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## **Acceptance and Commitment Therapy and the New Behavior Therapies**

*Mindfulness, Acceptance,  
and Relationship*

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**B**eyond their existence in the behavior therapy tradition broadly defined, no single factor unites the methods presented in this volume more than how hard it is to classify them using existing terms within empirical clinical psychology. Many are venturing boldly into areas outside the behavior therapy tradition, such as dialectics, spirituality, relationship, and mindfulness. The methods are unusually flexible, including means that are direct and indirect, didactic and experiential, instructional and metaphorical. Cognitively rationalized approaches are questioning the primacy of changes in cognitive content. Behaviorally rationalized approaches are embracing cognitive topics. What is going on here?

When many new approaches emerge that are difficult to classify, it is possibly a sign that the field itself is reorganizing. This has happen before in behavior therapy. It seems to be happening again (Hayes, in press).

### FIRST- AND SECOND-GENERATION BEHAVIOR THERAPY

Behavior therapy (referring to the entire range of behavioral and cognitive therapies, from clinical behavior analysis to cognitive therapy) emerged as an approach committed to the development of well-specified and rigorously tested applied technologies based on scientifically well-established basic principles (Franks & Wilson, 1974). It rejected existing clinical theories and technologies that were poorly specified, vaguely argued, and little researched. Behavior therapists criticized (e.g., Bandura, 1969, pp. 11–13; Wolpe & Rachman, 1960) the amazing flights of psychoanalytic fancy that could be occasioned by the simplest of phobias or other clinical disorders (e.g., Freud, 1909/1955). As a form of instructive ridicule, behavior therapists trained simple actions by direct shaping in the chronically mentally ill, and then watched with amusement as psychoanalytic colleagues concocted bizarre symbolic interpretations of behaviors that had known and simple histories (e.g., Ayllon, Haughton, & Hughes, 1965). The alternative presented by behavior therapy was direct, humble, rational, and empirical. Abandoning an interest in hypothesized unconscious fears and desires, behavior therapists focused instead on direct symptom relief. The psychoanalytic worry that this would result only in superficial behavioral gains (e.g., Bookbinder, 1962; Schraml & Selg, 1966) was criticized (e.g., Yates, 1958), puzzled over (Bandura, 1969, pp. 48–49), and shown empirically to be largely unfounded (Nurnberger & Hingtgen, 1973).

The rejection of existing clinical concepts and methods had several collateral effects, beyond the inclusion of science and well-established basic principles. It became unfashionable in behavior therapy to dabble in clinical issues that were too subtle, complex, or broad in scope. Clinical targets generally involved “first-order” change. If an anxious child was not going to school, going to school or anxiety about going to school was the target, not unconscious interests or conflicts. The approach was not only first order but also often direct. Perhaps because the products of science are sets of verbal rules, the clinical approaches themselves tended to be presented to clients in relatively straightforward or didactic ways. If social skills were poor, attempts were made to specify verbally the various components of “good social skills” and then train them directly, often including such methods as instructions and feedback.

This first generation of behavior therapy changed dramatically with the advent of cognitive methods. Both stimulus–response associationism and behavior analysis had failed to provide an adequate account of human language and cognition, and early behavior therapists soon learned that they needed to deal with thoughts and feelings in a more direct and central way. The cognitive therapy movement (e.g., Beck, Rush, Shaw, & Emery, 1979; Mahoney, 1974; Meichenbaum, 1977) attempted to do so. The objections of early founders that cognition had been dealt with all along (e.g.,

Wolpe, 1980) were largely ignored, because it was the centrality of cognition and the ability to deal with it in a natural way that was more at issue. In the absence of adequate basic accounts, early cognitive-behavioral therapies approached cognition in a direct and clinically relevant way. In this work, “cognition” generally referred to the commonsense categories of thoughts, ideas, beliefs, or suppositions. Through the use of questionnaires and clinical interviews focused on such targets, clinicians learned to identify cognitive errors in particular patient populations, and direct means were developed to correct these problems.

Some of the leaders of these new approaches sought to overthrow behavior therapy, as was reflected in Beck’s well-known challenge: “Can a fledgling psychotherapy challenge the giants in the field—psychoanalysis and behavior therapy?” (1976, p. 333), but the behavior therapy tradition proved more flexible than that. What made a relatively smooth transition to the second generation of behavior therapy possible was the first-order change focus of the cognitive movement: “Cognitive therapy is best viewed as the application of the cognitive model of a particular disorder with the use of a variety of techniques designed to modify the dysfunctional beliefs and faulty information processing characteristic of each disorder” (Beck, 1993, p. 194). This first-order change focus comported so well with the overall approach of the first wave of behavior therapy that a second generation of behavior therapy could be created simply by expanding the scope, models, and methods of the tradition. “Cognitive-behavioral therapists” added irrational thoughts, pathological cognitive schemas, or faulty information-processing styles to the list of direct targets for change, along with new methods appropriate for these targets. In the second wave of behavior therapy, undesirable thoughts would be weakened or eliminated through their detection, correction, testing, and disputation, much as anxiety was to be replaced by relaxation in the first wave.

All of this happened 25–30 years ago. In the years that have followed, cognitive-behavioral therapy (CBT) has seen unprecedented success. The empirical basis of the field has been enormously strengthened, and in problem area after problem area, empirical clinicians have shown that CBT is helpful. Behavior therapy dominates lists of empirically supported treatments (Chambless et al., 1996) and clinical practice guidelines based on effective approaches (Hayes, Follette, Dawes, & Grady, 1995; Hayes & Gregg, 2001).

### **CONTEXTS SUPPORTING A NEW GENERATION OF BEHAVIOR THERAPY**

Long periods of normal science occur when adherents have interesting work to do, rewards for doing that work, and when the organizational nar-

rative seems to be coherent and progressive. In such phases, it is what is implicit, not what is explicit, that is most powerful. Assumptions about the questions, issues, methods, and forms of evidence appropriate to a field are often more important to maintaining a dominant paradigm than are specific theories, studies, principles, or technologies. Eventually, however, things change. Anomalies emerge that undermine the dominant paradigm. Patterns of support shift, and lines of research become less fruitful. Young professionals enter the field without being as bound to underlying assumptions. Questions that were never resolved reemerge. As a result, new questions dare to be asked and new methods and principles are developed. As the assumptive base of a dominant paradigm weakens or diversifies, this process can accelerate, particularly if new ideas are productive and help remove or resolve previously encountered roadblocks and anomalies. Sometimes change of this kind occurs in a deliberate way, with a political or an even revolutionary quality to it, but more commonly it happens in a humble and entirely natural way. Researchers simply begin to think outside the largely implicit box, and interesting findings emerge. That seems to be exactly what has happened with most of the methods discussed in this volume.

