

Regulatory Focus in a Demanding World

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Why is an understanding of self-regulatory processes so important for grasping the nature of personality? We suggest that personality is revealed through motivated preferences and biases in both individuals' "ways of seeing" the world and their "ways of coping" in the world—two different kinds of sensitivities that can define personality (Higgins & Scholer, 2008). These sensitivities are most likely to be revealed in particular types of situations—in low demand situations ("out of nothing") and in high demand situations ("when the going gets tough").

Expectancies, needs, beliefs, and knowledge structures derived from past experiences affect the perception of objects, events, and other individuals in the world (e.g., Bartlett, 1932; Bruner, 1957; Kelly, 1955). As envisioned in Kelly's personal constructs theory, individuals scan the perceptual field to "pick up blips of meaning" that relate to their chronically accessible constructs (Kelly, 1955, p. 145; see also Higgins, King, & Mavin, 1982). Low demand situations, in which input is minimal or ambiguous, provide opportunities to observe how individuals' perceptions, judgments, and evaluations are shaped by their "ways of seeing" sensitivities (e.g., their chronically accessible constructs). On the other hand, high demand situations, in which an individual's self-regulatory system is taxed or stressed, provide opportunities to observe how individuals' handling of problems and pressures is shaped by their "ways of coping" sensitivities (see also Caspi & Moffit, 1993; Cox & Ferguson, 1991; Wright & Mischel 1987). Thus we argue that it's not just that personality tells us about self-regulation, it's that understanding how people self-regulate is essential to understanding personality itself.

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Given the focus of this handbook, we will emphasize the latter sensitivity—individuals' ways of coping—and the high demand situations that elicit different strategic approaches. In discussing this sensitivity, we will use regulatory focus theory (Higgins, 1997) as the primary subject of our analysis. In our discussion of regulatory focus theory, we adopt a “general principles” perspective on personality that posits that “person” and “situation” variables are simply different sources of the same general underlying principles or mechanisms (Higgins, 1990, 1999a). Rather than distinguishing between “person” explanatory principles and “situation” explanatory principles, this approach argues that the same psychological principles underlie both person and situation explanations. Consequently, studies in which regulatory focus is measured as a chronic variable *and* studies in which regulatory focus is situationally manipulated provide important insights into the nature of these regulatory systems.

We begin by reviewing regulatory focus theory in the context of the sensitivities (both “ways of seeing” and “ways of coping”) that define the prevention and promotion systems. We then focus on three classes of high-demand situations that illustrate the distinct strategic ways in which promotion-focused and prevention-focused individuals cope in the world—the high-demand situations of failure, self-control conflicts, and challenges arising from membership in different social groups. In our discussion, we explore how thinking about self-regulatory hierarchies—from tactics to strategies to regulatory systems—is useful for addressing these questions and for discovering the universalities in defining personality.

Regulatory Focus Theory

Building on earlier distinctions (e.g., Bowlby, 1969, 1973; Higgins, 1987; Mowrer, 1960), regulatory focus theory distinguishes between two coexisting regulatory systems that serve critically important but different survival needs (Higgins, 1997). The promotion orientation regulates nurturance needs and is concerned with growth, advancement, and accomplishment. Individuals in a promotion focus are striving towards ideals, wishes, and aspirations. They are concerned with the presence and absence of positive outcomes (gains or nongains) and are more sensitive to the difference between the status quo or neutral state and a positive deviation from that state (the difference between “0” and “+1”) than to the difference between the status quo or neutral state and a negative deviation from that state (the difference between “0” and “−1”). In contrast, the prevention orientation regulates security needs. Individuals in a prevention focus are concerned with safety and responsibility and with meeting one's oughts, duties, and responsibilities. They are concerned with the absence and presence of negative outcomes (nonlosses or losses) and are more sensitive to the difference between “0” and “−1” than to the difference between “0” and “+1” (cf. Brendl & Higgins, 1996).

The differing concerns of the two systems also result in distinct emotional sensitivities. For promotion-focused individuals, success represents a gain and results in

cheerfulness-related emotions; failure represents a nongain and results in dejection-related emotions. For prevention-focused individuals, however, success represents a nonloss, resulting in quiescent-related emotions; failure represents a loss and results in agitation-related emotions. Consequently, promotion-focused individuals are more sensitive to emotions along the cheerfulness–dejection dimension and prevention-focused individuals are more sensitive to emotions along the quiescence–agitation dimension (Higgins, 1997; Shah & Higgins, 2001).

Importantly, although the two systems are concerned with the regulation of different needs, promotion and prevention orientations each involve *both* approaching desired end states (e.g., approaching accomplishment or safety, respectively) and avoiding undesired end states (e.g., avoiding nonfulfillment or danger, respectively). This has two important implications. First, the value or personal relevance of some desired end states may be greater in one system than the other (see Higgins, 2002). For instance, prevention-focused individuals may value the desired end state of ensuring that one's home is protected more than promotion-focused individuals. Secondly, the *same* desired end state can be represented in different ways by prevention- versus promotion-focused individuals. For example, the same desired end state (e.g., being physically fit) may be represented as a duty or responsibility for prevention-focused individuals but as an ideal or aspiration for promotion-focused individuals.

At a strategic level, differences between promotion and prevention focus relate to different preferences for using eager approach and vigilant avoidance strategies, respectively (Crowe & Higgins, 1997; Higgins & Molden, 2003; Liberman, Molden, Idson, & Higgins, 2001; Molden & Higgins, 2005). Although both promotion-focused and prevention-focused individuals can pursue the same desired end state (e.g., being physically fit), they have different preferred strategies for doing so. Thus promotion-focused individuals prefer to use eager approach strategies (approaching matches to desired end states, approaching mismatches to undesired end states), whereas prevention-focused individuals prefer to use vigilant avoidance strategies (avoiding mismatches to desired end states, avoiding matches to undesired end states). The eager strategic means preferred by individuals in a promotion focus reflect their concerns with advancement and accomplishment, their pursuit of ideals and growth, and their relative sensitivity to the difference between “0” and “+1.” The vigilant strategic means preferred by individuals in a prevention focus reflect their concerns with safety and responsibility, their need to guard against mistakes, and their relative sensitivity to the difference between “0” and “–1.”

