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 CHAPTER 17

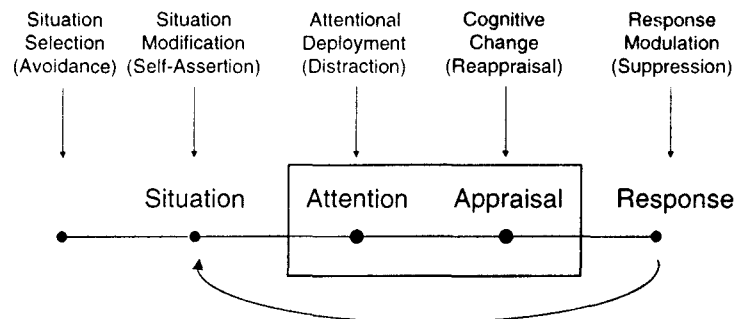
 Individual Differences  
in Emotion Regulation

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Emotions often seem to be forced on us by external events that are outside our control. Take the statement "Talking to Joe makes me so sad!" The speaker indicates that it is Joe who causes her sadness and implies that there is not much she can do about it. Contrary to this intuition, however, people actually exercise considerable influence over the emotions they have. Many different strategies may be used to regulate emotions, and people seem to differ widely in which ones they tend to use. These individual differences in the use of emotion-regulatory strategies are the focus of this chapter.

Our overarching framework is a process model of emotion regulation based on a generally accepted conception of the emotion-generative process (for reviews, see Gross, 1998, 2001; Gross & Thompson, this volume). Briefly put, this conception holds that an emotion begins with an evaluation of emotion cues. When attended to and evaluated in certain ways, emotion cues trigger a coordinated set of response tendencies. Once these response tendencies arise, they may be modulated in various ways. Because emotion unfolds over time, emotion regulation strategies can be differentiated in terms of *when* they have their primary impact on the emotion-generative process. As shown in Figure 17.1, five families of more specific strategies can be located along the timeline of the emotion process (Gross, 1998, 2001).

In particular, *situation selection* refers to avoiding certain people, places, or activities to limit one's exposure to situations likely to generate negative emotion. Once selected, *situation modification* operates to tailor or change a situation to decrease its negative emotional impact. Third, situations have many different aspects, so *attentional deployment* can be used to focus on less negatively valenced aspects of the situation. Once



**FIGURE 17.1.** A process model of emotion regulation. Individual differences in emotion regulation may arise at five points in the emotion-generative process: (1) selection of the situation, (2) modification of the situation, (3) deployment of attention, (4) change of cognitions, and (5) modulation of experiential, behavioral, or physiological responses. Specific instantiations of these five families of regulatory strategies (given in parentheses) may be used for the downregulation of negative emotion, as described in the text.

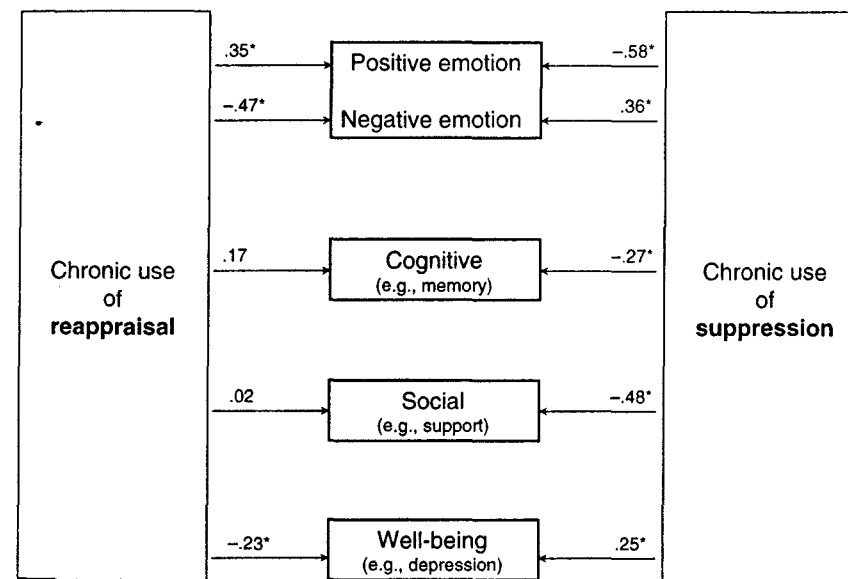
focused on a particular aspect of the situation, *cognitive change* refers to constructing a more positive meaning out of the many possible meanings that may be attached to that situation. Finally, *response modulation* refers to various kinds of attempts to influence emotion-response tendencies once they already have been elicited. In this chapter, we focus on five particular instances of these strategies that individuals use to achieve the most frequent goal of emotion regulation in everyday life: downregulating (decreasing) emotions that typically have a negative valence, such as anxiety/fear, sadness, and anger (Gross, Richards, & John, 2006). These specific forms of emotion downregulation are indicated in Figure 17.1 in parentheses under each family name.

Our aim in this chapter is to use these five emotion regulation strategies as a conceptual framework to analyze a broad range of constructs selected from three theoretical paradigms: (1) broad personality traits; (2) dynamic approaches including coping styles and adult attachment; and (3) social-cognitive approaches. In trying to achieve this aim, we faced the difficulty that relatively little is known about individual differences in these five specific forms of emotion regulation. For this reason, we have drawn extensively on our own studies (Gross & John, 2003; see also John & Gross, 2004) that have tested whether there are consistent individual differences in the use of reappraisal and suppression and how these naturally occurring individual differences relate to healthy adaptation: the experience of positive and negative emotion, cognition, relationships, and well-being.

These findings, summarized in Figure 17.2, were generally consistent with the temporal assumptions in our process model (see Figure 17.1) and with earlier experimental results. Specifically, we found that reappraisal—which occurs early in the emotion-generative process before emotion-response tendencies have been fully generated—permits the modification of the entire emotional sequence, including the experience of more positive and less negative emotion, without notable physiological, cognitive, or interpersonal costs. By contrast, suppression—which comes relatively late in the emotion-generative process—primarily modifies the behavioral aspect of the emotion-response tendencies, without reducing the experience of negative emotion. Because it

comes late in the emotion-generative process, suppression requires the individual to effortfully manage response tendencies as they arise continually, consuming cognitive resources that could otherwise be used for optimal performance in the social contexts in which the emotions arise. Moreover, suppression creates a sense of discrepancy between inner experience and outer expression, leading to negative feelings about the self and alienating the individual from others, impeding the development of emotionally close relationships (John & Gross, 2004).

