

Introduction to Acceptance and Commitment Therapy

Theoretical, Practical, and Empirical Foundations



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KEYWORDS

- Acceptance and commitment therapy • Contextual behavioral science
- Psychological flexibility • Psychological inflexibility • Psychiatric disorder

KEY POINTS

- Acceptance and commitment therapy (ACT) is a model of treatment organized around a set of evidence-based principles designed to reduce human suffering and promote prosperity.
- ACT is based on a knowledge development system known as contextual behavioral science, which provides a guiding framework for ACT research and development.
- Psychological inflexibility processes (eg, experiential avoidance, cognitive fusion) are the main mechanisms of psychopathology in ACT.
- Conversely, acceptance and mindfulness processes, along with values-based behavior change principles, work to improve flourishing and well-being via instantiating psychological flexibility.
- Substantial research support exists for ACT applied to a range of diverse areas related to both human challenges and flourishing.

INTRODUCTION

Acceptance and commitment therapy¹ (ACT) is a model of treatment organized in relation to a set of evidence-based principles designed to reduce human suffering and promote prosperity via instantiating psychological flexibility. Situated within the broad family of cognitive-behavioral therapies² (CBTs), ACT builds upon previous generations and traditions within CBT to include a focus on acceptance, mindfulness, and values-based processes.³ Since its inception in the 1980s, the evidence for ACT has continued to grow exponentially.^{4–6} In light of this, ACT has been recognized by numerous health care organizations (eg, World Health Organization, American

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Abbreviations	
ACT	acceptance and commitment therapy
CBS	contextual behavioral science
CBTs	cognitive-behavioral therapies
LMICs	lower- and middle-income countries
PBT	process-based therapy
RCT	randomized controlled trial
RFT	relational frame theory

Psychological Association, and UK National Institute for Health and Care Excellence) as an empirically supported intervention for a range of conditions.

Due to its broad scope and focus on processes of change, ACT has been conceptualized as a prototype of a process-based therapy⁷ (PBT). This process-based focus means that applications of ACT have varied considerably throughout its development, while remaining true to the underlying theory. As the ACT research enterprise has matured over the past 4 decades, adaptations of ACT for a range of psychiatric disorders have emerged.^{4,8} Given the breadth of these clinical applications, ACT has been conceptualized as transdiagnostic in nature.⁹ As described in more detail in the forthcoming section on research support for ACT, one especially noteworthy feature of ACT's research enterprise is that it has been applied to a number of important social issues and human challenges beyond the domain of clinical psychopathology. For example, ACT principles have been successfully used to improve workplace performance,¹⁰ reduce stigmatizing attitudes,¹¹ decrease interpersonal partner violence,¹² and ameliorate distress and burnout in human services workers,¹³ to name but a few of the diverse applications.

It is clear that ACT has had a substantial impact on the field of behavioral health, further cementing its status as an evidence-based intervention. While ACT embodies breadth and depth at its core, precision is also important in the sense that nuanced, in-depth applications of ACT are needed to sufficiently tailor ACT principles for particular problem areas. As such, this special issue of *Psychiatric Clinics* offers a collection of articles that explicate application of ACT to specific psychiatric conditions or problem areas. While much has been written over the years on the application of ACT for various mental health conditions,¹⁴ continued maturation and refinements in ACT theory, clinical applications, and empirical evidence of mediators and moderators suggest that an updated set of state-of-the-evidence articles in a psychiatry-specific outlet would be useful.

In the present special issue, we invited scholars with expertise in ACT as it applies to particular psychiatric areas to contribute targeted articles. While space limitations precluded an exhaustive coverage of all applications of ACT for psychiatric disorders, we chose to prioritize conditions where ACT has a reasonably robust history of research and development. We encouraged all contributors to include sections covering (a) tailored, targeted theoretic descriptions of ACT applied to the target area; (b) clinical lessons learned, including specific, nuanced adaptations to ACT needed when working with the specific population; and (c) research support for ACT in the target area, with an emphasis on treatment efficacy and processes/mechanisms of change. In service of promoting incisive, nuanced applications of ACT to particular areas, we also requested authors omit extended descriptions of the general ACT model. Instead, we reserved that task for this introductory article. In what follows, we provide an overview of ACT across the domains of theory, clinical practice, and empirical support, followed by an introduction to the special issue.

