The Encyclopedia of Clinical Psychology

Entry entitled: "Acceptance and Commitment Therapy"

Evan M. Forman[1], Adrienne S. Juarascio[1,2], Lindsay M. Martin[1], James D. Herbert[1]

[1]Drexel University; [2]Medical University of South Carolina

Email addresses (for internal use): emf27@drexel.edu, asj32@drexel.edu, lmm422@drexel.edu, jh49@drexel.edu

Word count: 2,770 (abstract: 121)

Abstract

Acceptance and Commitment Therapy (ACT) is a cognitive-behavior therapy (CBT) that utilizes six core psychological process of change (acceptance, defusion, present moment awareness, self as context, values and committed action) to help individuals achieve psychological flexibility, i.e., the ability to choose one's behavior even when doing so brings a person into contact with aversive internal experiences. ACT shares many features of traditional CBT and its distinctiveness has been a subject of debate. However, ACT appears to operate at least partially through distinct processes, and to emphasize experiential acceptance and valued behavior change over attempts to restructure thoughts or achieve symptom reduction. Empirical support for ACT and its hypothesized therapeutic processes is mounting quickly, but much of it suffers from methodological shortcomings.

Main Text

History

The dominance of the psychoanalytic paradigm within psychotherapy began to give way to an empirical, objective, and scientific approach known as behavior therapy in the late 1940s. Behavior therapy, first developed by Joseph Wolpe (April 20, 1915-December 4, 1997), focused largely on modifying problematic behaviors (including cognitions and emotions) through classical and operant conditioning procedures identified by individuals such as B.F. Skinner (March 20, 1904 – August 18, 1990) and Ivan Pavlov (September 26, 1849 – February 27, 1936). Starting in the late 1960's and continuing through the 1990's, cognitive factors assumed a significantly greater focus in both the theory and practice of behavior therapy under the umbrella term "cognitive behavior therapy" (CBT). Rational Emotive Therapy (later renamed Rational Emotive Behavior Therapy) developed by Albert Ellis (September 27, 1913 – July 24, 2007) and Cognitive Therapy developed by Aaron Beck (born July 18, 1921) share a similar theoretical model that proposes that distorted or maladaptive thoughts, beliefs, and information process styles are largely responsible for psychological problems.

Beginning in the 1990s, an offshoot of cognitive behavioral treatments rose to prominence that integrated principles and techniques associated with mindfulness (present-centered awareness and nonjudgmental acceptance of one's internal experiences) with more traditional behavior therapy strategies. These treatments included mindfulness-based cognitive therapy developed by Zindel Segal, Mark Williams and John Teasdale, dialectical behavior therapy developed by Marsha Linehan, metacognitive therapy developed by Adrian Wells and Gerald Matthews, and ACT, among others. ACT, which was developed by Steven Hayes along with Kelly Wilson and Kirk Strosahl (Hayes, Wilson, and Strosahl 2011), has shown particularly rapid growth in both scientific support and popularity among clinicians. For example, according to the PsycInfo database, the number of scientific manuscripts

published with the keyword “acceptance and commitment therapy” increased from 6 in 2000, to 41 in 2005, to 91 in 2010; as of June-2012, the total reached 657 and included 65 randomized controlled trials.

Philosophical and Theoretical Roots

ACT is embedded within a larger scientific program called Contextual Behavioral Science (CBS) which is derived from Skinner’s radical behaviorism. CBS is an integrated program that includes a specific philosophy of science, a theory of language and cognition, a model of psychopathology and health, and various applied technologies, of which ACT is the most developed. CBS holds that its integration of philosophy, theory and technique, and its ability to utilize developments at one level to inform advances at the others, will be particularly successful at addressing major challenges of the human condition(Hayes, Barnes-Holmes, and Wilson in press). Many of the features of ACT reflect its philosophical roots in functional contextualism, and its theoretical roots in a theory of language and cognition known as Relational Frame Theory (RFT; Torneke 2010). Examples include ACT's emphasis of "what works," rather than what is "true" or "accurate”; the idea that language, although extremely powerful when applied to human challenges with the external world like building shelter and acquiring a steady food supply, tends to backfire when applied inwardly to one’s psychological challenges; and the reliance on metaphors rather than didactic explanations and prescriptions. It remains to be seen if the emphasis that CBS places on an integrated, multi-level approach that links philosophy, theory, and applied practice will result in more rapid progress than more traditional approaches that tend to emphasize a single level of analysis.

