CHAPTER 15

# Emotion Regulation as an Integrative Framework for Understanding and Treating Psychopathology

## Douglas S. Mennin and David M. Fresco

Investigations of emotional processes such as sadness, elation, fear, and anxiety have historically been viewed as core components of numerous psychopathological conditions (Barlow, 2002; Kring & Werner, 2004). Despite their centrality in psychopathology, emotions have historically been a source of confusion and disagreement in clinical psychology, in part because of a lack of conceptual clarity in the definition of emotion, awareness of the purpose it serves, and an understanding of how psychopathology can be generated from absence, deficits, or excesses in efforts to regulate emotions (Greenberg, 2002; Samoilov & Goldfried, 2000). The affective science field (e.g., Davidson, Jackson, & Kalin, 2000) provides an opportunity to expand our paradigms regarding the role of emotion-related processes in conceptualizing and treating psychopathology. In this chapter, we review (1) a conceptualization of emotion regulation that stresses distinctions in generative and regulatory characteristics; (2) the application of an emotion dysregulation perspective to various forms of psychopathology; and (3) the utilization of an emotion regulation framework for integrating various emotion-related approaches to treatment.
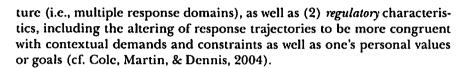
## Emotions and Emotion Regulation

Emotions can be discussed in terms of their (1) *generative* characteristics, including their purpose (i.e., function, motivational properties) and struc-

356

ture (i.e., multiple response domains), as well as (2) *regulatory* characteristics, including the altering of response trajectories to be more congruent with contextual demands and constraints as well as one's personal values or goals (cf. Cole, Martin, & Dennis, 2004).

## Emotion Generation

### Generative Function

Emotions arise purposefully to promote action toward survival as well as personal and societal functions by signaling the relevance of our basic motivations or higher order values and goals to given external or internal contexts (Keltner & Haidt, 1999). Because of this informational role, emotions can be integral in making decisions regarding particular actions or plans. Negative emotions focus us toward a particular direction to solve a problem or clarify our goals (Parrott, 2001). For instance, fear can narrow our attention to a possible threat, sadness can orient us toward a possible loss, and disgust can spur us to elude an indigestible object or idea. Similarly, positive emotions (e.g., joy or interest) help widen the array of thoughts and actions and build new approaches through the generation of enduring personal resources (Fredrickson, 2001).

Emotional responding arises from our innate motivational systems, which are activated in response to punishment and reward as well as a need for momentary action (i.e., fight–flight system) (Carver & Scheier, 1998; Gray & McNaughton, 2000; Higgins, 1997). One motivational function of emotions is protection, which is reflective of a behavioral inhibition (BIS), or prevention, system that instigates avoidance of novel or potentially threatening or painful stimuli or end states. For instance, anxiety signals an impetus to avoid people, objects, or events perceived as harmful. Conversely, the behavioral activation, or promotion, system relates to approach in the face of rewarding or appetitive stimuli or end states. Promotion and prevention systems are independent and can be activated alone or in unison in response to a stimulus or event such as when an individual becomes both excited and anxious about an anticipated career change, increasing both motivations to approach rewards and avoid risks associated with this life change (Dollard & Miller, 1950). Motivational conflicts can be resolved through higher order values-based decision making (Wilson & Murrell, 2004).

### Generative Structure

In addition to function, emotion generation can be characterized by activation in one or more response components (e.g., Lang, Bradley, & Cuthbert, 1998). Although no single brain area or body part is dedicated solely to emotions, a series of components may be engaged during emotional

responding, including (1) *physiological responses* (e.g., heart rate, musculature responses, body temperature, blood pressure) and their coordination in subcortical and brainstem areas; (2) *behavioral responses*, including expressive elements (e.g., facial displays) and motor actions (e.g., physical escape or avoidance); and (3) *subjective responses*, including verbally mediated thought as well as "feelings," which have been hypothesized to involve a directing of attention to changes in the other components, such as feeling "scared" when experiencing an increase in heart rate (LeDoux, 1996).

This multisystemic structure serves an important purpose for survival because it allows for the rapid, simultaneous coordination of many response systems in preparation for action. For instance, in fear, physiological changes are enacted to prepare the body for mobilization, subjective awareness directs attention toward threatening stimuli for appraisal of danger value, and behavioral patterns are enacted to thwart or escape possible harm. In such instances, these multiple systems increase the odds for survival through their coordinated responses (Cosmides & Tooby, 2000). However, most emotionally eliciting events in our modern age do not require this level of mobilization. Indeed, findings indicate loose coordination of these response components in various instances of induced emotional experience (cf. Lang et al., 1998; Mauss, Levenson, McCarter, Wilhelm, & Gross, 2005). Neurobiological evidence supports the notion that there are multiple pathways to emotion generation, including automated, "hard-wired," or lower order systems (largely involving physiological responses and their subcortical control) and more controlled, higher order systems (largely involving subjective, cortical responses), separate but interactive and mutually essential for differing aspects of emotional experience (LeDoux, 1996).

## Emotion Regulation

### Dynamic Systems

Higher order and lower order neural systems related to emotions actively regulate each other (Davidson et al., 2000; LeDoux, 1996). As such, theorists have begun to view regulatory functions of emotion through the lens of homeostatic mechanisms, in which the overarching goal of self-regulation is maintenance of organismic equilibrium (e.g., Bonnano, 2001). The challenge of an emotional landscape, however, is that conditions are ever changing. For an emotional system to be effective, it needs to be flexible and responsive to changing environmental needs. Indeed, the ability to adaptively regulate emotions for a given context is associated with well-being (cf. Mayer, Salovey, & Caruso, 2004) and the promotion of mental health (cf. Kring & Werner, 2004). Functioning may be a product of the ability to balance the need for behavioral stability and behavioral flexibility (i.e., maintaining *allostasis*; McEwen, 2003). Emotional response sys-

tems regulate each other through mutual communication that is dynamic, consistent, and, when most effective, flexible (Bonnano, 2001; Cole et al., 2004). Thus, emotions can be seen as responding to the need to balance contextual demands and personal goals or values with regulatory efforts by acting as (1) regulators of other processes such as cognition and behavior and (2) recipients of regulatory efforts by these other processes to modulate strength or weakness of responses (cf. Cole et al., 2004).

## Emotions Regulate

Despite considerable evidence that emotions negatively bias cognitive processes (cf. Mineka, Rafaeli, & Yovel, 2003), few studies have examined the conditions under which individuals benefit from emotional information. Although intense or inappropriate activation of emotional responses may indeed characterize maladaptive cognitive functioning, emotions activated at low or moderate levels can also be regulatory by facilitating cognitive activities in situations beyond survival needs. Through motivation, emotions can direct attention toward goal-relevant features in the environment and can facilitate their perceptual processing to increase the probability of goal attainment (e.g., Anderson & Phelps, 2001). Also, promotional motivations elicited by positive emotions have been shown to enhance verbal working memory while preventive motivations elicited by negative emotions have been found to enhance spatial working memory (Gray, 2004). Finally, neuroimaging, psychophysiological, and behavioral evidence suggests that initial affective responses can guide advantageous decision making (cf. Bargh & Williams, 2007).