THEORETICAL FOUNDATIONS OF ACCEPTANCE AND COMMITMENT THERAPY

Contextual Behavioral Science

Before proceeding with a specific explication of the theoretic tenets of ACT per se, it seems worthwhile to outline the overarching framework of knowledge development and philosophical assumptions upon which ACT is based. Contextual behavioral science¹⁵ (CBS) is an epistemological approach that guides ACT research and development. As discussed in more detail in Zettle and colleagues,¹⁶ several key features of CBS are particularly useful for understanding the conceptual foundations of ACT and scientific efforts to develop and refine it. First, CBS prioritizes knowledge development within a multi-level, multi-dimensional contextual evolutionary life science approach.¹⁷ As articulated by Hayes¹⁸ in the final article of this volume, this perspective entails that ACT is well-positioned to reflect the theoretical underpinnings of the extended evolutionary meta model within the emerging PBT movement.¹⁹ Second, CBS emphasizes a reticulated scientific strategy,²⁰ which values tight links among philosophical assumptions, theory, applied interventions, and research that examines connections among these domains, including translational efforts bridging basic and applied science. This is reflected within many of the articles in this volume, which describe philosophical, theoretical, and applied (clinical) advances in ACT as interrelated strands. Finally, CBS is grounded in behavior analytic sensibilities, including the philosophical worldview of functional contextualism, which is the very epistemological lens through which ACT was developed.²¹ As a result, research from a CBS perspective seeks to address a range of topics relevant to the behavior of individuals or groups within a particular context—something that is apparent in the notably broad range of adaptations of ACT described earlier and in this special issue.

Functional Contextualism

Philosophy of science has increasingly been recognized as a foundational aspect of intervention development and training within clinical science.²² As such, explication of functional contextualism provides more nuance in our understanding of ACT's theoretical foundations. Several facets of functional contextualism have direct implications for implementing ACT. First, the main focus of analysis in functional contextualism is the behavior of a given individual within a particular context—considered both situationally and historically.²³ This idiographic focus on the unique individual and relevant contextual factors facilitates precise tailoring of ACT in practice. Second, the chief analytical goal in functional contextualism is the prediction and influence of behavior with precision, scope, and depth.¹⁵ This entails that pragmatism and functionality are key aspects of ACT that help clients' instantiate practical actions that move them toward meaningful life directions.¹ Finally, the main criteria in which analyses in functional contextualism are evaluated is workability.²⁴ This emphasis on functional utility means that ACT intervention principles can be considered based on functionality (rather than form), which permits flexible adaptation (multiple forms of a therapeutic technique can serve the same function) and intuitive assessment of impact (Did my intervention have the intended effect?).

Relational Frame Theory

To better understand how functional contextualism and CBS relate to ACT intervention principles, additional discussion of relational frame theory²⁵ (RFT)—a behavioral account of human language and cognition—is needed. As described in more detail in Hughes and colleagues,²⁶ RFT offers a behavior analytic explanation for how verbally complex humans form associations between and among stimuli (including verbal ones,

such as thoughts), even when such associations have not been directly learned before. Essentially, relating is conceptualized as an operant behavior, and since coherence (or logical sense-making) functions as a reinforcer, this process is generative and near limitless in nature.²⁷ Additionally, the process of transformation of stimulus functions entails that the affective state or meaning associated with a given stimulus can transfer across stimuli in a relational network.²⁸ This means that affective valence associated with previously formed relational networks can impact future behavior in response to environmental stimuli. For example, flowers growing in the garden can remind us of a dead loved one who enjoyed gardening, and subsequently elicit sadness.

