CHAPTER 3

Psychological Flexibility as a Unified Model of Human Functioning

In this chapter we introduce a unified model of human functioning and adaptability and show its clinical relevance. We believe that the model's six core features are broadly responsible for human adaptability—or, said inversely, for human suffering. We also provide some links to the relevant science, relating work done in ACT and RFT labs with work done in other domains of psychological science that bear upon the subject. In the next chapter we will show how these same processes can be used to formulate case and plan interventions.

As we define it, a unified model is *a set of coherent processes that applies with precision, scope, and depth to a wide range of clinically relevant problems and to issues of human functioning and adaptability.* Think of a fountain that you may have seen at a city park, one that is capable of providing continuously different patterns of water displays. Some of the displays shoot high in the air, while others interact through carefully sequenced firings of different spouts. Each display you see is designed to be unique; that is what makes the fountain aesthetically appealing. At another level of analysis, the fountain is undergirded by a common set of pipes, a small number of pumps and motors, and a common circuit panel. All of this hidden plumbing and electrical equipment is the foundation for everything the fountain is able to do. A small number of processes are capable of producing nearly an infinite number of different displays.

Similarly, in ACT, our focus is not on the myriad displays of human suffering (symptoms and syndromes, or collections of symptoms) but rather on the processes that control the whole show. The psychological flexibility

model that underlies ACT is focused on a limited set of coherently related processes that contribute to human adaptability and its opposite, human psychopathology and suffering.

THE GOALS OF A UNIFIED MODEL

As discussed in Chapters 1 and 2, the acid test of any treatment model is its *ability to lead to clinically meaningful interventions*. It is possible to generate broadly applicable protocols—and the evidence suggests that ACT has done that—but that alone cannot meet our definition of a unified model. It is also critical to demonstrate the following: (1) the processes that purportedly explain the impact of treatment in fact do so; (2) the key human processes that the model argues are relevant to outcome are indeed relevant; and (3) the components of intervention that are asserted to be important *are* in fact important. In other words, clinical psychological models succeed or fail not just based on outcomes but also on *the identification of mediational processes, moderators of outcomes, and key components, all linked to ongoing basic and clinical research*.

A unified model must also show that these same processes differentiate functional from dysfunctional members of the population. It is not enough to show that *clinical* populations have a particular response style—one also needs to show that healthier segments of the population differ in some observable way on the same response style. Another way to express this requirement is that *the model of treatment and the model of psychopathology must be integrated and linked to common core processes.*

ACT is based on a dimensional approach to clinical assessment that emphasizes the continuous nature of human behavior. A dimensional approach can add to confusion, however, if there are too many dimensions and they are not of key importance and not organized into a coherent whole. Therefore, a unified model *must select among the many such processes available and organize a smaller subset into a coherent perspective.* It is easy to observe this phenomenon. Suppose we started to organize human psychology by dimensional features willy-nilly, in turn adding such things as age, degree of religious commitment, degree of self-esteem, the degree of external or internal orientation, and so on. By the time this list reached double digits, it would be too complicated to be clinically useful. Without an adequate *underlying theory*, there would be nothing to prevent any such approach from attempting to assess literally scores of dimensions. Functional dimensional classification requires that one focus on likely dimensions of clinical relevance as derived through basic science. The functional contextual approach seeks utility by limiting their number, linking them to basic processes, and organizing them into a coherent model. We now

believe that the ACT model has developed sufficiently well to satisfy all of these criteria.

AN OVERVIEW OF A PSYCHOLOGICAL FLEXIBILITY MODEL

The psychological flexibility model is inductive in its nature and linked to basic human processes derived largely from laboratory science. By design, it is simultaneously a model of psychopathology, a model of psychological health, and a model of psychological intervention. In a hexagon-shaped Figure 3.1, we represent the six processes that contribute to psychological inflexibility: inflexible attention; disruption of chosen values; inaction or impulsivity; attachment to a conceptualized self; cognitive fusion; and experiential avoidance. Figure 3.2 shows the corresponding six core processes that produce psychological flexibility: flexible attention to the present moment; chosen values; committed action; self-as-context; defusion; and acceptance. The model's shape and focus on psychological flexibility have led to the tongue-in-cheek label the "hexaflex." For good or ill, the label seems to have stuck. If it makes you smile a bit to use the term, do not worry—it makes us smile a bit too, despite its serious purpose.

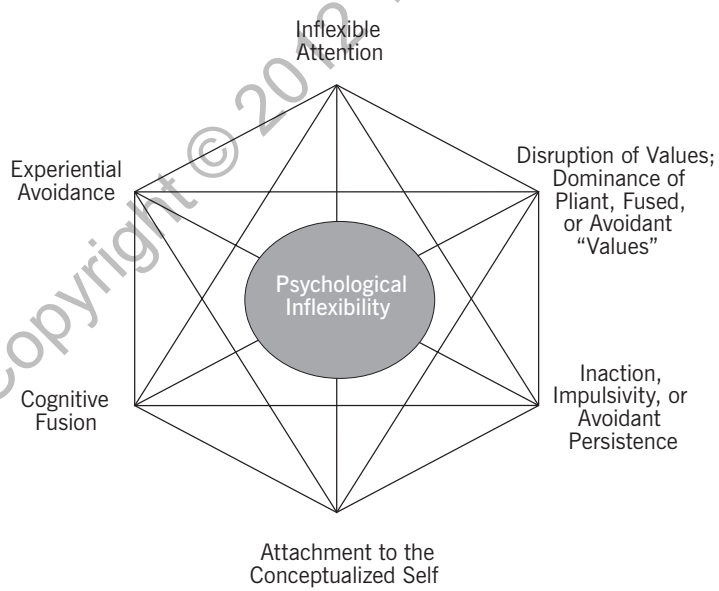

FIGURE 3.1. Psychological inflexibility as a model of psychopathology. Copyright by Steven C. Hayes. Used by permission.

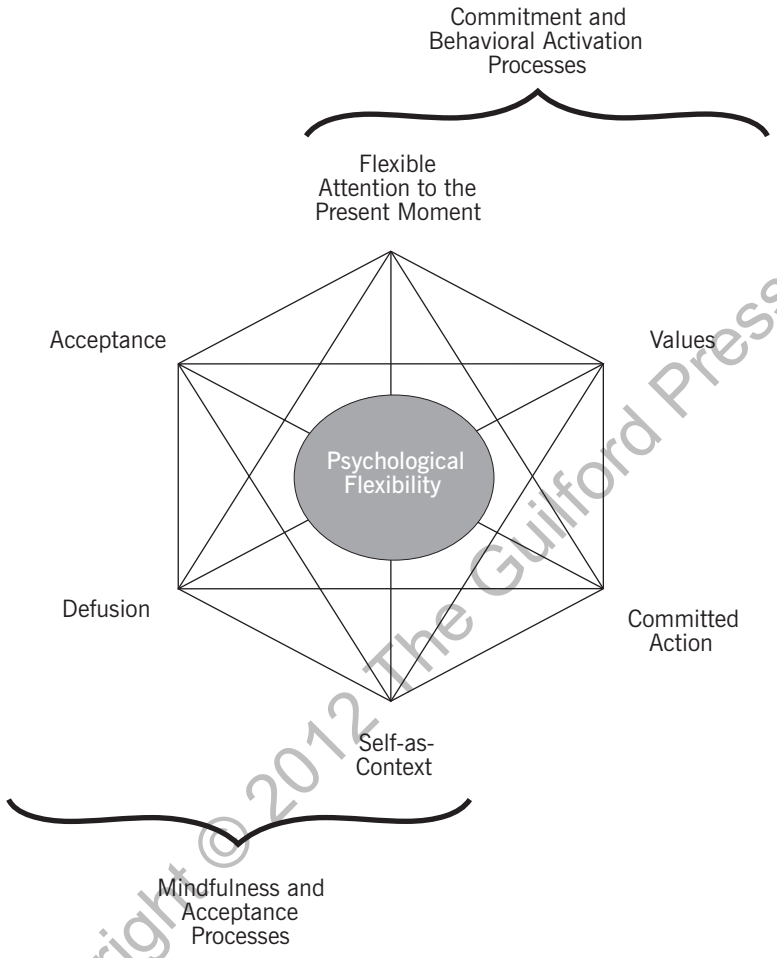

FIGURE 3.2. Psychological flexibility as a model of human functioning and behavior change. The four processes on the left are taken to be mindfulness and acceptance processes; the four on the right are commitment and behavior change or behavioral activation processes. All six working together are "psychological flexibility." Copyright by Steven C. Hayes. Used by permission.

Our major proposition is that these six core processes are responsible for promoting psychological flexibility and—in the absence of one or more of them—risks of psychological rigidity. Furthermore, it is our claim that psychological rigidity is a root cause of human suffering and maladaptive functioning. How many clients will you see in psychotherapy who are able to detach themselves from unworkable rules, to accept what cannot be changed inside and outside their skin, to live in the present moment and attend to what is relevant, to make contact with a deeper sense of self as a locus of perspective taking, and to choose and explicate closely held life values and organize their life's actions around those values? Few, if any, would be our claim.

The psychological flexibility model holds that pain is a natural consequence of living but that people suffer unnecessarily when their overall level of psychological rigidity prevents them from adapting to internal or external contexts (see Figure 3.1). Unnecessary suffering occurs when verbal/cognitive processes tend to narrow human repertoires in keys areas through cognitive entanglement and experiential avoidance. When people overidentify, or "fuse," with unworkable verbal rules, their behavioral repertoire becomes narrow, and they lose effective contact with the direct results of action. This response inhibits their ability to change course when existing strategies are not working. It also causes them to be more persistent in trying to analyze and understand their difficulty. Being "right" about what is wrong can become more important than living in a vital and effectual way. When people engage in experiential avoidance, their behavior comes under aversive control, that is, they are mainly trying to avoid, suppress, or escape from thoughts, feelings, memories, or bodily sensations. Avoidance causes further behavioral constriction and a gradual loss of contact with the positive consequences of responding. A cycle of avoidance can become dominant, in which the need to maintain avoidance increases as the "collateral damage" mounts (i.e., declining relationships, dashed hopes and dreams, etc.).

These patterns tend to overwhelm flexible attentional processes. For example, when people cannot get into the present moment in a flexible, fluid, and voluntary way and instead are preoccupied with the past or the future, they become easy targets for rumination, anxiety, depression, and the like. If they overidentify with their self-story or become rigidly attached to an unworkable view of self, they often end up behaving in ways that function as self-fulfilling prophecies. As a result, there is an unwarranted amplification of the impact of difficult aspects of one's prior history. These overly dominant processes also tend to interfere with the positive uses of human cognition, namely, constructing positive meaning and linking action to chosen consequences. Interference with these positive uses reduces motivation and inhibits values-based actions. When people

are out of touch with closely held personal values, their behavior is instead controlled by social conformity, attempts to please or placate others, or avoidance. When this behavior persists over time, major areas of life that produce a sense of health, vitality, and purpose stagnate. Instead, people begin to engage in withdrawal, self-isolation, or, conversely, they exhibit behavioral excesses such as drinking, drugging, cutting, overeating, chain smoking, and so forth. Collectively, these "negative hexaflex" processes can lead to a style of living that feels emotionally dead inside, as if the person is living on "autopilot," or a style filled with turmoil, angst, and self-focus. In either case, life is being lived, but it is not producing a sense of vitality, purpose, and meaning.

