Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

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Dr. Hayes' conflicts include:

Royalties on books, trainings, and apps that are based on his scientific work from a variety of publishers.

He is part owner of PsychFlex.

Introduction

We are privileged to be joined by Dr. Steven Hayes for this podcast. Dr. Hayes is a psychologist with a remarkable academic career. He is the author of a number of seminal papers and pioneered Relational Frame Theory (RFT) and Acceptance and Commitment Therapy (ACT). The following document is a combination of our review of papers on RFT and ACT combined with some excerpts from our conversation with Dr. Hayes. When possible, time stamps are provided for specific moments in the podcast. Paraphrases or summaries from the podcast are included for the sake of brevity.

At the intro to the episode, we summarize studies that compared ACT to other common therapies like Cognitive Behavioral Therapy (CBT) or Cognitive Therapy (CT).

ACT and CBT had equal efficacy for depression

There are a number of studies comparing ACT and CBT, which we provide below. In general, the studies showed equivocal efficacy for both types of therapy. While more needs to be done to determine when to use ACT in clinical practices, this data shows it is a valuable alternative to CBT.

- The first study we discuss compared ACT and CBT in regards to depression treatment. They used a Random Controlled Trial (RCT) with 82 participants with MDD. Results showed a CBT effect size of 1.62 and ACT effect size of 1.17 for the Quick Inventory for Depressive Symptomatology, and CBT 1.19 and ACT 1.00 for the Hamilton Depression Rating Scale. They put the between group effect size as 0.28 and 0.25, respectively,

favoring CBT but did not report a P value. However, "the treatment efficacy did not significantly differ between the two treatment conditions" (A-Tjak et al., 2018).

- A second RCT of 19 women with MDD did 12 bi-weekly therapy sessions. Both ACT and CT led to significant reductions in depression, but there was no significant difference between the two in severity of depression (p = 0.66, Effect Size = 0.01) or in the ruminative response scale (p = 0.52, Effect Size = 0.03) (Tamannaeifar et al., (2014).
- Another RCT looked at 101 participants who attended an average number of either 15.27 CT sessions or15.60 ACT sessions (p = 0.90). They found no significant difference among treatment groups in measures of depression (p = .837), anxiety (p = .860) or participant functioning (p = .802) (Forman et al., 2007).
- An RCT with 135 caregivers showed no difference in improvement of depression between ACT and CBT (Losada et al., 2015).
- An RCT with 49 adolescent outpatients (age 12-17) with three arms of CBT, ACT, and wait list showed equivalent improvements in anxiety and depression in both CBT and ACT (Swain 2015).
- An RCT with 157 children compared ACT, CBT, and a wait-list control for anxiety disorders, and showed equivalent results between ACT and CBT (Hancock 2018).

ACT and CBT equally treat chronic pain

Similarly, ACT and CBT appear to have similar results when used to treat patients with chronic pain. An RCT of 114 participants with an average of 15 years of nonmalignant chronic pain compared ACT versus CBT for eight weekly sessions. There were no significant differences between treatments in terms of pain reduction or depression. Of note, both improved in pain measures even six months after treatment was done, though no significant differences were found (Wetherell et al., 2011).

One study shows ACT did better than CBT for substance use

ACT may be a superior treatment choice for substance abuse therapy. One RCT of 50 incarcerated women with substance use disorder found that ACT was superior to CBT at post-treatment (27.8% abstinence vs. 15.8% abstinence) and at six-month follow-up assessments (43.8% abstinence vs. 26.7% abstinence) (Lanza, P. V. et al., 2014).

Anxiety disorders had mixed results when comparing ACT with CBT

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

The difference between the efficacy of ACT and CBT for anxiety disorders is less clear-cut. In an RCT of 87 patients with an anxiety disorder, there was no significant difference between ACT and CBT treatment after the 12 sessions. However, participants with **comorbid mood disorder tended to have greater anxiety reduction in ACT at both time points (p =.07)**. Those without comorbid mood disorders had a better response to CBT, but only at 12 months after treatment (Wolitzky-Taylor, K. B. et al., 2012).

In a study of 128 people with one or more anxiety disorders randomized to 12 sessions of ACT or CBT, the authors concluded, “ACT and CBT did not differ significantly at post-treatment on either anxiety specific or broader outcomes.” Of note, ACT demonstrated a mildly faster improvement in Clinical Severity Ratings. Twelve months later, Clinical Severity Ratings showed greater improvement in ACT than CBT ($p < 0.5$, $d = 1.05$). But, the authors also noted, “more ACT participants utilized outside psychotherapy during the initial followup interval than CBT participants . . . however, [this] did not change the pattern of results, suggesting that use of non-study therapy did not influence the principal disorder severity findings.” CBT participants rated higher on the Quality of Life Inventory than ACT ($p < .05$, $d = .43$) (Arch et al., 2012).