Through relational framing, we have a propensity to experience the world based on verbally-constructed mental representations (ie, relational networks) formed via individual learning histories.²⁵ This remarkable ability to derive relations in an almost infinite number of ways permits a range of higher-level cognitive functions, including evaluating, planning, creating, and problem-solving. Relating in terms of rule-governed behavior (eg, if-then statements) also facilitates effective interaction with our environment and allows us to learn important lessons without actually experiencing detrimental consequences firsthand.²⁹ However, this ability is a double-edged sword in the sense that when relational framing becomes rigid or context-insensitive, rule-governed behavior can influence overt behavioral responding in maladaptive ways.³⁰ For example, formation of a frame of coordination between oneself and the concept of “unlovable” can lead an individual to withdraw from, or avoid, intimate relationships. It is precisely this process of relational framing that is thought to underlie psychological inflexibility from an ACT perspective.

Psychological Flexibility Model

Rooted in these conceptual foundations, ACT conceptualizes psychopathology in terms of psychological inflexibility, maladaptive patterns of behavior that are rigidly and excessively governed by internal experiences (eg, thoughts, feelings, and sensations), rather than what is meaningful or effective (ie, values or direct contingencies). Psychological inflexibility is composed of rigid patterns that impede adaptive functioning (ie, lack of variability) across the domains specified in PBT: affective, cognitive, motivational, attentional, self, and behavioral domains.⁷ This includes experiential avoidance, which refers to inflexible patterns of behavior focused on avoiding, escaping, or otherwise controlling inner experiences, even when doing so has negative consequences. Such avoidant behavioral patterns are key features across a range of psychiatric disorders, and research consistently demonstrates experiential avoidance contributes to the development and maintenance of a wide range of psychopathology.³¹ Cognitive fusion is another noteworthy subprocess of psychological inflexibility, in which behavior is rigidly guided by the literal functions or meaning of cognitions (eg, thoughts, beliefs, rules, and expectations). In other words, thoughts are treated as literal, unquestioned truth, and important to act on (ie, excessive rule-governed behavior), even if such action runs counter to direct experience or what would be effective or meaningful in a given context.

Consistent with the pragmatic focus of a functional contextual approach, the psychological inflexibility model conceptualizes maladaptive behaviors in a way that also orients to how to bring about positive change. This focuses on increasing flexibility in affective, cognitive, motivational, attentional, self, and behavioral domains, such that adaptive responses are selected for and retained based on direct contingencies and personal values relevant to given contexts.⁷ Psychological flexibility thus mirrors psychological inflexibility in highlighting therapeutic processes of change linked to intervention kernels that precisely target sources of inflexibility.

The psychological flexibility model contains 6 sub-processes. *Acceptance* involves an active approach and embrace of aversive internal experiences (as well as non-striving toward “positive” internal experiences), rather than experiential avoidance. *Cognitive defusion* involves responding to thoughts as just thoughts, rather than literal truth, and behaving flexibly in the presence of such thoughts. *Self-as-context* orients to an observing experience of self as the container for internal experiences (eg, “I am the sky, thoughts and feelings are like the passing weather”), rather than a fused, rigid self defined by “self-stories.” *Ability to flexibly attend to experiences in the present moment* is the alternative to inflexible forms of attention (eg, ruminative thoughts about the past, worries about the future, and hypervigilance in the present moment). *Clarifying and connecting with one’s personal values* (in terms of what is intrinsically motivating and personally meaningful in how one acts) provide an alternative to maladaptive, inflexible sources of motivation (eg, aversive control, rigid rule-governed behavior about how one should act). *Committed action* (ie, maintaining ongoing patterns of valued action) orients to how these psychological flexibility processes are instantiated in overt actions over time, breaking ineffective behavioral patterns (eg, avoidance, inaction). These processes are often clustered into 3 pillars of being open (accepting, cognitively defused), aware (mindful of the present, from an observing sense of self), and actively engaged (committed action, in line with one’s personal values).³²