## Emotions are Regulated

A significant aspect of emotions is the manner by which we attempt to influence their experience and expression. Although emotions serve adaptive functions, their presence is not always functional. Conversely, in some contexts, emotion absence might be seen as dysfunctional. Regulation of emotion by cognitive and behavioral processes can take the form of up-regulation (i.e., enhance) or down-regulation (i.e., dampen) of emotion (Gross, 2002). Emotional processes unfold over time; thus, emotion regulation is best conceptualized and measured temporally congruent with the unfolding of emotional responses (cf. Davidson et al., 2000). Gross's (2002) process model of emotion regulatory strategies distinguishes between strategies that modulate emotion before (i.e., *antecedent-focused strategies*) versus after (i.e., *response-focused strategies*) an emotional response (see Werner & Gross, Chapter 1, this volume). Antecedent-focused strategies include selecting a situation, modifying an ongoing situation, directing one's attention toward or away from emotional stimuli, and changing the conditions of the situation itself (e.g., reappraising one's beliefs regarding a situation).

Adaptive forms of response-focused strategies might include self-soothing (e.g., relaxation; Borkovec & Sharpless, 2004), emotional expression (Bonnano, 2001), and engagement of positive stimuli (Fredrickson, 2001). However, empirical research demonstrates that some response-focused strategies such as suppression, the active inhibition of ongoing emotion expressive behavior, tax cognitive resources and, paradoxically, increase physiological arousal, making suppression a potentially costly form of regulation (cf. Gross, 2002).

## Emotion Dysregulation and Psychopathology

Although emotions serve important functions, they can take detrimental forms when characterized by contextually invariant excesses, deficits, or lability or when regulatory efforts are not utilized, are deficient, are used excessively, or are enacted in rigid and inflexible ways (Kring & Werner, 2004). Given advances in the affective sciences, understanding how fear, anxiety, sadness, and elation—which are, in fact, common, often humanity-defining experiences—can become associated with psychopathology may be an important avenue for inquiry (Samoilov & Goldfried, 2000). An understanding of functional and dysfunctional emotion processes may elucidate our conceptualization of these disorders and provide a broader framework for understanding how other factors (e.g., cognitive, behavioral, interpersonal, and biological) interrelate in the pathogenesis and maintenance of anxiety pathology (Barlow, 2002).

Important to applying affective science to psychopathology is the development of overarching frameworks to organize the roles of emotion-related factors. Rottenberg and Gross (2003) have stressed that when examining the relationship between emotion-dysregulation and psychopathology, investigators need to parse emotion generative processes from regulation deficits and to recognize that, similar to conceptualizations of healthy regulation, dysregulatory efforts occur dynamically throughout different points in the emotion-generative process. This distinction is quite congruent with classical conceptualizations of pathological learning. For instance, Mowrer (1947) distinguished characteristics of fear acquisition (i.e., associative conditioning) from resultant avoidance behaviors, which reinforce fear and anxiety (i.e., operant conditioning). Recent evidence further supports the distinction of emotion-generative and dysregulatory factors in psychopathology. For example, we found that characteristics of one's emotional experience and components of dysregulation were distinct and had differential relationships with anxiety and mood pathology (Mennin, Holaway, Fresco, Moore, & Heimberg, 2007). With this distinction in mind, we present an updated emotion dysregulation model that distinguishes dysfunction in emotion-generative processes (e.g., heightened intensity of emotions) from regulatory efforts (e.g., poor understanding

of emotional experience, negative cognitive reactions to emotions, or maladaptive management of emotions).

### Elevated Emotion Generation

Generative characteristics of emotion experience include its intensity, valence, duration, and lability (Thompson, 1994). Dysfunction may occur in one or more of these characteristics (cf. Berenbaum, Raghavan, Le, Vernon, & Gomez, 2003). The subjective intensity of emotional experience refers to frequently experiencing emotions more strongly and having reactions that occur more intensely, easily, and quickly than others. Intensity of emotions has been linked to borderline personality disorder (cf. Linehan, 1993) as well as both anxiety and mood disorders (e.g., Mennin et al., 2007). Furthermore, recent evidence has demonstrated that heightened subjective intensity of emotions is particularly relevant for individuals with generalized anxiety disorder (GAD) compared with those with social anxiety disorder (SAD) (Mennin et al., 2007; Mennin, McLaughlin, & Flanagan, in press) or depression (Mennin et al., 2007). Also important to understanding the relationship between emotion-generative characteristics and psychopathology is delineating the role of motivational components (cf. Gray & McNaughton, 2000). Indeed, prevention motivations (i.e., BIS) are strongly related to both neuroticism and the anxiety and mood disorders (Campbell-Sills, Liverant, & Brown, 2004). Despite the relevance of emotion-generative processes to dysfunction, Kring and Werner (2004) point out that intensity alone may not be pathological (e.g., someone who reacts strongly at weddings with tears of joy or screams loudly at a horror movie). It may take the presence of emotion regulation deficits for intense emotions to be problematic (Linehan, 1993; Lynch, Robins, Morse, & MorKrause, 2001). The presence of intensity may become detrimental by heightening a need for regulation such that emotionally intense individuals are confronted with a greater need for regulation and, without these skills, emotional processes become dysfunctional.

### Emotion Dysregulation

Our emotion dysregulation model (Mennin, Heimberg, Turk, & Fresco, 2005; Mennin et al., 2007) defines dysregulation broadly as represented by maladaptive emotional responsiveness reflected in dysfunctional understanding, reactivity, and management. This formulation is congruent with others who define regulation both in terms of processes related to managing emotions and processes involved in evaluating and responding to emotions (e.g., Cole et al., 2004; Gratz & Roemer, 2004). *Poor understanding of emotional experience* refers to difficulties in clarifying, labeling, and differentiating emotions and their underlying motivational messages in order to draw meanings from these experiences, elucidate choices for action, and

respond more effectively to changing contexts. A lack of understanding of emotional information has been shown to be characteristic of those with depression (e.g., Mennin et al., 2007; Rude & McCarthy, 2003), anxiety disorders (e.g., Mennin et al., 2005, 2007; Parker, Taylor, Bagby, & Acklin, 1993), and substance use disorders (e.g., Haviland, Hendryx, Shaw, & Henry, 1994).

Rather than processing emotion information and utilizing its motivational value, individuals with various forms of psychopathology may negatively react to emotions as reflected in the activation of negative beliefs about emotions and avoidance of emotional awareness (i.e., *negative cognitive reactions to emotions*). For instance, anxiety sensitivity, which refers to beliefs regarding the harmfulness of fear- or anxiety-related sensations, is associated with a number of anxiety disorders, particularly panic disorder (Taylor, Koch, & McNally, 1992). More generally, individuals with anxiety and mood disorders have demonstrated both negative judgments and cognitive avoidance of a number of emotional experiences, including anxiety, sadness, anger, and elating emotions (e.g., Kashdan, Morina, & Priebe, 2009; Leahy, 2002; Mennin et al., 2005, 2007; Salters-Pedneault, Roemer, Tull, Rucker, & Mennin, 2006; Tull & Roemer, 2007).