As will be developed more fully throughout this chapter, these strategic preferences are enacted by the lower level tactics and behaviors that individuals adopt. These levels are independent, such that the same tactic or behavior may serve either an eager or vigilant strategy or that two different tactics may serve the same underlying strategy. For instance, a vigilant strategy may be served by either risky or conservative methods at the tactical level, and by either action or inaction at the behavioral level (Scholer & Higgins, 2008; Scholer, Stroessner, & Higgins, 2008).

Although promotion-focused individuals prefer eager strategies and prevention-focused individuals prefer vigilant strategies, this does not always mean that the strategies individuals use fit their underlying orientation, because the system level and the strategic level of self-regulation are independent (Scholer & Higgins, 2008). Situational pressures, such as a manager's instructions, as well as an individual's regulatory skills and efficacy, can impact whether individuals use the strategies that fit their underlying orientation. Regulatory fit theory (Higgins, 2000) outlines the significant implications of using strategic means that fit or do not fit one's underlying orientation. When individuals experience regulatory fit by using strategic means that sustain their underlying orientation, they "feel right" about what they are doing (Higgins, 2000) and also experience increased engagement (Higgins, 2006). Regulatory fit has been shown to affect the value of the goal pursuit activity, the value of subsequent object appraisals (Higgins, Idson, Freitas, Spiegel, and Molden, 2003), and to result in better task performance (Shah, Higgins, & Friedman, 1998). In this chapter, we explore how the principles of regulatory fit theory can be applied to understanding the effectiveness of self-regulation in different contexts.

Regulatory focus theory (Higgins, 1997) provides a clear example of how an underlying motivational system influences both "ways of seeing" and "ways of coping." In this section, we've emphasized how regulatory focus differences in "ways of seeing" are reflected in a number of different sensitivities. As envisioned in Kelly's (1955) personal constructs theory, these differences in the chronically accessible constructs of prevention and promotion-focused individuals result in distinct "blips of meaning" as they scan the perceptual field (see also Higgins et al., 1982). Prevention- and promotion-focused individuals are differentially sensitive, respectively, to the qualities of desired end states (e.g., safety vs. nurturance) and undesired end states (e.g., danger vs. nonfulfillment), to loss or nonloss information versus gain or nongain information, to the difference between "0" and "-1" versus the difference between "0" and "+1," to vigilant versus eager strategies, and to the quiescent-agitation dimension of emotions versus the cheerfulness-dejection dimension of emotions. Whereas prevention-focused individuals are more likely to encode and remember loss-relevant information, promotion-focused individuals are more likely to encode and remember gain-relevant information (Higgins & Tykocinski, 1992). Similarly, whereas prevention-focused individuals are more likely to remember information related to vigilant strategies, promotion-focused individuals are more likely to remember information related to eager strategies (Higgins, Roney, Crowe, and Hymes, 1994). Whereas individuals in a prevention focus emotionally experience failure more intensely than individuals in a promotion focus, the reverse is true for emotionally experiencing success (Idson, Liberman, & Higgins, 2000). Whereas individuals in a prevention focus are faster at appraising how quiescent or agitated an object makes them feel, individuals in a promotion focus are faster at appraising how cheerful or dejected an object makes them feel (Shah & Higgins, 2001).

As we suggested in the introductory section, these differences in "ways of seeing" will be most clearly revealed in low demand situations in which input is minimal,

ambiguous, or vague (cf. Sorrentino & Higgins, 1986). This is because such situations provide relatively few reality constraints (Kruglanski, 1996; Kunda, 1990), and thus chronically accessible promotion or prevention concerns will have a greater influence in what draws attention, what meanings are assigned, and what judgments are deemed appropriate and relevant. However, while it is low demand situations that are especially likely to reveal regulatory focus differences in “ways of seeing,” it is in high demand situations that regulatory differences in “ways of coping” are most likely to be observed.

Differences in coping strategies and abilities to self-regulate emerge most clearly when individuals are placed in stressful situations. The competency demand hypothesis (Wright & Mischel, 1987) details that psychologically demanding situations reveal with particular clarity an individual’s characteristics (see also Caspi & Moffit, 1993). Wright and Mischel provide an apt metaphor:

An attribution of brittleness is not a summary statement about a generalized tendency to shatter or break; rather, it expresses a set of subjunctive if-then propositions about how the object would respond to certain situations (e.g., cracking or shattering when physically stressed). (1987, p. 1161)

While these high demand situations that stress and tax individuals certainly reveal their strategic ways of coping, we don’t mean to suggest that the ways in which individuals cope in the world are not related to the ways in which individuals see the world. On the contrary, the way in which an individual sees the world will certainly influence the ways in which that individual copes in the world. For example, Jane’s tendency in the middle of an argument to interpret her husband’s ambiguous comment as hostile will escalate the tension and create new self-regulatory demands and challenges. Thus high demand situations, while revealing characteristic “ways of coping,” are also profoundly impacted by and revealing of individuals’ “ways of seeing.”

Coping in High Demand Situations

Life is hard. We pass up the chocolate cake in the pursuit of a svelte waistline. We turn down an invitation for a lovely day of hiking in order to make progress on an overdue chapter. We hold our tongue when the customer service representative fails to take responsibility for a billing error. Our heart gets broken, we break the hearts of others, we fail, we get fired, we get hired, we make new friends and resolve conflicts with old ones. But we don’t all respond to life’s challenges in the same ways, nor are the same strategies for self-regulation equally effective for all.