Therapeutic Components

The main therapeutic goal of ACT is to promote psychological flexibility, i.e., the ability to persist or change behaviors in the pursuit of goals and values even when doing so brings a person into contact

with aversive internal experiences (Hayes et al. 2006). Symptom reduction, especially of internal experiences such as distressing thoughts, feelings, memories, etc., is de-emphasized in ACT, with the focus instead being on helping patients live a more valued life. In order to promote therapeutic improvement, the ACT model targets six psychological processes (acceptance, defusion, present-moment awareness, self-as-context, values, and behavioral commitment) that can together promote psychological flexibility. The six processes can in turn be summarized into three main targets of ACT: being *open* (acceptance and defusion), *centered* (present-moment awareness and self-as-context), and *engaged* (values and behavioral commitments). As seen in Figure 1, each of these six processes can be viewed as belonging to a continuum, with the goal of the treatment to move from the pathological end of the spectrum (dominance of the conceptualized past or future, cognitive fusion, experiential avoidance, attachment of the conceptualized self, lack of values clarity/contact, unworkable action) to psychological flexibility. Part of the therapeutic process is learning when and how to use each of the six psychological processes to effectively promote long-term workable behavioral change. A number of therapeutic techniques have been developed to help patient's move along the continuum, such as experiential exercises demonstrating acceptance of difficult emotions, metaphors illustrating willingness, labeling the process of thinking ("I'm having that thought that…") during the experience of a thought, behavioral exposures with the rationale of improving acceptance and flexibility and movement towards valued action, and thought experiments comparing how one would be versus how one wishes to be eulogized (with the idea being to capture the core values by which one is currently leading one's life, and the core values one hopes will guide the majority of one's future behaviors).

Comparison to Traditional CBT

There is an emerging consensus that ACT is situated squarely within the broad umbrella of cognitive behavior therapies (Herbert and Forman 2011). Moreover, ACT shares many features with

traditional models of CBT (tCBT). At the same time, some aspects of ACT appear to be distinct from CBT as it has traditionally been (and continues to be) conceptualized and practiced. Some illustrative comparisons are presented in Table 1

Controversy Surrounding ACT's Distinctiveness and Place Relative to Traditional CBT

Given the degree to which tCBT and ACT share many of the same core processes, some scholars have noted that it is misleading to consider ACT a new type of behavior therapy and are indeed skeptical of the very notion of a "third wave" of behavior therapy. For example, Hofmann and Asmundon (2008, p. 13) argue that are "no data to suggest that [ACT] represents an entirely new treatment approach." Instead, they note that although there are fundamental differences in the philosophical foundation, ACT techniques are fully compatible with CBT. Others such as Arch and Craske (2008) note that many of the differences between ACT and tCBT are stereotypical and exaggerated and that in practice, the two types of therapies are often more similar than distinct.

Despite these criticisms, there are a number of grounds that support ACT as a distinct treatment relative to tCBT. These range from fundamental differences in the philosophical and theoretical underpinnings of tCBT and ACT (Arch and Craske 2008, Hofmann and Asmundson 2008), evidence that ACT and tCBT can be distinguished from each other clinically (Arch et al. 2012, Forman et al. 2007) and appear to work through different treatment mechanisms (Forman et al. 2012). Of special note, some well-controlled studies with adherence checks have obtained differential outcomes when comparing ACT and tCBT (e.g.,Arch et al. 2012, Forman et al. in press).

Empirical Support

Efficacy

A growing body of empirical support for the effectiveness of ACT across a broad domain of presenting concerns, as well as for many of the basic tenants of the ACT model, has developed in recent years. For example, ACT has been shown to be effective for a number of anxiety disorders, mood disorders, mixed depression and anxiety, substance use disorders, psychotic disorders, eating disorders and weight issues, impulse control disorders, personality disorders, as well as issues confronted in behavioral medicine(Powers, Zum Vorde Sive Vording, and Emmelkamp 2009). . Based on extant empirical support, Division 12 of the American Psychological Association has listed ACT as having strong research support for the treatment of chronic pain and psychosis, and modest research support for mixed anxiety disorders, obsessive compulsive disorder and depression.

A number of meta-analyses speak to the efficacy of ACT. Hayes and colleagues (2006) evaluated 24 studies and concluded that ACT was highly effective for treating a wide range of psychopathology, and that it outperformed comparison treatments. A later meta-analysis of randomized controlled trials (*N* = 13) obtained similar results (Öst 2008). However the methodological rigor of many of the analyzed studies was judged to be problematic and inversely related to effect size (Öst 2008). Yet another meta-analysis (*N* = 18) concluded that although ACT was effective, it had only a small and insignificant advantage over other established treatments (Powers, Zum Vorde Sive Vording, and Emmelkamp 2009).

