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CHAPTER

## 5 Too Much of a Good Thing? Trade-offs in Promotion and Prevention Focus

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### Abstract

Different kinds of motivational orientations provide distinctive ways of perceiving the world, dealing with life's inevitable slings and arrows, regulating challenges and opportunities, and creating success. In this chapter, we explore these differences in the two motivational systems outlined in regulatory focus theory: the promotion and prevention systems (Higgins, 1997). In particular, we discuss these systems in terms of the trade-offs in each; what are the benefits and costs of a strong promotion focus? What are the advantages and drawbacks of a strong prevention focus? We explore the trade-offs of each system with regard to three significant aspects of self-regulation and motivation: emotional experiences, the balance between commitment versus exploration, and performance. We conclude by discussing the importance of constraints on these systems for effective self-regulation and by suggesting avenues for future research.

**Keywords:** [regulatory focus](#), [motivation](#), [self-regulation](#), [emotion](#), [commitment](#), [performance](#)

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Air travel can provide not only logistical but also intellectual challenges. When you tell your seatmate that you study motivation, inevitably the question arises: “I’m having trouble motivating (substitute wife, son, employee). How can I get them *more* motivated?” Such is the typical conception of motivation. More is better. The problem is always that people are lacking in amount. If the maximum level of motivation can be achieved, all will be right with the world. And you can never have enough.

This chapter is dedicated to our fellow traveler. Is more motivation always better? The answer to this question, we believe, is consistent with what we face (sometimes resignedly) in most aspects of life: There are always *trade-offs*. Having a lot of a good thing means having at least some of a bad thing, too. Strength is intimately connected to weakness. Benefits come at some cost. This chapter is an exploration of such trade-offs within the two fundamental motivational systems outlined in regulatory focus theory (Higgins, 1997):

the promotion system and the prevention system. This chapter is a response to our seatmate (i.e., “It is not always about increasing motivation”), albeit with perhaps more nuance and complexity that one dares get into in Row 22.

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We begin by introducing the promotion and prevention systems. We then explore what kind of life an individual would have if each system were totally unconstrained. In other words, what kind of life would a purely promotion-focused individual face? What kinds of opportunities and challenges would a purely prevention-focused individual confront? We explore the trade-offs of the pure forms of each system generally and the trade-offs in relation to specific situations. For instance, more promotion may be useful when brainstorming a new ad campaign (Friedman & Förster, 2001), but not so useful if overseeing the safety of one's employees (Wallace, Little, & Shull, 2008). We organize our discussion of trade-offs around three significant issues in motivation and self-regulation: emotional life, commitment versus exploration, and performance. Lastly, we discuss the importance of constraints on these systems in order to achieve optimal self-regulation. We describe the ways in which the prevention and promotion systems may constrain each other, as well as how other motivational orientations (e.g., regulatory mode; Higgins, Kruglanski, & Pierro, 2003) may also provide constraints on these systems.

## Overview of Regulatory Focus Theory

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Building on earlier distinctions (Bowlby, 1969; 1973; Higgins, 1987; Mowrer, 1960), regulatory focus theory distinguishes between two coexisting motivational systems (promotion, prevention) that serve critically important but different survival needs (Higgins, 1997). The systems differ in what fundamentally motivates (nurturance versus security) and in what regulatory strategies are preferred (eagerness versus vigilance). Given that each system addresses a significant survival need, it is not surprising that people need both systems to be maximally effective in the world. However, in any given moment, one system is likely to predominate over the other, due to either chronic or situational differences in accessibility. In this chapter, we imagine what life would be like if an individual were purely promotion or prevention focused by exploring the benefits and costs of the extreme forms of each system.

The world of a promotion-focused individual is a world filled with possibility for advancement. An individual who is chronically promotion focused has been socialized to see that what matters in life is making good things happen—seeking the presence versus absence of positive outcomes. Caretaker-child interactions that support the development of a promotion focus direct attention to nurturance needs and emphasize desired end states as ideals (Higgins, 1987, 1997; Keller, 2008; Manian, Papadakis, Strauman, & Essex, 2006; Manian, Strauman, & Denney, 1998). Consequently, promotion-focused individuals are concerned with growth, advancement, and accomplishment that are served by using eager approach strategies in goal pursuit—approaching matches to desired end states and approaching mismatches to undesired end states (Crowe & Higgins, 1997; Higgins, Roney, Crowe, & Hymes, 1994; Liberman, Molden, Idson, & Higgins, 2001; Molden & Higgins, 2005; Wang & Lee, 2006). Advancements that count are those that result in positive deviations from the status quo or neutral state—the difference between “0” and “+1.” Promotion-focused individuals are less sensitive to negative deviations from the status quo or neutral state, that is, the difference between “0” and “-1” (Brendl & Higgins, 1996; Higgins, 1997; Higgins & Tykocinski, 1992). In other words, promotion-focused individuals are maximally sensitive to gains versus nongains. Important gains are those related to their ideals, wishes, and aspirations.