The psychological flexibility model seems on the surface to be extremely conventional: most human suffering is attributable to the mind, most psychopathology is indeed a "mental" disorder, and health requires learning to adopt a different mode of mind. What is unconventional is that ACT theorists approach mind with a technical appreciation of the nature of verbal and cognitive activity and a contextual behavioral approach to language. It is the *context* of verbal activity that is the key element in producing suffering—more so than the *content* of private experiences per se. It is not so much that people are thinking the wrong thing; rather, the problem is thought itself and how the wider community supports the excessive literal use of words and symbols as a mode of behavioral regulation.

The ultimate goal of ACT is to bring verbal cognitive processes under better contextual control and to have the client spend more time in contact with the positive consequences of his or her actions immediately in the present as part of a valued life path. The six "positive hexaflex" processes enumerated in Figure 3.2 collectively contribute to psychological flexibility and adaptive human functioning. These are the processes we try to enhance through ACT interventions.

Each of these core processes acts as a foil, or counteraction, to those that produce rigidity and suffering:

- To correct for the problem of overattachment to the contents of mental activity (fusion), ACT teaches the client to step back and see private events (thoughts, emotions, memories, sensations) for what they are (ongoing experiences to be had) and not what they say they are (literal truths that organize the world). This process is defusion. We "deliteralize" or weaken the functional dominance of literal, evaluative, rule-based responding. Thus, defusion is focused primarily on the verbal aspects of human experience.
- To correct the problem of experiential avoidance, ACT teaches the client to "make room for" unwanted private content without engaging in futile efforts to suppress, control, or escape from it and

moreover to explore the rise and fall of these difficult experiences with an attitude of genuine curiosity and self-compassion (acceptance). Thus, acceptance is focused particularly on the emotional aspects of human experience.

- To correct for the overattachment to and identification with one's self-story (attachment to a conceptualized self), ACT helps the client develop a stronger connection with self as an aspect of the "I–here–nowness" of experience. This observer perspective, or self-as-context, is used to provide a conscious foundation for exploring thoughts and feelings in a defused and accepting fashion.
- In place of rigid attentional processes that tend to carry people into the remembered past or imagined future, ACT attempts to establish flexible attentional processes that enable the client to come back to the present moment.
- If the problem is being disconnected from personal values or acting in ways that are inconsistent with one's values, ACT helps the client consciously opt for his or her values and connect with the positive qualities of the present that are intrinsically related to the situation (valuing).
- If the client struggles with an inability to act in effective ways or engages in impulsive acts or avoidant persistence, ACT helps the client link specific actions to his or her own chosen values (committed action) and helps the client build successively larger patterns of effective values-based actions, just as is done in traditional behavior therapy.

In actual clinical practice, clients seldom present with glaring deficits in all six of the core processes, which is why it is important to specifically assess each process before as well as on an ongoing basis throughout therapy. In actual practice, touching on one ACT core process almost invariably "activates" one or more of the other processes. From our perspective, this phenomenon presents the therapist with a golden opportunity, enabling him or her to use any identified strengths in the positive hexaflex to help the client correct identified weaknesses. Thus, as we elaborate further in Chapter 4, the hexaflex can simultaneously function as a case conceptualization and a planning or tracking tool.

THE CORE PROCESSES OF THE PSYCHOLOGICAL FLEXIBILITY MODEL

The six core processes of psychological flexibility—acceptance, defusion, the self-as-context, flexible attention to the present moment, chosen

values, and committed action—have emerged over nearly 30 years of basic and clinical research. Each plays a fundamental role in determining how well humans are able to adapt to the changing and often challenging circumstances of life. While each process is related to all the others, each is also more deeply interlinked with one process more than the others. It is useful to think of these three process pairs as response styles: Acceptance–Defusion, Present-Moment Awareness–Self-as-Context, and Values–Committed Action (see Figure 3.3). We use the terms *Open*, *Centered*, and *Engaged* to describe these core process dyads. Like a triad of pillars supporting a roof or three legs supporting a stool (Strosahl & Robinson, 2008), the three response styles have tremendous strength when properly aligned and functioning together. But if one or more legs is weak or out of alignment, the entire structure becomes wobbly and can collapse under even a very light load. Russ Harris (2008) embraces a similar idea in his "Triflex" model of psychological flexibility. The challenge of maintaining psychological flexibility is in creating an ongoing equilibrium among the three response styles and their components.

In the sections that follow, we address each of the six core processes of ACT, organized in terms of the three basic response styles—open, centered, and engaged—in that order. Later in this chapter we examine the

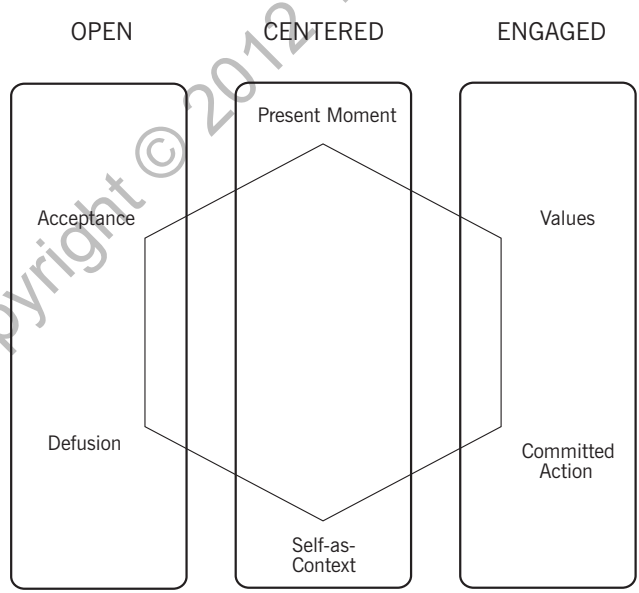

FIGURE 3.3. The three response styles that make up psychological flexibility. Copyright by Steven C. Hayes. Used by permission.

mediation, moderation, and outcome evidence for these processes and procedures.

Open Response Style: Defusion and Acceptance

Acceptance and defusion are key skills that support one's openness to direct experience. Defusion enables the individual to let go of needless entanglement with distressing, unwanted private events and experiences and to view them in a nonjudgmental way as merely ongoing mental activity. Acceptance unables the individual to engage the experiences more fully with an attitude of curiosity, to learn from them, and to make room for their occurrence. In the preceding chapter we discussed the verbal basis of two processes that can be repertoire-narrowing, namely, experiential avoidance and cognitive fusion. These two processes occupy the left-hand side of the negative hexaflex model (see Figure 3.1). If taking a rejecting and fused stance with respect to private experience is a cornerstone of pathology in the psychological flexibility model, being psychologically open is the remedy and a target for intervention.

Although discussions of ACT often begin with the subject of acceptance, we address defusion first because of the centrality of language and cognition in the psychological flexibility model and the key role of fusion in experiential avoidance.

Fusion and Defusion

Humans live in an intensely verbal world. This verbal emphasis is well recognized, but the exact processes involved are not often described. These processes, generally designated as "mental," are said to reside in our "minds." As a technical matter, when we speak here of "minds," we are referring to the individual's repertoire of relational (i.e., verbal or cognitive) activities, such as evaluating, categorizing, planning, reasoning, comparing, referencing, and so on. Although we use the word as a noun, *mind*, it is not a specific physical object. The "brain" is such a thing—replete with gray and white matter, midbrain structures, and the like—but the mind is a behavioral repertoire rather than a specific organ. *Minding* would be a more accurate, if cumbersome, term.

Verbal behavior is a wonderful tool for interacting effectively in and with the world, but it can overwhelm all other forms of activity. Once established, verbal relations occur with little continuous deliberate environmental support, since many of the consequences that maintain it—sensemaking, problem solving, storytelling, and so on—are virtually built into language and cognition themselves, once the skills are established. There is nothing in the world of human experience that "the mind" cannot reach. Even the

most obviously "nonverbal" event can readily become at least in part verbal for humans—simply by *thinking* about it.

In a technical sense, cognitive fusion is a process by which verbal events exert strong stimulus control over responding, to the exclusion of other contextual variables. Phrased differently, fusion is a kind of verbal dominance in behavioral regulation. Because the contexts that support verbal behavior are ubiquitous, we tend to behave verbally from morning to night, constantly describing, categorizing, relating, and evaluating. In our normal mode of mind, the functions of the world are fused with (etymologically, "poured together with") those deriving from thoughts and descriptions. As behavior becomes increasingly driven by derived stimulus relations, direct experience plays less of a role. Fusion makes it hard to distinguish between the two. We begin to respond to our mental constructions as though we are responding directly to a physical situation.

That is not necessarily bad. If we scream "Watch out!" to a person about to bump into something, there is little reason to want verbal stimuli to be balanced against other sources of behavioral regulation in that instant. Similarly, if you are preparing your taxes, allowing your mental focus to dwell entirely on the fit between the relevant numbers and the tax regulations does no harm. But when fusion is *not* helpful, it's important to have alternatives. Normal day-to-day living may never establish that alternative, since there is little to ensure that defusion skills are learned. *Bringing cognitive fusion under control by the client is one of the key purposes of the ACT approach.*

When we think a particular thought, what shows up are some of the stimulus functions of the events related to the thought. Suppose a client with panic disorder who is scheduled to give a presentation in a few weeks is becoming increasingly terrified. Suppose she (or he) imagines losing control while on stage in front of hundreds of people. In a fused state, this bad ending will seem immediately present and highly likely. The person may have fleeting images of going out of control or imagine the shock, horror, and derisive laughter her behavior would evoke in the audience. Anxiety is a natural response to immediately present aversive events, and as these fused thoughts occur, the thought itself may occasion panic symptoms. This reaction in turn perpetuates the imagined embarrassment even further. The fearful person who constructs a fearful environment and then fuses with that thought acts as though the fearsomeness of the world has been discovered, not constructed. The event imagined has not actually happened; however, the fusion of verbal symbols with the event allows some of the functional properties of the event to actually be present in a psychological sense. Without ever having to revisit the high-risk situation (e.g., the person may never have actually given such a presentation before), fusion enables the client to have already had a panic attack "while giving a

presentation." From an ACT perspective, it is not the thought itself that is the problem. Rather, the involuntary fusion with it and the resultant avoidance do the real damage.

To some degree, fusion is built into human language and its evolutionarily sensible functions. Language most likely evolved initially as a form of social control, cooperation, and danger signaling and then gradually expanded into a general problem-solving tool. As the saying goes, "It is better to miss lunch than be lunch." Language greatly expands our ability to detect and avoid danger and to marshal social support. It seems highly unlikely that language evolved to promote self-actualization, personal happiness, or aesthetic appreciation. No evolutionary advantage would be supplied by reminding organisms how safe and satisfied they are or by helping them to appreciate a beautiful sunset. A problem-solving mode of mind is a tremendously powerful tool. It at least partly explains why human beings took over the planet.