The contexts supporting the emergence of the new behavior therapies are several. First, a number of empirical anomalies have emerged. Clinical improvement in CBT often occurs before the presumptively key features have been adequately implemented (Ilardi & Craighead, 1994). Despite challenges (Tang & DeRubeis, 1999), this disturbing finding has not been adequately explained (Ilardi & Craighead, 1999; Wilson, 1999). Changes in cognitive mediators often fail to explain the impact of CBT (e.g., Burns & Spangler, 2001; Morgenstern & Longabaugh, 2000), particularly in areas that are causal and explanatory rather than descriptive (Beck & Perkins, 2001; Bieling & Kuyken, 2003). Component analyses of CBT (e.g., Gortner, Gollan, Dobson, & Jacobson, 1998; Jacobson et al., 1996; Zettle & Hayes, 1987) have led to the disturbing conclusion that there is “no additive benefit to providing cognitive interventions in cognitive therapy” (Dobson & Khatri, 2000, p. 913).

Second, the underlying treatment development model is showing signs of wear. Effect sizes have largely stagnated for technologies that are rigidly adherent to second-generation assumptions (Öst, 2002). Researchers, who are largely dependent for their funding on a technological model of treatment development (Rounsaville, Carroll, & Onken, 2001), are facing a proliferation of similar treatment manuals (Hayes, 2002b) in the absence of methods for their distillation. The federal funds that fed the rise of the second wave of behavior therapy increasingly have emphasized the need for innovative theory and a link to basic science (Rounsaville et al., 2001), which is leading to new models and to more focus on the empirical anomalies of the second generation. Because some research areas are well-plowed

fields, researchers have tended to focus on unusual populations and subpopulations that can be examined within the existing model—but this has sometimes led to the development of new methods that do not fully comport with second-generation assumptions.

Third, the rise of constructivism and similar postmodernist (and post-postmodernist) theories, have weakened the mechanistic assumptions that have dominated in some wings of behavior therapy (Hayes, Hayes, Reese, & Sarbin, 1993). Instead, more pragmatic and contextualistic assumptions have come to the fore (Biglan & Hayes, 1996; Jacobson, 1997). Even the thinking of leaders of second-generation behavior therapy show the assumptive changes (e.g., cf. Beck, Rush, Shaw, & Emery, 1979, with Emery & Campbell, 1986; or Mahoney, 1974, with Mahoney, 2002). This change is subtle, but it is pervasive and powerful, and we discuss it extensively shortly.

### THE THIRD WAVE

Contextual changes are not enough to change a field. New ideas are also needed. As the present volume shows, these new ideas have emerged and greatly strengthened over the last decade (cf. Hayes, Jacobson, Follette, & Dougher, 1994, with this volume). On the behavioral side, as exposure-based therapies focused on internal events (Barlow, 2002), it became clearer that it was the *function* of these events that was most at issue, not their form, frequency, or situational sensitivity per se. The positive outcomes for dialectical behavior therapy (DBT; Linehan, 1993; see Hayes, Masuda, Bissett, Luoma, & Guerrero, 2004, for a recent outcome review) provided strong support for mindfulness and both acceptance and change in the treatment of complex clinical problems. Mindfulness and acceptance are radical additions to behavior therapy, because they challenge the universal applicability of first-order change strategies. Within the cognitive wing, similar changes have occurred. Attentional and metacognitive perspectives (e.g., Wells, 1994) began to make clear that it was the function of problematic cognitions, not their form, that was most relevant. More emphasis began to be given to contacting the present moment (e.g., Borkovec & Roemer, 1994; see Borkovec & Sharpless, Chapter 10, this volume) and mindfulness (Segal, Williams, & Teasdale, 2001; Teasdale et al., 2002), strengthening that shift in focus.

The third generation of behavior therapy has been defined in the following way (Hayes, in press):

Grounded in an empirical, principle-focused approach, the third wave of behavioral and cognitive therapy is particularly sensitive to the context and functions of psychological phenomena, not just their form, and thus tends

to emphasize contextual and experiential change strategies in addition to more direct and didactic ones. These treatments tend to seek the construction of broad, flexible and effective repertoires over an eliminative approach to narrowly defined problems, and to emphasize the relevance of the issues they examine for clinicians as well as clients. The third wave reformulates and synthesizes previous generations of behavioral and cognitive therapy and carries them forward into questions, issues, and domains previously addressed primarily by other traditions, in hopes of improving both understanding and outcomes.

Defined in that way, the new behavior therapies carry forward the behavior therapy tradition, but they (1) abandon a sole commitment to first-order change, (2) adopt more contextualistic assumptions, (3) adopt more experiential and indirect change strategies in addition to direct strategies, and (4) considerably broaden the focus of change.

Acceptance and commitment therapy (ACT, said as one word, not as A-C-T; Hayes, Strosahl, & Wilson, 1999) is in line with all of these features of the new behavior therapies. ACT is neither simple behavior therapy nor classic CBT. It is a contextualistic behavioral treatment that sits squarely among the set of third-generation treatments described in this volume. As such, an explication of ACT may help reveal commonalities and connections among some of these other treatments.

## ACCEPTANCE AND COMMITMENT THERAPY

### Underlying Philosophy

ACT emerged from behavior analysis, one of the more misunderstood wings of modern psychology. It is not by accident that several of the new behavior therapies are most closely linked to this wing of behavior therapy, which only recently has developed sufficiently to impact adult psychotherapy in a powerful way.

Behavior analysis is much easier to understand when its philosophical foundations are understood. Although mechanistic forms of behavior analysis exist, by far the more dominant strand of modern behavior analysis is based on a type of American pragmatism we have termed functional contextualism (Hayes, 1993). A full discussion of contextualism as a philosophy of science is a topic beyond the scope of the present chapter (but see Biglan & Hayes, 1996; Hayes et al., 1993; Hayes, Hayes, & Reese, 1988; Pepper, 1942), but some attention seems warranted for two reasons. First, explicitly (e.g., Jacobson, 1997) or implicitly, several of the new behavior therapies have contextualistic roots. Second, this philosophical difference seems to make more sense of the difference between second-generation behavior therapy and the new forms that have emerged.

The contextualistic wing of the new behavior therapies conceptualizes psychological events as a set of ongoing interactions between whole organisms and historically and situationally defined contexts. The root metaphor of contextualism (Pepper, 1942) is the “ongoing act in context,” that is, the commonsense situated action. Contextualists seek to maintain contact with the whole event and its context, and to analyze that event in such a way that its holistic quality is not undermined.