Because we refer back to these studies throughout this chapter, we note that we measured individual differences in the habitual use of reappraisal and suppression with the Emotion Regulation Questionnaire (ERQ; see Gross & John, 2003, for details). Example items are “I control my emotions by *changing the way I think* about the situation I’m in” for reappraisal, and “I control my emotions by *not expressing them*” for suppression. Note that each of the 10 ERQ items indicates clearly the one emotion-regulatory process it is intended to measure, and nothing else, to avoid any potential confounding by mentioning any positive or negative adjustment consequences. The correlation between the reappraisal and suppression scales was zero in multiple samples, and the two ERQ scales were not related to cognitive ability or social desirability, probably because the items are worded fairly neutrally and do not mention individual differences in adjustment or well-being. More generally, we conceptualize these individual differ-



**FIGURE 17.2.** Summary of previous research (see Gross & John, 2003; John & Gross, 2004) on individual differences in the chronic use of reappraisal and suppression: Differential associations with emotion experience, cognition, relationships, and well-being. Specific correlations in the figure refer to the illustrative variables given in parentheses. For example, use of reappraisal correlated  $-.23$  with depression and use of suppression correlated  $.25$ . \*  $p < .05$ .

ences in emotion regulation not as fixed or immutable traits but as socially acquired strategies that are sensitive to individual development, as shown by age-related changes toward a healthier pattern of strategy use from early to middle adulthood (John & Gross, 2004).

For the remaining three emotion regulation strategies, we rely on theoretical argument and careful comparison of the measurement procedures and scales used to operationalize each construct. The conclusions presented here thus reflect our best current (though limited) understandings of constructs and measures; by necessity, they are sometimes speculative. They should therefore be taken not as a definitive roadmap but instead as an initial compilation of where we stand and what needs to be known, a set of ideas and hypotheses that await being put to empirical test. We also wish to emphasize at the outset that we use the five particular kinds of emotion-regulatory strategies in Figure 17.1 as an organizing framework not because we think our model is the only or best one. On the contrary, comparing this model to other constructs in the field will serve to illuminate its limitations and ambiguities. We started with this model because we needed to start somewhere, because even an imperfect model is better than none, and because this model is, in our view, most specifically tied to our core topic—the particular strategies individuals habitually use to regulate their emotions.

## LINKS TO GLOBAL PERSONALITY TRAITS

Personality traits are generalized response dispositions that “initiate and guide consistent (equivalent) forms of adaptive and expressive behaviors” (Allport, 1937, p. 295). One should thus expect individual differences in emotion regulation strategies to play an important role in generating the individual differences represented by traits. What traits should we consider here? After decades of research on the “right” number and definition of the most important trait dimensions, the field has converged on a consensual, general taxonomy of personality traits, the “Big Five” personality domains (John, 1990). Rather than replacing all previous systems, this taxonomy serves an integrative function: It can represent the various and diverse systems of personality description within one common framework (John & Srivastava, 1999). It is worth emphasizing that the Big Five are very broad constructs that subsume a wide range of more specific, subordinate constructs, and they are manifested across all response classes, including behavior, emotion, and cognition. They are diverse not only in content but also in terms of underlying processes. We therefore expected each of these broad trait domains to show a particular patterning, or configuration, of associated emotion regulation strategies, rather than any simple one-to-one correspondences between any one trait domain and any one strategy (Table 17.1).

### Conscientiousness

Conscientiousness describes *socially prescribed impulse control* that facilitates task- and goal-directed behavior, such as thinking before acting; delaying gratification; following norms and rules; and planning, organizing, and prioritizing tasks (John & Srivastava, 1999). What kinds of emotion-regulation strategies might highly conscientious individuals use? Their characteristic traits (Costa & McCrae, 1992) lead to two straightforward predictions. First, their ability to plan, organize, and think ahead about potential consequences before acting should make it far easier for them to use *situation selection*.

**TABLE 17.1. Linking Global Personality Traits to Habitual Use of Emotion Regulation Strategies**

Big Five personality trait domains	Five regulation strategies for downregulating negative emotions				
	Situation selection (avoidance)	Situation modification (self-assertion)	Attention deployment (distraction)	Cognitive change (reappraisal)	Response modulation (suppression)
Conscientiousness	+	+	+	0	0
Extraversion	-	+	0	0	-
Neuroticism	(+)	-	-	-	0
Openness	(-)	(+)	+	+	-
Agreeableness	0	-	0	0	(0)

*Note.* The table entries indicate the sign of the predicted relation between each Big Five personality domain and the habitual use of each emotion regulation strategy: “+” indicates a positive relation, “-” a negative relation, and “0” a prediction of no clearly positive or clearly negative relation. For entries shown in parentheses, such as (+), the prediction was not unequivocal and likely depends on other factors or considerations (see text).

Compared to the more impulsive individuals low in Conscientiousness, they should be able to avoid knowingly entering or getting trapped in situations that cause them negative emotions. For example, the highly conscientious college student who knows she will feel bad about not finishing her class paper on time will decline a social invitation before completing the paper. This prediction fits with findings that conscientious individuals tend to have fewer regrets (Cate, 2006)—by carefully choosing situations that are consistent with their goals and plans, they end up doing fewer things they later come to regret.

Highly conscientious individuals should also use *situation modification* more frequently. When they find themselves in a situation that makes them feel negative emotion and they cannot “unselect” that situation, they would seem likely to do something about it—the situation, interaction partner, or behavior eliciting their negative affect. Whereas individuals low in conscientiousness are likely too disorganized to effectively modify the situation, highly conscientious individuals generally have the competence to function effectively in the world.

Our third regulation strategy, *attention deployment*, should also be related to conscientiousness: Being able to focus on a task and deploy attention to goal-relevant features of the environment is one of the defining features of conscientiousness (e.g., self-discipline, deliberation, and order; Costa & McCrae, 1992) and low levels of conscientiousness have been linked to the attentional deficits so common in attention-deficit/hyperactivity disorder (ADHD) (Nigg et al., 2002). Thus, when situation selection and situation modification are not possible, we expect highly conscientious individuals to use attentional skills, such as distracting themselves from an emotionally negative stimulus by switching their attentional focus to another task, goal, or activity.

Everything else being equal, situation selection should be their most preferred chronic regulatory strategy, followed by situation modification, with attentional strategies such as distraction serving only as an option of last resort. Taken together, these three predictions suggest that on average, highly conscientious individuals will encour-

ter fewer emotionally intense situations, and if they do, will more effectively modify them or focus away from them, thus leading lives that are overall less emotional, more balanced and more predictable, with fewer extreme lows (as well as highs). This conclusion is consistent with findings that conscientiousness is the least emotionally charged of the Big Five domains and least correlated with either positive or negative emotion (e.g., Watson & Clark, 1997; Gross & John, 1998; Shiota, Keltner, & John, 2006). Therefore, we predict no correlations with the habitual use of either of the remaining two strategies (see Table 17.1), not because conscientious individuals lack the capacity for reappraisal or suppression but because they should have relatively little need to use these strategies frequently. Using our ERQ Reappraisal and Suppression scales, we have found small, if any, correlations with conscientiousness (Gross & John, 2003).