Unfortunately, this mode of mind is difficult to stop. Consider what happens when a person is lost. In that situation, the person looks to see how he or she got there and determines the distance between the current location and where he or she wants to be. Mark Williams (2006), one of the creators of mindfulness-based cognitive therapy, calls this approach a "discrepancy-based mode of mind." Most of the language functions involved in this process have little to do with the "here and now"; rather, they are based on prediction and comparison. Some of the thoughts we generate as part of this problem-solving process may be unproductive, but in this mode of mind the thoughts' content is more closely related to emotions and actions, and the thoughts' practical application is less of a focal point than their supposed truth. As a result, people get more entangled and live more in their heads. Indeed, the modern media seem to be encouraging a fused state of mind, as the public is increasingly exposed to emotionally charged judgmental talk. Perhaps as a result, our heightened access to electronic media predicts more stigma and bias (Graves, 1999).

Clinical Relevance of Fusion–Defusion

The foregoing types of fusion-related phenomena are the target of many forms of therapy. Indeed, they are precisely why the cognitive revolution occurred in behavior therapy in the first place. The main theorists of the time concluded that an undesirable thought → action relation should be modified by changing the form, frequency, or situational sensitivity of negative thoughts. While appreciating the severity of the problem, ACT recommends an alternative solution, namely, establishing more cognitive flexibility and undermining the contexts that automatically support thought → action relations. Cognitive flexibility is difficult to attain, short

of penetrating the illusion of language. This illusion, embedded in normal language processes, suggests that thoughts are what they say they are—that thoughts model reality, and so there is only one right and true answer to any given question.

As a clinical alternative to the traditional cognitive behavioral approach of identifying and reshaping the content of distorted thoughts, defusion methods attempt to alter the functional context of minding so that it is possible to appreciate the process of thinking and feeling, not just the content of those activities. In RFT terms, fusion involves contexts that enhance the transformation of stimulus functions for language and cognition. Think of defusion interventions as the clinical application of the opposite process. Defusion methods reduce the transformation of stimulus functions by altering the cues and contexts that support fusion. In order to alter the function, rather than the form, of thinking, defusion methods often help clients notice their act of verbally organizing the world in real time. Multiple or even contradictory thoughts might be noticed (or even deliberately fostered) without the necessity immediately to pick the correct one or to argue with the incorrect ones. Defusion gradually influences the content and style of thinking as well, although not through logical reprogramming but rather through exposure to new learning experiences being fostered by cognitive flexibility and openness.

Scores of cognitive defusion techniques have been developed, and we discuss many of them at greater length in Chapter 9. One classic ACT defusion technique we describe there is the *Milk, Milk, Milk* exercise, first used by Titchener (1916, p. 425). It consists, first, of initially exploring all of the physical properties of the single referenced word. For example "milk" is white, creamy, cold, and so on. The word is then repeated out loud and rapidly by both the therapist and client for about 30 seconds. In our example, the word *milk* quickly loses all meaning, and what is left over is a funny guttural sound. Try this on your own just to see what happens to your own relationship with the word *milk*. In clinical practice, we often follow this exercise with a similar one, this time using a single-word variant of a core clinical concern or troublesome thought that the person is ready to let go of (e.g., "mean," "stupid," "weak," "loser," etc.). If a clinically relevant thought is selected, research shows that the believability of the thought generally drops along with the distress it produces (Masuda, Hayes, Sackett, & Twohig, 2004; Masuda, Hayes, et al., 2009).

Why would this odd procedure work? It's because normal strings of words are a context in which words have meaning. Try this: if you do not know what "juzzwuzz" means, please clap your hands. We will wait for you. If you felt inclined to clap (or actually did), you are feeling the pull of cognitive fusion. "Clap" and "we will wait" are just ink on paper or electrons on a computer screen. In some contexts, "please clap your hands"

functions to produce specific hand actions, and even though this may not be a normal context for such actions (since reading a book for understanding does not normally require motor behavior), you can still feel the pull. There are ways to reduce the pull. If you say, write, or type "clap" 100 times fast, that function might be somewhat reduced. It might also be reduced if you noted that CLAP spelled backwards is PALC; or that upside down it resembles CTVb; or if you said it so slowly it took 10 seconds; or any of a dozen other procedures that might undermine the illusion of literality maintained by the language community and its practices. Our experience is that clients can readily generate new methods in therapy once the language illusion is penetrated and the nature and purpose of defusion are better understood. A recent study found a strong defusion effect on pain tolerance from having participants read a statement aloud while walking around the room. What was the statement? "I cannot walk around this room" (McMullen et al., 2008).

A context that supports giving verbal reasons for behavior tends to increase fusion, which is probably why reason givers are harder to treat (e.g., Addis & Jacobson, 1996). But we can reduce the incentive for reason giving in therapy. Even the positive psychological impact of cognitive reappraisal is dependent on psychological flexibility processes (Kashdan, Barrios, Forsyth, & Steger, 2006); so, even when we do need to deal directly with cognitive content, we can do so in a way that is sensitive to function and context. There are contextual alternatives to the cognitive problems we face as human beings.

Experiential Avoidance versus Acceptance

Relational frames are mutual or bidirectional. This characteristic readily turns self-knowledge into self-struggle because it is so automatic and natural to describe and evaluate our own history, physical sensations, thoughts, feelings, and behavioral predispositions. Verbal events related to aversive events are often experienced as aversive. Remembering a rejection is not itself a rejection, but we often take direct action against such private experiences, in effect turning them into the enemy. If clients are asked to look around a therapy room, they usually can find much to evaluate negatively with just a few minutes of effort. This ongoing stream of evaluation is applied as readily to ourselves as to our environment. But seeing an ugly door or an ugly rug does not affect us in the same way as does seeing an ugly thought or an ugly emotion because in the first instance you can leave the room. You can't leave your body or history. Language sets us up to struggle with the world within.

Experiential avoidance 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, frequency, or situational sensitivity of these experiences even though doing so is not immediately necessary. We introduced the term some time ago (Hayes & Wilson, 1994; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996) to highlight the dangers of a psychologically closed, rigid, and defensive approach to the world within. It has since become commonplace in the psychological literature, with hundreds of studies having been conducted. Terms such as *emotional avoidance* or *cognitive avoidance* are sometimes used rather than the more generic term when these are the types of private experiences that the person seeks to escape, avoid, or modify.

There is a growing body of evidence demonstrating that experiential avoidance is associated with a startlingly wide variety of psychopathology and behavioral problems (for reviews, see Chawla & Ostafin, 2007; or, for psychological flexibility more broadly, see Kashdan & Rottenberg, 2010). A meta-analysis (Hayes et al., 2006) showed that levels of experiential avoidance as measured by the Acceptance and Action Questionnaire accounts for 16–28% of the variance in behavioral health problems generally. Experiential avoidance shares some attributes in common with several other concepts in the contemporary literature such as emotion dysregulation (Gratz & Roemer, 2004), distress intolerance (Brown, Lejuez, Kahler, & Strong, 2002), intolerance of uncertainty (Dugas, Freeston, & Ladouceur, 1997), cognitive and emotional suppression (e.g., Wenzlaff & Wegner, 2000), and mindfulness (Bear et al., 2008), among others. Researchers are busy distinguishing among such concepts and comparing their relative contributions (e.g., Kashdan et al., 2006; Karekla & Panayiotou, 2011), but thus far comprehensive reviews seem to agree that experiential avoidance integrates key aspects of behavior that cut across these other concepts (e.g., Chawla & Ostafin, 2007).

The costs and dangers of experiential avoidance have been implicitly or explicitly recognized in most systems of therapy. Behavior therapists recognize that "the general phenomenon of emotional avoidance is a common occurrence; unpleasant events are ignored, distorted, or forgotten" (Foa, Steketee, & Young, 1984, p. 34). Client-centered therapy emphasizes the importance of working with clients to enable them to become "more openly aware of their own feelings and attitudes as they exist" (Rogers, 1961, p. 115). Gestalt therapy holds that "dysfunction occurs when emotions are interrupted before they can enter awareness" (Greenberg & Safran, 1989, p. 20). Existential psychologists focus on avoidance of a fear of death: "to cope with these fears, we erect defenses … that, if maladaptive, result in clinical syndromes" (Yalom, 1980, p. 47).

We are not arguing that experiential avoidance is always toxic. In some circumscribed contexts (e.g., working as an emergency room nurse),

avoidance of private events may even be adaptive (Mitmansgruber, Beck, & Schüßler, 2008). Rather than the avoidance strategies themselves, it is their indiscriminate application that has a greater impact on human adaptability (Bonnano, Papa, LaLande, Westphal, & Coifman, 2004). The problem is that avoidance strategies are highly resistant to extinction (Luciano et al., 2008) because they are maintained by reductions in aversive internal states such as anxiety, fear, sadness, or anger. Unfortunately, these avoided experiences often then quickly return and are experienced as more distressing and dominant than before. Because avoidance behaviors are learned under conditions of such aversive control, they are more likely to be applied rigidly, independent of the current context (Folkman, Lazarus, Gruen, & DeLongis, 1986). Thus, while experiential avoidance might work in some constrained situations, the strategy is likely to become overlearned and applied to contexts where experiential avoidance is ineffective or even harmful. For example, acquiring wealth might not be intrinsically harmful, but it is when linked to experiential avoidance (Kashdan & Breen, 2007).

The mutual or bidirectional nature of relational frames makes experiential avoidance basic to human existence. Imagine that a survivor of sexual trauma is asked to describe that trauma. In so doing, there will be a transformation of stimulus functions between the report and the trauma. When the trauma survivor describes what happened, some of the original functions of the event will appear. Thus, the telling of the story will itself be experienced as aversive—it hurts to tell about painful experiences.

Human emotions that are negatively evaluated or that emerge from aversive events also tend to be avoided. Anxiety, for example, is a natural response to aversive events. In nonverbal organisms, anxiety is not itself bad because the response and the event that produces it are not mutually related. There is nothing in the animal experimental literature to suggest that nonverbal organisms naturally avoid their *responses* to aversive events; rather, they avoid the aversive events themselves (or situations that reliably predict them). Their emotional responses occur after aversive events or their correlates—they do not predict the arrival of these events. But human language is bidirectional, and that is enough to put a target on the back of any difficult emotion. Anxiety is bad. Getting rid of it is good.

The natural tendency toward experiential avoidance is also amplified by the verbal community. Seeing negative emotion in others is an aversive to each of us. Parents and others have long used pliance to reduce children's expression of negative emotion (because it is aversive), but often they say they are asking the child to change the emotion itself, not just its expression. For example, fearful children are told, "Go to sleep! There is nothing to be afraid of!" and will probably conclude that they can and should voluntarily eliminate fear. Negative emotions per se will be nominated as the bad actor. Children are told, regularly and often, that they

can and should control negative affective states. Even babies are often evaluated according to how little they express negative affective states (e.g., "She's such a good baby, she never cries"). Punishment and reinforcement are frequently doled out according to the ability to control and suppress at least the outward signs of aversive emotional states ("Stop crying or I'll give you something to cry about"). Siblings and schoolmates support the ongoing purposeful control of thoughts, memories, or emotions. Statements such as "Don't be a cry-baby" or "Just forget about X" will be backed up by a variety of socially mediated consequences (e.g., ridicule, being shamed, admiration for "sucking it up").