History of Acceptance and Commitment Therapy as explained by Dr. Hayes

As previously mentioned, ACT has been under development for nearly 40 years. Dr. Hayes attributes the beginning of this development to his own battle with panic disorder. He describes a transitional moment during his “night on the carpet” when he had a fundamental change of thinking and felt prompted to embrace his current struggle with anxiety. Dr. Hayes had some experience with mindfulness from his time living in a religious commune, and notes it was a radically different way of thinking 40 years ago when the word mindfulness was not in western psychotherapy vernacular. After deciding to embrace his emotions and thoughts, he began to work out methods for helping clients do the same. He spent the next 17 years with a lab of clinical students working out processes, measures, components, and even the philosophy of science. They went into the lion’s den of languaging about language, starting from the bottom with questions like “What is a word?” This work culminated in a model of language and cognition of the human mind, called Relational Frame Theory (RFT), that created the framework for ACT. There are now six change processes that are built on this model and work toward alleviating psychological problems.

The Six Change Processes

1. Acceptance
2. Cognitive Defusion

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

3. Contact with the present moment
4. Self as context
5. Values
6. Committed Action

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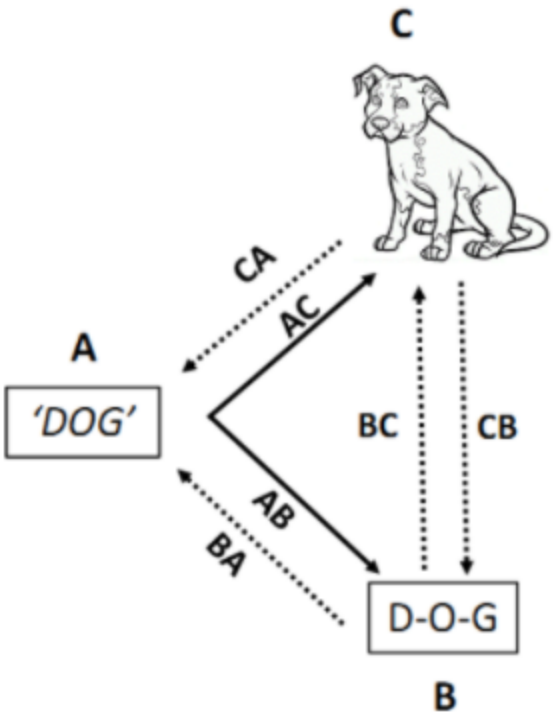
Relational Frame Theory as explained by Dr. Hayes

Dr. Hayes describes RFT as “the smoking gun that differentiates humans from other animals.” Our basic capacity to learn by consequences, called operant conditioning, and to learn from association, called classical conditioning, is not unique to humans**.** The bird outside the window uses these learning processes. But, humans are different because we are a cooperative species that uses language. Many animals can name objects, such as hooting when they see a snake. However, humans can orient themselves with objects in a unique way through language, deriving an extra association when learning something new. For example, if you learn three things you also learned six associations, as you can see in the example below:



“Figure 1. A visual illustration of an equivalence relation between the spoken word ‘DOG’ (A), the written word D-O-G (B) and a picture of a dog (C). The solid arrows (AB and AC) designate relations between stimuli that are explicitly taught while the dashed arrows (BC and CB) indicate derived relations that emerge without any training or instruction.

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

> Note that testing only the B-C and C-B relations has sometimes been used as an abbreviated method for assessing equivalence responding." (Devany, Hayes, & Nelson 1986)

RFT forms the theoretical bedrock of ACT by explaining the unique power of language to generate associations and responses from new stimuli. ACT works to separate these responses and associations from their triggers, or to simply observe the response without comment or judgment. It accomplishes this goal of separation through the six change processes listed above and described below.

Acceptance and Commitment Therapy

Below is a brief overview of the 6 change processes of ACT adapted from Fletcher, L., & Hayes, S. C. (2005):

Acceptance

Acceptance is the process of actively embracing the private events, such as thoughts or emotions, that you feel without trying to change them. For example, Dr. Hayes approached his panic disorder by deciding to be present and dive into his experience of anxiety. Acceptance doesn't mean "I like it" or "I want it." It is helpful to think of simply "holding" an experience instead of pushing it away. This method throws out the almost impossible goal of completely getting rid of the patient's symptoms. This acceptance of a private experience is only a starting point. The next step is what you are going to do with that feeling. It opens the door to living the life you want with or without symptoms.