Contextualists are supremely interested in function over form, because formal events literally have no meaning. An event disconnected from its history and current situational context is, in some sense, not an “event” at all: “It is not an act conceived as alone or cut off that we mean; it is an act in and with its setting” (Pepper, 1942, p. 232). Consider an action such as “walking to the store to get food for dinner.” If we focus purely on the movements of muscles in the legs, and allow them to be separated from context, a whole action of this kind and its functional nature disappears. As we remove a place to go from and to (e.g., remove “stores” from consideration), the “walk” becomes disorganized and directionless. As we remove both the motivational and situational antecedents (e.g., not having the food needed at home; the approach of dinnertime; food deprivation) and the consequences of this action (e.g., obtaining and ultimately eating the food; entertaining family or friends at dinner), the walk becomes purposeless and ahistorical. Indeed, as we remove behavioral context and its history (e.g., the ongoing set and sequence of microactions involved in lifting one leg and then another; balancing on one foot in transition; the long history of millions of such steps and transitions in a lifetime that included “learning to walk” when those integrated actions were not known), “walking” itself disappears, and we are uncertain whether the muscle movement we are speaking of is twitching, kicking, wiggling, dancing, or any of thousands of other actions.

Mechanists deal with functional events by assembling a composite from the “elementary” pieces of interest. The assumptions of mechanism lead to the idea that the world is preorganized into parts, relations, and forces—one only has to discover the true underlying elements. Thus, an ontological claim underlies mechanism: The parts are already there; we must find them; without them, we cannot understand complexity. Contextualism makes no ontological claims at all. A functional unit is the unit, but it is so for pragmatic purposes brought into the situation by the analyst. Just as “going to the store” can be a functional unit, so too can “analyzing patients behavior into treatment responsive units.” Actions are functional, including those of the clinician and scientist.

From the point of view of contextualism, determining the functional nature of a given event requires an ever-widening examination of context. As this process goes on, functional events continuously change their quality: What once was context becomes content, and more context needs to be

sought. The movement of a leg that occurs in the context of particular sequences of leg movements is “walking,” whereas the same movement in another context is “kicking.” Once we are speaking of walking, however, further contextual examination shows that walking in the context of food preparation is different than walking for exercise, functionally speaking. Making a dinner in the context of having one’s boss visit is different than making a private dinner to be eaten alone.

This could go on *ad infinitum*. What limits the process of examining context in an ever widening circle is the contextualist’s pragmatic view of truth. The truth criterion of contextualism is successful working (Hayes et al., 1988; Pepper, 1942). The process of contextual explication is not thought of as “discovering” the “truth” but as a process of construing the situation so that effective action is possible. Thus, analysis for a contextualist “becomes important in reference to the end” (Pepper, 1942, p. 251). Skinner is quite clear about this: “It is true that we could trace human behavior not only to the physical conditions which shape and maintain it but also to the causes of those conditions and the causes of those causes, almost *ad infinitum*” but we need take analysis only to the point at which “effective action can be taken” (Skinner, 1974, p. 210). Thus, a “proposition is ‘true’ to the extent that with its help the listener responds effectively to the situation it describes” (p. 235). That stance on truth, built into behavior analysis, has a big impact on treatments that take a functional analytic approach.

It is also this pragmatic approach that makes goals so important in contextualism. In order to know whether one is responding effectively, it is necessary to know what effects are being sought. Thus, goals are foundational in contextualism, and different goals can lead to different types of contextualism (Hayes, 1993). Goals enable analysis by allowing successful working to be assessed, but goals can only be stated, not evaluated. This is because evaluation requires a measuring stick, and in contextualism, it is the analytic goal that is itself the measuring stick.

By far the most dominant form of contextualism is descriptive contextualism (Hayes, 1993). Examples include constructivism, hermeneutics, dramaturgy, narrative psychology, feminist psychology, and Marxism. Analysts in these forms seek an appreciation of the features of a whole event. Their analytic practices often look more like history than experimental science, and indeed, they often challenge the overblown knowledge claims of traditional science. Functional contextualists seek the prediction and influence of ongoing interactions between whole organisms and historically and situationally defined contexts. Analyses are sought that have precision (only certain terms and concepts apply to a given phenomenon), scope (principles apply to a range of phenomena), and depth (they cohere across scientific levels of analysis, such as biology, psychology, and cultural anthropology).



Behavior analysis is the dominant example of functional contextualism, and understanding that demystifies several features of behavior analysis (Hayes & Brownstein, 1986). Consider “environmentalism.” If one adopts “prediction and influence” as a unified goal (i.e., if principles and theories should help accomplish both simultaneously), then it is logically necessary for analyses to include manipulable contextual variables. It is not possible to influence psychological events without changing their context. Only contextual variables can be manipulated directly. Thus, while analyses that begin and end in the domain of psychological dependent variables (e.g., emotion, thought, overt action) can achieve good levels of prediction, a gap necessarily exists between these analyses and the actions that might be taken to change psychological events. By understanding the contextualistic nature of behavior analysis, its environmentalism is revealed to be pragmatic, not dogmatic.

Each of these features in the previous discussion (function, context, situated truth, and purpose) is emphasized in ACT and in several of the other of the therapies in this volume. New behavior therapists are not moved very much by form: The issue is function. It is not enough to know that a thought or feeling of a particular form or intensity occurred to know whether this is a problem, for example. One also has to know the context in which it occurred and, through that analysis, the function it serves. Furthermore, once it is known to be a problem, it is not necessarily the case that it will be targeted directly. It is possible that the same event, formally defined, could become functionally inert by changing context rather than content.

This approach is revealed in the embrace of acceptance, defusion, mindfulness, and so on. In ACT, as in many of the new behavior therapies, there is a conscious posture of openness and acceptance toward psychological events, even if they are formally “negative,” “irrational,” or even “psychotic.” What determines whether an event will be targeted for change is not form but function, and there is considerable flexibility about how it will be targeted. A “negative thought” mindfully observed will not necessarily have a negative function, even though it might in other contexts, such as one of literal truth or falsity. A difficult emotion accepted as an emotion will not necessarily have a negative function, even though it might in other contexts, such as one of resistance, suppression, or behavioral compliance.

Underlying an interest in what given psychological events serve is a view that truth is always itself a contextually situated function. We know the world only through our interactions in and with it, and these interactions are always historically and contextually limited. Thus, clients and therapists alike are often encouraged to hold an interest in the literal “truth” of their own thoughts or evaluations lightly. In ACT, this can be seen quite clearly, such as when clients are asked “not to believe a word” of ACT.

Finally, the foundational nature of goals in contextualism is reflected

in the emphasis on chosen values as a necessary component of a meaningful life and a meaningful course of treatment. This is seen very clearly in DBT, behavioral activation (Jacobson, Martell, & Dimidjian, 2001), integrated behavioral couple therapy (IBCT; Christensen, Jacobson, & Babcock, 1995; Jacobson, Christensen, Prince, Cordova, & Eldridge, 2000), and ACT. Instead of pursuing truth, clients are encouraged to become passionately interested in how to live according to their own values, that is, how to accomplish their purposes.