Modern media have greatly increased our exposure to horror and trauma while at the same time overtly supporting experiential avoidance strategies, whether in the form of a pill, a beer, a glitzy car, or simple escapism. What is going on here is the social extension of a psychological process. The process is not new—it is just promoted more effectively in the Internet age.

Clinical Relevance of Experiential Avoidance–Acceptance

The clinical relevance of the avoidance process is clear when one considers that most clients come to therapy complaining of emotions and, implicitly or explicitly, concerned that they cannot control them. Common clinical complaints such as "I can't control my depression" or "I'm too anxious" take this form. But the reality is that private events are poorly regulated, and the struggle to control or change them can easily be detrimental because it can become suppressive and repertoire-narrowing.

The conscious and deliberate avoidance of private events is highly likely to fail in several situations often encountered in clinical work, such as in the following examples.

1. *The process of deliberate control contradicts the desired outcome.* There are several examples of this situation in which avoidance produces the opposite of its stated goal. When subjects are asked to suppress a thought or emotion, they subsequently show an increase in this suppressed thought or feeling as compared to those not given suppression instructions (see Wenzlaff & Wegner, 2000). The rebound is greatest in contexts in which the suppression took place or, alternatively, while in the same psychological state that prevailed when the suppression originally occurred.

There is disagreement about why this phenomenon occurs, but suppression is well known to increase the salience of cues related to the suppressed item. In addition, suppression rules inevitably reference the item to be suppressed. "Don't think of red cars" contains the words *red cars*, and even mentioning them inclines one to think of them. Often suppression

rules contain explicit or implicit consequences that themselves bring the suppressed item to the fore. The warning or threat "Don't be anxious or else your life will be over" is likely to elicit anxiety in much the same way as a person walking up with a gun and saying, "Your life is over."

2. *The event to be controlled is not rule-governed.* Private events that are conditioned directly are not readily eliminated by verbal rules. In these circumstances, attempts at purposeful rule-based control may be futile because the underlying process is not verbally regulated. The event might change—but not necessarily in the intended way. For instance, suppose a person is extremely distressed about a memory of a difficult panic attack and tries to do everything to eliminate it. Memories are often spontaneous events triggered by a wide range of stimuli and are unlikely to go away, at least not in a healthy fashion. The strategies required to suppress such events entirely are nearly always self-destructive (i.e., alcohol- and drug-based numbing) and eventually produce difficulties in their own right.

3. *Avoidance is possible, but accomplishing it entails significant costs.* Suppose a memory is avoided by avoiding all situations that might give rise to it. This approach might reduce the frequency of the memory, but it might also horribly limit the person's life. For example, a survivor of sexual abuse or domestic violence might avoid *all* intimate relationships.

4. *The event is not changeable at all.* Sometimes experiential control is put in the service of unchangeable events. For example, a person may take the view that "I can't accept that my dad was killed" and will consume drugs to ease his or her grief. Grief is a natural reaction to such losses, but no amount of drug consumption will alter either the situation or the loss. No effort to reduce or alter private events is called for here. When an unchangeable loss occurs, the healthy thing to do is to feel fully what one feels. That process will include loss and grief. It may include many other things as well, such as laughter over the funny things that person did, or appreciation for what they created in life. The issue is one of flexibility.

5. *The change effort itself is a form of behavior contradictory to the goal of the change effort.* The behavior of controlling something itself has meaning. Sometimes what it means is the opposite of its purpose. A person trying hard to be more spontaneous is not really being spontaneous at all. Confidence is another good example, given that so many clients lack it, want it, and seem unable to achieve it. The etymology of the word *confidence* helps to show why. *Con-* means "with" and *-fidence* comes from the Latin *fides*, which is the root of the words *fidelity* and *faith*. "Confidence" literally means "with fidelity" or "with faith"—in short, it means being true to oneself. The act of running from scary feelings in the effort to feel more confident is not a confident action because that very act has no self-faith or self-fidelity. When frightening feelings are present, the most functionally confident action one can take is to feel them fully. In other words, experiential acceptance is the *behavior* of confidence.

The foregoing situations are all contraindications for deliberate control over experiential content as a coping strategy. Human emotional responses are just echoes of our own history being brought into the present by the current context. If our reactions are rooted in our history and our reactions are our enemies, then our own history has become our enemy. There are no good technologies for removing a person's history, at least not selectively. Time and the human nervous system move in one direction—not two—and new experiences are always *added*, never *subtracted*. In order to avoid automatic emotional reactions, we have to distort our lives in such a way as to be psychologically out of contact with our own histories. That is why experiential avoidance leads not only to restricted negative emotions but to a lack of positive emotions (Kashdan & Steger, 2006) and a lack of healthy emotional differentiation and flexibility (Kashdan, Ferssizidis, Collins, & Muraven, 2010). The alternative, though difficult to implement, is to turn around and embrace one's immediate experience in a nonjudgmental way and without struggle. This very act may in turn gradually alter emotions—but in an inclusive and open way in which all aspects of one's history are welcome to come along for the ride.

Acceptance, as we use the term, refers both to behavioral willingness and psychological acceptance. Willingness is *the voluntary and values-based choice to enable or sustain contact with private experiences or the events that will likely occasion them*. Psychological acceptance is *the adoption of an intentionally open, receptive, flexible, and nonjudgmental posture with respect to moment-to-moment experience*.

Without willingness, acceptance in the sense we mean it is unlikely to be present. Acceptance is not resignation or tolerance—it is an active process. Harris (2008) is sensitive to the distinction when he uses the term *enhancement* instead of *acceptance*. Indeed, we use that term clinically, especially to keep *acceptance* from leading to a passive quality (more like tolerance) that is not related to positive health outcomes (Cook & Hayes, 2010; Kollman, Brown, & Barlow, 2009). The linkage between *willingness* and *acceptance* is so great that these terms are often used as synonyms in the ACT literature, but a useful distinction can be made. For example, a client can be willing (e.g., a person suffering from social phobia may enter a social situation on purpose) and yet not practice acceptance (i.e., the person immediately tried to suppress anxiety when it appeared).

Acceptance is not readily rule-governed. Instructions to adopt an attitude of openness, curiosity, and flexibility normally carry a problem-solving purpose with them, which is exactly what acceptance is not. Clients may even initially try to use "acceptance" as yet another strategy to control or eliminate unwanted psychological events ("If I just let my experience be there long enough, it will go away"). When acceptance is linked to this kind of problem-solving mode of mind, it is not acceptance at all. That may be one reason why acceptance appears to require metaphors, exercises, and

shaping to be learned rather than instructions simply to be given (McMullen et al., 2008).

Centered Response Style: The Present Moment and Self-as-Context

It is not possible to be open and engaged in life without also being centered in consciousness and in the social, physical, and psychological present. The center column of the hexaflex functions like a hinge of conscious and flexible contact with "the now." Acceptance and defusion, on the one hand, and values and action, on the other, are based on the choices of a conscious person behaving in the present context. Therapy almost always begins with the centering of two people into a relationship. Conscious and flexible attention to "the now" empowers the person to activate defusion and acceptance skills when they are called for or to engage in value-based actions when they are needed. The ability to sweep back and forth between these is the touchstone of psychological flexibility, and it is empowered by centering processes.

Being Absent versus Flexible Contact with the Present Moment

The more time one spends in the problem-solving mode of mind, the less time one spends making contact with the "here and now." Clients who are not able to contact the here and now typically have difficulties in altering their behavior to fit the changing demands of their social context. Contact with the present moment involves attending to what is present in a focused, voluntary, and flexible fashion. Some external events exert so much stimulus control over behavior that contact with them is no longer fully voluntary, flexible, or focused. If a gun went off in the room you are in right now, the startle response would be quite predictable and inflexible. There might be a monk somewhere for whom that would not be true, but for most people it is. Fortunately, startle responses of that kind have little cost. Other external events can also induce inflexible responses, as any parent of a child mesmerized by a television show or video game can tell you. Internal thoughts, feelings, memories, bodily sensations, urges, and dispositions can have a similar dominating effect, and their impact on flexible attentional processes can be costly indeed. A key principle of human adaptability is that to respond effectively to natural contingencies the person must be psychologically present to make direct contact with those contingencies.

The only time that anything happens is in the present. The present is all there is. In that context, in a certain sense it is a bit odd to talk about "contact with the present moment" as if there is an alternative. The

present is always present; so, contact with anything is contact with the present moment. The alternative is a psychological one based on verbal functions: people can seemingly "disappear" from the moment and instead get "lost" in the process of minding. Symbolic meaning always lags at least a bit behind direct experience. Consider the words *I am speaking of now.* The "now" of me speaking is not the same "now" as a listener understanding the sentence or even the same as me finishing the sentence. Contrast this experience with direct perceptual experiences, which are always in the now. When we enter into the world of verbal meaning, we immediately risk losing contact with the present. That risk is much enlarged whenever language is used for problem solving.

Solving problems involves considering how the past led to the present in order to create a preferred future. Consider fusion with an emotional thought such as "Why do I feel like this?!" "Why" draws attention to the past and future, and not in a flexible way. An answer is demanded; possibilities have to be generated and weighed. "This" suggests the query is present-focused, but it is really referring to a present feeling in comparison to an imagined state that might be felt in some place and time ("this *and not that*"). Learning to attend to the present requires breaking through all of these automatic and habitual processes of attentional inflexibility. Rigid attention and failure to come into the present has been associated with many kinds of problems, including trauma (Holman & Silver, 1998), rumination (Davis & Nolen-Hoeksema, 2000), and pain (Schultze et al., 2010), among others.

It is common to think of attention as a thing that is allocated, much as money is spent, but in a behavioral sense attending is just interacting with something. It makes more sense to think of attention as a kind of general skill. It is possible to learn to interact with present events in a way that is focused, voluntary, and flexible irrespective of the specific events. Most people can interact this way with some things but not others, and often the difference is not voluntary but merely habitual. Psychological flexibility involves the ability to exercise attentional control even in situations that are complex, evocative, or intensely social in nature. Imagine a socially anxious person who is about to give a public speech and is mentally cycling through fearsome thoughts about potentially disastrous outcomes. The stimulus control of the thought is overwhelming, and a vast number of other events are crowded out. A present-moment focus might initially look more diffuse or varied, but opting for that alternative can set the stage for voluntary focus. The person might note a frightening thought, but at the same moment the person might also notice what it feels like to breathe in and out, or notice the rustling of the audience, or note the urge to make a difference and contribute to others. The thought is just one of several events occurring. The person might then be able to focus on what is

important—for example, on how to contribute by making a careful verbal argument in the next part of the speech. If frightening thoughts intrude, this same process of expansion, acknowledgment, and focus might enable more sustained attention to the speech.