### Extraversion

Briefly put, extraversion implies an *energetic approach* toward the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality (John & Srivastava, 1999). Compared to more introverted individuals, extraverts forcefully pursue their goals (including romantic partners), seek out and achieve positions of influence and leadership, and feel free to express both positive and negative emotions (e.g., Anderson, John, Keltner, & Kring, 2001; Gross & John, 1998; see Pervin & John, 2001, for a review). Given their strong behavioral approach orientation (Carver & White, 1994), deliberate situation selection would seem an unlikely emotion regulation strategy for extraverts; they should approach potentially rewarding situations despite any negative emotion-eliciting potential. In contrast, introverts should try to avoid or withdraw from such situations, as indicated by the negative sign for this link in Table 17.1.

For situation modification, the predicted link in Table 17.1 is positive, whereas for the response modulation strategy of suppression it is negative: extraverts should exert their energy, social skill, and emotion-expressive effort to positively change the situation whereas introverts will be more withdrawn and hold in their feelings and hide them from being observed by others. These predictions are consistent with findings that extraverts are much more likely than introverts to express their emotions, both positive and negative (e.g., Gross & John, 1998), even though in terms of emotion *experience* they differ from introverts only in terms of positive emotion experience (Watson & Clark, 1997; Gross, Sutton, & Kettelar, 1998). More recently, we found that measures of extraversion correlated negatively with ERQ Suppression (Gross & John, 2003).

Table 17.1 indicates no clear predictions for the habitual use of either distraction or reappraisal. Highly extraverted individuals might use physical and other energizing activities (e.g., exercise) to distract themselves from negative emotions in those rare situations when all paths toward active situation modification are blocked, but that would seem a matter of last resort, not a frequent choice. The zero-relation entry in Table 17.1 reflects the nonsignificant correlation we found for extraversion and our ERQ Reappraisal scale.

### Neuroticism

Neuroticism contrasts emotional stability and even-temperedness with *negative emotionality*, such as feeling anxious, nervous, sad, and tense. Overall, we expected neuroticism to relate negatively to most of the emotion regulation strategies—that is, everything else being equal, individuals high in neuroticism would make fewer, and less effective,

attempts at emotion regulation. In part, this hypothesis derives from the beliefs and attitudes highly neurotic individuals hold regarding emotions: They are less likely to believe that people can change their emotions and more likely to report that their own emotions are very strong and difficult to control (Gross & John, 1998). In turn, this pessimistic assessment of their emotion-regulatory prospects should make it less likely that they will engage in frequent attempts to use any of the regulatory strategies, suggesting a general failure to even attempt regulatory efforts.

For situation modification, for example, we clearly predict a negative link, as individuals high in neuroticism will lack the self-esteem and confidence to assert their needs and enforce specific changes in the situation. Similarly, given their intense negative emotions, highly neurotic individuals are unlikely to have at their disposal the attentional resources needed to effectively distract themselves; on the contrary, research suggests that anxious and depressed individuals ruminate about their negative emotions and thus inadvertently upregulate their negative emotion states (e.g., Nolen-Hoeksema, Parker, & Larson, 1994). For reappraisal, we indeed found a negative correlation with neuroticism (Gross & John, 2003).

Predictions about the link with situation selection are interesting because they illustrate an important complexity. Aware of their predisposition to experience negative emotion, highly neurotic individuals would likely be concerned about negative emotion-eliciting situations and prefer to avoid them, leading us to predict a positive relation. However, in Table 17.1 this prediction appears in parentheses because their concern and worry may not translate into effective action: Highly neurotic individuals may not have the confidence and self-efficacy needed to plan and prepare to effectively avoid negative-emotion contexts. In summary, the pattern of predictions in Table 17.1 suggests that individuals high in neuroticism are likely to fail at downregulating their substantial negative emotion, at least in part because, we suggest, they do not even try to use potentially effective strategies.

### Openness to Experience

Openness to Experience (vs. closed-mindedness) is the most cognitive of the Big Five domains and describes the breadth, depth, originality, and complexity of an individual's *mental and experiential life*. In terms of emotion processes, Openness has been shown to relate to aesthetic emotions, such as interest and awe (Shiota et al., 2006), as well as to greater awareness, clarity, and intensity of whatever emotion the individual is feeling at the time (i.e., openness to feelings; cf. Costa & McCrae, 1992; also Buss, 1980).

Which strategies would open individuals use to regulate their emotions? Being open to their own feelings, they accept their emotions as real, important, and generally worth attention and regulation and should thus feel optimistic about the prospect of regulating their emotions. Given their cognitive complexity and imagination, attentional and cognitive-change strategies should be most accessible to them, as shown in Table 17.1. Our ERQ data provided some support for the positive link with reappraisal (Gross & John, 2003), though the size of that correlation was not as large as we expected. We also found some empirical support for the predicted negative relation to suppression (i.e., open individuals value both the reality of their emotions and their behavioral autonomy).

General predictions were hardest to make for situation selection and modification because they seem to depend on the nature of the situation. Consider situation selection: Open individuals are interested in novel and stimulating situations and seem unlikely to

avoid an interesting situation just because it has the potential for negative emotion (see also Carstensen & Charles, 1998). In short, Openness is likely to interact with specific situation characteristics in determining the use of these regulatory strategies.

### Agreeableness

Agreeableness refers to interpersonal features of personality, contrasting a *prosocial and communal orientation* toward others with mistrust, selfishness, and antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty. As shown in Table 17.1, few general predictions could be made for agreeableness, suggesting that individual differences in the habitual use of emotion regulation were least central to this Big Five domain. We can make one general prediction, namely, regarding situation modification, because highly agreeable individuals are more concerned with others than with the assertion of their self-interest (e.g., altruism and modesty) and do not value having power (Roccas, Sagiv, Schwartz, & Knafo, 2002); thus, we suggest, highly agreeable individuals will forgo forceful attempts to modify the situation to regulate their emotions.

No general predictions can be made for the other regulatory strategies in Figure 17.1 because most effects for agreeableness will depend on the specific interpersonal features of the situation in which regulatory efforts take place. Consider situation selection: To predict whether highly agreeable individuals would seek out or avoid a particular situation, we need to know their attitudes and feelings about the other individuals in the situation. For example, if another person is distressed and in clear need of help, highly agreeable individuals would likely offer assistance, even though helping may expose them to negative emotion themselves. In short, whether highly agreeable individuals use a particular regulation strategy will likely depend on social, rather than emotional, features of the situation.

Indeed, in our ERQ data, Agreeableness was not related to either the Reappraisal or the Suppression scale (Gross & John, 2003). However, despite this lack of overall effects, there may be some important emotion-specific (and context-specific) effects. For example, highly agreeable individuals may be more likely to use suppression to regulate feelings of anger and contempt within a close relationship to avoid confrontations and retain interpersonal harmony. We return to the issue of emotion and context-specific regulation efforts at the end of this chapter.