ACCEPTANCE AND COMMITMENT THERAPY IN PRACTICE

As discussed in more detail by Hofmann and Hayes,³³ ACT developed within the broader historical context of the ‘empirically supported treatments for specific psychiatric syndromes’ era. Somewhat in contrast to this, owing to its process-based and universal nature, the manifestation of ACT in practice is often defined functionally rather than topographically. As such, ACT eschews reification solely as a specific treatment for a particular disorder. However, due to the pressing need for alleviating suffering associated with specific forms of psychopathology, ACT in practice is often pragmatically applied to specific conditions. As highlighted by Borgogna and Aita³⁴ in this special issue, this necessarily creates a tension in terms of how ACT is defined and operationalized in practice when working with particular psychiatric conditions. Hence, practical applications of ACT can be explicated via common core processes and treatment components (ie, scope), as well as via refinement of ACT at the problem- or case-specific level (ie, precision in adaptation to context). In light of this complexity, in this section we outline some of the core features of ACT in clinical practice across the domains of technique, structure, and modality.

Therapeutic Techniques

While we leave the task of describing specific ACT techniques adapted for particular psychiatric disorders to the authors in this special issue, several hallmarks of a general ACT approach to psychopathology bear mention here (see Hayes and colleagues¹ and Luoma and colleagues³⁵ for book-length treatments on ACT in practice). First, consistent with its functional contextual roots, ACT clinicians continually seek to understand the function of a given behavior as it unfolds in a particular context. Thus, multiple behaviors can serve a similar function, and a given behavior can have multiple functions depending on the context. This focus on functional response classes (eg, experiential avoidance), and intervention principles designed to target them (eg, acceptance, values-based committed action) allows for nuanced application of ACT principles for a diverse range of clinical issues. Relatedly, the appreciation of the situational and historical contexts in which behavior occurs allows ACT clinicians to

deepen their idiographic assessment and case conceptualization of each unique client, as well as foster variability, selection, and retention of client behavior in relevant contexts.⁷ Second, in terms of specific therapeutic techniques, ACT practitioners often employ metaphors and experiential exercises to disrupt the literal functions of language (ie, foster defusion and self-as-context). Mindfulness and present-moment awareness processes can help build repertoires of flexible attention in which one can develop a different, more adaptive, relationship with internal content.³⁶ Finally, the universal nature of relating as an operant underlying human cognition from an RFT perspective supports the longstanding assertion in ACT that psychological flexibility principles apply to both client and therapist alike. As embodied in the classic ACT phrase “we’re in this soup together,¹” the compassionate and empathic nature of this stance allows for deepening of the therapeutic relationship in ACT.^{37,38}

Therapy Structure

One additional aspect related to delivering ACT in practice involves the degree to which a given course of therapy is structured. That is, some approaches to ACT³⁹ follow a phase-based, stepwise framework that addresses the core psychological flexibility processes sequentially (ie, awareness of control as the problem, followed by acceptance, defusion, etc.). This type of approach may be especially useful for clinicians new to ACT, as implementing a more structured, stepwise approach to ACT seems likely to facilitate clinical training.⁴⁰ In contrast to this, other manifestations of ACT in practice involve a more flexible, fluid, and dynamic approach to therapy.^{38,41} In this case, ongoing moment-by-moment assessment of strengths and deficits in ACT processes guides the implementation and timing of therapeutic targets throughout treatment. This type of approach, which often involves prioritizing values work as a motivator for difficult behavior change efforts,⁴² seeks to instantiate psychological flexibility within the dynamic context of interactions between client and clinicians as they unfold in the therapeutic relationship.