There is evidence that such focused, voluntary, and flexible attentional processes can be taught and learned (e.g., Baer, 2003, 2006). Contemplative practice is, in part, training in a present-moment focus as we mean it here. For example, imagine a person who is closely attending to their breathing as part of a mindfulness exercise. A few seconds later, another event (say, a thought about what is happening at home) might grab one's attention, but then attention can be redirected gently to the breathing occurring now. A problem-solving mode of mind is not required to engage in this type of activity.

Minds hate unemployment. Anyone who has done a silent retreat that lasts for days knows how the mind will go on extinction bursts (a temporary increase in responding when a reinforcer is withdrawn), coming up with wonderful and creative ideas, or worries, or physical concerns, and so on—all demanding that they be given attention. In retreats of this kind, the person is told, when they notice such a mental rush coming on, to bring their attention back to their breath. In other words, steps are taken to keep that fused, problem-solving mode of mind on extinction. The mind can be almost diabolical in luring people into a fused problem-solving mode of mind. For example, the mind might kick in and say "I'm not doing it right" or (even more alluring at times) "Boy, I'm doing a good job meditating today!" These thoughts could be noticed and attention brought back to the breath but if the next response is "What was it my meditation instructor said earlier?" or "I hope I can keep getting better," then "the bird has already flown the coop"—that is, attention has been diverted from the present and noticing thoughts in the present when they occur and, instead, directed into a fused language stream. The solution to this conundrum is practice—practicing noticing and gently redirecting attention. Over and over again, small sequences of doing so teach attending as a general skill above and beyond the content of experience.

As a scientific matter, we know that acceptance and mindfulness methods can significantly alter basic attentional skills (Chambers, Chuen Yee Lo, & Allen, 2008; Jha, Krompinger, & Baime, 2007). Indeed, mindfulness-based cognitive therapy originally was going to be named "attentional control therapy," or ACT (how confusing that would have been!). Metacognitive therapy (Wells, 2008) has developed many clever methods for teaching attention regulation skills. ACT (acceptance and commitment therapy) providers are willing and eager to embrace these developments because they are entirely consistent with the psychological flexibility model (e.g., Paez-Blarrina et al., 2008a, 2008b).

Attachment to a Conceptualized Self versus Ongoing Awareness and Perspective Taking

Psychology has a long if somewhat murky history of attempting to develop and test theories of self-experience. Terms such as *self-concept* or *self-esteem* have been used in many ways, often tied to trait explanations of behavior. Generally, these theories emphasize self-experience as a kind of "thing"—much as one might treat personality attributes as a thing. Many therapeutic traditions emphasize the need to alter the self-concept as a way of promoting psychological health. This point of view implies that the self-concept is directly accessible via verbal behavior and is responsive to direct or rational interventions. For example, low self-esteem may be thought to be the result of illogical thinking (and so forth).

While our clients are often very familiar with their verbally constructed reports of self, they are much less familiar with ongoing self-awareness and even less in contact with the more spiritual aspect of self—the perspective-taking self based on the "I/here/nowness" of conscious experience. ACT distinguishes among three major types of "self-experience" (Barnes-Holmes, Hayes, & Dymond, 2001; Hayes & Gregg, 2000; Hayes, Strosahl, et al., 1999b). More types surely exist, but we are interested here only in those forms of self-relatedness that produce various types of self-knowledge. Those three types are the conceptualized self (or self-as-content), ongoing self-awareness (or self-as-process), and perspective taking (or self-as-context).

THE CONCEPTUALIZED SELF

When children begin to acquire language, they are taught to categorize themselves and their own reactions. They are boys or girls, happy or sad, hungry or not. Two things happen as a result of such training. First, children learn to differentiate and categorize their own reactions and behavioral dispositions—the basis of self-awareness—weaving the various features of their lives into integrated stories—the basis of a self-story. Second, they learn to make verbal reports from a consistent perspective and to distinguish that perspective from the perspective of others.

The conceptualized self is the direct by-product of training in naming, categorization, and evaluation. It is the type of self-relatedness that we are most likely to be fused with. We humans do not merely live in the world—we interact with it verbally and cognitively. We interpret it, build narratives about it, and evaluate it. Clients invariably have formulated their personal characteristics into what Adler designated a "private logic." They have told stories, formulated their life history, defined their dominant attributes, evaluated these attributes, compared their attributes

to those of others, constructed cause-and-effect relations between their history and attributes, and so on. As described in Chapter 2, the derived stimulus relations of language can readily dominate other behavioral processes.

In the problem-solving mode of mind, "self" is a kind of conceptualized object. People describe themselves in terms of their roles, history, dispositions, and attributes, such as "I'm a nice guy" or "I'm depressed" or "I'm handsome." A myriad of such statements come together as a kind of story (or set of stories) of who we are. "I am like the way I am because I was abused," or "I'm a critical person, like my father." A simple phrase, such as "I am a person who … ," can generate dozens, even hundreds, of these apparently accurate self-descriptions. While it is easier to speak of the conceptualized self in the singular, it is useful to remember that there are many versions constructed to fit the social purposes of various life contexts. For example, if urged to "Tell me a little bit about yourself," a person's self-story can vary widely, depending on whether the questioner is a human resource specialist at a job interview or a new acquaintance at a social get-together.

Many things are embedded in the self-stories we tell: evaluations, causes and effects, emotions, and reactions to the story. Many of these features are broad and difficult to change. Historically based explanations of cause-and-effect relationships, when viewed through language, are seen as "facts." Other members of the verbal community support these "facts"—in part because they too have a self-story based on "facts" that may be drawn from their histories. Over time, facilitated by fusion, we become wedded to the process of self-reflective categorization and evaluation, almost as if these stories define who we are. In this fused state, any threat to the story is a matter of life and death. We try to live up (or down) to this constructed view of ourselves. We hide our secrets from others or even ourselves. We try to live inside the stories, be they grand or horrific. We try to become what we say we are. The ego has landed!

Several factors promote the verbal dominance of this type of self-knowing. First, derivation is part of relational responding. Among other implications, this observation means that relational networks that are consistent are inherently more self-supportive because each part of the network can be used to derive other parts that may have been weakened over time. Cognitively impaired persons can readily confabulate on this basis, with fragments of a self-story that are known used to fill in gaps that are not known. Second, we have a massive history of learning to detect and maintain consistency. The goal of sensemaking is central to a problem-solving mode of mind, and it seems only "rational" to develop a consistent, socially conforming account of who we are and how we got to be that way.

Third, the social community not only demands story telling of this kind but also expects some correspondence between what occurred and what one says, and what one says and what one does. Consequences are doled out accordingly. The social community calls this "being right" or "knowing yourself." From an early age, being right and showing that you know yourself evokes powerful consequences. Fourth, phrases such as "I am a person who … " are assertedly about issues of being, as if "I am alive" and "I am kind" are the same sorts of statements. Via frames of coordination (instead of hierarchy so that the self *contains* these things), "I" comes to be in the same verbal class as these conceptualized attributes, a process spiritual traditions call "attachment."

Finally, when a person identifies with a particular self-conceptualization, alternatives to it are less likely to be seen. Inconsistencies can seem almost life-threatening. The relational frame here seems to be "me = conceptualization of me" and its entailed derivative "threaten conceptualization = eliminate me." Through these frames of coordination, we are drawn into protecting our conceptualized self as if it were our physical self. Perhaps for that reason, events that threaten the conceptualized self can evoke strong emotions and lead to heightened experiential avoidance (Mendolia & Baker, 2008), presumably because of the need to maintain consistency within the self-narrative.

In ACT, the conceptualized self (or selves) is seen as highly problematic in that it can interfere with psychological flexibility. Fusion with the conceptualized self can lead to an attempt to maintain consistency by distorting or reinterpreting events if they seem inconsistent with the self-story. If a person believes him- or herself to be kind, for example, there is less room to deal directly and openly with instances of cruel behavior. If a person believes him- or herself to be incompetent, there is less room to acknowledge skills. In this way, the conceptualized self fosters self-deception, which in turn makes it even more resistant to change since confronting that process means confronting the deception.

Mainstream empirical clinical psychology has often encouraged an emphasis on changing the conceptualized self on the grounds that people with mental health problems often judge themselves too severely. Unfortunately, such interventions can produce weak or counterproductive results. Indeed, comprehensive reviews of the scientific literature show that deliberately boosting positive self-image through therapeutic interventions or school programs is as likely to promote unhealthy narcissism as it is improved outcomes (Baumeister et al., 2003). In a particularly sad twist of fate, self-affirmations turn out to be helpful only for those who already have high self-esteem. If used indiscriminately by those who most need them, positive self-statements ("I am a lovable person") are actively

harmful (Wood, Perunovic, & Lee, 2009). In ACT, the goal is not to alter the content of the self-story directly but to weaken the attachment to it. It is that overbearing attachment, we argue, that creates harm because it makes behavior more narrow and rigid, reducing psychological flexibility.

SELF-AS-ONGOING-AWARENESS

Self-awareness is important in therapy and closely allied with a healthy and psychologically vital life. This perception is true in part because much of our socialization about what to do in life situations is tied to an ongoing process of verbal self-awareness. Emotional talk is perhaps the clearest example. Anger, anxiety, or sadness are quite varied in the histories that give rise to them, but within each they are quite similar in their social and psychological implications. An individual who is not able to be aware of ongoing behavioral states cannot address the highly variable and volatile circumstances that daily life presents. Consider, for example, a young girl who has been sexually abused for many years by her father. Suppose that during this entire time period expressions of emotion associated with this aversive experience were reinterpreted, ignored, or denied by siblings, relatives, and parents. For instance, the perpetrator might have tried to convince the child that she actually was not upset when in fact she was upset, or that she should feel loved when in fact she emphatically did not feel loved. Given such a history, the child's ongoing self-awareness might be distorted or weakened, since many conventional verbal discriminations had been undermined; in other words, the child might not "know" how she felt—in the sense of being able to use words that accurately describe feeling states. Such a situation would not mean that she was not having intense emotional experiences but rather that she couldn't employ conventional verbal symbols to understand, communicate, respond to, and self-regulate her emotional experiences. In some deep sense, the person would be flying blind psychologically until this deficit was corrected (such as in the context of a therapeutic relationship that helped the person develop more normative self-awareness).

In terms of the psychological process involved, the basis for self as ongoing awareness is simply ongoing verbal description (what Skinnerians label as "tacts"). The conceptualized self involves integrating observations and descriptions into an evaluative self-story. In contrast, self-as-process is based on the simple relational actions of noting what is present, without fusion or needless defense. It is this latter sense of self that is fostered through ACT interventions.

From a behavioral point of view, self-awareness consists in responding to one's own responding. Skinner (1974) used the example of seeing. Most nonhuman animals "see," but humans uniquely also see that they see.