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## LINKS TO DYNAMIC APPROACHES

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Psychodynamic concepts and ideas remain an active force in work on emotion regulation, in such diverse areas as affect (see Westen & Blagov, this volume), self-esteem (see Baumeister, Geyer, & Tice, this volume), and close relationships (see Shaver & Mikulincer, this volume), but, most important, they provided the starting point for the now vast literature on stress and coping.

### Stress and Coping

Researchers interested in stress have conducted extensive research on individual differences in coping styles—the ways individuals attempt to deal with adversity (e.g., Carver & Scheier, 1994; Lazarus & Folkman, 1984; Zeidner & Endler, 1996). In their pioneer-

ing work, Folkman and Lazarus (e.g., 1985) emphasized two major functions of coping, namely, “the regulation of distressing emotions and doing something to change for the better the problem causing the distress” (p. 152). This emphasis on regulatory efforts focused on the external problems facing the individual (e.g., a final exam) shows that in some ways the concerns of coping research are broader than those of emotion regulation research (e.g., coping also includes processes such as analyzing the problem in order to understand it better). At the same time, the domain of coping is defined more narrowly because it is limited, by definition, to stressful situations—that is, how the individual deals with potential or actual harms, losses, or threats and with the strong and immediate negative reactions these events arouse in the individual. Thus, the goals, scope, and focus of research on coping and on emotion regulation overlap only partially.

There are also some methodological differences. Much coping research has examined individual differences within the context of a specific stressful encounter and focused on the individual’s behavioral and cognitive responses to the stressor. This emphasis on what individuals actually do or try to do in a specific context (as reported on questionnaires or in interviews) contrasts with the global-trait approach discussed earlier which emphasizes what individuals usually do or would typically do.

What, then, are the major dimensions of coping in which individuals differ from each other? Folkman and Lazarus (e.g., 1985, 1988) reasoned that multiple ways of coping could be distinguished but, lacking an established theoretical framework, concluded that they would have to set out to discover the major dimensions of coping empirically. They assembled 68 items they intended to capture a wide variety of behavioral and cognitive coping responses, representing the things people commonly do when they are dealing with stress. Some of these items were inspired by previous theory and literature, including that on defense mechanisms (e.g., wishful thinking, denial), whereas others were added later at the suggestion of subjects in their studies (e.g., prayer). Exploratory factor analyses and rational item selection led initially to six and eventually eight scales assumed to measure distinct ways of coping: *Confrontive*, *Distancing*, *Self-Controlling*, *Seeking Social Support*, *Accepting Responsibility*, *Escape-Avoidance*, *Planful Problem Solving*, and *Positive Reappraisal* (Folkman & Lazarus, 1988), and these eight Ways of Coping quickly became “the most commonly used measure of basic coping responses” (Parker, Endler, & Bagby, 1993, p. 361).

The last of these scales, initially labeled “Emphasizing the Positive” (Folkman & Lazarus, 1985), is of particular interest here, as its name implies a link to the family of emotion regulation strategies we have here called cognitive change (see Figure 17.1), especially to the cognitive reappraisal strategy. Consider the seven items on Folkman and Lazarus’s (1988) Positive Reappraisal scale: 20. I was inspired to do something creative; 23. I changed or grew as a person in a good way; 30. I came out of the experience better than I went in; 36. I found new faith; 38. I rediscovered what is important in life; 56. I changed something about myself; and 60. I prayed. While these items indeed describe a person who emphasizes particular positive aspects of a stressful experience, these items serve to illustrate some important differences between their and our approaches. Most of these items do not directly address emotion-regulatory processes, as we have defined them, and certainly do not assess the particular process of changing the meaning or appraisal of an emotion-eliciting event. Instead, these items describe diverse, though generally positive, consequences arising from or after the stressful experience (e.g., I came out of the experience better than I went in), including personal growth, self-transformation, greater creativity, and even spiritual renewal.

This complex item content poses serious issues for research on the correlates and adaptational consequences of using a particular emotion-regulatory strategy. As Lazarus (2000) explained, "The danger of confounding is that measures of coping could contain some of the same variables—for example, distress or psychopathology—as the outcome measure of mental health. Thus, if the antecedent and consequent measures are essentially the same, any correlation between them would represent some degree of tautology" (p. 666). This point underscores the importance of focusing item content specifically on the regulatory process of interest. Indeed, among the items listed earlier, only one (I prayed) would seem to capture a potential emotion-regulatory effort. Yet, the meaning of this item is vague vis-à-vis the particular strategy used: Individuals may indeed pray in order to gain a new perspective or understanding of an emotion-eliciting event, but they may also pray to distract themselves, to share their feelings with a greater power (low suppression), or even to gain the inner strength to modify the situation (see Table 17.2).

Currently, the most commonly used coping measure is the COPE, developed by Carver, Scheier, and Weintraub (1989), which includes 13 short and internally consistent scales measuring coping styles, plus a single item on alcohol/drug use.<sup>1</sup> As shown in Table 17.2, we expected several of the coping styles measured by the COPE scales to show conceptual links to our emotion regulation strategies (the remaining five COPE scales seem to fall largely outside the scope of the emotion regulatory domain).

**TABLE 17.2. Linking Dynamic Constructs to Habitual Use of Emotion Regulation Strategies**

Dynamic constructs: coping styles and attachment	Five regulation strategies for downregulating negative emotions				
	Situation selection (avoidance)	Situation modification (self- assertion)	Attention deployment (distraction)	Cognitive change (reappraisal)	Response modulation (suppression)
Coping styles (COPE)					
Planning	+	+	(-)	0	0
Active coping	+	+	-	0	0
Seeking social support					
Emotional	0	0	-	0	-
Instrumental	0	0	-	0	-
Positive reinterpretation and growth	0	0	0	+	0
Turning to religion	(+)	0	(+)	(+)	(-)
Focus on and venting of emotion	0	0	-	0	-
Mental disengagement	+	0	+	0	0
Attachment					
Avoidance	(+)	(+)	(+)	0	+

*Note.* The table entries indicate the sign of the predicted relation between each construct (indicated in the first column) and the habitual use of each emotion regulation strategy: "+" indicates a positive relation, "-" a negative relation, and "0" a prediction of no clearly positive or clearly negative relation. For entries shown in parentheses, such as (+), the prediction was not unequivocal and likely depends on other factors or considerations (see text).