Emotion dysregulation is also indicated by difficulty knowing when or how to enhance or diminish emotional experiences in a manner that is appropriate to a particular environmental context (i.e., *maladaptive management of emotions*). Maladaptive emotion management skills have been observed in individuals with anxiety disorders (Baker, Holloway, Thomas, Thomas, & Owens, 2004; Mennin et al., 2005, 2007, in press; Salters-Pedneault et al., 2006), child abuse-related posttraumatic stress disorder (PTSD) (Cloitre, Koenen, Cohen, & Han, 2002), depression (Flett, Blankstein, & Obertynski, 1996; Mennin et al., 2007), and borderline personality disorder (Yen, Zlotnick, & Costello, 2002; Zittel Conklin, Bradley, & Westen, 2006). Further, studies have found poor emotion management to be associated with functional impairment beyond the effects of symptoms (Cloitre, Miranda, Stovall-McClough, & Han, 2005). Identified management problems have included difficulty self-soothing, repairing negative moods, engaging in goal-directed behaviors when distressed, displaying impulse control, and ability to access effective regulation strategies.
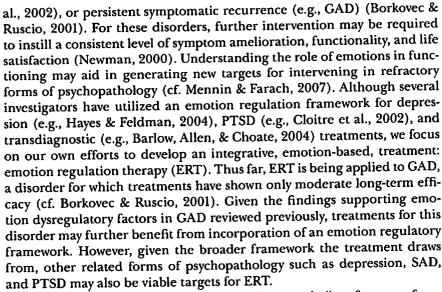
## Clinical Application of an Emotion Regulation Perspective

In addition to expanding our understanding of psychopathology, a focus on emotion dysfunction may also have treatment implications. Although psychotherapeutic interventions for numerous disorders demonstrate considerable efficacy (cf. Roth & Fonagy, 2004), some conditions remain characterized by relapse (e.g., depression) (Segal, Williams, & Teasdale, 2002), poor ability to function adaptively (e.g., chronic PTSD) (Cloitre et

al., 2002), or persistent symptomatic recurrence (e.g., GAD) (Borkovec & Ruscio, 2001). For these disorders, further intervention may be required to instill a consistent level of symptom amelioration, functionality, and life satisfaction (Newman, 2000). Understanding the role of emotions in functioning may aid in generating new targets for intervening in refractory forms of psychopathology (cf. Mennin & Farach, 2007). Although several investigators have utilized an emotion regulation framework for depression (e.g., Hayes & Feldman, 2004), PTSD (e.g., Cloitre et al., 2002), and transdiagnostic (e.g., Barlow, Allen, & Choate, 2004) treatments, we focus on our own efforts to develop an integrative, emotion-based, treatment: emotion regulation therapy (ERT). Thus far, ERT is being applied to GAD, a disorder for which treatments have shown only moderate long-term efficacy (cf. Borkovec & Ruscio, 2001). Given the findings supporting emotion dysregulatory factors in GAD reviewed previously, treatments for this disorder may further benefit from incorporation of an emotion regulatory framework. However, given the broader framework the treatment draws from, other related forms of psychopathology such as depression, SAD, and PTSD may also be viable targets for ERT.

ERT utilizes an emotion regulatory framework (i.e., focus on functional emotions, motivation, and emotion regulation) to integrate components of (1) cognitive-behavioral therapy (CBT) treatments (e.g., psychoeducation, self-monitoring, cognitive perspective taking, problem solving, relaxation and diaphragmatic breathing exercises; Borkovec & Sharpless, 2004; Dugas & Robichaud, 2007); (2) acceptance-, dialectic-, and mindfulness-based behavioral treatments (e.g., mindfulness exercises to broaden awareness of sensations, bodily responses, and emotions in the present moment; exercises to increase willingness to accept emotions, commitment to action related to personal values [Hayes, Strosahl, & Wilson, 1999; Linehan, 1993; Roemer & Orsillo, 2008; Segal et al., 2002]); and (3) experiential therapy (e.g., focus on empathic attunement, importance of agency, delineation of emotion function, engagement of experiential tasks; e.g., Elliott, Watson, Goldman, & Greenberg, 2004; Gendlin, 1996; Greenberg, 2002). We expect clients successfully treated with ERT to show significant decreases in reactive efforts to control emotions (e.g., worry, suppression) and commensurate increases in the ability to accept emotional experience, flexibly balance emotions according to contextual demands, and utilize emotional information to adaptively problem solve, make decisions, and take action according to their personal values, which, we argue, will lead to improvements in quality of life and adaptive functioning. Successfully treated clients should also have a greater ability to be self-reliant in the face of distress and uncertainty.

Acceptance- and mindfulness-based approaches increasingly have been developed as stand-alone, supplemental, or integrated interventions with CBT for anxiety and mood disorders (e.g., Eifert & Forsyth, 2005; Roemer & Orsillo, 2008; see also Valdivia-Salas, Sheppard, & Forsyth, Chapter 13,

this volume). These interventions view the allowance of emotional experiences as essential to breaking maladaptive intrapersonal and interpersonal patterns. Linehan's (1993) dialectical behavior therapy (DBT), which consists of mindfulness-based and emotion regulatory skills-based intervention for individuals with borderline personality disorder, has served as a resource for individuals developing mindfulness-based approaches to the treatment of anxiety disorders (Gratz, Tull, & Wagner, 2005). In acceptance and commitment therapy (ACT), clients are given extensive training in attending to and examining their internal experiences without avoiding them (Hayes et al., 1999). Elements of this intervention have been combined with mindfulness techniques and integrated with CBT for GAD to help clients increase awareness of their emotional state and to allow them to utilize this information to set, prioritize, and achieve adaptive personal goals (cf. Roemer & Orsillo, 2008).
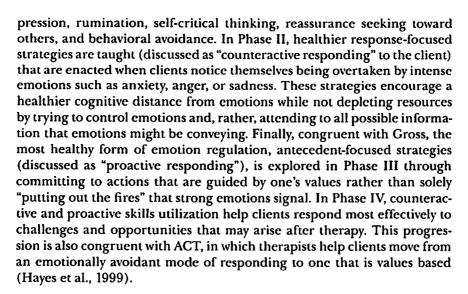
ERT continues to be actively developed, but preliminary data from our open trial appear promising (Mennin, Fresco, Ritter, Heimberg, & Moore, 2008). Presently, ERT consists of 20 weekly sessions. The first four weekly sessions (Phase I) focus on psychoeducation about the emotion regulation model (i.e., role of emotions, motivations, and reactive and control-oriented responses to emotions such as suppression, worry, reassurance seeking, and behavioral avoidance and skills training in mindful sensation, somatic, and emotion awareness). The next six weekly sessions (Phase II) focus on the development of skills aimed at balancing responses to emotions through decentering, acceptance, and management. The following six sessions (Phase III) focus on making a proactive commitment to taking actions reflective of personal values (involving balancing actions related to promotion and prevention motivations). Obstacles to taking these actions are explored, in session, through experiential exposure to emotionally evocative motivational themes through the use of emotion-focused techniques from the experiential tradition (Elliott et al., 2004; Greenberg, 2002) and, out of session, through active skills application during planned valued-action exercises. The final four sessions (Phase IV) focus on skills consolidation, taking larger steps toward valued action, handling lapses and relapses, and termination.

Consistent with DBT (Linehan, 1993) and other treatments (e.g., Cloitre et al., 2005), ERT utilizes a phasic structure that helps clients build skills in the first half of treatment that are utilized in the second half of therapy during exposure exercises. In ERT, this progression also draws largely from Gross's (2002) emotion regulation model, which distinguishes between efforts to regulate emotions later (i.e., response-focused strategies) and earlier (i.e., antecedent-focused strategies) in the emotion-generative process. ERT follows a progression wherein emotion dysregulation is addressed in Phase I through the exploration of unhealthy response-focused strategies (discussed as "reactive responding" to the client), such as worrying, sup-

pression, rumination, self-critical thinking, reassurance seeking toward others, and behavioral avoidance. In Phase II, healthier response-focused strategies are taught (discussed as "counteractive responding" to the client) that are enacted when clients notice themselves being overtaken by intense emotions such as anxiety, anger, or sadness. These strategies encourage a healthier cognitive distance from emotions while not depleting resources by trying to control emotions and, rather, attending to all possible information that emotions might be conveying. Finally, congruent with Gross, the most healthy form of emotion regulation, antecedent-focused strategies (discussed as "proactive responding"), is explored in Phase III through committing to actions that are guided by one's values rather than solely "putting out the fires" that strong emotions signal. In Phase IV, counteractive and proactive skills utilization help clients respond most effectively to challenges and opportunities that may arise after therapy. This progression is also congruent with ACT, in which therapists help clients move from an emotionally avoidant mode of responding to one that is values based (Hayes et al., 1999).