In the following subsections, we explore how prevention-focused and promotion-focused individuals respond in different ways to many of life’s high-demand situations. In particular, we focus on three classes of high-demand situations: failures,

self-control conflicts, and challenges deriving from membership in social groups. There are certainly many types of high-demand situations that we could have selected. We've chosen these domains because they represent key self-regulatory challenges and because they provide an opportunity to highlight recent work in the study of regulatory focus. In the next subsections, we review not only how promotion- and prevention-focused individuals cope in strategically different ways, but also outline how the principles of regulatory fit theory (Higgins, 2000) suggest when and how individuals may be more or less effective in the task of self-regulation.

Coping with Failure

“Failure, then failure! So the world stamps us at every turn” (James, 1902, p. 138). Though we do not endorse James's sentiment that failure is ever-present, some failures in life *are* inevitable. However, the stamp that failure leaves is experienced and represented very differently within the prevention versus promotion regulatory systems, whether it's a failure to meet our own standards, a failure to meet the standards of significant others, or the failure to maintain the status quo. For prevention-focused individuals, failure represents the presence of negativity and the failure to uphold a duty. In contrast, for promotion-focused individuals, failure represents the absence of positivity and the failure to attain a hoped for ideal or aspiration (e.g., Strauman & Higgins, 1987). Consequently, failure results in distinct (and different) emotional and motivational responses for prevention-focused and promotion-focused individuals. Failure also differentially engages or disrupts the system's preferred strategy (vigilance or eagerness, respectively), prompting different kinds of reactions and evaluations of progress.

Affective responses to failure. As we alluded to earlier, regulatory focus differences in representations of failure lead to distinctly different affective responses. Failure in a promotion focus reflects a nongain (the absence of a positive outcome) and results in dejection-related emotions like sadness and disappointment. In contrast, failure in a prevention focus reflects a loss (the presence of a negative outcome) and results in agitation-related emotions like anxiety and worry (Higgins, 1987, 1997; Shah & Higgins, 2001). Individuals not only experience acute failures (e.g., not making the cut for the soccer team), but also experience more general failures in the form of self-discrepancies, or mismatches between chronic standards or self-guides for the self and the actual self (e.g., “I'm not the athlete I dreamed I was.”). These mismatches can arise between an individual's self-concept and his or her own self-standard or from mismatches between an individual's self-concept and the standard of a significant other for that person (Higgins, 1987). Furthermore, these mismatches can represent failures within the promotion system (ideal discrepancies) or failures within the prevention system (ought discrepancies).

Even when self-discrepancies (“I'm not achieving as much as I ought to be”; “I'm not as outgoing as my mother ideally hopes me to be”) are made momentarily more

accessible in an indirect way, they produce distinct emotional and behavioral consequences (Strauman & Higgins, 1987). For instance, several studies have found that priming ideal (promotion) discrepancies leads to increases in dejection, whereas priming ought (prevention) discrepancies leads to increases in agitation (Higgins, Bond, Klein, & Strauman, 1986; Strauman & Higgins, 1987). While the accessibility of the self-guide and its strength or importance have been found to moderate these relations (e.g., Boldero & Francis, 2000; Higgins, 1999b; Higgins, Shah, & Friedman, 1997), these chronic failures can be activated in subtle and situational ways, impacting self-regulatory processes more broadly.

In an interesting exploration of how self-discrepancies may often be activated in our daily lives, Reznik and Andersen (2007) provide evidence that transference processes can lead to the activation of self-discrepancies associated with significant others. Work by Andersen and colleagues on the relational-self model has established that individuals are ready to use accessible significant-other representations to make sense of new individuals and social interactions (Andersen & Saribay, 2005). For instance, people express more positive affect when they engage in an interaction with a target who apparently shares similarities with a liked, rather than a disliked, significant other (Berk & Andersen, 2000) and are also more likely to behave with the “similar” target in the way they would with their significant other (Andersen & Baum, 1994; Hinkley & Andersen, 1996). Reznik and Andersen extended this work to show that the self-discrepancies associated with significant others are also activated when encountering new social targets who share features with those significant others, shaping social interactions with the target.

In one study, participants expected to interact with a target individual who resembled a parent who held a self-guide for them from which they were discrepant (Reznik & Andersen, 2007). While all individuals evaluated the target more positively when he or she had features that resembled their parent than not, they also experienced more depressed affect if they had ideal (promotion) self-discrepancies associated with that parent and experienced more hostile/agitated affect if they had ought (prevention) self-discrepancies associated with that parent. Furthermore, individuals with ought discrepancies were more likely to want to avoid interaction with the target, whereas individuals with ideal discrepancies were more likely to want to approach interaction with the target.

This work suggests the far-reaching consequences of the different kinds of failures that promotion and prevention-focused individuals are likely to experience. The experience of failure is not limited to concrete events, but can also develop when we are made aware of how we've fallen short from our own or another person's more general standards. Furthermore, when these self-discrepancies are made accessible, they aren't limited in their impact to the relevant significant other. Rather, the work by Reznik & Andersen (2007) suggests that they profoundly impact self-regulation and interpersonal regulation in other contexts as well, as when interacting with someone who simply resembles a significant other (with some individuals being more impacted by these actual significant other discrepancies than others; see Moretti & Higgins, 1999).