### **Basic Theory: Relational Frame Theory**

The second generation of behavior therapy emerged because the first generation failed to deal adequately with cognition. The second generation either adopted a more natural but also a more commonsense approach, or tried to make information processing do the necessary analytic work. A commonsense approach undermined the critically important link between behavior therapy and basic principles, but the information processing approach proved difficult to use as a basis of clinical change. The latter is not surprising, since most information processing analyses do not include clear historical or situational variables. Instead, the “cause” of cognitive function in most information-processing accounts is either in the material basis of cognitive systems (e.g., neurological events) or in the structure of cognitive systems themselves. It is not obvious how to alter either of these directly in therapy. Given current inadequacies in neuroscience, the form of cognitive systems tended to be targeted, but the information-processing theories generally did not specify precisely how contextual events can be changed to alter the structure or function of cognitive systems. This is a problem for therapists, since therapists are, after all, outside of the cognitive system being examined.

Behavior analysts can be interested in the nature of cognition, since private events are explicitly embraced (Skinner, 1945), but the analysis must be contextual: “We cannot account for the behavior of any system while staying wholly inside it” (Skinner, 1953, p. 35). ACT is based on a comprehensive functional contextual program of basic research on language and cognition called relational frame theory (RFT; Hayes, Barnes-Holmes, & Roche, 2001). The presence of such a research program is unique to ACT. ACT is an empirical clinical intervention that is tightly integrated with its own comprehensive basic science program on the nature of human cognition, itself composed of scores of human experimental studies.

RFT research has shown that human beings are extraordinarily able to learn to derive and combine stimulus relationships and to bring them under arbitrary contextual control. These derived stimulus relations, in turn, alter the functions of events that participate in relational networks—a process that is also under contextual control. Together, these features are argued to form the foundation of human language and higher cognition.

Nonarbitrary stimulus relations are those defined by formal properties of related events. Nonarbitrary stimulus relations impact strongly on the behavior of all complex organisms. For example, even insects might learn to approach the darker of two holes (Reese, 1968). Humans, however, can readily learn to relate events that are *not* formally related (Lipkens, Hayes, & Hayes, 1993). For example, having learned that  $x$  is “smaller than”  $X$ , humans may later be able to apply this stimulus relation to events under the control of arbitrary cues (such as the words *smaller than*). A very young child will know, say, that a nickel is bigger than a dime, but a slightly older child will learn that a nickel is “smaller than” a dime by attribution even though, in a formal sense, it is not.

There are three main properties of this kind of relational learning. First, such relations exhibit “bidirectionality”—a relation learned in one direction entails another in the opposite direction. If a person learns that  $A$  relates in a particular way to  $B$  in a context (the context is termed “ $C_{rel}$ ” for “relational context”), then this must entail some kind of relation between  $B$  and  $A$  in that context. For example, a person who is taught that cold is the same as freezing will conclude that freezing is the same as cold. Second, such relations show combinatorial entailment: If a person learns in a particular context that  $A$  relates in a particular way to  $B$ , and  $B$  relates in a particular way to  $C$ , then this must entail some kind of mutual relation between  $A$  and  $C$  in that context. For example, if a child learns in a given context that a nickel is smaller than a dime, and a dime is smaller than a quarter, then he or she will conclude that a quarter is bigger than a nickel, and a nickel is smaller than a quarter. Finally, such relations enable a transformation of stimulus functions among related stimuli. If a child needs to buy candy and a dime is known to be valuable, in an appropriate context that selects this function (the context is termed “ $C_{func}$ ” for “functional context”), then he or she will conclude that a nickel will be less valuable and a quarter will be more valuable, without necessarily directly purchasing candy with nickels and quarters. When all three features are established with a given type of relational responding, we call the performance a “relational frame.”

What makes relational framing clinically relevant is that functions given to one member of related events tend to alter the functions of other members. Suppose a child has never before seen or played with a cat. After learning “C-A-T”  $\rightarrow$  animal, and C-A-T  $\rightarrow$  “cat,” the child can derive four additional relations: animal  $\rightarrow$  C-A-T, “cat”  $\rightarrow$  C-A-T, “cat”  $\rightarrow$  animal, and animal  $\rightarrow$  “cat.” Now suppose that the child is scratched while playing with a cat, cries, and runs away. When the child later hears father saying, “Oh, look! A cat,” she may cry and run away even though scratches never occurred in the presence of the words “Oh, look! A cat.” What brings these situations together is not their formal properties but the derived relations among them.

There are by now scores of studies on RFT (reviewed in Hayes et al.,

2001). The research program has now reached the point that virtually every key feature of the theory has been tested at least to some degree. While hardly “proven,” no data currently exist that contradict the tenets of the theory.

RFT focuses ACT not merely on the nature of a relational network in a given situation (hardly a new idea, since in different terms that is what differentiated first- from second-generation behavior therapy) but on the contexts that can alter that network or its function. Thus, ACT has a technical account that can predict and explain the counterintuitive effects of first-order change efforts in the cognitive domain, or the pervasive effects of mindfulness, acceptance, defusion, and so on.

### **Theory of Psychopathology: Psychological Inflexibility**

Even a small set of relational frames allows human beings to talk or think about events that are not present, to compare possible outcomes, and then to have these verbal relations alter how analyzed events function. Consider a simple problem: A door is locked. A human being might literally talk through the problem using only frames of coordination (e.g., naming), time or contingency (if . . . then), and comparison: If I do this, that will happen, which would be good. This process is enormously useful and seems to underlie the tremendous ecological success of human beings, who have become the dominant species on the planet despite being relatively weak, slow, and unprepared for physical combat.

Unfortunately, even such a small set of relational frames is enough to create human misery in the midst of ecological success. A socially anxious person might apply these same frames to a speaking situation: “If I avoid speaking, I won’t get anxious, which is good.” A depressed person might apply it to self-harm: “If I kill myself, I will stop suffering, which is good.” With no more in the cognitive toolset than these kinds of relational behaviors frames, humans can worry about their performance; compare themselves or a partner unfavorably to an ideal, compare the present to a conceptualized past, or compare the present to a feared or favored future.

Although human language enables an explosion of indirect sources of control over human responding (and thus a considerable increase in the flexibility of the human repertoire), several key processes are fostered by relational frames that are repertoire narrowing. Three are described here.

#### *The Ubiquity of Pain*

Organisms are naturally especially attuned to aversive stimulation and should be so for evolutionary reasons. Relational frames enormously increase the reach of aversive events. For example, a dog that is kicked by a large man might whimper at the later sight of him, or those who look like

him. A verbal human with the same experience could reconstruct that experience in any environmental context. Even formally contradictory events might occasion the relation (e.g., a birthday cake or a beautiful sunset might occasion the thought, “I used to be happy before I was abused”). What this means is that humans have a hugely expanded capacity for aversive stimulation and simultaneously cannot reduce psychological pain through simple situational solutions (e.g., avoid stimuli that are similar to painful events in the past).