## Phase I: Psychoeducational Model and Skills Training in Mindful Awareness

In Phase I, clients learn a psychoeducation model of ERT, begin to self-monitor components of their experience related to this conceptualization (i.e., motivations, emotions, responses to emotions), and begin skills training in mindful awareness of emotions and their perceptual and somatic elements.

### Psychoeducational Model

In the initial sessions of ERT, clients are introduced to a psychoeducation module that currently highlights GAD and centers on (1) motivations that, as in all humans, naturally pull us to prevent harm and promote rewards and how, at times, these "pulls" are in conflict (Dollard & Miller, 1950; Higgins, 1997); (2) intense emotional reactions (e.g., Mennin et al., 2007) that, coupled with a history that challenged a sense of security (cf. Borkovec & Sharpless, 2004), have led to an increased focus on prevention motivations (Dugas & Robichaud, 2007; Woody & Rachman, 1994); (3) rapid and rigid reactive responses such as worrying, suppression, and reassurance seeking that are enacted in service of controlling these strong emotions (Borkovec & Sharpless, 2004; Hayes et al., 1999), which, subsequently, lead to losses in emotional clarity; and (4) a decreased likelihood to balance promotion and prevention motivations according to either contextual demands (Rodebaugh & Heimberg, 2008) or one's personal value system (Hayes et al., 1999; Wilson & Murrell, 2004). Throughout ERT, clients solidify their awareness of these model components through out-of-session

self-monitoring and unstructured writing exercises (e.g., Sloan, Marx, & Epstein, 2005), which are meant to increase awareness of anxiety-related themes through developing a narrative of these experiences.

### Skills Training in Mindful Awareness of Sensations, Soma, and Emotion

Phase I sessions also focus on developing skills that encourage greater awareness of components of the emotion process, including bodily responses, sensations, and subjective experience. In ERT, *mindfulness* is utilized to increase a healthy awareness of the emotional process. By practicing mindfulness exercises, individuals flexibly but purposefully (i.e., engaging one thing at a time) encourage attention to immediate experience with curiosity, openness, and nonjudgment, thereby allowing for increased recognition of experience in the present moment (Bishop et al., 2004; Kabat-Zinn, 1990). Drawing from both mindfulness-based stress reduction (Kabat-Zinn, 1990) and mindfulness-based cognitive therapy (MBCT; Segal et al., 2002), ERT includes both in-session and between-session mindfulness skill-building exercises. Out of session, clients are encouraged to practice mindful awareness skills related to bodily responses, sensations, and emotions in a daily practice that stresses a new exercise each session as well as the continued practice of previously learned exercises. In session, practitioners utilize numerous exercises to help client's increase present-moment awareness. For example, in the *body scan*, one slowly examines each part of their body from head to toe, including imagining internal organ functioning, to gain a better awareness of bodily responses (Kabat-Zinn, 1990). In ERT, established behavioral techniques (cf. Bernstein, Borkovec, & Hazlett-Stevens, 2000) are adapted to be congruent with a mindfulness perspective. Clients are taught *diaphragmatic breathing* and a modified *progressive muscle relaxation* training, which includes an abbreviated body scan to increase flexibility in somatovisceral and muscular responses rather than solely to regulate high levels of arousal (cf. Roemer & Orsillo, 2008). In addition, broadened awareness to appetitive and aversive stimuli alike are encouraged through practices that increase mindful ingestion of senses, including the *raisin exercise*, in which clients are asked to slowly ingest a raisin while taking notice of its tactile, olfactory, and visual features (Kabat-Zinn, 1990).

Gendlin (1996), in his focusing-oriented psychotherapy, has stressed the importance of awareness of the immediate emotional experience, especially as it relates to bodily sensations. In his treatment, individuals learn to identify emotions through a process of *focusing* to gain a "felt sense," which refers to a better understanding of implicit meanings associated with often-experienced bodily responses. Both focusing and increasing mindfulness toward positive and negative emotions (Kabat-Zinn, 1990; Segal et al., 2002) are utilized in ERT to broaden awareness of the emotional process. Although not every emotion experienced should be considered

adaptive, broadening awareness to the full spectrum of emotional experience can help clients move through "cloudy" (i.e., secondary emotional reactions) toward "clear" (i.e., primary emotions that convey initial action tendencies and their associated meanings for behavior) emotions, including the presence of all motivational cues that may be present (Greenberg, 2002; Linehan, 1993; Roemer & Orsillo, 2008).

## Phase II: Skills Training in Balancing Responses to Emotions

In Phase II, clients work to build skills to flexibly balance their responses to emotions by (1) decentering from immediate emotional experience (rather than distracting or perseverating); (2) allowing and accepting emotions; and (3) mindfully managing difficult emotional responses. Clients engage in a daily practice of these skills and utilize briefer forms of these skills during moments when they become aware that they are responding reactively (e.g., worrying) to external and internal emotional events.

### Decentering from Immediate Emotional Experience

The first response-balancing skill set that clients learn promotes cultivating a response to emotions and emotional thoughts with a *slightly* distanced observational perspective. Termed *decentering* (similar constructs include metacognitive awareness [Segal et al., 2002]; cognitive defusion [Hayes et al., 1999]; reflective functioning [Fonagy, Gergely, Jurist, & Target, 2002]), this is the ability to define one's thoughts and feelings as temporary, objective events in the mind as opposed to reflections of the self that are necessarily true. In a decentered perspective, "the reality of the moment is not absolute, immutable, or unalterable" (Safran & Segal, 1990, p. 117). Fresco and colleagues (2007) found a measure of decentering to be negatively related to emotional avoidance and suppression strategies but positively related to reappraisal strategies. Teasdale and colleagues (2002) found that MBCT resulted in larger increases in decentering than treatment as usual, highlighting its potential as a possible mediator. Similarly, Masuda, Hayes, Sackett, and Twohig (2004) found that a cognitive defusion task reduced discomfort in and believability of negative, self-relevant thoughts more so than distraction or cognitive control.