Strategic impact of failure. Failure not only produces distinct emotional responses for prevention- and promotion-focused individuals, but also has distinct consequences for promotion- versus prevention-focused individuals in terms of its effect on their preferred ways of acting on the world. For promotion-focused individuals, failure is not only negative affectively, but is also a direct threat to eagerness, the strategic orientation that sustains or fits the promotion system. The threat that failure poses to eagerness may lead either to greater attempts to bolster eagerness in the face of failure or, when failures accumulate, may lead to the demotivation of the promotion system and depression (Vieth et al., 2003). For prevention-focused individuals, failure is also affectively negative. However, for prevention-focused individuals, failure poses no threat to the system's preferred strategic orientation. Rather, failure intensifies the preferred strategic orientation of the prevention system—vigilance—by increasing anxiety and alertness. Consequently, the motivational impact of failure for subsequent performance and coping behaviors differs for promotion- versus prevention-focused individuals.

To the extent that the strategic vigilance of prevention-focused individuals can become energized through failure, prevention-focused individuals should show better performance after failure feedback. In contrast, given that the strategic eagerness of promotion-focused individuals can become deflated after failure, promotion-focused individuals should show worse performance after failure feedback. Indeed, Idson and Higgins (2000) found that promotion-focused individuals showed a decline in performance after failure feedback relative to success feedback. Prevention-focused individuals showed the opposite pattern—better performance after failure feedback than after success feedback. However, it's not that promotion-focused individuals simply give up after failure; rather, they are likely to respond to failure in ways that protect their eagerness. For example, Förster, Grant, Idson, and Higgins (2001) found that after failure feedback, promotion performance expectancies only decreased slightly while prevention expectancies for performance decreased significantly. In order to maintain eagerness, promotion-focused individuals maintained relatively high expectancies, even after failure. In contrast, in order to maintain vigilance, prevention-focused individuals responded to failure by lowering expectancies even more.

Regardless of the absolute level of performance on a task, it's often possible to experience one's performance as either a relative failure (via upward counterfactuals or comparisons) or relative success (via downward counterfactuals or comparisons) (Roese, 1997). Given the differential impact of failure on promotion-related eagerness and prevention-related vigilance, how might the type of counterfactuals in which individuals engage make regulation of failure more effective? Two lines of research suggest that different types of counterfactuals will have distinct consequences for promotion-versus prevention-focused individuals.

Within the Reflection and Evaluation Model (REM) of comparative thinking, Markman and colleagues argue that there are four types of counterfactuals: upward and downward counterfactuals that can be either reflective or evaluative (K. Markman & McMullen, 2003). K. Markman, McMullen, Elizaga, and Mizoguchi (2006) argued that certain kinds of counterfactuals are going to be a better fit for promotion

and that others are going to be a better fit for prevention. They found that either type of upward counterfactual—evaluative (comparing current reality to a better reality) or reflective (focusing on a better reality)—are a good fit for promotion, as both upward counterfactuals have the potential to sustain eagerness by focusing on potential gains to be realized. In contrast, they found that either downward reflective counterfactuals (focusing on a worse reality) or upward evaluative counterfactuals led to better subsequent performance for prevention-focused individuals. Both of these types of counterfactuals have the possibility of increasing vigilance, either by focusing on the contrast between a better reality and the current state (making the current state feel like a failure or loss) or by bringing the possibility of a worse reality closer. Markman et al. (2006) also found that, independently of the hedonic impact of the counterfactual, using counterfactuals that fit a regulatory focus orientation produced stronger motivation (i.e., higher persistence) on a task. This suggests that individuals who naturally adopt or who are led to engage in counterfactual thinking that fits their underlying system will be better able to cope with the possibility of failure.

Indeed, prevention- and promotion-focused individuals are likely to reflect differently on past failures in other ways, too. Counterfactuals can also take the form of reversing a previous inaction (e.g., “If only I *had* done X, then Y”) or of reversing a previous action (e.g., “If only I *hadn't* done X, then Y”) (Roese, 1997). Additive counterfactuals, that is, counterfactuals that reverse a previous inaction that missed an opportunity for a gain, involve imagining moving from what was a “0” to a “+1” instead. In contrast, subtractive counterfactuals, that reverse a previous action that produced a loss, involve imagining moving from what was a “−1” to a “0” instead. Roese, Hur, and Pennington (1999) found that participants who considered promotion-related setbacks (their own or fictional examples) generated more additive (eager) counterfactuals, whereas participants who considered prevention-related setbacks generated more subtractive (vigilant) counterfactuals. Thus promotion- or prevention-focused individuals appear to imagine what might have been in different ways, and these past reflections not only shape the meaning of prior events but the likelihood of engaging in different future behaviors.

Across these studies, there is evidence that after failure promotion-focused individuals can engage in strategies to boost eagerness in order to counteract the demotivating impact of failure in their system. However, when promotion failures accumulate, promotion-focused individuals may become depressed. Self-systems theory (SST), a recently developed structured psychotherapy to treat depression, is based on the hypothesis that “chronic or catastrophic failure to meet promotion goals is a contributory causal factor in the onset and maintenance of depressive episodes for individuals with a promotion focus” (Vieth et al., 2003, p. 249). SST characterizes depression as a problem of motivation and goal pursuit, resulting from failures in pursuing and achieving promotion goals. Among the many goals of the treatment is to help clients reengage in promotion-focused behaviors. In a randomized trial comparing SST to cognitive therapy (Strauman et al., 2006), it was found to be more effective for

individuals with a history of lack of socialization in promotion (i.e., deficits in the promotion system). This vulnerability of individuals to depression following severe promotion-related failures is another example of how the impact of failure within the two systems has very different consequences.

Failure below the status quo. Generally speaking, individuals experience failure when they fall below the status quo. For prevention-focused individuals, compared to promotion-focused individuals, one might think that such failure would be less problematic because failure sustains the vigilance that fits their orientation. However, failure can be *unacceptable* for prevention-focused individuals in a way that is not true for promotion-focused individuals. Promotion-focused individuals are particularly sensitive to the presence or absence of *positive* outcomes. For a promotion-focused individual, the absence of positive outcomes may be represented by “0” (the status quo) or by “-1.” While the absence of positive outcomes is problematic for a promotion-focused individual, there is no strong distinction between “0” and “-1” because *both* represent nongains; that is, it is the difference between “0” and “+1” that matters. In contrast, for prevention-focused individuals, falling below the status quo represents a serious threat to safety and security, given their relative sensitivity to the difference between “0” and “-1.” Consequently, for prevention-focused individuals there is a significant difference between “0” and “-1.” “0” represents the status quo (safety) while “-1” represents loss and negativity.