### *Cognitive Fusion*

Precisely because verbal events are so useful, language functions dominate over nonverbal functions. Thus, the increased psychological flexibility and creativity purchased by human language in some areas is paid for by the greatly increased inflexibility when responses are needed that are interfered with by literal evaluative rules. A well-established research literature shows that behavior governed by verbal rules tends to be relatively inflexible and rigid (see Hayes, 1989, for a book-length review). There are several known sources of this effect: Verbal rules tend to narrow the range of behavior available to make contact with more direct experiences; they tend to narrow the impact of contingencies themselves; they introduce or augment social compliance or resistance in otherwise less social situations; and, finally, they engage contingencies that strengthen rule generation and rule-following repertoires as such. The end result is that literal, evaluative strategies dominate in the regulation of human behavior, even when less literal and less judgmental strategies would be more effective.

Relational networks are extraordinarily difficult to break up, even with direct, contradictory training (Wilson & Hayes, 1996). Myriad derived relations are available to maintain and reestablish a given relational network. In practical terms, this means that elaborated relational networks continue to be elaborated. Detecting that one is deriving coherent relational networks (e.g., learning that one is “right”) or that relating events is leading to effective outcomes (e.g., learning that one has “solved the problem”), and similar processes, in essence provide automatic reinforcement for the action of deriving stimulus relations. This constant generation of reasons and explanations fundamentally alters how psychological events function (see Addis & Jacobson, 1996, for supportive data on this point), yet the broad value of verbal analysis makes it very difficult to slow down language and cognition once it is well established, despite its instrumental nature. This combination of features means that stimulus functions from relational frames typically dominate over other sources of behavioral regulation in humans (what we term “cognitive fusion”), making an individual less in contact with here-and-now experience and direct contingencies, and more dominated by verbal rules and evaluations (Hayes, 1989).

*Experiential Avoidance*

Experiential avoidance is a nonarbitrary result of the domination of literal and evaluative language. Experiential avoidance is the phenomenon that occurs when a person is unwilling to remain in contact with particular private experiences (e.g., bodily sensations, emotions, thoughts, memories, behavioral predispositions) and takes steps to alter the form or frequency of these events and the contexts that occasion them, even when doing so creates harm. There is a substantial body of evidence that experiential avoidance is harmful in a variety of psychopathological areas (see Hayes, Wilson, Gifford, Follette, & Strosahl, 1996).

As language abilities have evolved, more and more constructs have been applied to private events, and these events have become enmeshed in evaluative verbal regulatory strategies. Originally, these terms were mere metaphors (e.g., being “inclined” to go was metaphorically related to physical objects that were literally “leaning toward going”; “anxiety” referred to a difficulty in breathing; and so on), but eventually they became concrete references to internal “things,” and the emotional or cognitive states that were related to evaluated situations themselves acquired evaluative connotations. For example, it is normative to believe that “anxiety is bad,” presumably in part because anxiety is a response to events that are themselves construed to be bad.

As a problem-solving repertoire, language and cognition are used to produce positive states of affairs and to avoid negative ones. Once thoughts and feelings themselves become evaluatively entangled, it is an obvious step to do the same thing with these private events, particularly because verbal processes increase the psychological presence of pain and decrease the adequacy of situational solutions to it.

The results are often unhelpful, because private events are historical and verbally entangled. Consider a negatively evaluated thought. In order to avoid a thought deliberately, a verbal rule must be followed specifying the thought to be avoided. Unfortunately, this rule itself contains the avoided thought, and to check on its success, that rule (and thus the thought) must be recontacted. The well-known paradox of thought suppression shows the problem clearly.

Many forms of psychopathology can be thought of as forms of experiential avoidance, yet the processes that give rise to it are inherent in literal language itself. As experiential avoidance takes hold, more stress and arousal are likely, which in turn occasion more evaluative verbal comparisons, and more self-focused avoidance strategies. This is a notably pathological process. Emotion-focused and avoidant strategies predict negative outcomes in depression (DeGenova, Patton, Jurich, & MacDermid, 1994), substance abuse (Ireland, McMahon, Malow, & Kouzekanani, 1994), the sequelae of child sexual abuse (Leitenberg, Greenwald, & Cado, 1992), and many others areas. Deliberate attempts to suppress thoughts and feel-

ings can increase their occurrence and behavioral impact (Cioffi & Holloway, 1993; Clark, Ball, & Pape, 1991; Wegner, Schneider, Carter, & White, 1987), and can greatly complicate exposure-based strategies (Feldner, Zvolensky, Eifert, & Spira, 2003).

### **Theory of Change: Psychological Flexibility**

The goal of ACT is to produce more psychological flexibility: the ability to change or to persist with functional behavioral classes when doing so serves valued ends. Since it is not possible to remove or eliminate language processes that create difficulty for human beings (nor would we want to, since these same processes are essential to human functioning), the goal is to bring these processes under contextual control.

The psychological space within which ACT works is shown in Figure 1.1. Six key processes are shown there. All six are aspects of the same process, which we have termed “psychological flexibility,” because all six are linked to an alteration of the core language processes that interfere with such flexibility. ACT interventions can enter into that space through any of the subprocesses and can move through them in any given order. More specifically, ACT increases psychological flexibility by helping clients contact the costs of psychological inflexibility (this is not a specific item in Figure 1.1—rather, it is a process of contacting the costs of alternative psychological patterns), and then (1) establishing psychological acceptance skills; (2) establishing cognitive defusion skills; (3) distinguishing self-as-context from the conceptualized self; (4) contacting the present moment and establishing self-as-process skills; (5) distinguishing choice from reasoned action (necessary to avoid values clarification from becoming excessively rule-governed), clarifying values, and distinguishing them from goals and actions; and (6) teaching committed behavioral persistence and behavioral change strategies linked to choose values. All of this is then brought together into a process of developing larger and larger patterns of psychologically flexible and effective action.

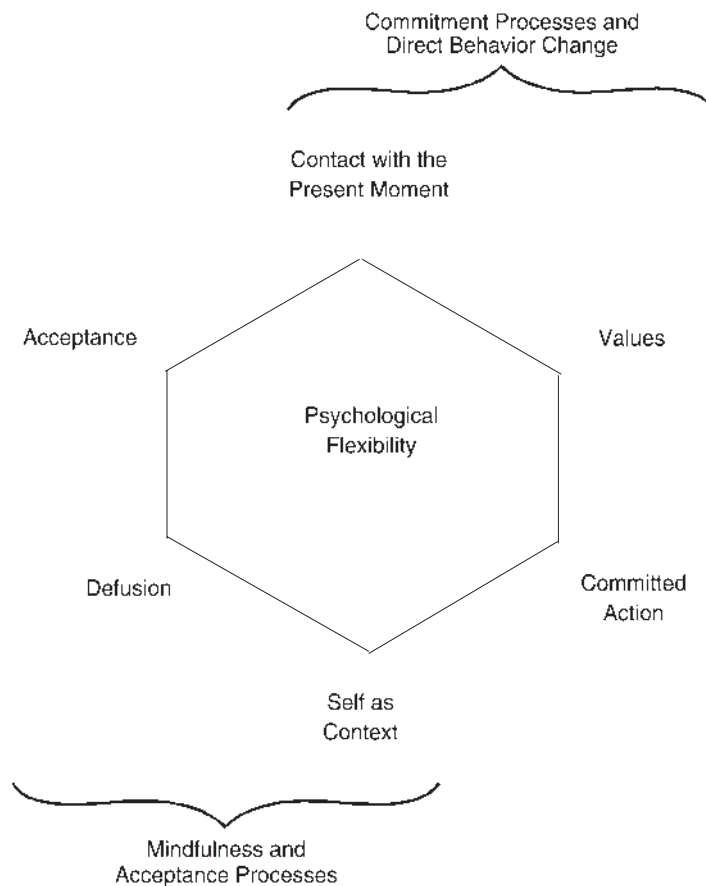
These six processes can be divided into two major groups. The four processes on the left (acceptance, defusion, contact with the present moment, and self-as-context) together delineate acceptance and mindfulness skills from an ACT perspective. The four on the right (contact with the present moment, self-as-context, values, and committed action) together delineate commitment and behavior change skills from an ACT perspective. The reason ACT is called “acceptance and commitment therapy” is that these two larger sets of skills are united into a coherent whole in the ACT approach.