> There is a … difference between behaving and reporting that one is behaving or reporting the causes of one's behavior. In arranging conditions under which a person describes the public or private world in which he lives, a community generates that very special form of behavior called knowing. … Self-knowledge is of social origin. (p. 30)

The social/verbal community makes self-knowledge important by requiring answers to such questions as "How are you feeling? What do you like? What happened to you yesterday? Where did you go? What did you see?" As Skinner says, "It is only when a person's private world becomes important to others that it is made important to him" (Skinner, 1974, p. 31).

Clinically speaking, the skill of learning to describe what you feel or think can easily be impaired by living in emotionally impoverished environments that fail to pose any questions, or dysfunctional social environments that insist on providing answers that do not fit the person's experience, or environments that encourage experiential avoidance so that the individual primarily has distorted contact with distressing private experiences in the first place.

SELF-AS-CONTEXT

The final aspect of self-relatedness is the one that is most often ignored in Western culture, namely, self-as-context, or perspective taking. The psychological literature contains numerous terms and concepts that allude to this aspect of self: a transcendent sense of self, the observing self, noticing self, continuity of consciousness, pure consciousness, pure awareness, and others. Spiritual and religious traditions similarly cite a variety of relevant terms: spirituality, a "no-thing" self, big mind, wise mind, and so on. The multiplicity of terms used to describe this type of experience reflects how far removed it is from the problem-solving mode of mind. We are speaking of an aspect of self that metaphorically cannot be looked at but instead must be looked *from*. From the inside out, it is seemingly not an "it" at all, and having multiple names reflects the challenge of naming a process that has no "thing-like" properties that one can readily detect. It is not possible to contact fully the limits of consciousness consciously.

It is one of the paradoxes of life that the very existence of this sense of self—so key to psychological liberation—is but a side effect of the same language processes that create human suffering. Children begin to acquire self-awareness by being asked about themselves and others: e.g., "What did your sister eat yesterday?" They are asked about the present, past, and future; and about things happening here, there, and virtually everywhere. In order to give consistent verbal reports, children have to develop a sense of perspective—a point of view—and to distinguish their own from that

of others. Even as the content of these descriptions begins to weave a self-story—which can be limiting—the sense of perspective is growing—which can be liberating.

The key verbal relations in the development of perspective taking are "deictic," which means "by demonstration." Most verbal relations can be modeled initially by the formal properties of related events. You do not need to know the perspective of the speaker to instruct someone on which of two objects is physically larger, for example. When a child learns that "Dada" is bigger than the baby, the initial comparative relation is in the physical set. Only later will the child need to go through the harder task of making that relation arbitrarily applicable, as when learning that "Dada" is also much older than the baby. Deictic relations are not like that because they make sense only relative to a perspective; so, they have to be taught in a different way.

Consider the relation of "here" versus "there." Much to the confusion of young children, you cannot model "here/there" with physical objects. You have to learn it by demonstration. Suppose Mom has a box and the child has a ball. The child needs to learn to say "The ball is here, the box is there" even though Mom at the very same time would be saying "The box is here, the ball is there." If the child ran to where Mom was standing, "there" would suddenly become "here" and the place left behind would now be "there," not "here." This relationship is learned over hundreds if not thousands of examples; what is consistent across examples is not the *content* of the answer but rather the *context*, or perspective, from which the answer occurs. That is the case with all other deictic frames, such as I/you, we/they, and now/then.

Over the past few years RFT researchers have learned a great deal about how perspective taking happens, how to measure it, and how to produce it. The procedure used to teach deictic relational frames is quite clever. Take the three key deictic relations of I/you, here/there, and now/then. Deictic tests start with such simple questions as "I have a box and you have a ball. What do you have?" Then they progress to a question that demands contextual flexibility. An example of a simple-reversal question is "I have a box and you have a ball. If I were you and you were me, what would you have?" The questions can get more complex. An example of a double-reversal question is "Today I have a box and you have a ball. Yesterday I had a pen and you had a cup. If I were you and you were me, and today was yesterday and yesterday was today, what do you have today?" Even more complex questions are possible (e.g., triple reversals) by combining multiple deictic frames. Questions can be carefully worded to tap many different combinations of times, places, and persons as well as important types of content (e.g., objects, emotions, behaviors).

Research has shown that deictic relations assessed in this way gradually strengthen across childhood, becoming more useful in middle childhood

(McHugh, Barnes-Holmes, & Barnes-Holmes, 2004). They are key to understanding that other people have "minds" and that one's own perspective is different from the perspectives of others. Deictic frames have been shown to be central to "theory of mind" skills (McHugh et al., 2004), such as understanding deception (McHugh, Barnes-Holmes, Barnes-Holmes, Stewart, & Dymond, 2007a) or that others can have false beliefs (McHugh, Barnes-Holmes, Barnes-Holmes, & Stewart, 2006; McHugh, Barnes-Holmes, Barnes-Holmes, Whelan, & Stewart, 2007). Deictic relations are weak in clinical populations who have problems with sense of self, including those with autistic spectrum disorders (Rehfeldt et al., 2007). Adults with "social anhedonia," the inability to experience pleasure from social interactions, have difficulty with deictic framing (Villatte, Monestès, McHugh, Freixa i Baqué, & Loas, 2008, 2010). Deictic framing can be successfully taught, however, and when it is, perspective-taking and theory-of-mind skills improve (Weil, Hayes, & Capurro, 2011).

RFT theorists are able to model, measure, and train a perspective-taking sense of self because they have a precise sense of the verbal units that give rise to it. It is rather remarkable that children acquire these skills via the sloppy training history that is inside a natural language community. Usually deictic training is indirect. If you teach it with many "I" statements, "I" in some meaningful sense *is* the location that is left behind when all of the content differences are subtracted out. For example, notice what is consistent in answers to the questions "What happened to you yesterday? What did you see? What did you eat?" We normally answer, "I did such and such," "I saw so and so," and "I ate this and that." Similar training in "we/they" occurs in more allocentric cultures and languages. The "I" that is referred to is not just a physical organism—it is also a locus, place, or perspective. But RFT research has shown that "I" statements of this kind cannot create the proper discriminations unless they are accompanied by predictable and useful statements from others about their perspectives as well. Just as "here" does not exist without "there" or "now" without "then," or "we" without "they," "I" as a perspective needs the perspective of "you" to be fully formed.

Think of self-as-context as a kind of coming together of the major classes of deictic relations, such as I/you, here/there, and now/then. Figure 3.4 shows the idea. Like objects in elliptical orbits, children learn to imagine responding from here or there; in the now or in the then; from the point of view of "I" or the point of view of "you." As in the top panel of the figure, these actions overlap, but they are not fully integrated. When these classes of responding come together, a sense of perspective emerges as an integrated event. Once that occurs, all self-knowledge can occur from a conscious perspective of "I/here/now," as is represented metaphorically in the bottom panel. Even when we imagine, say, being behind the eyes of another person, we still have a sense of looking from an "I/here/

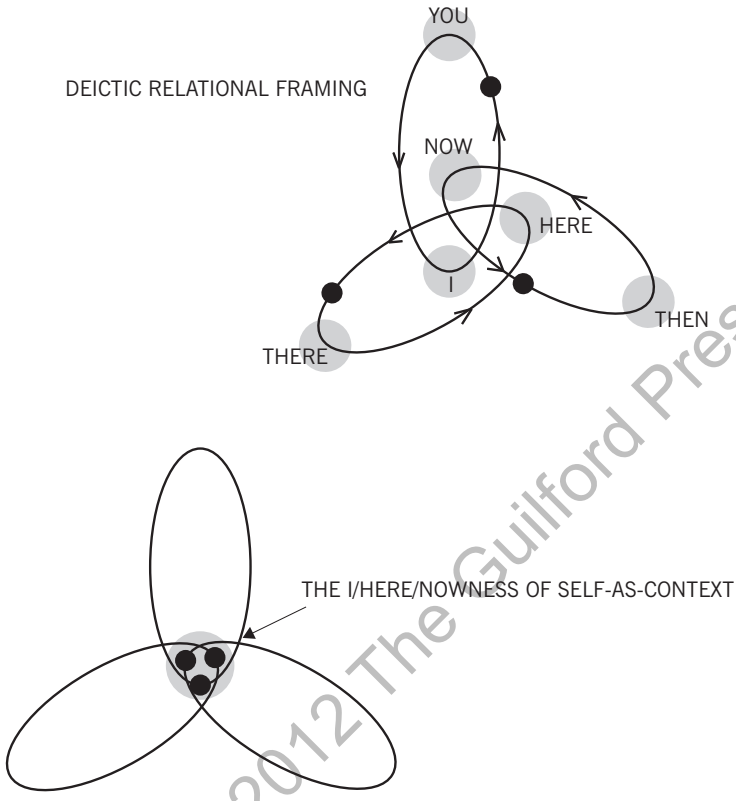

FIGURE 3.4. A graphic representation of how deictic relational frames go together to create "self-as-context"—a socially interconnected sense of self as a type of perspective taking. Copyright by Steven C. Hayes. Used by permission.

now" locus inside another person. Conscious content now is known in the context of a consistent locus or point of view that can integrate that knowledge. Infantile amnesia begins to drop away. Events are held in memory in a verbal temporal order. A conscious person shows up—not as the object of reflection but as a perspective from which knowing can occur.

Common clinical exercises begin to make more sense when the core properties of perspective taking are appreciated. A young adult with weak appreciation of his impact on others might be asked by a therapist, "Could you put yourself in that empty chair? If you were your mother, what would you want to say to you?" A socially inadequate child might be told, "Imagine you were Superman. What would Superman say?" Flexibility of perspective taking allows the integrated sense of "I/here/now" to be located without regard for time, place, or person. We can write letters to ourselves

from a distant and wiser future or try to see the world from behind another person's eyes. It is clinically important because it situates self-knowledge in a more expansive temporal, social, and spatial context. This flexibility increases the ability to respond to the consequences of actions that are delayed, that occur elsewhere, or that are felt primarily by others.

There are profound applied and theoretical implications of this sense of self and its cognitive basis. We note three here.

1. *Spirituality and a sense of transcendence.* As a sense of perspective taking is formed, a fundamental distinction is made between the content of a verbal event and the sense of locus from which observations are made. Once consciousness as perspective emerges, its limits can never be fully appreciated consciously. This dimension of human experience is unique in that it is not thing-like—it has no discernible edges, limits, or distinctions. Everywhere you go, there you are. Anything you know verbally, you were there to know it verbally. One can be conscious of the limits of everything except one's own consciousness.

These qualities give self-as-perspective a timeless, placeless, and transcendent quality. "Matter" is the stuff of which things are made (it came originally from a word meaning "timber"), and self-as-perspective is *not* thing-like. It is thus "immaterial" or "spiritual." We are arguing that the distinction between verbally known content and the self-as-context is the experiential source of the matter–spirit distinction that seems to have emerged in virtually all human cultures (Hayes, 1984). That distinction is an ancient one, originating long before the scientific perspective dominated human culture. Rather than rejecting this distinction, ACT and RFT recognize it as useful and scientifically sensible.