Therapeutic Modalities

With regard to therapeutic modalities and formats of ACT, several unique adaptations have been developed throughout ACT’s history in order to meet the needs of specific populations and settings. In terms of format, ACT is often delivered as individual outpatient psychotherapy.^{1,38} However, the format of ACT has been flexibly adapted for inpatient,⁴³ group-based,⁴⁴ and single-session contexts.⁴⁵ ACT principles have also been delivered via smartphone applications for health-related behavior change (eg, smoking⁴⁶), self-help books,^{47,48} and self-guided online programs.⁴⁹ Aligning with the growing telehealth/telemedicine movement, ACT has also been shown to be efficacious and feasible for delivery via synchronous telehealth modalities.⁵⁰ While the topographical forms of these various modalities differ, they remain functionally unified via their focus on instantiating psychological flexibility.

Keeping with the focus of this special issue on ACT for psychiatric disorders, this section on ACT in practice has necessarily focused mainly on clinical applications. However, it is worth highlighting again that ACT principles have been used to address a number of socially relevant issues outside of traditional diagnostic and statistical manual (DSM)-defined psychiatric disorders.^{5,6}

RESEARCH EVIDENCE FOR ACCEPTANCE AND COMMITMENT THERAPY

Unique features of CBS found in ACT theory and practice are also reflected in the substantial research literature on ACT that has developed. There have now been over

1000 randomized controlled trials (RCTs) on ACT, which highlight key themes in line with a CBS approach.⁵ First, there are a very wide range of outcomes and populations that have been studied with ACT aligned with its focus on psychological flexibility as a common core process relevant to various forms of human suffering and flourishing (eg, psychiatric disorders, chronic health conditions, caregiver and workplace stress, academic success, health promotion, athletics, and stigma).^{5,6} Second, the emphasis in ACT is on well-being and quality of life (the most commonly measured outcome), rather than reducing internal psychiatric symptoms (which were only measured as a primary outcome in 35% of studies).⁵ Third, ACT is not rooted in a latent disease/syndrome-based classification approach to understanding and treating mental health, but it can be applied to these contexts, as indicated by 21% of the RCTs being conducted with DSM-defined populations.⁵ Fourth, the process-based focus in ACT allows for substantial flexibility in how and where it is implemented, consistent with the pragmatic and prosocial aims of CBS.¹⁷ For example, ACT has been widely adopted in lower- and middle-income countries (LMICs), with 46% of RCTs conducted in LMICs across several continents. This may reflect the open and flexible format for implementing ACT that supports its adoption in contexts with less resources and infrastructure.^{5,51} Similarly, as discussed earlier, ACT has been applied in a variety of in-person, self-guided, and combined formats, which allows for its adaptation to meet the needs of various treatment settings and populations, while maintaining a focus on targeting psychological flexibility.^{5,6}

These features are rooted in the process-based focus of ACT. At one level, the evidence for ACT can be summarized in its focus on improving psychological inflexibility as a transdiagnostic process of change, and its subsequent impact on quality of life as the main goal of treatment in increasing valued living, while improvements in specific forms of psychological suffering may be treated as much more secondary to the goals and evidence for ACT. Consistent with this, meta-analyses consistently indicate psychological inflexibility predicts a wide range of psychiatric disorders among other relevant psychosocial problems.^{31,52,53} Furthermore, across the various populations ACT has been evaluated in, studies are relatively consistent in finding ACT improves psychological inflexibility compared to inactive and active control conditions.^{4,52} Although there are methodological limitations in many of these studies,⁵⁴ overall, the effects of ACT on psychological inflexibility appear to mediate treatment outcomes.^{52,55,56} Thus, ACT appears effective as a transdiagnostic, process-focused treatment that aims to increase psychological flexibility to improve quality of life and well-being across populations that would benefit.