Theorized Model

In addition to testing the efficacy of ACT overall, a growing body of research has sought to test the efficacy of the various components of the ACT model separately and in relation to the model as a whole. Overall, a growing literature supports various aspects of the ACT model (Herbert and Forman 2011). A recent meta-analysis of mediational findings in 12 outcome studies of ACT obtained support for the mediating role of cognitive defusion, experiential avoidance, and mindfulness (Hayes et al. 2007). For example, two trials that tracked changes in mediators and outcomes over time revealed somewhat

differing mediators between ACT and traditional CBT (Forman et al. 2012; Arch et al. (2012). Lab-based analog studies have also helped support the efficacy of specific ACT components. A recent meta-analysis of 66 such studies (Levin et al. in press) concluded that acceptance, defusion, present-moment awareness, values, and mindfulness are all independently efficacious over and above comparison components.

Critical Analysis of Empirical Basis

While solid empirical support exists both for the efficacy of ACT and for its underlying model, a number of dimensions of this support are subject to criticisms. For example, many trials demonstrating support for ACT were not well-controlled (e.g., used treatment-as-usual as a comparison group) or not controlled at all, and/or did not compare ACT to an established gold standard intervention. ACT trials have also been criticized for small samples and/or samples that were diagnostically murky, lack of randomization, inclusion of only shorter-term assessments, insufficient numbers of therapists, and lack of adherence and competency ratings of therapists. Also, a large majority of these trials have been carried out by investigators who are within ACT's inner circle or have direct connections to them raising a concern about allegiance effects. Given the above, perhaps special weight should be placed on the outcomes of two randomized trials that were conducted by independent researchers, were well-controlled, and assessed longer-term outcomes. In a trial conducted in our lab, patients with depression or anxiety receiving ACT demonstrated equivalent gains at post-treatment, but greater regression to baseline at 18-month follow-up, compared to those receiving traditional CBT (Forman, Shaw, et al., 2012). A traditional CBT-oriented group at UCLA headed by Michelle Craske recently completed a rigorous trial of anxiety disorder patients. Results suggested that, at 12-month follow-up, ACT patients had better clinical severity ratings but CBT patients reported greater quality of life (Arch et al., 2012). While the comparative efficacy of ACT is not entirely clear at this point, these trials did convincingly

establish that, overall, the treatment is highly effective and that these effects largely persist into the long-term.

The data supporting individual ACT processes, while high in quantity, must be viewed with caution for several reasons. A good deal of the mediational findings were collected contemporaneously rather than cross-sectionally, assessments of ACT processes to date have largely depended on self-report questionnaires, and there are still no full-scale component analysis trials that attempt to disaggregate the active ingredients of ACT. In fairness, scholars are also calling into question the importance of various components of standard CBT, particularly as there is converging evidence that behavioral treatments alone are equally effective if not more effective than treatments that combine behavioral and cognitive components. However, these data only strengthen the possibility that ACT's non-behavioral components are similarly inert.

Summary

Acceptance and Commitment Therapy is a relatively new type of cognitive behavioral therapy that disavows symptom management and instead teaches strategies that enable the pursuit of valued behavior even when this behavior creates aversive thoughts and feelings. ACT emerged from a combination of traditional cognitive-behavior therapy, mindfulness traditions rooted in Eastern spiritual traditions, functional contextualism as a distinct philosophy of science, and a behavioral theory of language and cognition called Relational Frame Theory. Therapeutic components of ACT include psychological flexibility (the ability to choose one's behavior even when doing so brings a person into contact with aversive internal experiences), psychological acceptance (actively embracing one's internal experiences), cognitive fusion (achieving sufficient psychological distance from one's thoughts to appreciate them as merely thoughts rather than as the truth or as able to dictate one's actions), values clarification (identifying what it is that one cares about most deeply and what one wants one's life to be

about) and committed action (the development of larger patterns of values-directed behavior). As such, ACT shares many features with traditional CBT, but also is distinct perhaps most of all in its disavowal of attempts to directly modify cognition or emotion. The extent to which ACT represents a qualitatively distinct new "wave" of treatment is controversial and remains to be seen. Although ACT lacks the larger body of methodologically strong outcome evidence observed by tCBT, an accumulating base of empirical trials support its efficacy and purported mechanisms of action. Even so, the majority of this evidence suffers from methodological limitations that, although consistent with ACT's stage of development, limit confidence in any conclusions that can be drawn. Future trials and component analyses, as well as laboratory analog studies, both employing methodologically sound designs and reliable and valid measures of putative change and outcome processes, will go a long way towards better understanding this highly influential treatment.