### **Therapeutic Assumptions and General Approach**

ACT is a general clinical approach, not just a specific technology. There are already approximately a dozen specific ACT protocols for specific prob-

lems. The specific technologies used to create the psychological functions shown in Figure 1.1 may differ from problem to problem or setting to setting. If they are focused on and move these functions, the total package is ACT.

ACT takes the view that powerful and rapid change is often possible, even in difficult cases. This assumption is in part pragmatic, but it also flows from the underlying theory of change. As a behavior therapy, ACT takes the view that at the level of content, life's difficulties are historical and conditioned (e.g., classically conditioned emotional responding), and highly elaborated and networked in a verbal-cognitive sense. For that reason, psychological *content* tends to change relatively slowly. The *functions*



**FIGURE 1.1.** The facets of psychological flexibility according to the model of change underlying ACT.



of these events are contextual, however. A much smaller set of pivotal events, contextual change can lead to pervasive and rapid functional change.

Human beings will initially focus on difficult content as the core of their problems, but from an ACT perspective, it is the tendency to take these experiences literally and then to fight against them that is viewed as most harmful. This means that “anxiety” is not necessarily the problem in “anxiety disorders”—anxiety embraced is not necessarily a problem at all. A similar point would be made for “depressed mood” or “irrational thoughts,” or any private experience supposedly linked mechanically to overt behavior.

This same point applied to the feelings and thoughts of the ACT therapist; ACT encourages therapist to open themselves up to their own difficult thoughts, feelings, memories, and bodily sensations. Thus, the therapeutic relationship in ACT tends to be an equal one: Both the client and therapist are swimming in the same verbal stream.

The key goal of ACT is to support clients in feeling and thinking what they directly feel and think already, as it *is*, not as what it *says it is*, and to help clients move in a valued direction, *with* all of their history and automatic reactions. Because language processes themselves are generally viewed as a source of psychologically rigid repertoires, ACT tends to use a relatively nonlinear form of language. ACT relies heavily on paradox, metaphors, stories, exercises, behavioral tasks, and experiential processes. Direct instruction, logical analysis, and persuasion have a relatively limited role. Even ACT-related concepts are treated in a deliberately flexible manner: The point is not to establish a new belief system, but rather to establish a more flexible repertoire, one that can change when change serves and persist when persistence serves.

ACT techniques are means to establish that kind of psychological flexibility. The process of ACT involves facing the costs of psychological inflexibility and its sources, particularly cognitive fusion (figuring it out, being right, giving reasons, treating oneself as a verbally evaluated object) and avoidance (suppression, passivity in the face of needed action). It also involves learning how to accept and defuse in various areas (emotions, self, thoughts, sensations) in which psychological rigidity has been dominant. It involves a deep interest in what one wants out of life and learning to build larger and larger and larger patterns of effective behavior linked to those goals and values.

## Techniques

There are several specific domains of ACT intervention, and each has its own specific methodology, exercises, homework, and metaphors. A book-length version of ACT is available that describes some common ACT technology (Hayes et al., 1999), so only a brief description is needed here. Even

that book, however, is only part of what is available, since techniques are the most flexible part of ACT. An ACT protocol for children will differ from that for adults; one for coping with psychotic symptoms will differ from one for quitting smoking. At issue are the core processes: Even techniques created in the spur of the moment are “ACT” if they are focused on and move those processes.

### *Confronting the System: Creative Hopelessness*

If the normal literal context really worked, there would be no need for a technology that fundamentally challenges such normal processes. Thus, often the first stage of ACT—especially for chronic or multiproblem patients—is a detailed examination of the cost of the current contextual situation. In this phase, ACT therapists examine carefully what the client has done to solve the problem and his or her actual experience of how workable those change agendas have been. Their unworkability has been experienced, but instead of generating variability, often it has generated only self-blame and yet another attempt to solve the problem using a direct, literal approach. The ACT therapist asks the client to consider the possibility that maybe the problem is not the techniques but their very purpose. In so doing, the ACT therapists essentially (or sometimes overtly) is asking: “Who do you believe: your mind or your experience?” The process is not so much persuasive as experiential and evocative.

The “person and the hammer” metaphor is an example of an ACT metaphor in this phase of therapy:

“It would be as if you were to go to the doctor and say that you have a headache, and the doctor looks at you and sort of with your hand out of sight—behind your own back so to speak—you’re hitting yourself in the head with a rubber hammer. You may not know that you’re hitting yourself, or you might have a very good reason for doing so. It is unlikely that a doctor in that circumstance would want to give you aspirin for a headache, or tell you to wear a hat. What I see in this history you’ve given me is one attempt after another to reduce the pain, and that’s certainly understandable. But what does your experience tell you about that? It seems that this whole effort is just another whack on the head. Now you not only feel bad, you feel bad that you feel bad. That’s another whack. And then you’ve in essence asked other clinicians just what you are asking me now: might they have a really, really strong hat, or a really, really strong aspirin? Well, first, I don’t. And, second, I suspect that when you find that out, the hammer will just come down again. ‘I can’t be helped.’ Whack. It’s not that you can’t be helped. It’s that what you’ve called ‘help’ are whacks to the head. When you have a headache like that it might be better to put down the hammer.”