Cognitive Defusion

Cognitive Defusion is the process of creating context for thoughts and feelings in order to prevent the relations or associations we make from becoming self-fulfilling prophecies. An example of this process, called emotional distancing, is moving from "I am a failure" to "I failed this test" or "I did not do as well as I wanted to on this task, but there are many times where I have done well." The first is an example of cognitive fusion and the latter two are examples of cognitive defusion.

Contact with the Present Moment

Contact with the present moment is the process most similar to mindfulness, as it emphasizes being present with your thoughts and feelings without judgement. This better allows the client to use the processes of acceptance and cognitive defusion. Dr. Hayes describes it as "pure awareness, period."

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

Self-as-context

Self-as-context is the process that approaches the bounds of human experiences which are limited to experience of self (I), place (here), and time (now). Realizing self-as-context allows an individual to recognize their own experience from a transcendent vantage point. Practically, this process makes it easier to transition from descriptions of one's self to descriptions of one's experience. For example, changing "I am anxious" to "I am having the thought of being anxious" or "sometimes my mind has thoughts of being anxious."

Values

In the podcast, Dr. Hayes provides additional context to this process, explaining that "we are the meaning-making species. We're constantly giving meaning to what happens to us. We're fitting it into a narrative. While you can't control this wild horse of language, you can use it to serve your own purposes. When you connect with the kind of person you want to be and what your values are, that perspective-taking move . . . connects you to this . . . witnessing self-part of you from which the hell of your own history is not a threat to you, and you can see options in the moment." (37:55-38:29) Recognizing what is most important to you and what you want in life helps frame the present moment into a more goal-directed and positive light. Instead of trying to stop feeling anxious about public speaking, for example, you would focus on confidently teaching a lecture despite your anxiety about it. One example used to elicit values in therapy is to ask the patient, "What do you want the description on your gravestone to be?" In other words, what do you want to be remembered for?

Committed Action

Committed action is the behavior that works towards value-consistent goals. It is the next step after deciding on values, and works to determine specific steps you can take to bring those values to fruition. Knowing personal values and operating from an observer's point of view makes goal-oriented decisions clearer and more reproducible. For example, in light of a chosen value of "I want to show my family that I love them," a patient can recognize that even though she may not desire to sit down and ask her daughter about her day, she will choose to do so, because her desire to show her love is more important than her current mood.

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

DAVID PUDER, M.D.
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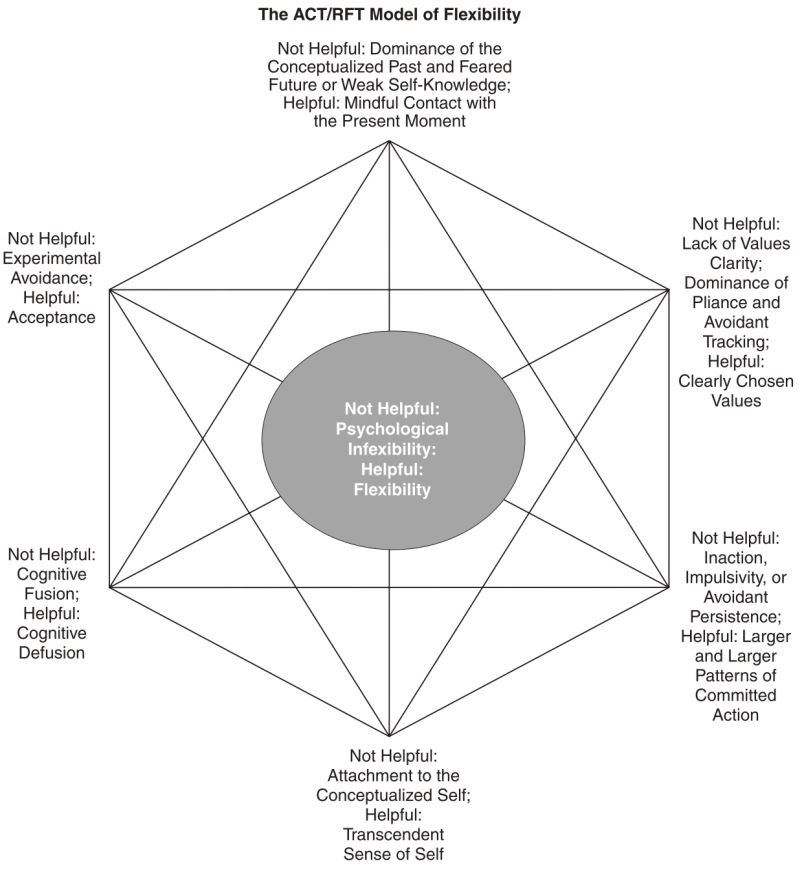
FIGURE 1. The ACT/RFT Model of Psychological Flexibility and Inflexibility