Consistent with a reticulated, multi-level approach in CBS, there is also a body of translational research defining and linking the sub-processes of psychological inflexibility to more basic biopsychosocial processes, especially behavioral principles,^{57,58} although critical analyses have highlighted further translational work is needed.⁵⁹ Furthermore, the connection between psychological flexibility sub-processes and specific ACT components has been well-studied in laboratory-based research.⁶⁰ Understanding psychological flexibility and how to influence this process across levels of analysis is key to a CBS approach and arguably responsible for its success in creating a process-based therapy that is flexible, broadly applicable, and widely adopted, yet tightly linked to a well-specific set of therapeutic processes.⁵⁵

The CBS approach to studying ACT differs from many other treatments, which often are more organized with regards to confirmatory efficacy trials establishing rigorous, replicable evidence for treating the symptoms of specific psychiatric disorders (or similar latent disease constructs). Yet there may be increasing convergence with movement away from syndromally organized evaluations of treatment and the rise

of more process-focused approaches, such as experimental therapeutics⁶¹ and Research Domain Criteria.⁶² Concurrently, ACT research has increasingly grown and matured in specific psychiatric conditions, leading to more targeted evidence bases and refinements with ACT in treating specific disorders.^{4,6} This tension between the focus on psychological processes to improve quality of life broadly and the importance of findings that this process focus leads to improvements in specific psychiatric disorders are highlighted throughout the articles in this special issue, particularly the critical analysis of ACT research.³⁴ Yet, this targeted research has supported the endorsement and adoption of ACT by larger health care and scientific organizations.⁶³ Developments from researching ACT with targeted psychiatric conditions is what directly informed this special issue and why it was organized by disorder category.

OVERVIEW OF THE SPECIAL ISSUE AND SUMMARY

As described at the outset of this article, we were fortunate to receive outstanding contributions to this special issue from a range of scholars with expertise in ACT spanning diverse geographic regions (United States, Australia, and Cyprus), in some ways reflective of ACT's global presence. The content of the 13 articles in this special issue can be described within 3 domains. The first 6 articles focus on psychiatric conditions for which a substantial degree of empirical support for ACT exists. This includes articles on ACT for anxiety disorders,⁶⁴ obsessive-compulsive disorder,⁶⁵ depression,⁶⁶ psychosis,⁶⁷ chronic pain (ie, co-occurring mental and chronic health conditions),⁶⁸ and body-focused repetitive behaviors.⁶⁹ The subsequent 5 articles contain applications of ACT for psychiatric disorders with an emerging degree of conceptual and empirical support. This includes articles on ACT for eating disorders,⁷⁰ substance use disorders,⁷¹ posttraumatic stress disorder,⁷² hoarding disorder,⁷³ and psychiatric disorders in youth.⁷⁴ The remaining 2 articles address larger conceptual issues within ACT. Aligned with the CBS ethos concerning critical evaluation of ACT's scientific enterprise,¹⁷ Borgogna and Aita³⁴ address challenges and opportunities within ACT research. Finally, Hayes¹⁸ provides an overview of ACT as it relates to the emerging PBT movement, with an emphasis on the need for innovative theory, methodologies, and statistics aligned with the ultimate purpose and approach of PBT.

Approximately 4 decades into its existence, it is clear that a substantial body of empirical evidence for ACT exists. Furthermore, a deliberate focus on philosophy and theory development efforts have facilitated the nuanced application of ACT to a range of conditions, including the specific psychiatric disorders covered in this special issue. With the advent of the burgeoning PBT movement, it seems that our field is on the precipice of moving toward unifying our intervention approach to personalized evidence-based practice, taking us beyond the era of specific treatment protocols for DSM disorders. While such developments are promising and indeed ongoing,^{75,76} psychiatry practitioners currently face imminent demands in terms of clients presenting with particular forms of psychopathology. It is our hope that this special issue, and the articles within, can be of use for practitioners as they work to alleviate human suffering associated with psychiatric disorders.

CLINICS CARE POINTS

- Providers working from an ACT approach can benefit from nuanced understanding of the conceptual and theoretical foundations of ACT.
- Psychological flexibility principles, owing to their notable precision and scope, can be flexibly adapted to address a range of socially relevant issues and human challenges.

- With regard to tailoring ACT specifically for psychiatric disorders, clinicians can benefit from an in-depth understanding of ACT theory, clinical, and research domains for particular conditions, including those compiled in this special issue.

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The authors have nothing to disclose.

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