This difference between promotion- and prevention-focused individuals in how failure below the status quo is experienced has significant implications for the actions they are willing and motivated to take. For prevention-focused individuals, acceptable progress is measured by whether it returns them to the status quo. Prevention-focused individuals should be willing to do *whatever is necessary* to get back to the status quo. In contrast, promotion-focused individuals are motivated to make progress away from the current state, but the status quo holds no special meaning as the state they want to reach. Rather, acceptable progress is measured by whether there is advancement away from the current state towards “+1.” In this sense, given a current failure *below the status quo*, promotion and prevention individuals should be willing to incur different risks in the pursuit of progress.

In support of this idea, we’ve found that when individuals have fallen below the status quo in a stock investment paradigm, prevention-focus strength, but not promotion-focus strength, predicts a willingness to take risks that have the possibility of returning participants to the status quo (Scholer, Zou, Fujita, Stroessner, & Higgins, 2009). After losing money and falling below the status quo, participants were given the choice between two stock options, a relatively risky option and a relatively conservative option. When the risky option was the only choice that had the potential to return participants to the status quo, individuals in a prevention focus chose the risky option. However, if the conservative option also had the potential to return them to the status quo, prevention-focused participants preferred the conservative choice. Thus, for choices below the status quo, individuals’ preference for the risky option

versus the conservative option was strongly influenced when they were in a prevention focus but not when they were in a promotion focus.

This study also highlights the independence of the strategic level of self-regulation and the tactics that serve those strategies. When the tactics were equivalent in instrumentality (i.e., allowing a return to the status quo), prevention-focused participants preferred the conservative tactic that corresponded more naturally with their preferred vigilant strategy. However, when the risky tactic was the only option that could return them to the status quo, it also could be adopted to serve the vigilant strategy. Another example of the independence of the strategic and tactical levels was observed in the K. Markman et al. (2006) studies described earlier. Upward evaluative counterfactuals served, *for different reasons*, either the vigilant strategic orientation of the prevention system or the eager strategic orientation of the promotion system. A study by Werth and Förster (2007) provides a further illustration of this strategy–tactic independence. Although typically the promotion system is associated with speed (see Förster, Higgins, and Taylor-Bianco, 2003), drivers in a prevention focus judge a traffic situation as more dangerous and therefore brake earlier than people in a promotion focus. Here, speed serves vigilance against danger, rather than eager advancement.

Interim summary. All failure is not the same. Understanding the differences between prevention-system failure and promotion-system failure can lead to more effective self-regulatory management of both self and others. For instance, attempting to increase another person's eagerness after failure ("Oh, that wasn't so bad, Champ! I know you'll do great next time!") can help promotion-focused individuals but is likely to harm prevention-focused individuals. Framing an average performance as a relative failure may increase the motivation of a prevention-focused individual, but may deflate the motivation of a promotion-focused individual. Perceiving a failure as a sign of being below the status quo may lead to greater risk-taking by prevention-focused individuals relative to promotion-focused individuals, for better or ill effect. By understanding the nature of failure within these two systems, we can begin to understand how to help individuals cope more effectively with one of the inevitabilities in life—sometimes we fail.

Self-Control Conflicts

Another class of high demand situations involves self-control conflicts. The classic self-control conflict involves the tension between immediate, short-term gain (e.g., skipping that gym class in order to sleep in) and distant, long-term gain (e.g., being physically fit). However, that's not the only type of self-control conflict that individuals experience. Individuals also experience conflicts between the pursuit of two different goals (e.g., being a professional vs. being a mother) or between the use of two different strategies (e.g., coping in an eager vs. a vigilant way). In this subsection, we explore how the different concerns and preferred strategies of the prevention and promotion

systems result in different ways of coping with a variety of self-control conflicts. We also focus more directly on how the principles of regulatory fit theory can be applied to understanding these self-regulatory conflicts.

As we've discussed, eager strategies fit the promotion system and vigilant strategies fit the prevention system. When individuals use the strategy that fits their underlying orientation, it creates a state of "regulatory fit" that sustains the underlying orientation, makes individuals "feel right" about their evaluations and responses, and increases engagement (Higgins, 2000, 2006). Individuals in a state of fit perform better on an anagram task than individuals in a state of nonfit (Shah, Higgins, & Friedman, 1998) and report greater task enjoyment (Freitas & Higgins, 2002). The implications of regulatory fit theory also extend to demanding self-control conflicts, such as managing healthy behaviors and coping with life's daily challenges.

Higgins et al. (2001) demonstrated that, in a classic self-control dilemma, the strength of the promotion system was related to a preference for eager strategies (approaching matches to the desired goal), whereas the strength of the prevention system was related to a preference for vigilant strategies (avoiding mismatches to the desired goal). Specifically, participants first imagined themselves in a situation in which they are on a diet and are tempted by pizza. Individuals with a stronger promotion focus were more likely to use tactics that advanced the diet goal (approaching a match to the goal), whereas individuals with a stronger prevention focus were less likely to use tactics that impeded the diet goal (avoiding a mismatch to the goal). In other words, promotion-focused individuals were more likely to eagerly approach matches to the goal, whereas prevention-focused individuals were more likely to vigilantly avoid tactics that could impede the goal.