Subcategories: the ACT Hexaflex = Psychological flexibility (Fletcher, L., & Hayes, S. C. 2005). The above diagram shows the relationships between each of the six processes as well as their negative corollaries.

Other ACT Studies

ACT vs. CBT for social phobia

Craske et al., 2014 performed a three-arm RCT comparing ACT, CBT, and a control for social phobia. The authors found that both treatment groups performed better than the wait-list control group, and that ACT was comparable to CBT with no significant differences in self-reported or clinician reported symptom severity or public speaking outcomes.

Psychosis

Gaudiano & Herbert (2006) conducted an RCT trial examining treatment as usual vs. treatment as usual with supplementary ACT sessions for hospitalized patients with psychosis. The ACT group was found to improve brief psychiatric rating scale scores compared to treatment as usual with an effect size of d=0.60. The ACT group also experienced significantly less distress from hallucinations. Rehospitalization was checked at the four-month follow-up, and the treatment-as-usual group had a 1.62 times greater chance of rehospitalization during this time. ACT was more likely to achieve a clinically significant improvement in symptoms relative to treatment as usual, with an absolute risk reduction of 43.3% and the number needed to treat was 3.

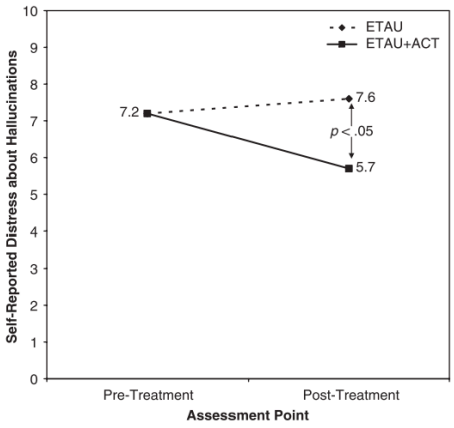


Fig. 2. Group differences on self-reported distress from hallucinations. *Note*: Pre-treatment scores used as covariate.

From (Gaudiano, B. A., & Herbert, J. D. 2006)

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

Smoking cessation

Gifford et al., 2004 compared the effectiveness of ACT to nicotine replacement therapy for smoking cessation with a mixture of self-reported measures and expired carbon monoxide (to determine smoking cessation). Both groups underwent weekly interviews but the nicotine replacement arm did not receive talk therapy. The authors found significant differences between the two interventions at the one-year follow up, with a 9.3% quit rate with nicotine replacement and a 21.2% quit rate with ACT. In other words, **ACT participants were 2.3 times more likely to have quit at the one year follow up.** Furthermore, ACT processes seemed to mediate this success with decreased avoidance and inflexibility being linked to a higher likelihood of cessation.

Stigma and burnout among behavioral health providers

Hayes et. al., (2004) examined the effectiveness of ACT reducing the stigma among behavioral health providers when compared to either a biological training on substance abuse or Multicultural Training (MT). Hayes et. al. found that ACT and MT did not worsen stigmatizing attitudes, unlike the biological training. In fact, ACT showed improvement compared to biological training at follow-up ($t(56) = -2.63$, $p = .011$), while Multicultural Training did not. When examining provider burnout, ACT also showed greater improvement than MT at follow up ($t(60) = 2.72$, $p = .008$).

Summary

- Acceptance and Commitment Therapy (ACT) was pioneered by Dr. Steven Hayes nearly 40 years ago.
- ACT has the goal of alleviating human psychological problems with the six change processes of acceptance, cognitive defusion, contact with the present moment, self as context, values, and committed action.
- The growing body of evidence suggests that ACT is comparable to the gold standard, cognitive behavior therapy (CBT), in treating certain psychiatric diseases.

Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

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DAVID PUDER, M.D.
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Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

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Episode 103: Acceptance and Commitment Therapy with Dr. Steven Hayes

Matthew Hagele, M.A.; Maddison Ulrich, B.S.; Kyle Logan, B.S.; Christopher Neal, D.O.; David Puder, M.D.

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