*Control Is the Problem*

Deliberate, literal, evaluative problem solving works everywhere except in places that are exacerbated by deliberate, literal, evaluative problem solving. This is hard to see, because in the vast majority of external situations, language can be used to get rid of things and the overarching rule is confirmed: Figure out how to get rid of it and get rid of it. Relational frames can have counterintuitive effects, however. For example, deliberately not thinking of something involves following a rule (“Don’t think of  $x$ ”), contains the avoided item ( $x$ ), and thus will evoke it. Similarly, if a negative evaluation of anxiety is participating in actions with regard to it, anxiety will be elicited by those action, since anxiety is how humans respond to immanent negative events. In this part of ACT, a simple idea is put on the table: Conscious, deliberate, and purposeful control simply may not work very well with regard to the private experiences the client has been targeting. The following metaphor is designed to expose clients to the hopelessly rigged game deliberate control leads to in the world within:

“Suppose I tell you right now, ‘I don’t want you to think about. . . warm jelly donuts! You know how they smell when they first come out of the oven. . . . The taste of the jelly when you bite into the donut as the jelly squishes out the opposite side into your lap through the wax paper . . . the white flaky frosting on the top of the soft, rounded shape? Now it’s very important, DON’T THINK ABOUT ANY OF THIS!’ What just happened?”

In processing this metaphor (and similar metaphors or exercises), the client is asked to see whether he or she has been playing into a rigged game in attempts to control automatic thoughts, feelings, and memories.

*Cognitive Defusion and Mindfulness Techniques*

From an RFT perspective, the literal functions of language and cognition are not automatic or mechanical: They are contextual. Second-generation efforts to change thoughts can have a perverse effect: the  $C_{rel}$  events provided (e.g., “Don’t think this—instead, think that”) also serve as  $C_{func}$  events for the very thoughts being targeted (i.e., the change effort underlines and increases the importance of these thoughts themselves). Instead, ACT tends to alter  $C_{func}$  events so as to decrease the impact and importance of difficult private events. These cognitive defusion and mindfulness techniques erode the stimulus functions that occur through relational learning (Hayes & Wilson, 1994; Hayes et al., 1999).

The classic ACT defusion technique is the Milk, Milk, Milk exercise, first used by Titchener (1916, p. 425). It consists of an exploration of all of the

properties of a single word. For example *milk* is white, creamy, and so on. This word is then said out loud by the therapist and client rapidly for about a minute. In the context of rapid repetition, the word quickly loses all meaning and becomes just a sound. It is clinically powerful to repeat the exercise with a single word variant of a clinical concern or troublesome thought the client may have (e.g., mean, stupid, weak, etc.) (Masuda, Hayes, Sackett, & Twohig, 2004). If later a client is deeply entangled in a negative thought, the ACT therapist might simply say quietly, “Milk, milk, milk,” as if to ask the client to notice the process of thinking itself in the moment.

ACT sessions are often begun with mindfulness exercises, and they are used regularly throughout therapy. The Soldiers in the Parade exercise is an example:

“I want to do a little exercise that will help underline the difference between looking *at* thoughts, versus looking *from* thoughts. In a moment, I’m going to ask you to let yourself think anything you think. With each thought, imagine that there are little soldiers marching out of your ear and then in front of you, like a parade in front of a reviewing stand. The soldiers are carrying signs, and each thought is printed on a sign in the form of words or pictures. The task is simply this: Watch the parade and see how long you can go letting it flow by. If it stops for any reason—if you join the parade, leave the reviewing stand, become a soldier, or whatever—see if you can catch back up just a moment and see what happened right before the observation of the parade stopped.”

Clients are allowed a minute or two. For some clients, the parade will never start. For most, it will start and then stop. When either experience is examined, inevitably a thought occurred that the client “bought into” (e.g., the client will remember something that has to be done later and will begin planning or worrying). This exercise is often assigned as homework. The point is to begin to learn how to look at thoughts as thoughts rather than looking at the world through thoughts, and to learn how to detect the difference.

### *A Transcendent Sense of Self*

Difficult thoughts and feelings appear to threaten the self, and in the sense of self as a conceptualized object, they do. For example, anxiety threatens the evaluation, “I’m a calm person.” It is not realistic to ask clients to experience private events fully and without defense without providing psychological space within which that is possible. The first published ACT work was focused on how language itself provides a way to solve this problem through the continuity of consciousness that emerges from deictic relational frames such as I–you, here–there, and now–then (Hayes, 1984). RFT re-

search has since begun to confirm the view that these frames create a sense of perspective (Hayes et al., 2001; McHugh & Barnes-Holmes, in press). Perspective taking is psychologically critical because it forms a direct experiential basis for human spirituality (Hayes, 1984). “Here now” is always the perspective from which events are directly experienced and thus cannot be threatened by the difficult nature of psychological content.

Various exercises are used to draw this out in ACT, including the Observer Exercise (a variant of the self-identification exercise developed by Assagioli, 1971, pp. 211–217). A metaphor that helps explain self as context is as follows:

“It’s as if there is a chess board that goes out infinitely in all directions. It’s covered with different colored pieces, black pieces and white pieces. They work together in teams, like in chess—the white pieces fight against the black pieces. You can think of your thoughts and feelings and beliefs as these pieces; they sort of hang out together in teams too. For example, ‘bad’ feelings (like anxiety, depression, and resentment) hang out with ‘bad’ thoughts and ‘bad’ memories. Same thing with the ‘good’ ones. Normally, the way the game is played is that we select which side we want to win. We put the ‘good’ pieces (like thoughts that are self-confident, feelings of being in control, etc.) on one side, and the ‘bad’ pieces on the other. Then we get up on the back of the white queen and ride to battle, fighting to win the war against our own thoughts and feelings. But there’s a problem here. From this posture, huge portions of yourself *are your own enemy*. You’ve got to win; your life seemingly depends on it. But since time goes in one direction, not two, the pieces don’t actually leave the board. You still remember your pain; you still can think scary thoughts. So the battle just goes on and on. But what is you aren’t the pieces anyway. Maybe you are more like the board, and if you’re the board, maybe its possible to let the game go on without having to live inside it.”

### *Acceptance and Willingness*

Etymologically, acceptance means “to take what is offered.” In ACT, acceptance is not merely tolerance—it is the active nonjudgmental embracing of experience in the here and now. Acceptance involves undefended “exposure” to thoughts, feelings, and bodily sensations as they are directly experienced to be.

A wide variety of willingness and exposure exercises are used. What is important during these exercises is that the person let go of regulating private events and expose him- or herself to these events without the use of safety behaviors. This is a metaphor to explain the “letting go” quality of acceptance:

“It’s like jumping versus stepping down. If you jump from a book, you put yourself in space and let gravity carry you to the ground. The same exact motion would be involved in jumping from a sheet of paper, or the roof of your house, or an airplane. Now stepping down is different. In that case, you never put yourself completely in the hands of gravity. . . . You maintain some degree of control with your leg muscles. But stepping down only works in some situations. You can step down from a book, but you can’t step down from the roof of your house. So what we need to do is to practice jumping. We can pick the context, just like we can pick a book or a house to jump from. So we could pick the 7–11 or a big mall to go feel what it feels like to be anxious. Or we could go in for 1 minute or 15. But what we can’t do is be willing provided anxiety is below 8 on a scale of 1 to 10. That’s not acceptance; it’s not willingness; it’s not jumping. That’s still controlling. It’s stepping down.”