Both the *Active Coping* and *Planning* scales measure anticipatory, active coping efforts and should therefore relate to situation selection and to situation modification. The *Positive Reinterpretation and Growth* scale should relate primarily to cognitive change, especially reappraisal (and to longer-term consequences and adaptations the individual might make later, following the stressful experience). Specifically, the *Positive Reinterpretation and Growth* scale involves looking for the silver lining in stressful situations and trying to learn from difficult experiences; this scale also measures generally optimistic appraisals and particular longer-term consequences and adaptations the individual might make much later, following the stressful experience, such as learning from experience. Gross and John (2003) found that, as expected, ERQ Reappraisal was correlated with this COPE scale, but its inclusion of long-term consequences that have little to do with the immediate coping or regulatory response makes the scale unnecessarily complex. Indeed, Carver et al. (1989) found that the two explicit growth items had low loadings on this factor (.23 and .19) in one study; in their other study (recollections of coping during a stressful event) this factor broke apart into two separate factors.

Similarly, *Focus on and Venting of Emotions* involves being aware of one's upset and distress and "letting it out." Our analysis suggests that the Focus on and Venting of Emotions scale in the COPE is heterogeneous from an emotion-regulatory perspective: Items such as "I get upset, and am really aware of it" are conceptually related to what we call attention deployment (focusing on the emotion is the conceptual opposite of distraction), whereas items such as "I feel a lot of emotional distress and I find myself expressing those feelings a lot" combines elements of both attention-awareness and expression (i.e., low suppression efforts). Interestingly, Carver et al. assumed that this is a dysfunctional coping style but found its empirical correlates to be complex; for example, Focus/Venting correlated in one study with the functional coping style of social support seeking. In our model, the low-suppression aspect of Focus/Venting scale should be psychologically advantageous whereas its attention deployment aspect (low distraction) should be disadvantageous. Why would seeking social support for emotional reasons correlate with the Focus/Venting scale? Because, we suggest (see Table 17.2), both involve aspects of response modulation linked to low suppression, such as expression and sharing, which we hypothesize to be generally positive emotion-regulatory strategies.

As with the Focus on and Venting of Emotions scale, the two *Seeking Social Support* scales should relate to less use of both distraction (i.e., focusing away from one's emotions) and emotional suppression. After all, talking to another person about one's problems requires some sharing and expression of one's feelings (low suppression) and will serve to focus the individual on these emotions rather than distract from them. In contrast, the *Mental Disengagement* scale (coping by turning to work; going to the movies) should relate most to distraction. However, as Carver et al. (1989) noted, these items form a somewhat loose set of diverse activities; moreover, the inclusion of items about sleep and daydreaming suggests a potential link to situation selection because these activities can be performed for reasons other than distraction (e.g., avoiding the stressful situation). The single item on *Drug and Alcohol Use* "in order to think about it less" might also be related to distraction.

As we noted previously in our earlier discussion of using prayer, the *Turning to Religion* scale could serve several of our strategies, as shown in Table 17.2; it will be interesting to study it further to understand the emotion-regulatory processes that may mediate the often positive effects of religiosity on well-being (e.g., having a safe place for expression by sharing feelings with God; or reappraisal, or distraction).

### Adult Romantic Attachment

Attachment theory (e.g., Bowlby, 1969/1982; Cassidy & Kobak, 1988) predicts an important link between attachment working models and the use of particular emotion regulation strategies, suggesting that attachment styles originate from the child's need to regulate the anxiety emerging from early relationship patterns with the caregiver. In particular, if the caregiver is consistently unavailable, the child will learn to expect nonresponsive caregiving from others and develop an attachment style that promotes a detachment from, and devaluation of, close attachment figures. This avoidant attachment pattern permits downregulation of the otherwise overwhelming negative affect the child would feel when the caregiver is (again) not available to meet the child's needs; behaviorally, this attachment pattern promotes early independence and self-reliance, an adaptive response given the child's early rearing environment.

In adulthood, the *avoidant attachment pattern* is manifested in feeling uncomfortable with, and actively avoiding, emotionally close relationships; an example item used to assess attachment avoidance in adult romantic relationships is "I get uncomfortable when a romantic partner wants to be very close" (Brennan, Clark, & Shaver, 1998). How do these theoretical considerations relate to the five kinds of emotion regulation strategies in Figure 17.1?

One clear prediction is a link to response-modulation strategies such as suppression: When faced with an emotional situation they cannot avoid or escape, avoidantly attached individuals should be more likely to try to regulate their emotion via expressive suppression than nonavoidant individuals. That is, they would try to not share their emotions with others and to keep their emotions from showing in their expressive behavior. Consistent with this prediction, Gross and John (2003) found the ERQ Suppression scale correlated positively and substantially with two different measures of attachment avoidance. Moreover, individuals chronically using suppression to regulate their emotions felt they had less social support available to them, and their peers agreed that they had less emotionally close relationships, both findings consistent with our analysis of the use of suppression in avoidant attachment.

A second prediction is a link with situation selection. Individuals with an avoidant attachment pattern should be less likely to seek out closeness and comfort from others than less avoidant individuals, especially in stressful or emotionally charged situations. Studies of proximity and social-support seeking (Simpson, Rholes, & Nelligan, 1992; also Fraley, Garner, & Shaver, 2000) have provided evidence for the use of such situation-selection strategies by avoidant individuals. Of course, seeking social support, as noted above in the discussion of that coping strategy in the COPE, involves the anticipation of sharing one's emotion (or distress), something we have just suggested the avoidantly attached individual wants to avoid. More broadly, then, this proposed link with situation selection would seem to apply only to a limited range of situations—avoidantly attached individuals should avoid only those kinds of situations that bring with them social expectations or pressure to share and express their emotions.

A more general point is that attachment theory is focused on one particular domain, behavior in close relationships, and thus addresses emotion regulation only in that domain. Thus, we would expect the first three strategies in our model to be important for avoidant individuals only if the emotion to be regulated is interpersonal in origin or direction. From that follows, clearly, the suppression link explicated previously, as well as more contextually narrow versions of situation selection (e.g., avoiding interpersonal situations that may generate the expression of strong feelings about others and

breaking up with a partner who wants to be close), situation modification (e.g., changing the subject in a "relationship-defining" discussion with one's partner), and distraction (e.g., reading a book instead of discussing one's feelings). Finally, reappraisal seems least relevant because it does not involve avoidance of the emotion-eliciting stimulus but a cognitive-transformational effort—to psychologically change the stimulus into something else, rather than simply avoid it (situation selection), remove it (situation modification), or ignore it (distraction). This view is consistent with our findings that ERQ Reappraisal did not correlate with several measures of avoidant attachment or with several measures of social support (Gross & John, 2003).