Decentering is not synonymous with mindfulness, but practices of the latter can promote the ability of the former. Consequently, ERT includes the mountain meditation (Kabat-Zinn, 1990), a mindfulness practice to help clients gain perspective on a difficult emotional state by imagining themselves as a sturdy mountain that is continually awash in the effects of changing climates and seasons, yet essentially still, consistent, and grounded. A central principle in this practice is the encouragement of equanimity, which refers to approaching the diversity of human experiences and emotions with an evenhandedness and equilibrium (Kabat-

Zinn, 1990; Segal et al., 2002). Thus, clients are able to decenter when they recognize that emotional storms, like real ones, are experiences rather than defining entities. In the observer exercise (Hayes et al., 1999), clients learn to notice internal emotional processes (i.e., emotional sensations, thoughts, memories) as transient experiences rather than defining characteristics. Also consistent with ACT, which stresses the importance of language as a conduit for mental events (i.e., cognitive fusion; Hayes et al., 1999), ERT clients are encouraged to practice defusion (i.e., decentering) from the impact of language-reinforcing associations. For example, clients might be encouraged to say "I am *having* anxiety right now" instead of "I *am* anxious." In experiential therapies, the ability to find this decentered or slightly distanced stance is called *working distance* (Gendlin, 1996), a term that highlights the importance of not only generating cognitive distance but also encouraging observation or exploration of the emotional state from this distance. Drawing on Linehan (1993), ERT clients learn the concept of "wise mind" to promote a decentered stance. *Wise mind* refers to a flexible integration of both rational and emotional states of mind. Engaging a wise mind is to respond to emotional events with the ability to pull back from immediate emotional experience and motivations and flexibly attend to both rational and emotive aspects of experience as is necessary to attain desired outcomes, tolerate distress, and properly adapt to life's inevitable challenges (cf. Teasdale, 1999).

## Allowing and Accepting Emotions

Efforts to suppress or constrain emotional experience paradoxically increase physiological arousal (cf. Gross, 2002). Conversely, studies indicate that experimentally induced regulation strategies to accept, allow, or mindfully broaden attention to emotions have demonstrated a greater ameliorative effect on symptoms compared with efforts to suppress (e.g., Campbell-Sills, Barlow, Brown, & Hofmann, 2006; Levitt, Brown, Orsillo, & Barlow, 2004). The skills utilized in ERT to encourage allowance of emotions are drawn primarily from acceptance- and mindfulness-based behavioral practices (e.g., Hayes et al., 1999; Roemer & Orsillo, 2008; Segal et al., 2002). Mindfulness facilitates the reduction of reactive urges to avoid or control difficult experiences by promoting the allowance of the rise and passage of emotions (Segal et al., 2002). Accepting emotional experiences is central to the goals of ACT (Hayes et al., 1999). Although not an explicit skill, metaphors, commonly used in ACT, are utilized as a conduit to internalize a *willingness* to allow emotions to be present. Exercises from ACT, such as "carrying your keys," are used in ERT to promote willingness and build upon clients' developing ability to decenter. In this task, clients physically place their keys in front of them and then mentally assign characteristics of one's emotional experience (i.e., motivations, worries, critical thoughts) to different keys and then carry these keys (and their represen-

tational meanings) with them rather than trying to rid themselves of these experiences despite how distressing they may feel.

Encouraging the allowance of emotional responses reduces reactive emotional responses and increases receptiveness to information conveyed by emotion (Roemer & Orsillo, 2008). If emotion responses impart motivational information, then increasing allowance of experience through an expanded, present-moment focus may enhance one's ability to detect and use early emotional cues to guide actions, solve conflicts, and make important decisions. Drawing from emotion-focused therapy (see Greenberg, 2002), ERT allowance skills target the functional role of emotions in the acceptance process. Clients learn through allowing and engaging emotional experiences, distressing or otherwise, that emotions are not truths but, rather, are a means to provide information regarding one's values, judgments, and well-being (Greenberg, 2002). By accepting and exploring emotions, clients gain an ability to be present with emotions and learn how to determine their functional utility in guiding actions. Becoming more comfortable with emotions and the motivational information they impart may also be automated, through repeated exposure, into a greater ability to utilize their felt sense more rapidly in facilitating cognitive processes such as decision making (Damasio, 1994).

## Mindfully Managing Difficult Emotional Responses

A debate remains over whether efforts to manage emotions are therapeutic or even possible. Traditional cognitive therapy emphasizes the control of emotional responses, particularly through conscious thought (e.g., Beck, Rush, Shaw, & Emery, 1979). In contrast, acceptance-based behavioral therapies do not involve the direct manipulation of emotional states because control efforts are seen as countertherapeutic and ultimately futile (Hayes et al., 1999; Valdivia-Salas et al., Chapter 13, this volume), especially when used habitually because they become contextually nonfunctional as flexibility in emotional responses gets reduced (Wilson & Murrell, 2004). ERT adopts a dynamic systems approach to emotion function and regulation, recognizing the merits of both the allowance and management of emotional responses used in a functional manner. Some environmental contingencies (either external or internal) may be engaged best through allowance and acceptance of emotions (e.g., nervous anticipation of biopsy results), whereas others may call for more immediate efforts to effect change in the emotional process (e.g., focusing away from sad feelings after a breakup while in a board meeting).

In ERT, we introduce skills to help soothe intense and distressful emotional thoughts, bodily sensations, and action tendencies in service of maintaining mindful contact and clarification with the emotional experience rather than in service of disengaging from or quelling the emotional state. Specifically, clients utilize the "breathing space" (Segal et al., 2002),

a brief mindfulness practice, to assist in locating their wise mind (Linehan, 1993) in a moment of distress so that management skills are not enacted in a manner to escape or remove emotional experience. Mindfulness, by broadening attentional processes, can counter the action tendencies associated with the narrowed focus inherent in threat-based emotions such as fear and anxiety. The nonjudgmental stance encouraged by mindfulness exercises may also help individuals gain perspective on a situation that might have inherent negative emotion-reducing properties (Roemer & Orsillo, 2008). Management skills are discussed in terms of their ability to lessen emotional intensity to not only reduce distress but also to gain a clearer signal of the range of emotional messages in an important life situation.

ERT uses several strategies to promote mindful management of emotions. An important strategy, given the central role of divergent motivations in the treatment, is engaging in *opposite action* (Linehan, 1993), *changing emotions with emotion* (Greenberg, 2002), or *modifying emotional action tendencies* (Barlow et al., 2004). These approaches involve assessing whether an emotion is functional in a given situation, examining cues that may exacerbate emotional responses, deliberately not engaging behavioral responses associated with context-specific maladaptive emotions, and replacing the responses with behavior that is counter to the actions tendency compelled by the emotion. For instance, positive emotional experiences may be used to widen one's attentional frame after prolonged exposure to negative emotions. In addition, ERT clients can utilize recall relaxation (cf. Borkovec & Sharpless, 2004), which follows from the mindfulness-enriched progressive muscle relaxation practice discussed previously, to promote more flexibility in musculature response during periods of physical tension. Finally, reappraisal (Gross, 2002) processes are utilized in conjunction with the promotion of mindful self-compassion in response to self-critical thoughts (Segal et al., 2002). A "softening" of critical self-statements during intense emotional episodes is encouraged through the invoking of alternative, compassionate statements.

## Phase III: Values-Based, Experiential Exposure

Exposure therapies typically focus on fear-evoking cues (cf. Foa & Kozak, 1986). However, advances in affective sciences support a broader focus on various emotions and disorders beyond fear as well as an expansion of the goal of emotional processing from reducing emotions to the creation of new personal meanings through facilitated attention to the motivational information conveyed through emotion (cf. Greenberg, 2002; Teasdale, 1999). In this regard, new meanings occur from the utilization of emotional information rather than its mere reduction. Indeed, modern learning theory suggests that exposure is effective not because previously associated

emotional meanings are unlearned or erased but because new emotional meanings are strengthened (Bouton, 2002). Also, the promotion of new, rewarding behaviors is a central treatment goal for behavioral activation therapy (Martell, Addis, & Jacobson, 2001; see also Syzdek, Addis, & Martell, Chapter 17, this volume), which has demonstrated efficacy for depression.