This scenario study supports the predicted strategic preferences of prevention- and promotion-focused individuals in a self-control conflict. Other studies, both in and outside the lab, have shown how these strategic preferences can be taken advantage of to increase the effectiveness of self-regulation. For instance, several studies have demonstrated that when health messages take advantage of the principles of regulatory fit, individuals will be more persuaded to increase their consumption of fruits and vegetables (Cesario, Grant, & Higgins, 2004; Latimer, Williams-Piehot, et al., 2008; Spiegel, Grant-Pillow, & Higgins, 2004), increase physical activity (Latimer, Rivers, et al., 2008), and reduce intentions to smoke (Kim, 2006; Zhao & Pechmann, 2007).

Messages that "fit"—either because the message fits the receivers' chronic orientation (e.g., Latimer, Williams-Piehot, et al., 2008) or because a message primes both a regulatory system (e.g., promotion) and the related strategy (e.g., eagerness) (Spiegel et al., 2004)—appear to increase the effectiveness of self-regulation through several channels. When individuals receive a message under conditions of regulatory fit, they have been shown to "feel right" about their experience of the message (Cesario et al., 2004; Cesario & Higgins, 2008), to experience greater processing fluency (Lee & Aaker, 2004), to have more positive feelings towards the focal activity (Latimer, Rivers, et al., 2008), to show greater accessibility for the message (Lee & Aaker, 2004), and to feel that it is more diagnostic (e.g., useful) for making behavioral choices (Zhao &

Pechmann, 2007). Although there is much yet to be understood about how regulatory fit can be applied most effectively in persuasive contexts (see Cesario, Higgins, & Scholer, 2007; Lee & Higgins, 2009), there is little doubt that the strategic ways in which individuals engage in self-control, and are persuaded to engage in self-control, matter for effective self-regulation.

Individuals are not only more persuaded by *messages* that fit their regulatory orientation, they are also more persuaded by *people* who fit their regulatory orientation (Lockwood, Jordan, & Kunda, 2002). For instance, whereas individuals in a promotion focus showed an increase in academic motivation when a role model highlighted eager approach strategies for achieving academic success, individuals in a prevention focus were more motivated by exposure to a role model who highlighted vigilant strategies for avoiding academic failure (Lockwood et al., 2002). Lockwood and her colleagues (Lockwood, Chasteen, & Wong, 2005) have extended this work to show that the differing health regulatory concerns of younger adults (e.g., generally more focused on promotion concerns) and older adults (e.g., focused on both promotion and prevention concerns) lead to differential motivation by positive and negative health role models. While both younger and older adults were motivated by positive health role models, older adults were also motivated by negative health role models.

Grant, Higgins, Baer, and Bolger (2007) have further demonstrated the impact of regulatory fit on the regulation of daily life problems. Grant et al. (2007) predicted that regulatory fit would increase a strategy's effectiveness by influencing the extent to which individuals would "feel right" about whatever coping strategies they used, thereby directly reducing the experience of distress. Specifically, they found that on days when participants used more coping strategies that fit their underlying orientations (i.e., eager coping strategies for promotion, vigilant coping strategies for prevention), they experienced *less* distress. Grant et al. also found that there was a significant impact of nonfit: On days when participants used more coping strategies that did *not* fit their underlying orientations, they experienced *more* distress. It is important to note that there was no main effect of promotion or prevention pride on distress; chronic regulatory orientation did not affect reactivity to stress. What were critical were the strategic ways in which individuals coped with daily stressors. While there was some evidence in this study that eager approach strategies generally led to less distress than vigilant avoidance strategies, the fit or nonfit between participants' underlying orientations and the strategy employed was especially important for well-being.

The research we have reviewed so far suggests that coping with self-control conflicts by using strategies that fit one's underlying promotion or prevention orientation generally leads to more effective self-regulation. Recent research also suggests that when individuals regulate in a state of regulatory fit, they are better able to manage subsequent self-regulatory challenges (Hong & Lee, 2008). Hong and Lee found that participants in a state of regulatory fit exhibited greater subsequent self-regulator strength (as assessed by how long they could squeeze a handgrip; see Muraven, Tice, & Baumeister, 1998) than participants in a state of nonfit. Another implication of the difference in preferred strategies for prevention- versus promotion-focused

individuals is that certain kinds of self-control temptations are an inherently better fit for one system more than the other. In some situations, prevention-focused individuals may be better able to resist temptations because avoiding obstacles to goal attainment is a preferred means of prevention-focused self-regulation. For instance, inducing a prevention focus reduces the likelihood that impulsive eaters exposed to chocolate cake will exhibit intentions to indulge (Sengupta & Zhou, 2007). Furthermore, prevention-focused individuals even enjoy a task that requires resisting tempting diversions more than promotion-focused individuals (Freitas, Liberman, & Higgins, 2002).

However, Dholakia, Gopinath, Bagozzi, and Natarajan (2006) have shown that with regard to some temptations, promotion-focused individuals may be better able to engage in self-control. Dholakia et al. found that while promotion-focused individuals reported a greater desire for the tempting object, their use of strategies focused on approaching the long-term goal resulted in greater effectiveness than the avoidance strategies employed by prevention-focused individuals. It seems likely that the nature of the self-control conflict constrains what type of strategy is most advantageous. Some types of self-control conflicts will “fit” a promotion orientation better and some types of self-control conflicts will “fit” a prevention orientation better. Understanding the differences between these two situations that result in different optimal strategies for dealing with temptations is an important subject for future research.

Up until now, we’ve focused primarily on the benefits of regulatory fit for increasing the effectiveness of self-regulation. We wrap up this subsection on self-control conflicts by considering the *trade-offs* of regulatory fit: When might regulatory nonfit lead to more effective self-regulation than regulatory fit? This exploration requires us to consider the self-regulatory demands of particular tasks and to reflect more deeply on what it means to be in a state of nonfit.