SEE ALSO: Behavior Therapies (Behavioral Activation, Applied Relaxation, Behavior Analysis, Social Skills Training, Token Economies); Empirically-Supported Treatment (ESTs) and Empirically-Supported Principles of Change (ESPs); Mindfulness/Meditation (e.g., Mindfulness-Based Cognitive Therapy, Mindfulness-Based Stress Reduction); Psychotherapy Process and Outcome Research; Skinner, B. F. (1904-1990)

References

Arch, J.J, and M.G. Craske. 2008. "Acceptance and commitment therapy and cognitive behavioral therapy for anxiety disorders: Different treatments, similar mechanisms?" *Clinical Psychology: Science and Practice* no. 5:263-279.

Arch, J.J, Georg H. Eifert, C. Davies, J. Vilardaga, R.D. Rose, and M.G. Craske. 2012. "Randomized clincal trial of cognitive behavioral therapy (CBT) versus acceptance and commitment therapy (ACT) for mixed anxiety disorders. ." *Journal of Consulting & Clinical Psychology*.

Forman, E. M., J.E. Chapman, J. D. Herbert, E.M. Goetter, E.K. Yuen, and E. Moitra. 2012. "Using session-by-session measurement to compare mechanisms of action for acceptance and commitment therapy and cognitive therapy." *Behavior Modification* no. 36 (2):199-217.

Forman, E. M., J. D. Herbert, E. Moitra, P.D. Yeomans, and P.A Geller. 2007. "A randomized controlled effectiveness trial of acceptance and commitment therapy and cognitive therapy for anxiety and depression. ." *Behavior Modification* no. 31 (6):772-799.

Forman, E. M., J.A. Shaw, E.M. Goetter, J. D. Herbert, J.A. Park, and E.K. Yuen. in press. "Long-term follow up of a randomized controlled trial comparing acceptance and commitment therapy and cognitive therapy for anxiety and depression." *Behavior Therapy*.

Hayes, S. C., D. Barnes-Holmes, and Kelly G. Wilson. in press. "Contextual behavioral science: Creating a science more adequate to the challenge of the human condition."

Hayes, S. C., M.E. Levin, J.E. Yadavaia, and R.V. Vilardaga. 2007. ACT: Model and processes of change. In *Association for Behavioral and Cognitive Therapies*. Philadelphia.

Hayes, S. C., Kelly G. Wilson, and Kirk Strosahl. 2011. *Acceptance and commitment therapy, second edition: The process and practice of mindful change*: Guildford Press.

Hayes, Steven C., Jason B. Luoma, Frank W. Bond, Akihiko Masuda, and Jason Lillis. 2006. "Acceptance and commitment therapy: Model, processes and outcomes." *Behaviour Research and Therapy* no. 44:1-25.

Herbert, J. D., and E. M. Forman. 2011. "The evolution of cognitive behavior therapy: The rise of psychological acceptance and mindfulness." In *Acceptance and mindfulness in cognitive behavior therapy: Understanding and applying the new therapies*, edited by J. D. Herbert and E. M. Forman. Hoboken, NJ: John Wiley & Sons.

Hofmann, S.G., and G.J. Asmundson. 2008. "Acceptance and mindfulness-based therapy: New wave or old hat?" *Clinical Psychology Review* no. 28 (1):1-16.

Levin, M.E., M. Hildebrandt, Jason Lillis, and S. C. Hayes. in press. "The impact of treatment components suggested by the psychological flexibility model: A meta-analysis of laboratory-based component studies. ." *Behavior Therapy*.

Öst, L.G. 2008. "Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis." *Behavior Research and Therapy* no. 46 (3):296-321.

Powers, M.B., M.B. Zum Vorde Sive Vording, and P.M. Emmelkamp. 2009. "Acceptance and commitment therapy: A meta-analytic review." *Psychotherapy Psychosomatic* no. 78 (2):73-80.

Torneke, N. 2010. *Learning RFT: An introduction to relational frame theory and its clinical application.* . Oakland, CA: New Harbinger Publications, Inc.