After having worked in Phase II to develop effective, "counteractive" (i.e., response-focused) strategies in response to emotional states, Phase III centers on helping clients to engage a "proactive" (i.e., antecedent-focused) stance toward change by making choices about how they may want to be balancing protecting and promoting endeavors in service of what matters most to them. Consistent with ACT, this objective is accomplished by focusing clients on their personal values, which represent their highest priorities and most cherished principles (Hayes et al., 1999; Wilson & Murrell, 2004). In Phase III, clients experientially explore acting in accordance with their values and confronting any accompanying perceived obstacles that arise both within and between sessions. Specifically, Phase III sessions consist of three main exposure components to promote valued living: (1) imaginal action related to values-informed goals; (2) experiential tasks to explore perceived internal conflicts that impede engaging valued actions (Greenberg, 2002); and (3) planned homework exercises wherein clients engage valued actions outside of session. Clients also utilize the awareness and response-balancing skills to help facilitate engagement during the in-session experiential tasks and to facilitate valued action outside of session.

## Proactive Valued Action

ERT draws from ACT (Hayes et al., 1999) in stressing the importance of *commitment*, involving a willingness to act in accordance with one's values despite whether strong security motivations and accompanying anxiety, worry, and distress are present. This willingness may also involve an allowance of enhancement (i.e., promotion) motivations to become more salient and to follow these motivations in service of valued action. In ERT, commitment is considered to be proactive because it involves intentional actions toward goals that are reflective of stated values. However, outcome and goal achievement are not the purpose of engaging values (Hayes et al., 1999; Wilson & Murrell, 2004). Rather, values are engaged to be more congruent with what matters most to the client and to open up to the opportunities that come with that flexibility. In the outset of Phase III, therapists and clients collaborate to identify cherished values in the domains (e.g., family, friends, relationships, work, personal care) where clients report discrepancies between the importance they place on this value and how consistently they have been living accordingly (Wilson & Murrell, 2004). Therapists then encourage clients to think about a salient value with a large

discrepancy and how they want their actions to reflect this value *today*, even if it involves only a small action step.

Wilson and Murrell (2004) note that clients often have difficulty engaging in values work. Given that clients may still be committed to not experiencing their emotions and could utilize the skills in an avoidant manner, valued action is explored through systematic experiential exploration. By encouraging active exploration of valued actions, clients can form a better blueprint for how to live by their values and create new meaningful change. Specifically, imaginal exposure tasks that focus on engaging in *specific* valued actions are conducted (1) to provide clients with an experientially rich rehearsal of the steps that might be necessary to live by their values and (2) to confront the emotional challenges that are likely to arise as clients imagine engagement of valued action. In this imagery exposure task, therapists help clients imagine each step involved in engaging this action while noting changes in motivational levels and encouraging utilization of skills to address difficulties in awareness and balancing of emotional responses. Utilizing imagery to consolidate skills and promote functional action is also congruent with interventions such as *cognitive rehearsal* (Beck et al., 1979).
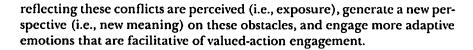
### Exploring Conflict Themes in Obstacles to Valued Living

The second component of exposure work in ERT involves addressing perceived obstacles to taking valued action. Obstacles reflect clients' own internal struggle that holds them back from engaging in this valued action. In ERT, obstacles are addressed through the lens of "conflict themes," including (1) a *motivational conflict* (e.g., security motivations are blocking or interrupting enhancement efforts); (2) *self-critical reactive responses to emotions* (i.e., judgmental negative beliefs about one's emotional responses and associated motivations); and (3) *unfinished business with a security-challenging or critical figure* (i.e., lingering painful feelings related to the perception that an important other has been profoundly judgmental and dismissive or disrupted a sense of safety and, possibly, the emergence of enhancement motivations). These conflict themes are addressed within session using experiential techniques from emotion-focused therapy (i.e., chair dialogues) (Elliott et al., 2004; Greenberg, 2002; for an alternative approach to chair dialogues in treatment for GAD, see Newman, Castonguay, Borkovec, Fisher, & Nordberg, 2008). Respective thematic experiential exposure tasks address each of these conflict themes. In ERT, the *motivational conflict* is most central to interrupting valued action and is addressed by encouraging clients to engage a dialogue between the part of themselves that is strongly motivated to obtain security and the part that is motivated toward self-reliance to arrive at a more unified motivational stance that is conducive to valued action. The purpose of these tasks is to reduce negative emotional responses that are activated when obstacles

reflecting these conflicts are perceived (i.e., exposure), generate a new perspective (i.e., new meaning) on these obstacles, and engage more adaptive emotions that are facilitative of valued-action engagement.

## Engaging Proactive Valued Action Outside of Session

Finally, valued action is promoted through between-session exercises that build on the work conducted during the valued-action exploration and obstacles-confrontation exposure tasks. Clients are reminded that protection and avoidance will always preclude the ability to live in their most cherished ways. Thus, commitment involves clients agreeing to bring some of this struggle with them in the week following therapy by making choices to engage valued actions. Therapists encourage clients to engage both planned (i.e., specific valued actions related to salient values explored in session and committed to in the presence of therapists) and spontaneous (i.e., any other valued actions clients notice themselves engaging in) valued actions outside of session (Hayes et al., 1999). Further, clients are encouraged to utilize skills both proactively (in an antecedent-focused manner) when they are planning to engage valued actions and counteractively (in a response-focused manner) when they notice themselves getting unexpectedly anxious and beginning to respond reactively with worry, reassurance seeking, self-criticism, or behavioral avoidance. Finally, external barriers (i.e., obstacles in the environment that are outside clients' control), which might have been deferred during exposure tasks, can also be addressed more actively in between session exercises. Therapists can help clients problem solve these obstacles or utilize skills such as acceptance to further facilitate valued action.

## Phase IV: Consolidating Gains, Anticipating Lapses and Relapses, and Termination Processing

In this final phase of ERT, sessions focus on consolidating gains and preparing for termination. Initial goals are reviewed to determine whether changes have occurred as well as determining what goals still need to be addressed. Clients and therapists discuss how to apply skills following therapy termination in service of (1) taking larger steps toward valued action and (2) addressing lapses so that they do not become full-blown relapses during difficult life periods that may arise (Dugas & Robichaud, 2007). Specifically, discussion focuses on ways to help prevent clients from becoming once again reliant on obtaining security and responding reactively (e.g., excessive worry and behavioral avoidance) once therapy is terminated. Clients and therapists discuss how emotion awareness and response-balancing skills can continue to be utilized in service of taking new valued actions and responding to difficult events. Ability to tolerate possible future stressful and painful life circumstances is also further explored by reviewing

skills and applying them to experiential exposure exercises that center on hypothetical situations related to core themes that may arise in the future. An open discussion of termination and "life after therapy" helps to fully address feelings associated with termination and the loss of the therapeutic relationship.
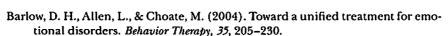
## Conclusions

Utilizing an integrative, emotion-based framework may provide a promising, novel direction for conceptualization of psychopathology and its treatment. Nonetheless, it is important to acknowledge the limitations and challenges that should be addressed as this field of inquiry moves forward. First, thus far, ERT has been utilized only for GAD. Its applicability to other conditions remains unknown. However, given the broad framework that the treatment draws from and the relevance of emotion dysregulation to a number of conditions, including major depression, bipolar disorders, SAD, PTSD, and eating disorders, a common treatment approach such as ERT may be viable for seemingly disparate, yet highly co-occurring, disorders (Barlow et al., 2004). Second, the construct validity of many of these ideas has not been established, although efforts are already underway (e.g., Bishop et al., 2004). Future research in this area must continue to operationalize these constructs as well as examine their validity in relation to more established constructs. Third, it will be important to determine whether these new treatments have incremental efficacy for refractory disorders compared with existing treatments and whether emotion regulatory factors are central mechanisms in this change. Finally, given the complexity inherent in integrating approaches, striving for parsimony will be an important challenge to address in future research. With these caveats in mind, future endeavors will no doubt expand inquiry into the nexus of affective and clinical psychological approaches and, it is hoped, in so doing, expand our knowledge base of psychopathological conceptualization and treatment.