### *Values*

Values are chosen qualities of action that can be instantiated in behavior but not possessed like an object. ACT therapists ask their clients, “What do you want your life to stand for?” In this phase of treatment, a client is asked to list values in different life domains such as family, intimate relationships, health, spirituality, and so on. Various evocative exercises are used to develop more clarity about fundamental values. For example, the ACT therapist may ask the client to write out what he or she would most like to see on his or her tombstone, or the eulogy he or she would want to hear at his or her own funeral. Once values are clearer, concrete goals (achievable things or events) are identified that instantiate a valued path, and specific behaviors that might lead to these goals are described. Barriers to these actions are also identified. Almost always, these barriers are not so much situational as psychological, and these are dealt with through acceptance, exposure, mindfulness, and defusion. This feature distinguishes ACT from simple evocative therapies. The goal is not endless emotional wallowing. It is acceptance in the service of living a valued life.

### *Commitment*

As in DBT, the “acceptance and change dialectic” (Linehan, 1993) is a focus throughout ACT work. ACT uses concrete homework and behavioral exercises to build larger and larger patterns of effective action. Specific commitments are made in specific areas, generally starting small, but quickly expanding an ever-widening DAVE cycle: defusion, acceptance, values, and engagement. Generally, clients start with small steps, but they continue to watch for emerging larger patterns. The goal is psychological

flexibility, which involves taking full responsibility for these behavioral patterns: changing when change is needed, and persisting when persistence is needed. Thus, as its name implies, ACT is as much a change-oriented strategy as an acceptance-oriented one, but change is focused on areas that are readily changeable.

## **EMPIRICAL FINDINGS OF ACCEPTANCE AND COMMITMENT THERAPY**

This chapter is not the place to review a rapidly changing empirical area. However, a brief examination of some of the available process and outcome findings seems warranted.

### **Process Data**

From an ACT–RFT perspective, it is the repertoire-narrowing effects of cognitive fusion and avoidance that produce rigidity, since they prevent new contingency-shaped behavior and undermine healthy forms of extinction. Acceptance and defusion, in particular, have been examined in ACT process work. ACT has been shown to decrease the literal believability of negative thoughts. This seems to occur faster than in traditional CBT (Zettle & Hayes, 1986), and to predict ACT outcomes (e.g., Bach & Hayes, 2002; Hayes, Bissett, et al., in press). Acceptance has also been shown to be improved more rapidly in ACT than in comparison conditions (Bond & Bunce, 2000) and to mediate ACT outcomes (e.g., Bond & Bunce, 2000; Gifford et al., in press; Zettle, 2003).

It is worth noting that this analysis shares features of other accounts, such as Teasdale and colleagues' (2002) analysis of the impact of cognitive therapy (CT) and mindfulness-based cognitive therapy (MBCT), and Bouton, Mineka, and Barlow's (2001) analysis of the mechanisms of conditioning in panic disorder. Indeed, many of the other new behavior therapies also treat thoughts as thoughts, undermine avoidance, and focusing on new behaviors, including Behavioral Activation, DBT, MCBT, and modern interoceptive exposure methods (Barlow, 2002). Furthermore, in the earliest stages of therapy when clinical response is known to be particularly powerful (Ilardi & Craighead, 1994), traditional CT also helps clients distance themselves from their thoughts (cognitive distancing is one of the first steps in traditional CT approaches) and then to behave in different ways toward them (e.g., for purposes of "hypothesis testing"). Thus, there may be a commonality in some areas among the processes targeted by the new behavior therapies more generally, and a possible partial explanation for some of the empirical anomalies of the second wave behavior therapies.

### **Outcome Data**

A recent review of ACT (and DBT and functional analytic psychotherapy [FAP]) outcomes (Hayes et al., 2004) found effectiveness and efficacy studies in depression, psychosis, substance use disorders, chronic pain, eating disorders, work-related stress, and other problems. The literature is evolving rapidly, with the vast majority of published studies appearing since the publication of the first ACT manual (Hayes et al., 1999). Small randomized, controlled trials have shown ACT to be better than CT (Zettle & Hayes, 1986) or equivalent to group CT (Zettle & Raines, 1989) in depression. It has been found to be better than behavioral workplace modification training for workplace stress management (Bond & Bunce, 2000), and to produce dramatic reductions in rehospitalization among persons coping with positive psychotic symptoms (Bach & Hayes, 2002). It has been shown to be equivalent to systematic desensitization in dealing with math anxiety (Zettle, 2003), and to be superior to methadone alone when used in combination with methadone with polysubstance-abusing opiate-addicted individuals (Hayes, Wilson, et al., in press). It has been shown to be superior to nicotine replacement therapy (NRT) as a method of smoking cessation (Gifford et al., in press) and superior to cognitive-behavioral group therapy with behavioral measures of social anxiety (Block, 2002). A quasi-experimental effectiveness study of ACT has shown that ACT-trained clinicians produce significantly better coping outcomes in the full range of patients normally seen in outpatient settings, and do so more quickly and without as frequent use of medication referrals (Strosahl, Hayes, Bergan, & Romano, 1998). Many of these studies are small and thus preliminary, but the existing data are positive, both on outcomes and the underlying model of psychopathology and therapeutic change.

## **THE NEW BEHAVIOR THERAPIES**

The new behavior therapies have brought a host of new ideas in the behavioral tradition, including mindfulness, acceptance, interoceptive exposure, cognitive defusion, values, focus on the present moment, and so on. It is worth noting that none of these methods is eliminative. Their implicit message is that the literal, evaluative, analytical, avoidant functions that dominate in a normal human mind are just a few of many functions that could occur. Similar to Langer's (1989) analysis of mindfulness, flexibility seems to be a process goal of almost all these new methods.

Although this is new, it echoes the old-fashioned behavioral wisdom of a constructional approach (Goldiamond, 1974), the very basis of early functional, behavioral accounts. Humans are historical organisms. Short of a lobotomy, humans do not get rid of previously established automatic



functions so much as they add new ones (Wilson & Roberts, 2002). The language of reduction and elimination seems persuasive only because our conceptual focus and our measurement systems are themselves so narrow.

Mindfulness, acceptance, and defusion are not just different ways of treating traditionally conceptualized problems of depression or anxiety. They imply a redefinition of the problem, the solution, and how both should be measured. As with the even more ancient spiritual traditions from which many of these methods emerged (see Hayes, 2002a), the problem is not the presence of particular thoughts, emotions, sensations, or urges. It is the constriction of a human life.

This change is evolutionary as a matter of process—as all of the chapters in this volume show, behavior therapists are simply following the data. But it may well be revolutionary in its impact. It is truly new for empirical clinical approaches to embrace the kind of deep clinical and human issues that have previously been the province of nonempirical approaches. If the new behavior therapies continue down this road, the entire field of behavioral health seems bound to change in a fundamental way.

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