Two recent programs of research suggest the importance of taking into account the demands of the task when considering the effects of regulatory fit. In a series of studies, Vaughn, Malik, Schwartz, Petkova, and Trudeau (2006) have shown that regulatory fit influences the stop rules that individuals employ when deciding whether to continue exerting effort on a task. When individuals are in a context that elicits an enjoyment stop rule (intrinsic task-focused rule), regulatory fit results in greater effort, due to the increased motivational intensity and the feeling of rightness about one’s evaluation of the task. However, when individuals are in a context that has an explicit, sufficiency-based stop rule, regulatory nonfit results in greater effort, due to the feeling of wrongness. Thus regulatory fit may lead to either greater or lesser investment of effort depending on how the stop rules for the task are construed. Another example of an interaction between task demands and regulatory fit has been shown by Maddox, Baldwin, and A. Markman (2006). Their work assumes an additional consequence of regulatory fit that we’ve not yet directly discussed – that regulatory fit appears to increase cognitive flexibility (A. Markman, Maddox, Worthy, & Baldwin, 2007). However, the impact of increased cognitive flexibility on effective self-regulation depends on the task demands. In support of this idea, Maddox et al. demonstrated that individuals in a state of regulatory fit performed better on a classification learning

task that required cognitive flexibility, but performed worse on a classification learning task in which cognitive flexibility was disadvantageous. Together, these studies make clear that when considering the effects of regulatory fit on self-regulation, one must also consider the demands of the task.

Intergroup Interactions

One of the challenges of self-regulation is that it's not just about the self. Self-regulation also involves regulation in a social context, one that includes interactions with members of one's own groups and other groups. In this final subsection, we discuss how regulatory focus impacts self-regulation in another type of high-demand context: intergroup interactions. We use the term "interactions" loosely to include situations in which an individual's group membership or differences between groups are made salient, even if no direct interaction is expected. In particular, we examine how regulatory focus is related to differences in responses to challenges on the basis of group membership, to differences in the kinds of groups that individuals value, and to how self-regulation is impacted by the collective regulatory focus of groups.

Response to challenges. When individuals are members of a group for which clear negative stereotypes exist, individuals are vulnerable to the potential for social discrimination. Individuals are also vulnerable to stereotype threat, a challenge to performance on the basis of negative stereotypes about their group in a particular achievement domain (Steele & Aronson, 1995). These situations represent high-demand situations that require self-regulatory responses in order to perform well and cope successfully with potential discrimination. A series of recent studies has examined how regulatory focus might interact with and impact the unfolding of such challenges.

Stereotype-threat theory (Steele, 1997) outlines how performance suffers when a negative stereotype is activated in a performance situation that is relevant to the individual. Seibt and Förster (2004) proposed that the activation of negative stereotypes might elicit a prevention focus and that the activation of the prevention system might result in a distinct pattern of performance strengths and deficits. In particular, Seibt and Förster (2004) argued that the increased activation of the prevention system following the awareness of the negative stereotyping of one's group in a relevant performance situation would lead to a vigilant processing style and a focus on minimal goals. However, this increased activation of the prevention system should also lead to increased accuracy, consistent with prevention system concerns and the findings of previous studies (see Förster et al., 2003). They found that on certain kinds of tasks, activation of negative stereotypes did lead to slower, more accurate performance. However, the activation of negative stereotypes also led to *poorer* performance on tasks that required creative, eager processing. Given that the types of achievement tasks often examined in the stereotype threat context are difficult and require the transfer of knowledge and/or creative solution generation, and given that previous studies have found that a

prevention focus reduces creative performance compared to a promotion focus (Crowe & Higgins, 1997; Friedman & Förster, 2001), an increased prevention focus under negative stereotype conditions is likely to have a detrimental effect on performance. However, Keller (2007) has shown that if a promotion focus, rather than a prevention focus, can be induced under stereotype threat conditions, the negative impact of stereotype threat can be reduced. Keller argues that when individuals are in a promotion focus, stereotype threat is more likely to be experienced as a challenge, rather than as a threat, leading to greater eagerness and engagement in one's maximal goals (and thus better performance) (see also Brazy & Shah, 2006).

It seems that negative stereotype threat, generally speaking, is likely to induce a prevention focus and that a prevention focus can leave individuals more vulnerable to the insidious effects of stereotype threat when the performance task is difficult. More generally, whether discrimination is unambiguous (Sassenberg & Hansen, 2007) or ambiguous (Oyserman, Uskul, Yoder, Nesse, & Williams, 2007), the prevention system is associated with greater sensitivity to the potential for social discrimination. Individuals primed with a prevention focus are more likely to evaluate an ambiguously unfair work scenario as unfair and are more likely to report that they would engage in some kind of situation-focused action to address the perceived injustice (Oyserman et al., 2007). Following social discrimination, individuals in a prevention focus experience more resentment and anger than promotion-focused individuals, and, as found in the Oyserman et al. study, show an increased motivation to act against the discriminatory judgment (Sassenberg & Hansen, 2007). Two mechanisms appear to contribute to this greater sensitivity. Oyserman et al. have argued that since signs of potential threat or danger are likely to cue the prevention system, simply making an individual's stigmatized identity salient increases vigilance in the prevention system. Sassenberg and Hansen additionally found that even when social discrimination was framed as a nongain, individuals tended to perceive it as a loss, which may also partly underlie the strong prevention response. Prevention-focused individuals respond more strongly to negative events (seen as losses) than do promotion-focused individuals, for whom negative events represent nongains (Idson et al., 2000).