Spiritual and religious traditions have dealt the most with this sense of self, perhaps because of its transcendent qualities of perspective taking. Eastern traditions speak of spirituality, using terms like *everything/nothing*. Buddhism and Taoism promote the idea of an "uncarved block" that originates at birth. The uncarved block is the simple wholeness of consciousness itself and the "ground" for experience. Judeo-Christian traditions speak of spirituality as sharing in the divine (e.g., humans are made in the image and likeness of God; Gen. 1: 26), and the features of God (omnipresent, all-knowing, and so on) seem to be understandable as extensions of the "no-thing" qualities of self-as-context (Hayes, 1984).

Some intervention traditions (e.g., 12-step programs) advocate for the importance of spirituality but without a definition or interpretation of what spirituality entails beyond that given by the lay culture. ACT is an evidence-based therapy that likewise emphasizes the importance of spirituality, but ACT gives a basic account of its core features.

2. *Consciousness as social, expansive, and interconnected.* The finding that perspective taking emerges from deictic relational frames says something

profound about the nature of human consciousness. Self-as-context is not a sense of self that is alone and cut-off. We are not speaking of "I" in a self-focused, processive sense, as might be the case with a conceptualized "I." It is inherently social, expansive, and interconnected because framing is mutually and combinatorially entailed. I begin to experience myself as a conscious human being at the precise point at which I begin to experience *you* as a conscious human being. I see from a perspective only because I also see that you see from a perspective. Consciousness is *shared*. Moreover, you cannot be fully conscious here and now without sensing your interconnection with others in other places and other times. Consciousness expands across times, places, and persons. In the deepest sense, consciousness itself contains the psychological quality that *we* are conscious—timelessly and everywhere.

3. *Compassion and acceptance; stigma and defusion*. As described thus far, acceptance and defusion seem, superficially, to be intrapsychic issues, but self-as-context expands their nature. Because perspective taking is social, it is not possible to take a loving, open, accepting, and active perspective on yourself without doing likewise for others. Perspective taking inherently enables us to be conscious of our own pain, but it also enables us to be conscious of other people's pain, which in turn is doubly painful. Thus, compassion and self-acceptance are related inside the model. It is not possible to develop a habit of defusing from judgmental self-referential thoughts without practicing defusion from judgmental thoughts toward others. Fusion with judgments is an undiscriminating cannon, and sooner or later one's own qualities or features inevitably come under fire. In addition, the things we find irksome and worthy of strong judgment in others are often things that are relevant to aspects of our own history and behavior.

Our model helps explain the empirical finding that stigma and prejudice toward others are often associated with personal psychological distress in the stigmatized area. Interestingly, the linkage between distress and stigmatizing thoughts disappears when we adjust for the impact of fusion and experiential avoidance (e.g., Masuda, Price, et al., 2009). This finding suggests that prejudice itself is fueled by experiential avoidance of self-referential content. It also suggests that it is not so much the content of thought as it is that rigid attachment to those thoughts that causes the most trouble. This observation does not imply necessarily that we need to give up evaluation and judgment—they can still be useful tools in the problem-solving mode (e.g., "She is a *good* lawyer"). Like all such tools, however, we must embrace them gingerly and realize their limited utility.

A social, expansive, and interconnected sense of consciousness naturally orients acceptance and defusion in the direction of compassion rather than prejudice and bias. It expands ACT processes across times and places. It is hard to maintain the idea that values should apply only locally—that

concern for others should extend only to one's family and not to those suffering elsewhere, or should pertain only to this time and place and not to those in succeeding generations. This beneficial predisposition helps explain the expansive qualities of ACT work itself. It is not by accident that ACT has been applied not just to self-stigma among clients seeking treatment (e.g., Lillis & Hayes, 2008; Luoma, Kohlenberg, Hayes, & Fletcher, in press) but also to the stigmatization of racial and ethnic groups (Lillis & Hayes, 2008) and persons with mental disorders (Masuda et al., 2007). ACT even militates against the tendency of clinicians to stigmatize their own clients (Hayes, Bissett, et al., 2004) through a type of expansiveness built into the model of psychological flexibility that is at the heart of its approach to therapeutic treatment.

MINDFULNESS AND SELF-RELATEDNESS

The entrance of mindfulness into the behavior therapy community is one of the most notable features of the "third-wave" cognitive and behavioral treatments (Hayes, 2004). A virtual treasure trove of mindfulness-based methods has entered into the behavioral and cognitive therapies over the past decade. This development is a mixed blessing because we run the risk of adding yet another intervention that seems to "work," but without any coherent or progressive scientific explanation as to why. The extent of the science–practice disconnect in this area is sobering. Indeed, there is no agreed-upon definition of mindfulness in psychology. A review of the various definitions (e.g., Bishop et al., 2004; Kabat-Zinn, 1994; Langer, 2000) shows that they describe mindfulness as variously a psychological process, an outcome, or a general method or collection of techniques (Hayes & Wilson, 2003).

Mindfulness needs to be better understood at the basic behavioral as well as clinical level. The need is for greater understanding of "mindfulness" as an ongoing process, as a mediator or moderator of response to therapy, and as a life outcome in its own right. Defined in all these various ways, mindfulness is difficult to research adequately. As with most lay concepts that later become a disciplinary focus, we may never agree upon an authoritative definition, but such agreement per se is not the issue. Scientists and clinical researchers need to explicate their starting assumptions more fully so that the rest of the verbal community can actually track what is being studied. Within the psychological flexibility model, mindfulness is viewed as both open and centered. We have elsewhere (see Fletcher & Hayes, 2005) explored in some detail how the four processes in these two response styles provide a definition of mindfulness, and our views are supported by recent neurobiological evidence on mindfulness processes (Fletcher, Schoendorff, & Hayes, 2010). The subtitle of the present volume speaks of "the process and practice of mindful change" in this specific

sense: ACT therapists and clients attempt to bring the left four hexagon processes to bear on values-based behavior change.

Engaged Response Style: Values and Committed Action

While openness can make one's repertoire of actions more flexible, and centering can ground awareness in the present moment, what makes life meaningful are the connections with closely held values through daily life actions. Ultimately, psychological health is produced through effective working in the real world. Subsequently, effective working tends to produce a sense of vitality, life connectedness, and a sense of health and well-being. This sense of flow and engagement emerges as a person makes contact with reinforcing events in the present that are intrinsic to deeply meaningful life actions.

Waiting, Reacting, and Pleasing versus Valuing

Cognitive fusion and experiential avoidance exact other long-term life tolls. They produce diverse patterns of behavior that develop chiefly under conditions of aversive control. The individual can easily lose his or her sense of life direction that normally helps motivate, organize, and direct vitality-producing life actions. Clinically, this phenomenon often appears as a kind of aimlessness that typically involves complaints about life seeming mundane, empty, or meaningless and/or complaints about lack of motivation or failure to follow through on both short- and long-term goals. The "midlife crisis" is perhaps an example—in which the client, who typically possesses a good job, is married, has children, and enjoys all the accoutrements of middle-class success, suddenly breaks loose of his or her normal moorings to seek some deeper form of meaning from life. This breakway often is accompanied by some socially taboo behavior such as having an affair, suddenly quitting a good job, and so forth. In such cases, we are often seeing the delayed and life-suppressing effects of having for too long followed socially prescribed rules about how to live rather than staying in touch with one's values. As the time-honored saying goes, "Vision without action is a daydream; action without vision is a nightmare."

The emphasis on values distinguishes ACT from many other cognitive-behavioral treatments specifically and from a broad range of therapies more generally. It is only within the context of values that action, acceptance, and defusion come together into a sensible whole. In the language of rule governance, values are formative and motivative augmentals. They are one of the most important uses of human language.

"In ACT, values are freely chosen, verbally constructed consequences of ongoing, dynamic, evolving patterns of activity, which establish

predominant reinforcers for that activity that are intrinsic in engagement in the valued behavioral pattern itself" (Wilson & DuFrene, 2009, p. 66). Wilson and DuFrene's (2009) formulation is dense and more easily understood when broken down into its key components.

FREELY CHOSEN VALUES

The emphasis in ACT is on values that clients experience as freely chosen rather than those that might be forced upon them by other people or by circumstances. This is a principal reason why ACT interventions focus on personal "choices" rather than using a "decision-making" approach. Choices are made *in the presence of* reasons for and against a particular action, but they are not *based on* those reasons. Decisions, on the other hand, tend to originate in the problem-solving mode of mind and can gain or lose resolve as reasons supposedly change. An implication of values being freely chosen is that their construction will play out in the healthiest sense when the person is contacting them in the here and now. Values like compassion for others or self tend to become manifest when a person is living in the present moment and making contact with the perspective-taking self, which is probably why values and compassion are a natural focus of most mindfulness traditions. Although "freely chosen" values are not socially forced, that does not mean they are not socially established or social in their focus. Free choice is not about individualism. It is about the psychological quality of ownership of actions.

VERBALLY CONSTRUCTED CONSEQUENCES

ACT interventions often focus on values construction and choice. The more common term is *values clarification*, but *clarification* can be misleading. It implies that there are preexisting, fully formed values that are waiting somewhere to be discovered. We prefer the term *construction* rather than *clarification*. We do so in order to highlight the active nature of valuing in ACT. Values, like minds, are not "thing-like" but rather are an ongoing process of verbal relating. For example, a client might not initially see a connection between having a fulfilling work career and being an effective parent. However, examining what the client would like to model for children as part of promoting their long-term life satisfaction might reveal such a verbally constructed link.

ONGOING, DYNAMIC, EVOLVING PATTERNS OF ACTIVITY

By "verbally constructed consequences of ongoing, dynamic, evolving patterns of activity," we mean that values give one the choice to engage

in certain patterns of behavior functionally defined by verbal behavior. The pattern chosen will be dynamic and evolving because it will be lived moment to moment as history and circumstance permit. Verbally constructed consequences are technically not reinforcing events because they may never be completed or even encountered. A person who values gender equity may never see it but may nevertheless work toward it as a constructed consequence or function of behavior. Reinforcers strengthen behavior when they are encountered, but values are never enacted in quite that way. What values do is they establish other events as reinforcers. That is why, technically speaking, values are augmentals.

INTRINSIC REINFORCERS PREDOMINATE

The events that values establish as reinforcers are described by Wilson and DuFrene (2009) as follows: "Predominant reinforcers … are intrinsic in engagement in the valued behavioral pattern itself." Values are not about the future so much as they are about living in the moment and doing things that embody personal values. These actions, by virtue of their connection to verbally expressed life desires, have reinforcing features. It is not the value per se that is reinforcing; it is the quality of action connected to values that is inherently reinforcing. In a sense, that quality of action is what is being freely chosen.

Suppose a person chooses to value being a loving father, that is, to be there for his children. If you explore what that might look like, a number of patterns of behavior can be described: spending time; being attentive; ensuring safety; encouraging learning. The process of loving will never be finished, and the patterns of action may evolve as the children and the father go through time together. If the father suddenly becomes bedridden, this value may be embodied in very different ways. The reinforcers are not off in some conceptualized verbal future. Rather, it is in the moment-by-moment process of telling stories, wiping noses, and comforting a skinned knee that the value of being a loving father is both practiced and reinforced. Trying to be a loving father because otherwise you might feel guilty—or because someone else would be disappointed if you failed—is not valuing in the sense in which we mean it. Indeed, the literature on values (e.g., Elliot, Sheldon, & Church, 1997; Sheldon & Elliot, 1999; Sheldon, Kasser, Smith, & Share, 2002) shows that only when the individual views values as a personal choice and not as a matter of social compliance or avoidance of guilt that values significantly correlate with favorable clinical outcomes.