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### LINKS TO SOCIAL-COGNITIVE CONSTRUCTS

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Social-cognitive theories of personality (Bandura, 1999; Cantor & Zirkel, 1990; Mischel & Shoda, 1999) emphasize that the person is a conscious agent actively construing, and interacting with, the world. They also emphasize that most behavior is learned and needs to be understood with reference to the current goals, concerns, and expectations of the individual as well as the particular social and cultural context. Social-cognitive theories have paid considerable attention to individual differences in the social and cognitive processes that are involved in domains broadly defined as self-control and self-regulation. Although self-control is defined more broadly than the emotion-regulatory processes that are the focus of the present chapter, one would nonetheless expect similarities in the individual-difference constructs considered in the two fields. Social-cognitive theories (Mischel, 1973; Mischel & Shoda, 1999) often highlight individual differences in particular conceptual units, and we focus on three here: outcome expectancies (Optimism), cognitive processes that accompany mood experiences (Meta-Mood constructs), and beliefs (implicit theories about people's ability to change their feelings).

#### Optimism and Pessimism: Generalized Expectations for Success and Failure

Scheier and Carver's (1985) work on optimism (see Carver & Scheier, 1999, for a review), and their control-theory approach more generally, emphasizes the importance of expectations for coping and for self-regulation more generally: When people expect to succeed, they keep trying and make an even greater effort; when people believe they cannot reach their goal, they withdraw effort or give up completely. This fundamental psychological principle is central to a broad range of theories that, following Rotter (1966), are referred to as expectancy-value theories.

Individual-difference theories built around expectations as the core construct usually postulate that the individual holds some sort of *generalized* expectations, such as Rotter's (1966) concept of internal and external locus control, defined as individual differences in expectations about whether events are under the individual's personal (internal) control (Peterson & Park, this volume).

Scheier and Carver (1985) focused on generalized outcome expectancies and operationalized individual differences in optimism versus pessimism in terms of positive (success) expectancies versus negative (failure) expectancies. Hewing closely to their conceptual definition in terms of global outcomes and generalized expectations, they

developed a questionnaire, called the LOT (Life Orientation Test), using a combined rational and factor-analytic approach. The items include direct but general statements about expectations (e.g., In uncertain times, I usually expect the best); some make use of laypeople's intuition about optimism (I am generally optimistic about the future); and another set assesses what might be called optimistic information processing (e.g., I always look on the bright side of things) but also resembles the notion of construing the meaning of future events in more positive terms, not unlike the emotion regulation strategy we have called cognitive reappraisal.

In a series of studies, Scheier and Carver (1992) have shown that relatively more optimistic individuals use different coping methods than more pessimistic individuals, such as more planning and problem-focused coping when the event was controllable, more positive reframing overall, and more acceptance of the situation when the stressor was not controllable; they would try to see the best in bad situations and, over time, try to learn something from them. In contrast, pessimists were more likely to use denial and to distance themselves from the problem, suggesting that greater optimism was generally correlated with a whole range of more functional, effective coping responses and predicted less psychological distress and better adjustment after a stressful event.

On the basis of this theorizing and research, we predict that Optimism should relate to the use of four of our emotion regulation strategies. The predictions are most straightforward to make for reappraisal (some aspects of which are explicitly mentioned in the optimistic information-processing items), suppression (there is little reason for optimists to hide their feelings from others), and situation modification (which we have previously linked conceptually to active coping and planning). Situation selection may turn out to be related but this prediction is complicated: Optimists (like extraverts) may not worry much about, and spend time anticipating, situations that may lead to negative emotions. For distraction, finally, we have no clear prediction, as previous research and theorizing have not highlighted the use of attentional resources among optimists.

### Emotional Intelligence: Meta-Mood Processes of Attention, Clarity, and Repair

Drawing on their social intelligence framework, Salovey, Mayer, Golman, Turvey, and Palfai (1995) adopted a cognitive perspective to understand the reflective processes that accompany many mood states. These "meta-mood" processes capture how individuals reflect on their feelings, including how they monitor, evaluate, and regulate them (Mayer & Gaschke, 1988). Salovey et al. (1995) assumed that emotions serve as an important source of information for the individual, and that individuals differ in how skilled they are at processing this kind of information. Salovey et al. designed the Trait Meta-Mood Scales (TMMS) to measure stable and general attitudes about moods and enduring strategies individuals use to deal with mood experiences. The TMMS measures three constructs: people's tendency to attend to their moods and emotions (attention), to discriminate clearly among them (clarity), and to regulate them (repair), each capturing individual differences "fundamental to the self-regulatory domain of emotional intelligence" (Salovey et al., 1995, p. 147).

Given that the TMMS is focused on individual differences in meta-moods—that is, thoughts and attitudes that accompany ongoing mood experiences—we did not expect any links to our regulatory strategies that occur further "upstream" in the emotion process, prior to the onset of an emotional episode itself, such as situation selection or

modification. However, attentional processes, cognitive change, and response modification should be of considerable relevance.

The TMMS Attention scale refers to paying close attention to feelings, accepting feelings, valuing them positively, and letting oneself experience them fully and intensively, using items such as "I believe in acting from the heart" versus "I don't think it's worth paying attention to your emotions or moods" (reversed-scored). As shown in Table 17.3, we expected the Attention scale to relate negatively to the chronic use of the emotion regulation strategies of distraction and suppression. The link to distraction is theoretically interesting because paying close attention to negative mood states has been shown to magnify and intensify the experience of negative affect and the risk for depression (Scheier & Carver, 1977); conversely, in our model distraction is expected to decrease negative emotion experience. Indeed, in one of Salovey et al.'s studies, the Attention scale was related to higher depression scores. Regarding the negative link to suppression, being intensely aware of and paying close attention to one's emotions should interfere with the considerable and ongoing cognitive effort required to effectively suppress one's emotions (Richards & Gross, 2000), and that should be especially true for individuals who experience their emotions intensely. Moreover, individuals scoring high on the Attention scale value their feelings and believe in letting them guide their behavior, quite the opposite to individuals habitually using suppression whose expressive behavior is often inconsistent with their inner feelings and who therefore experience themselves as inauthentic (John & Gross, 2004). Indeed, Attention correlated negatively with our ERQ Suppression scale.

The TMMS Clarity scale assesses being aware of and at ease with one's feelings, as contrasted with a deep and troubling confusion about one's feelings and what they mean. True-scored item examples include "I am usually very clear about my feelings" versus false-scored items such as "I can't make sense out of my feelings" and "My beliefs

**TABLE 17.3. Linking Social-Cognitive Constructs to Habitual Use of Emotion Regulation Strategies**

Social-cognitive constructs	Five regulation strategies for downregulating negative emotions				
	Situation selection (avoidance)	Situation modification (self-assertion)	Attention deployment (distraction)	Cognitive change (reappraisal)	Response modulation (suppression)
Optimism	(+)	+	0	+	-
Meta-mood processes					
Attention	0	0	-	0	-
Clarity	0	0	-	0	-
Repair	0	0	+	+	-
Incremental theory:					
Emotions can be controlled	(+)	+	+	+	0

*Note.* The table entries indicate the sign of the predicted relation between each social-cognitive construct and the habitual use of each emotion regulation strategy: "+" indicates a positive relation, "-" a negative relation, and "0" a prediction of no clearly positive or clearly negative relation. For entries shown in parentheses, such as (+), the prediction was not unequivocal and likely depends on other factors or considerations (see text).

and opinions seem to change depending how I feel." We expected a positive relation of Clarity with distraction (the ability to use attentional resources to move away from a negative emotion stimulus, rather than ruminating about it). Moreover, we expected a negative relation to suppression. Similar to our reasoning for the Attention scale, individuals who are clear about and comfortable with their emotions should feel little need to suppress their behavioral expression, and we did indeed find evidence for this negative relation (Gross & John, 2003).