In both studies, the prevention system was associated with taking *greater* action following perceived social discrimination. It seems likely that, in both of these situations, prevention-focused individuals perceived themselves in an unfair situation, below the status quo. They were consequently willing to do whatever was necessary to resolve it, including taking even risky actions (e.g., confronting a superior). While these studies suggest that promotion- and prevention-focused individuals will respond differently to discrimination or the potential for discrimination, they cannot tell us how this results in ultimately more or less effective coping. For instance, if the treatment is actually unfair, being in a prevention focus and being motivated to take action could be a good thing. However, if it's a misperception or if an individual is in no position to truly "speak truth to power," being in a prevention focus could be more detrimental. These questions suggest new possibilities for exploring the consequences of these different regulatory responses across different contexts.

The groups we value. Individuals can be associated with some groups regardless of their own preferences. However, we have choices about whether to belong to many other social groups. And regardless of whether we've chosen our membership in a group or not, we value some groups more than others. Recent work suggests that the value of groups may be derived, in part, from the group's ability to meet our regulatory needs. Sassenberg, Jonas, Shah, and Brazy (2007) found evidence that promotion-focused individuals explicitly and implicitly value high power groups more than prevention-focused individuals and that prevention-focused individuals explicitly and implicitly value low power groups more than promotion-focused individuals. They argue that high power groups provide a better fit for individuals in a promotion focus because they allow promotion-focused individuals to engage in the strategies that feel right to them—eagerly pursuing nurturance and accomplishment—whereas low power groups provide a better fit for individuals in a prevention focus because they allow prevention-focused individuals to engage in the strategies that feel right to them—vigilantly maintaining safety and security.

Furthermore, while promotion-focused and prevention-focused individuals may be attracted to different types of groups because these groups allow individuals to engage in their preferred strategies, the collective regulatory focus *of groups* can also influence the self-regulation of individuals. For instance, groups primed with promotion versus prevention concerns exhibit strategic convergence towards the primed system; promotion groups show a liberal bias in a recognition memory task whereas prevention groups show a conservative bias (Levine, Higgins, & Choi, 2000; see also Florack & Hartmann, 2007). Recent work has also shown that even in a minimal group paradigm, the collective regulatory focus of the group (as indicated by the mottos that the group endorses) affected individuals' behavior on an independent task, particularly for individuals who were highly identified with the group (Faddegon, Scheepers, & Ellemers, 2007). This work suggests that when considering the implications of regulatory focus in intergroup contexts, it will be important to explore both how different groups serve important regulatory functions and how different groups shape the regulatory concerns of their individual members.

Concluding Remarks

When facing any of the many challenges that life throws our way, being in a prevention versus promotion focus has significant implications for how the challenge will be confronted. These high demand situations reveal differences in ways of coping that result from fundamental differences in the motivations and strategic orientations of the promotion versus prevention systems. Vigilant strategies “fit” the prevention system and eager strategies “fit” the promotion system. Although this system–strategy fit is consistent across contexts, the relations between eager and vigilant strategies and the tactics and behaviors that serve them are far more complex. Vigilance results in

increased riskiness in some cases and in increased risk aversion in others (Scholer et al., 2008). The same counterfactual (upward evaluation) can fit an eager promotion strategy or a vigilant prevention strategy (K. Markman et al., 2006). The same fast reaction can serve promotion eagerness or prevention vigilance (Werth & Förster, 2007). More generally, more than one tactic can serve the same system, or the same tactic can serve both systems. What does this suggest about the universals in personality?

We argue that, rather than classifying and describing personalities on the basis of behavioral variability per se, coherence will be found by asking, "What motivational system and its strategic preferences is this behavior serving?" (see Higgins, 2008; Higgins & Scholer, 2008). Recent research (Higgins, 2008; Higgins, Pierro, & Kruglanski, 2008) examining cross-cultural differences in regulatory focus (Higgins, 1997), regulatory mode (Higgins, Kruglanski, & Pierro, 2003), the Big Five trait dimensions (see John, 1990; John & Srivastava, 1999), and self-esteem (Rosenberg, 1965) suggests some of the advantages of approaching personality in this way.

As an example, while some countries tend to have higher self-esteem than others, such as the United States relative to Japan, the functional relations between the underlying motivations of regulatory focus and self-esteem are consistent across countries. For instance, across all countries studied by Higgins et al. (2008), higher self-esteem was associated with higher promotion focus. For individuals high in promotion, self-esteem serves to sustain eagerness and boost optimism, which is critical for promotion functioning. In contrast, for functional reasons, individuals high in prevention would tactically dampen their optimism and confidence to remain vigilant. These differences in adaptive, tactical self-regulation would result in self-esteem being higher for individuals high in promotion than individuals high in prevention. Although *both* the United States and Japan have some individuals who are high in promotion and some who are high in prevention, the relative distributions of such individuals in each nation varies. The United States has more predominant promotion individuals than Japan, whereas Japan has more predominant prevention individuals than the United States (Higgins et al., 2008). Given the functional relations between promotion and prevention and self-esteem, one would predict that overall, self-esteem would be higher in the United States than in Japan. Indeed, this is what was found by Higgins et al. (2008). Thus cross-cultural differences in self-esteem, as well in other traits (e.g., extroversion), can be understood as deriving from the fact that different traits serve different motivational orientations and their preferred strategies, with these functional relations being universal but the distributions of predominant orientations varying cross-culturally (see Higgins, 2008).

Individuals deal with life's demands in distinctly different strategic ways depending on their regulatory state. Neither regulatory state is better than the other; there are self-regulatory trade-offs within each system. These trade-offs are reflected in the general sensitivities and preferred coping strategies of the promotion versus prevention systems, and also in the trade-offs related to being in a state of regulatory fit versus nonfit. While individuals can be chronically promotion-focused or prevention-focused, these regulatory states can also be temporarily induced or strengthened situationally.

This suggests exciting possibilities for designing interventions that capitalize on the strengths of a given system in specific situations. We hope that self-regulation will become as much a study of the way individuals triumph over the demands they face as of how they struggle.

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