## References

Anderson, A., & Phelps, E. (2001). Lesions of the human amygdala impair enhanced perception of emotionally salient events. *Nature, 411*, 305–309.

Baker, R., Holloway, J., Thomas, P., Thomas, S., & Owens, M. (2004). Emotional processing and panic. *Behaviour Research and Therapy, 42*, 1271–1287.

Bargh, J. A., & Williams, L. E. (2007). On the nonconscious of emotion regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 429–445). New York: Guilford Press.

Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic* (2nd ed.). New York: Guilford Press.

Barlow, D. H., Allen, L., & Choate, M. (2004). Toward a unified treatment for emotional disorders. *Behavior Therapy*, *35*, 205–230.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy for depression*. New York: Guilford Press.

Berenbaum, H., Raghavan, C., Le, H. N., Vernon, L., & Gomez, J. (2003). A taxonomy of emotional disturbances. *Clinical Psychology: Science and Practice*, *10*, 206–226.

Bernstein, D. A., Borkovec, T. D., & Hazlett-Stevens, H. (2000). *New directions in progressive relaxation training*. Westport, CT: Praeger.

Bishop, S. R., Laue, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*, 230–241.

Bonnano, G. (2001). Emotion self-regulation. In T. J. Mayne & G. A. Bonnano (Eds.), *Emotions: Current issues and future directions* (pp. 251–285). New York: Guilford Press.

Borkovec, T. D., & Ruscio, A. M. (2001). Psychotherapy for generalized anxiety disorder. *Journal of Clinical Psychiatry*, *62*(Suppl. 11), 37–42.

Borkovec, T. D., & Sharpless, B. (2004). Generalized anxiety disorder: Bringing cognitive-behavioral therapy into the valued present. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition* (pp. 209–242). New York: Guilford Press.

Bouton, M. E. (2002). Context, ambiguity, and unlearning: Sources of relapse after behavioral extinction. *Biological Psychiatry*, *52*, 976–986.

Campbell-Sills, L., Barlow, D. H., Brown, T. A., & Hofmann, S. G. (2006). Effects of emotional suppression and acceptance in anxiety and mood disorders. *Behaviour Research and Therapy*, *44*, 1251–1263.

Campbell-Sills, L., Liverant, G. I., & Brown, T. A. (2004). Psychometric evaluation of the Behavioral Inhibition/Behavioral Activation Scales in a large sample of outpatients with anxiety and mood disorders. *Psychological Assessment*, *16*, 244–254.

Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.

Cloitre, M., Koenen, K. C., Cohen, L. R., & Han, H. (2002). Skills training in affective and interpersonal regulation followed by exposure: A phase-based treatment for PTSD related to childhood abuse. *Journal of Consulting and Clinical Psychology*, *70*, 1067–1074.

Cloitre, M., Miranda, R., Stovall-McClough, K. C., & Han, H. (2005). Beyond PTSD: Emotion regulation and interpersonal problems as predictors of functional impairment in survivors of childhood abuse. *Behavior Therapy*, *36*, 119–124.

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, *75*, 317–333.

Cosmides, L., & Tooby, J. (2000). Evolutionary psychology and the emotions. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 91–115). New York: Guilford Press.

Damasio, A. R. (1994). *Descartes' error*. New York: Putnam.

Davidson, R. J., Jackson, D. C., & Kalin, N. H. (2000). Emotion, plasticity, context, and regulation: Perspectives from affective neuroscience. *Psychological Bulletin*, *126*, 890–909.

Dollard, J., & Miller, N. E. (1950). *Personality and psychotherapy*. New York: McGraw-Hill.

Dugas, M. J., & Robichaud, M. (2007). *Cognitive-behavioral treatment for generalized anxiety disorder*. New York: Routledge.

Eifert, G. H., & Forsyth, J. P. (2005). *Acceptance and commitment therapy for anxiety disorders: A practitioner's treatment guide to using mindfulness, acceptance, and values-based behavior change strategies*. Oakland, CA: New Harbinger.

Elliott, R., Watson, J., Goldman, R. N., & Greenberg, L. S. (2004). *Learning emotion-focused therapy: The process-experiential approach to change*. Washington, DC: American Psychological Association.

Flett, G. L., Blankstein, K. R., & Obertynski, M. (1996). Affect intensity, coping styles, mood regulation expectancies and depressive symptoms. *Personality and Individual Differences, 20*, 221–228.

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99*, 20–35.

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization and the development of the self*. New York: Other Press.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218–226.

Fresco, D. M., Moore, M. T., van Dulman, M. H. M., Segal, Z. V., Ma, S. H., Teasdale, J. D., et al. (2007). Initial psychometric properties of the Experiences Questionnaire: Validation of a self-report measure of decentering. *Behavior Therapy, 38*, 234–246.

Gendlin, E. T. (1996). *Focusing-oriented psychotherapy: A manual of the experiential method*. New York: Guilford Press.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and validation of the Difficulties with Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41–54.

Gratz, K. L., Tull, M. T., & Wagner, A. W. (2005). Applying DBT mindfulness skills to the treatment of clients with anxiety disorders In S. M. Orsillo & L. Roemer (Eds.), *Acceptance and mindfulness-based approaches to anxiety: Conceptualization and treatment* (pp. 147–164). New York: Springer.

Gray, J. A., & McNaughton, N. (2000). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system* (2nd ed.). New York: Oxford University Press.

Gray, J. R. (2004). Integration of emotion and cognitive control. *Current Directions in Psychological Science, 13, 46–48*.

Greenberg, L. S. (2002). *Emotion-focused therapy: Coaching clients to work through their feelings*. Washington, DC: American Psychological Association.

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology, 39*, 281–291.

Haviland, M. G., Hendryx, M. S., Shaw, D. G., & Henry, J. P. (1994). Alexithymia in women and men hospitalized for psychoactive substance dependence. *Comprehensive Psychiatry, 35*, 124–128.

Hayes, A. M., & Feldman, G. (2004). Clarifying the construct of mindfulness in the context of emotion regulation and the process of change in therapy. *Clinical Psychology: Science and Practice, 11*, 255–262.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change.* New York: Guilford Press.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist, 52,* 1280–1300.

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness.* New York: Delta.

Kashdan, T. B., Morina, N., & Priebe, S. (2009). Post-traumatic stress disorder, social anxiety disorder, and depression in survivors of the Kosovo War: Experiential avoidance as a contributor to distress and quality of life. *Journal of Anxiety Disorders, 23*(2), 185–196.

Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition & Emotion, 13,* 505–521.

Kring, A. M., & Werner, K. H. (2004). Emotion regulation and psychopathology. In P. Philippot & R. S. Feldman (Eds.), *The regulation of emotion* (pp. 359–385). Mahwah, NJ: Erlbaum.

Lang, P. J., Bradley, M. M., & Cuthbert, B. N. (1998). Emotion, motivation, and anxiety: Brain mechanisms and psychophysiology. *Biological Psychiatry, 44,* 1248–1263.