The TMMS Repair scale, finally, assesses attempts to improve negative mood by thinking positively and an optimistic (rather than pessimistic) attitude more generally. Item examples include "Although I am sometimes sad, I have a mostly optimistic outlook" and "No matter how badly I feel, I try to think about pleasant things." As shown in Table 17.3, we expected the Repair scale to relate positively to distraction as well as reappraisal: the explicit mood repair efforts included in the scale involve using thought (1) for focusing on something other (e.g., pleasant things or good thoughts) than the distressing stimulus, thus implicating distraction, and also (2) trying to think differently (e.g., more positively) about the situation, thus implicating reappraisal. In contrast, the use of suppression is hardly an optimistic process, as we have described (Gross & John, 2003), and its habitual use reflects the pessimistic expectation that others cannot be trusted to be shown the "real self." Indeed, we found that the Repair scale was related to ERQ Reappraisal and Suppression.

### Implicit Theories: Beliefs about People's Ability to Control Their Emotions

In this chapter, we have argued that people can generally regulate their emotions. However, our individual-difference perspective qualifies that general statement by emphasizing that some individuals do so more than others. But what do the "people in the street" think about this issue? That is, what are people's implicit theories about the degree to which emotions are fixed like an "entity" or malleable so that they can be controlled?

Dweck (e.g., 1999) and her colleagues have studied the beliefs people hold about the malleability of personal attributes: Individuals who hold *entity beliefs* view attributes as fixed and impossible to control, whereas individuals who hold *incremental beliefs* view attributes as malleable and controllable. Whereas most research on implicit theories has focused on intelligence, Tamir, John, Srivastava, and Gross (in press) studied beliefs about emotions. They modified items from the Implicit Theories of Intelligence Scale (Dweck, 1999) to refer to general beliefs about the extent to which emotions are malleable and incremental (e.g., "If they want to, people can change the emotions that they have") or fixed and uncontrollable (e.g., "The truth is, people have very little control over their emotions"). Results showed that these beliefs were internally consistent and, as expected, relatively distinct from implicit theories of intelligence; there were substantial individual differences, with only a small majority (about 60%) favoring the belief that emotions are relatively more malleable than fixed.

These general beliefs should importantly influence the individual's emotion-regulatory efforts. One source of influence involves the self and self-efficacy—after all, individuals who believe that emotions are fixed and cannot be changed will likely apply those beliefs to their own emotions as well. If they have no reason to think regulatory efforts will be successful, individuals would have little perceived competence and confidence in this domain (i.e., emotion regulation efficacy) and, in turn, should expend lit-

tle effort and energy on implementing emotion regulation strategies. In contrast, individuals who believe emotions are not fixed but can be controlled should have high levels of emotion regulation efficacy and, everything else being equal, use the effective regulatory strategies. As indicated in Table 17.3, this prediction should hold in particular for situation modification, distraction, and reappraisal.

According to this model, beliefs about emotion are at the nexus of a cognitive emotional interface by which cognitive belief structures constrain the emotion-regulatory efforts an individual makes and thus the emotions that result. As predicted, Tamir et al. (in press) found that implicit theories of emotion were indeed related to individuals' sense of efficacy in emotion regulation: Individuals who believed emotions are fixed were less likely to believe that they can actually modify their own emotions whereas individuals who believed emotions are malleable were more likely to believe that they possess the ability to control their emotions. Driven by the belief that change is impossible, entity theorists should be less likely to employ antecedent (i.e., anticipatory) strategies of emotion regulation; Tamir et al. found support for this prediction using the ERQ Cognitive Reappraisal scale: individuals who viewed emotion as more malleable were more likely to report actively modifying their emotions by changing their appraisal of emotion-eliciting events. On the other hand, once an emotional response has been set in motion, individuals should be able to use response-modification strategies, such as expressive suppression, in order to conform to social rules. Regardless of whether individuals believe emotion is fixed or malleable, they may be equally likely to mask their feelings in certain situations; indeed, malleable emotion beliefs were not related to the habitual use of suppression on the ERQ.

This leaves us with our predictions for situation selection and modification. Tamir et al. did not have available measures of the habitual use of these two strategies, but several of their findings seem relevant. First, students holding malleable emotion theories showed better emotional and social adjustment during the difficult transition from high school to college: They experienced less negative and more positive emotion, were less lonely, and had increasing levels of social support from their new college friends. These findings suggest, albeit indirectly, that they selected and modified situations in emotionally and socially advantageous ways. However, mediation analyses showed that the beneficial social consequences of malleable emotion theories could not be attributed to emotion-regulatory self-efficacy. That is, the situation selection and modification effects of emotion theories may involve a different causal pathway, such as beliefs and expectations individuals hold about other people's emotion experience and regulation.

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## CONCLUSIONS AND FUTURE DIRECTIONS

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Our analysis of links between five emotion regulatory processes and previous constructs in the individual-difference literature suggests three major conclusions. First, emotion regulation strategies are ubiquitous in trait, dynamic, and social-cognitive traditions, although they are not necessarily explicitly defined as involving emotion regulation. Second, most existing constructs are broad and conceptually complex, consisting of various mixtures (or conglomerations) of several basic processes that are not explicitly differentiated. Third, this conceptual complexity is also reflected in complex scales and measures of individual differences that impede the interpretation of findings and comparisons among seemingly related constructs. But this review has also

highlighted limitations in our model, which we now discuss along with broader issues for future research.

### Upregulation and Specific Emotion Effects

This chapter has focused on the downregulation of negative emotions, by far the most common target of emotion regulation efforts (Gross et al., 2006) and clearly a central concern in trait, dynamic, and social-cognitive approaches as well, as shown by the considerable number of conceptual links detailed in our review and Tables 17.1–17.3.

However, although this is a reasonable place to start, there is a lot of work ahead. One concern is that the rubric of “negative emotion” is broad and heterogeneous, and downregulation is not the sole purpose of emotion regulation. For example, individuals high in neuroticism show upregulation of negative emotion in some contexts (Tamir, 2005) as do individuals with a preoccupied or anxious-ambivalent attachment style (Cassidy & Kobak, 1988). In addition, individual differences in the up- or downregulation of positive emotions (e.g., pride, love, joy, and amusement) also bear examination. In our own work (Gross & John, 2003), we have found that individuals who habitually use suppression tend to apply that regulatory strategy to both negative and positive emotions. However, we suspect that such generalization of strategy use across broad swathes of negative and positive emotions is more likely the exception than the rule.

