticed as a thought in an eyes-closed experiential exercise. This posture is akin to certain forms of meditation, as in the soldiers in the parade exercise described by Heffner et al. (2002; Hayes et al., 1999). The thought could be said out loud a hundred times rapidly. It could be written on a card and placed in the person's pocket, or on two dozen cards. The person could tell four stories about a person who had that thought: one that turned out tragically, one that
turned out absurdly, one that was boring, and one that turned out heroically. The point of these exercises is twofold. First, they provide repertoire-building exposure as described in the previous section. And second, these interventions loosen the dominant verbal functions that make such a thought so life restricting.

As a general principle and posture for the ACT therapist, we never retreat from frightening psychological content when that content is between the client and a life the client desires. The therapist takes a somewhat meditative and serious (and perhaps playful) posture with respect to the avoided content. In doing so, the therapist models and facilitates the client's ability to develop new and flexible responses to old problematic psychological content. Because this client showed continued elevation in body dissatisfaction, thoughts and emotions related to this domain would be particularly good targets for both exposure and defusion strategies. These aspects of the client's psychological life are not currently driving any problematic behavior — as evidenced by her weight gain. However, they may be potential problem areas under stressful conditions. As a prophylactic to relapse, therapy should pay special attention to building flexibility with respect to thoughts and emotions associated with body satisfaction.

Empowerment

ACT is a client-centered treatment. It relies on the client's values to give it direction, on a dense understanding of the client's experience and struggle to provide the content for exposure and defusion interventions, and on the client's commitment to growth and development to make therapeutic gains possible.

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The ACT therapist works persistently to undermine the therapist's perceived power to change the client, and systematically emphasizes the client's contributions to treatment progress. In each session, the therapist should acknowledge and solicit the client's input into the direction and pace of treatment. Of course, clients will sometimes suffer from an unwillingness to take responsibility for their treatment and their lives, or a belief that they are incapable of such responsibility. If the therapist responds to this acted-out incompetence by taking control and responsibility, they will have confirmed the client's worst fears. The ACT therapist is a consistent source of active confidence that the client can and will take a direction in treatment. This is expressed both in word and in deed. We tell our clients that we believe that they can and will take a direction, and we actively rely on it in treatment.

In the case of this anorexic young woman, attempts to control her behavior from outside sources, such as her parents and swimming coach, resulted in noncompliance and misrepresentation of her food intake. Working alliance has been demonstrated repeatedly to be an important variable in successful treatment (Martin, Garske, & Davis, 2000). Use of authority to control behavior is probably best avoided, especially with adolescents who often have a low tolerance for commands. Having the direction of treatment dictated by this young woman's own values both defuses the likeliness of unhealthy reactions to authority and validates her sense of herself and her ability to set a direction in her life.
Conclusion

We have suggested that an experiential avoidance perspective has broad applicability, and that ACT, as a treatment for experiential avoidance, ought to likewise have broad applicability (Hayes et al., 1999; Hayes et al., 1996). Ultimately, however, the generality of the principles underlying ACT and the applicability of ACT technology to diverse areas of human suffering remains an empirical matter. We are pleased to see coherent and flexible applications of ACT to new domains. In particular, the integration of ACT interventions with interventions of well-established efficacy has the potential to answer questions about ways to improve treatment, rather than merely whether some treatment works.

References


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