Figure 1. *The six therapeutic processes of ACT that move the patient from psychological inflexibility to psychological flexibility.*

Psychological Inflexibility		Psychological Flexibility
Experiential avoidance **Attempts to suppress, avoid** Unnecessary attempts to change the frequency or content of internal experiences, such as thoughts, feelings, urges, and physical sensations particularly when control attempts would lead to psychological harm or values-inconsistent behavior		**Psychological acceptance** Actively embracing one's internal experiences; a willingness to choose valued actions even when they bring on uncomfortable experiences
Cognitive fusion/excessive literality Internal experiences are seen as literal truths that must be acted upon		**Defusion** Observing one's subjective experience as an ongoing process; minimizing the literal meaning of internal experiences so that thoughts are experienced as just thoughts, (and, under some definitions, feelings as just feelings) rather than as inherently "true" or otherwise meaningful.
Attachment to the conceptualized self A problematic attachment to an image of how one is or ought to be, and behaving to maintain this image, even when doing so leads to problematic behaviors or values-inconsistent action	→	**Self as context** Experiencing thoughts and feelings without allowing them to define who one is as a person or how one should behave
Unworkable action Engaging in patterns of behavior that move away from purposeful, valued living; impulsively, reactively, or automatically choosing self-defeating behavior patterns		**Committed action** Large and substantial patterns of effective action linked to values; choosing behaviors based on conscious choices and in consideration of one's chosen values
Lack of values clarity Difficulty accessing or articulating one's ultimate values such that one's behaviors are motivated by automatic processes, social pressures or avoidance		**Values clarity** Having clarity about the features of life that one cares deeply about and that motivate one to engage in behaviors
Dominance of the conceptualized past or feared future Unhelpful focus on events in the past or in the future		**Contact with the present moment** Non-judgmental contact with psychological and environmental events as they occur in real time; being flexible, fluid, and attentive to both internal and external events

Table 1. *A Comparison of ACT and Traditional CBT (tCBT)*

Issue	tCBT	ACT	Shared
Model of Psychopathology	Dysfunctional cognitions and faulty information processing	Psychological inflexibility (one's ability to choose actions from a range of options in order to behave more consistently with one's values rather than having choices constrained by avoidance of distressing internal experiences).	Cognition is the proximate cause of psychopathology, though behavioral conditioning contributes
Model of Treatment	Focuses on modifying cognitive content and processes via disputation, testing, and modification of cognitions.	Strategies (defusion, psychological acceptance) that purportedly work through specific mechanisms (acceptance of and defusion from internal experiences, decreased experiential avoidance) designed to increase flexibility.	Both models utilize cognitive strategies to facilitate behavioral strategies (exposure, behavioral activation).
Role of disputation	Disputation is a core strategy of CT.	Skeptical of disputation strategies, and generally avoids; disputation is viewed as more likely to further "entangle" a person in the verbal quagmire of his belief systems than to eliminate unhelpful cognitions; cognitive restructuring is viewed as a mild form of thought control is likely to fail, especially when the "stakes" are highest	ACT allows that certain forms of cognitive restructuring may be helpful, eg psychoeducational interventions around panic. Both treatments are averse to attempts to directly "control" thoughts.

Characteristic treatment techniques	Socratic questioning, cognitive disputation, empirical tests.	Liberal use of metaphors and experiential exercises.	Both focus on the present and future relative to traditional models of psychotherapy.
Therapeutic focus on private events as related to behavior change	Focus on changing content of private experience as precursor to behavior change.	Focus on disentangling private experience from behavior, & increasing willingness to experience distressing thoughts/feelings.	Both emphasize the importance of private experiences (thoughts, feelings, memories, etc.)
Role of defusion	Defusion is a byproduct of cognitive restructuring.	Defusion is a core strategy to enhance willingness & promote action.	Both view cognitions as observable by the self, and separable from the "truth."
Role of awareness	Awareness is a key component of recognizing automatic thoughts.	Awareness is a key component of mindfulness training.	Both focus on increasing awareness of thoughts, feelings and physiological sensations.
Behavioral strategies (exposure, behavioral activation)	Behavioral strategies utilized in the service of reducing negative affect (e.g., anxiety reduction through exposure) and/or increasing positive affect.	Behavioral strategies utilized to promote psychological flexibility in the context of increased willingness to experience distressing private experiences.	Both utilize behavioral strategies.

Adapted, with permission, from Forman, E. M. & Herbert, J. D. (2009). New directions in cognitive behavior therapy: Acceptance-based therapies. In W. O'Donohue & J. E. Fisher, (Eds.), *General principles and empirically supported techniques of cognitive behavior therapy* (pp. 77-101), Hoboken, NJ: Wiley.