Leahy, R. L. (2002). A model of emotional schemas. *Cognitive and Behavioral Practice, 9,* 177–190.

LeDoux, J. E. (1996). *The emotional brain: The mysterious underpinnings of emotional life.* New York: Simon & Schuster.

Linehan, M. M. (1993). *Cognitive-behavioral treatment for borderline personality disorder.* New York: Guilford Press.

Lynch, T. R., Robins, C. J., Morse, J. Q., & MorKrause, E. D. (2001). A mediational model relating affect intensity, emotion inhibition, and psychological distress. *Behavior Therapy, 32,* 519–536.

Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in context: Strategies for guided action.* New York: Norton.

Masuda, A., Hayes, S. C., Sackett, C. F., & Twohig, M. P. (2004). Cognitive defusion and self-relevant negative thoughts: Examining the impact of a ninety year old technique. *Behaviour Research and Therapy, 42,* 477–485.

Mauss, I. B., Levenson, R. W., McCarter, L., Wilhelm, F., & Gross, J. J. (2005). The tie that binds? Coherence among emotion experience, behavior, and physiology. *Emotion, 5,* 175–190.

Mayer, J. D., Salovey, P., & Caruso, D. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry, 15,* 197–215.

McEwen, B. S. (2003). Mood disorders and allostatic load. *Biological Psychiatry, 54,* 200–207.

Mennin, D. S., & Farach, F. J. (2007). Emotion and evolving treatments for adult psychopathology. *Clinical Psychology: Science and Practice, 14,* 329–352.

Mennin, D. S., Fresco, D. M., Ritter, M., Heimberg, R. G., & Moore, M. T. (2008, November). Emotion regulation therapy for generalized anxiety disorder: Integrating emotion-related approaches using an affect science framework. In C. T. Taylor & N. Amir (Chairs), *Novel approaches to the treatment of generalized anxiety disorder.* Paper presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.

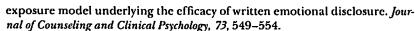Mennin, D. S., Heimberg, R. G., Turk, C. L., & Fresco, D. M. (2005). Preliminary

evidence for an emotion dysregulation model of generalized anxiety disorder. *Behaviour Research and Therapy, 43,* 1281–1310.

Mennin, D. S., Holaway, R., Fresco, D. M., Moore, M. T., & Heimberg, R. G. (2007). Delineating components of emotion and its dysregulation in anxiety and mood psychopathology. *Behavior Therapy, 38,* 284–302.

Mennin, D. S., McLaughlin, K. A., & Flanagan, T. (in press). Emotion regulation deficits in generalized anxiety disorder, social anxiety disorder, and their co-occurrence. *Journal of Anxiety Disorders.*

Mineka, S., Rafaeli, E., & Yovel, I. (2003). Cognitive biases in emotional disorders: Information processing and social-cognitive perspectives. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 976–1009). New York: Oxford University Press.

Mowrer, O. H. (1947). On the dual nature of learning: A re-interpretation of "conditioning" and "problem-solving." *Harvard Educational Review, 17,* 102–148.

Newman, M. G. (2000). Recommendations for a cost offset model of psychotherapy allocation using generalized anxiety disorder as an example. *Journal of Consulting and Clinical Psychology, 68,* 549–555.

Newman, M. G., Castonguay, L. G., Borkovec, T. D., Fisher, A. J., & Nordberg, S. S. (2008). An open trial of integrative therapy for generalized anxiety disorder. *Psychotherapy Theory, Research, Practice, Training, 45,* 135–147.

Parker, J. D., Taylor, G. J., Bagby, R. M., & Acklin, M. W. (1993). Alexithymia in panic disorder and simple phobia: A comparative study. *American Journal of Psychiatry, 150,* 1105–1107.

Parrott, W. G. (2001). Implications of dysfunctional emotions for understanding how emotions function. *Review of General Psychology, 5,* 180–186.

Rodebaugh, T. L., & Heimberg, R. G. (2008). Emotion regulation and the anxiety disorders: Adopting a self-regulation perspective. In A. Vingerhoets, I. Nyklícek, & J. Denollet (Eds.), *Emotion regulation: Conceptual and clinical issues* (pp. 140–149). New York: Springer.

Roemer, L., & Orsillo, S. M. (2008). *Mindfulness- and acceptance-based behavioral therapies in practice.* New York: Guilford Press.

Roth, A., & Fonagy, P. (2004). *What works for whom? A critical review of psychotherapy research* (2nd ed.). New York: Guilford Press.

Rottenberg, J., & Gross, J. (2003). When emotion goes wrong: Realizing the promise of affective science. *Clinical Psychology: Science and Practice, 10,* 227–232.

Rude, S. S., & McCarthy, C. T. (2003). Emotional functioning in depressed and depression-vulnerable college students. *Cognition & Emotion, 17,* 799–806.

Safran, J. D., & Segal, Z. V. (1990). *Interpersonal process in cognitive therapy.* New York: Basic Books.

Salters-Pedneault, K., Roemer, L., Tull, M. T., Rucker, L., & Mennin, D. S. (2006). Evidence of broad deficits in emotion regulation associated with chronic worry and generalized anxiety disorder. *Cognitive Therapy and Research, 30,* 469–480.

Samoilov, A., & Goldfried, M. R. (2000). Role of emotion in cognitive-behavior therapy. *Clinical Psychology: Science and Practice, 7,* 373–385.

Segal, Z., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse.* New York: Guilford Press.

Sloan, D. M., Marx, B. P., & Epstein, E. M. (2005). Further examination of the

exposure model underlying the efficacy of written emotional disclosure. *Journal of Counseling and Clinical Psychology, 73,* 549–554.

Taylor, S., Koch, W. J., & McNally, R. J. (1992). How does anxiety sensitivity vary across the anxiety disorders? *Journal of Anxiety Disorders, 6,* 249–259.

Teasdale, J. D. (1999). Emotional processing, three modes of mind, and the prevention of relapse in depression. *Behaviour Research and Therapy, 37,* S53–S78.

Teasdale, J. D., Moore, R. G., Hayhurst, H., Pope, M., Williams, S., & Segal, Z. V. (2002). Metacognitive awareness and prevention of relapse in depression: Empirical evidence. *Journal of Consulting and Clinical Psychology, 70,* 275–287.

Thompson, R. A. (1994). Emotion regulation: A theme in search of a definition. In N. Fox (Ed.), *Monographs of the Society for Research in Child Development, 59*(2/3), 25–52.

Tull, M. T., & Roemer, L. (2007). Emotion regulation deficits among a non-treatment seeking sample of individuals with uncued panic attacks: Evidence of emotional avoidance, non-acceptance, and decreased emotional clarity. *Behavior Therapy, 38,* 378–391.

Wilson, K. G., & Murrell, A. R. (2004). Values work in acceptance and commitment therapy: Setting a course for behavioral treatment. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition* (pp. 120–151). New York: Guilford Press.

Woody, S., & Rachman, S. (1994). Generalized anxiety disorder (GAD) as an unsuccessful search for safety. *Clinical Psychology Review, 14,* 743–753.

Yen, S., Zlotnick, C., & Costello, E. (2002). Affect regulation in women with borderline personality disorder traits. *Journal of Nervous and Mental Disease, 190,* 693–696.

Zittel Conklin, C., Bradley, R., & Westen, D. (2006). Affect regulation in borderline personality disorder. *Journal of Nervous and Mental Disease, 194,* 69–77.