More generally, these considerations about differences among negative and positive emotions raise broader issues about general and emotion-specific aspects of individual differences in strategy use. Future research should examine individual differences in the regulation of specific emotions because there may be important strategy-by-emotion interactions, such that particular emotions are more likely to be regulated by particular strategies (e.g., pride not by reappraisal but by suppression) and that individuals differ in how much they regulate particular emotions using particular strategies (e.g., individuals low in Agreeableness may be less likely to suppress pride).

To make matters even more complex, individuals sometimes try to regulate multiple and at times even conflicting emotions, such as simultaneous feelings of pride about one's own achievement and sadness and concern about the failure of a friend, or both joy and guilt about partaking in some “forbidden pleasure.” How individuals integrate such complex instances of emotion regulation is of particular interest to dynamic approaches to personality functioning (e.g., Westen & Blagov, this volume) and an interesting avenue for future research.

### Effects of Situational and Cultural Contexts

Another limitation of the present approach arises from another simplification, namely, that we have not explicitly considered the effects of specific contexts. In our discussion of the Big Five trait domains, we noted that some predictions can be made only with reference to specific contexts (e.g., individuals high in Openness should not use situation selection when they find the situation intellectually stimulating, and individuals high in Agreeableness may suppress anger in peer but not work contexts); we noted in the dynamic section that predictions for attachment avoidance apply only in close-relationship contexts that activate the attachment system. Similarly, gender and cultural factors will likely play a role, as work on display rules (Ekman, 1972) has suggested; indeed, everything else being equal, we have found that men use suppression more than

women, and individuals with ethnic-minority backgrounds use suppression more than mainstream European-Americans do (Gross & John, 2003).

Unfortunately, the problem with situation- and culture-specific theorizing and empiricism is similar to including emotion-specific effects, namely, the enormous increase in the number of cells that would need to be considered in research designs and measurement. In particular, simultaneous study of all 5 regulatory strategies, 2 regulatory purposes (up and down), and just 10 specific (negative and positive) emotions would already yield 100 potential combinations; further crossing those with several central situational or cultural contexts would make the research task not only unwieldy but unfathomable. Our own strategy has thus been to focus in greater depth on fewer (two) regulatory strategies and on downregulation, but that choice of research strategy should not be mistaken to mean that we underestimate the importance of specific emotion and context effects.

### Individual Differences in Frequency of Strategy Use and Self-Perceived Capability

This chapter has also focused on one particular aspect of individual differences in emotion regulation, namely, individual differences in the habitual *frequency* of strategy use (i.e., how likely an individual is to use a particular strategy). Again, that would seem a sensible starting place, but it hardly exhausts all aspects of individual differences. For example, in our discussion of Neuroticism we suggested that individuals high on this trait often wish (or even try) to avoid negative emotion-generative situations but fail to do so effectively, in part because they lack the confidence, or *self-perceived capability* (Bandura, 1999), to use this regulatory strategy. As we noted in our discussion of social-cognitive approaches, people's beliefs and expectancies are central determinants of what they will actually attempt to do. Thus, future research should study both frequency of use and self-perceived capability and compare these two aspects of individual differences in emotion regulation in terms of their correlates and consequences for adaptation.

### Implications for Well-Being and Psychopathology

Although our emphasis has been on the normal (or healthy) range of individual variation, we have commented on the effectiveness and adaptive value of the use of particular strategies. In our empirical work (see Figure 17.2), habitual use of reappraisal has been associated with generally healthy adjustment outcomes, and habitual use of suppression has been associated with a general pattern of less healthy outcomes, such as disadvantageous emotion experience, lack of social support, and depressive symptoms (Gross & John, 2002; John & Gross, 2004). One important direction for future research is to consider emotion regulation in the context of samples in which there is more variability in both psychological and physical health status. Moreover, future research needs to define more clearly the boundaries of when individuals overuse a generally effective strategy or apply it in unrealistic ways. For example, at what point does reappraisal cease to be sensible and effective and instead turns into a maladjusted strategy, as implied by defense mechanisms such as intellectualization, rationalization, or even denial?

An important distinction here involves the degree to which emotion-regulatory strategies are used in conscious and controlled ways, or in more automatized ways that

operate outside conscious control (Bargh & Williams, this volume; Mauss, Evers, Wilhelm, & Gross, 2006). Clearly, although in our empirical work we have assumed that people can generally observe and report on their emotion-regulatory efforts, most of these efforts are likely executed without much attention or conscious awareness. The distinction between such implicit and explicit forms of emotion regulation, and their likely interaction, is a topic of considerable importance for a more complete understanding of emotion regulation and its possible differentiation from dynamic notions of defense mechanisms (see Westen & Blagov, this volume). This distinction is also likely to play a role in understanding the origin and lifespan development of individual differences in emotion regulation, issues that hold great promise for future research.

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#### NOTE

1. Carver et al.'s (1989) factor analyses showed that the COPE scales defined 11 distinct dimensions, with each factor corresponding to only one scale except for two: Active Coping and Planning jointly defined one factor, and Seeking Social Support for Instrumental Reasons and for Emotional Reasons jointly formed one overall Social Support factor.

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## CHAPTER 18

A Clinical-Empirical Model  
of Emotion RegulationFROM DEFENSE AND MOTIVATED REASONING  
TO EMOTIONAL CONSTRAINT SATISFACTIONDREW WESTEN  
PAVEL S. BLAGOV

Although the systematic study of emotion regulation is a relatively recent development, one could make a case that much of psychology has long been about emotion regulation. People regulate their emotions through explicit problem solving (which is always directed toward eliminating an aversive state of affairs or creating a more positive one) and explicit coping (e.g., telling oneself "it will be all right"). They also regulate feeling states (including emotions as well as pleasant and unpleasant sensations) through operant conditioning, by which humans and other animals are implicitly drawn toward and away from stimuli that elicit positive and negative feeling states; and via other implicit procedures designed to protect people from negative affect (e.g., denial in the face of an ominous growth on the skin) or elicit positive affect (e.g., focusing on aspects of identity that emphasize our strengths and deemphasize our weaknesses).

Theoretically, researchers could classify emotion regulation strategies in multiple ways, for example, by where in the process of emotional arousal and interpretation they are employed (Gross, this volume), or by the emotions that tend to elicit them (Westen, 1994). One way of doing so of particular relevance from a clinical standpoint is to array these strategies along two axes, defined by the extent to which they are *adaptive* (whether their consequences are ultimately positive, negative, or mixed for the individual and others) and the extent to which they are *conscious* (whether they are largely explicit, and hence involve effortful control, or implicit, and hence are largely inaccessible to consciousness). As illustrated in Figure 18.1, emotion regulation strategies can be