To summarize, valuing focuses the client on generating psychological purpose and meaning and away from a problem-solving mode of mind. In Aristotelian terms, values function as "final causes" of behavior in that they

are the consuming purpose "for the sake of which" actions are undertaken. In a more technical sense, values provide the selection criteria that enable variation and selective retention to work as causal processes in the evolution of behavior. Values dignify the work of defusion and the acceptance of specific painful thoughts and feelings when such distressing experiences function as barriers to valued actions. ACT is not about endless emotional wallowing; rather, it involves "taking in" what one's history has to offer in the process of living a valued life. There is an extensive literature on values showing that significant behavior change can occur even with short-term values interventions (e.g., Cohen, Garcia, Apfel, & Master, 2006).

Inaction/Impulsivity versus Committed Action

The end result of fusion, avoidance, and loss of contact with values is a narrow, rigid pattern of ineffective responding. Behavioral rigidity can be characterized either by behavioral avoidance (inaction, passivity, withdrawal) or behavioral excesses (impulsive behavior, overuse of numbing behaviors such as drinking, drugging, bingeing, self-mutilation, etc.). The common thread among these behaviors is that they are designed to reduce or eliminate aversive states. Many times, the person will believe that feared outcomes and associated distressing private experiences can be prevented by avoiding a distressing situation entirely. In other cases, impulsive actions are taken that actually make situations worse; they are self-defeating. In still other cases, people will use "quick-fix" solutions that can have terrible long-term consequences. Regardless of their form, these actions' function is to limit aversive consequences rather than to seek something positive in life. Individuals who live this way experience a compression of life space that inevitably produces a variety of clinically significant symptoms such as depression, anxiety, addiction, and the like. Another way of saying this is that psychologically rigid individuals tend to have difficulty in initiating and maintaining actions that are sensitive to contingencies, thus reducing their ability to adapt to changing circumstances.

In the ACT model, the term *committed action* refers to *a values-based action designed to create a pattern of action that is itself values based*. In other words, there is a continuous redirection of behavior so as to construct larger and larger patterns of flexible and effective values-based behavior. Committed action is the antidote to the repertoire-narrowing effects of cognitive fusion and experiential avoidance. By implication, it is why ACT is a "hard-core" behavior therapy, in essence. By *commitment*, we are not speaking so much about a promise made about the future as we are the actual moment-by-moment living out of a behavioral pattern in which the person takes responsibility for its shape. When committed action slips, the additional commitment is to take responsibility for the slip and once again

direct one's efforts in a values-based direction. Individuals with the ability to direct and redirect behavior over time have an inordinate advantage over those who exhibit weak patterns of behavioral control. The cornerstone of psychological flexibility is the capacity to engage in highly organized and purposeful behavior that is sensitive to contingencies.

Committed action is an extension of values. Whereas a value involves the chosen consequences of ongoing patterns of activity and any values-based action is any action reinforced by these consequences, keeping a commitment means, in a moment-by-moment way, redirecting behavior toward larger patterns of behavior with a goal of sustaining these purposes. The moment the person sees a divergence and chooses to redirect his or her behavior so that it is values-consistent, the person is engaging in a committed act.

When we speak of action and behavior here, we do not necessarily mean physical acts. Commitment might well involve entirely private mental activities. One of Victor Frankl's commitments while in a Nazi concentration camp during World War II had to do with his wife. He decided in his own mind that love was something that made the suffering of the death camps worth enduring. He developed countless ways to keep his wife in mind even though he spent the entirety of his internment with no knowledge of whether she was alive, not knowing if he would ever see her again. He quotes the Song of Solomon: "Set me like a seal upon thy heart, love is as strong as death" (Frankl, 1992, p. 50). Frankl saw clearly the seduction of despair and instead chose to hold on to that image of his wife. Each time he did, he made a choice, a commitment to his value.

Unlike values, which may never be achieved as an object, concrete goals that are values-consistent can be achieved through committed action. ACT protocols generally involve the full range of goal setting and behavior change methodologies that are available in the larger therapeutic community in general and behavior therapy in particular. At the same time, existing behavioral approaches are often empowered by other aspects of the ACT model. There are some data suggesting that changes in other core processes "enable" the behavioral methods to work. For example, willingness and acceptance appear to help persons with panic disorder to be more open to exposure (Levitt, Brown, Orsillo, & Barlow, 2004) or chronic pain patients to change behavior (Dahl, Wilson, & Nilsson, 2004).

THE CORE OF THE MODEL: PSYCHOLOGICAL FLEXIBILITY

Psychological flexibility can be defined as contacting the present moment as a conscious human being, fully and without needless defense—as it is and not as what it says it is—and persisting with or changing a behavior in

the service of chosen values. We argue that the three response styles, comprising six core processes, together create psychological flexibility.

There are 30 directional relationships among the six core processes of the hexaflex. The lines depicted between the six components in Figures 3.1 and 3.2 are not for show; rather, each represents a theoretical claim of relatedness. Individual ACT processes do not make sense disconnected from the others in the overall model—any more than the double helix of DNA makes sense without pairs of nucleotides. For example, acceptance without values or action is a kind of tolerance or resignation. Values without acceptance or defusion are difficult to engender since caring and vulnerability go hand in hand, and experiential avoidance promotes numbness over vitality. Throughout this volume, core processes of the psychological flexibility model will be defined and refined with reference to the other points of the model, which makes sense, given their interrelatedness.

ACT Defined

ACT uses acceptance and mindfulness processes and commitment and behavioral activation processes to produce psychological flexibility. It seeks to bring human language and cognition under better contextual control so as to overcome the repertoire-narrowing effects of an excessive reliance on a problem-solving mode of mind as well as to promote a more open, centered, and engaged approach to living. The ACT approach is based on a functional contextual perspective on human adaptability and suffering, derived from behavioral principles as extended by relational frame theory. Although it contains techniques based on science, ACT is not just a technology. Functionally defined, it consists of any method that reliably produces psychological flexibility; theoretically speaking, any method based on the psychological flexibility theory we have described here could be called "ACT" if those employing the methods choose to describe it in that way.

Evidence for ACT and the Psychological Flexibility Model

Over the past decade, the number of published RFT and ACT studies has grown exponentially. In 1999, when this model was first described in a comprehensive fashion, RFT had not yet been presented in any book-length form; there were fewer than a handful of empirical studies on ACT; there were no well-established measures of ACT processes, nor any longitudinal or mediational studies on the relation of ACT processes to outcomes. All of that has changed. Even the most conservative categorization lists over 40 studies experimentally testing RFT processes (perhaps 100 more are related to RFT ideas), and yet not even one contains data

disputing the underlying rationale for the theory (Dymond, May, Munnelly, & Hoon, 2010). Ruiz (2010) found 22 correlational studies on the relation of psychological flexibility to depression (weighted $r = .55$), and 15 on anxiety (weighted $r = .51$), with more than 3,000 participants. Using correlational methodology, more that 30 longitudinal or mediational studies have examined the impact of ACT processes on long-term outcomes, and virtually every study fits within the expectations of the psychological flexibility model presented here. Levin, Hildebrandt, Lillis, and Hayes (2011) found 40 studies on ACT components, alone or in combination, with an average weighted effect size of $d = 0.70$ (95% confidence interval: .47–.93) on targeted outcomes. Ruiz found 25 outcome studies in clinical psychology areas ($N = 605$; 18 randomized trials), 27 in health psychology ($N = 1{,}224$; 16 randomized studies), and 14 in other areas such as sports, stigma, organization, or learning ($N = 555$; 14 randomized studies). Across all the existing literature, between-group effect sizes appear to be around .65 (Hayes et al., 2006; Öst, 2008; Powers, Vörding, & Emmelkamp, 2009; Pull, 2009). Nearly two-thirds of the randomized studies have had mediational analyses conducted, and all were successful at $p = .10$ or better, accounting for about half of the variance in outcome (Hayes, Levin, Vilardaga, & Yadavaia, 2008).

It is the breadth of problems addressed in these studies that is perhaps most startling. Such breadth is one of the main scientific requirements of a model that claims to be unified and transdiagnostic. There are controlled ACT studies on work stress, pain, smoking, anxiety, depression, diabetes management, substance use, stigma toward substance users in recovery, adjustment to cancer, epilepsy, coping with psychosis, borderline personality disorder, trichotillomania, obsessive–compulsive disorder, marijuana dependence, skin picking, racial prejudice, prejudice toward people with mental health problems, whiplash-associated disorders, generalized anxiety disorder, chronic pediatric pain, weight maintenance and self-stigma, clinicians' adoption of evidence-based pharmacotherapy, and training clinicians in psychotherapy methods other than ACT. The only sour notes so far are the use of ACT for more minor problems, where existing technology exceeded ACT outcomes on some measures (e.g., Zettle, 2003).

What is most important from the perspective of the psychological flexibility model is that when one or more of the core processes are changed—and they usually are—good outcomes are achieved. So far, that finding is without exception. That provides a target for the creativity of researchers and clinicians, who can the focus on *empirically supported processes*—not just empirically supported packages and manuals—a long-stated dream of empirically supported treatment (Rosen & Davison, 2003). Whether people call their work ACT no longer need be of interest. Indeed, one reason we are using the term *psychological flexibility model* is to emphasize

that this model goes beyond issues of either technology or the brand name. Even the term *psychological flexibility* is unimportant. What is important is whether the processes of acceptance, mindfulness, and values provide a coherent model of human suffering and adaptability, one that leads consistently to effective interventions and intervention components and to moderators and mediators of change. We will return to these issues in the last chapter of this book and look at the intellectual and strategic aspects of the psychological flexibility model and review more evidence for them.

CONCLUDING REMARKS

In this chapter, we introduced a model of psychological flexibility that involves six core processes organized within three major response styles. Although space does not permit an exhaustive review of the literature from every diverse research domain, we have attempted to note some areas of research that support the account. In addition, empirical data within the ACT and RFT research communities has been highlighted to show the promise of this transdiagnostic approach. We are not claiming to have an answer for every question that could be asked (or tested) with regard to the psychological flexibility model. The purpose of explicating the model in the first place is to provide interested practitioners and clinical and basic researchers with a framework that allows clinically important questions to be investigated. It is through this process of inquiry that we will ultimately discover the strengths and limitations of this approach. In the contextual behavioral science development model (see Chapter 13), that is exactly as it should be. We believe that the psychological flexibility model fits the requirements for a relatively adequate unified transdiagnostic account that can be use to foster human growth and alleviate human suffering. Starting with the next chapter, we will explore how that is done inside ACT.

Guilford Publications
72 Spring Street
New York, NY 10012
212-431-9800
800-365-7006
www.guilford.com