In contrast, the world of a prevention-focused individual is a world filled with duty. An individual who is chronically prevention focused has been socialized to see that what matters in life is maintaining satisfactory states by preventing bad things from happening—ensuring the absence versus presence of negative outcomes. Caretaker-child interactions that encourage the development of a prevention focus

direct attention to security needs and emphasize desired end states as oughts, duties, and obligations (Higgins, 1987, 1997; Keller, 2008; Manian et al., 1998; Manian et al., 2006). Consequently, prevention-focused individuals are concerned with safety and responsibility and focus on the necessity of maintaining the absence of negative outcomes. This orientation is best served by using vigilant avoidance strategies in goal pursuit—avoiding mismatches to desired end states and avoiding matches to undesired end states (Crowe & Higgins, 1997; Higgins et al., 1994; Liberman et al., 2001; Molden & Higgins, 2005; Wang & Lee, 2006). This sensitivity to the absence and presence of negative outcomes (nonlosses/losses) is reflected in greater assigned significance to the difference between “0” and “−1” than to the difference between “0” and “+1” (Brendl & Higgins, 1996; Higgins, 1997; Higgins & Tykocinski, 1992). Important nonlosses are those related to duties, oughts, and responsibilities.

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Importantly, although the promotion and prevention systems are concerned with the regulation of different needs, promotion and prevention orientations *each* involve the approach and avoidance systems of self-regulation—each involve *both* approaching desired end states (e.g., approaching nurturance or safety, respectively) and avoiding undesired end states (e.g., avoiding nonfulfillment or danger, respectively). In other words, although at the strategic level promotion and prevention relate differentially to eager approach and vigilant avoidance strategies, at the system level each system is involved in both approach and avoidance (Scholer & Higgins, 2008). These differences mean that some desired end states will be more valuable or relevant in one system versus the other (Higgins, 2002). For instance, prevention-focused individuals may value the desired end state of an accident-free production line more than promotion-focused individuals (Henning, Stuft, Payne, Bergman, Mannan, & Keren, 2009). Additionally, the same desired end state can be presented in different ways by prevention- versus promotion-focused individuals. For example, the same desired end state, such as having a good marriage, may be represented as a duty or responsibility for prevention-focused individuals but as an ideal or aspiration for promotion-focused individuals. Furthermore, the fit (e.g., promotion eager) or nonfit (e.g., promotion vigilant) between an individual's underlying goal orientation and use of strategic means affects strength of engagement in the goal pursuit activity beyond any direct implications of either the system or the strategy itself (regulatory fit theory; Higgins, 2000). In other words, the effectiveness of a given strategy depends not only on the inherent properties of the strategy and task demands but also on whether the strategy sustains or fits an individual's underlying orientation. When individuals experience regulatory fit by using strategic means that sustain their underlying orientation, they “feel right” about and engage more strongly in what they are doing (Higgins, 2000, 2006).

As noted earlier, promotion and prevention orientations can arise either from chronic accessibility (personality differences) or from temporary accessibility (situational factors). Consequently, regulatory focus has been studied both as a personality variable with chronic strength or predominance of prevention or promotion orientations (e.g., Cunningham, Raye, & Johnson, 2005; Higgins et al., 2001; Higgins, Shah, & Friedman, 1997; Lockwood, Jordan, & Kunda, 2002; Ouschan, Boldero, Kashima, Wakimoto, & Kashima, 2007) and as a situational variable involving priming ideals or oughts or framing goal pursuits as potential gains or nonlosses (e.g., Friedman & Förster, 2001; Higgins et al., 1994; Liberman et al., 2001; Shah & Higgins, 1997; Shah, Higgins, & Friedman, 1998). Because we believe that what ultimately matters in terms of predicting behavior is the regulatory *state* that one is in, whether that arises from chronic or temporary accessibility (cf. Higgins, 1999), we review research that examines regulatory focus as both a measured and manipulated variable.

## Trade-offs in Emotional Life

Few would argue with the claim that success feels better than failure. Yet what counts as a success or a failure and exactly how those triumphs and tragedies feel—both the precise quality and the intensity—depends at least in part on whether they are experienced within the promotion versus prevention systems. Additionally, the preferred strategic preferences of each system are sustained or disrupted by different affective states. In this section, we explore the trade-offs in the emotional life of a purely prevention-focused individual versus a purely promotion-focused individual.

### The Price of Happiness, The Cost of Calm

Success and failure are defined differently within the promotion and prevention systems, have differential significance, and have distinct emotional signatures (Higgins, 1997, 2001). Success in a promotion focus reflects the presence of a gain: the positive outcome of an advancement, an improvement. In contrast, success in a prevention focus reflects just a nonnegative state: the establishment or maintenance of a satisfactory state. Thus, while promotion success requires progress or advancement from “0” to “+1,” prevention success requires only maintenance of “0” such that a nonnegative, satisfactory state persists. Fundamentally, “success” in promotion requires positive *change* (gain), whereas “success” in prevention simply requires a state or condition that is satisfactory. This difference between requiring change (progress) versus requiring just a satisfactory state or condition constitutes a basic asymmetry between promotion and prevention.

Failure, too, is defined differently for promotion and prevention. For promotion-focused individuals, both “0” and “-1” are nongain, failure states. They both represent a failure to make progress, a failure to advance forward from “0.” For prevention-focused individuals, however, only “-1” is experienced as failure (Brendl & Higgins, 1996; Higgins, 1997). Not making progress is not a failure.

This means that if both a promotion-focused individual and a prevention-focused individual are in a current state of loss (“-1”), acceptable movement for a prevention-focused individual requires reaching the satisfactory state of “0,” whereas “0” holds no special meaning for a promotion-focused individual. Instead, acceptable movement for a promotion-focused individual means making progress beyond “0” towards “+1.” Similarly, if both a promotion-focused individual and a prevention-focused individual have moved from “0” to a current state of “+1,” the promotion-focused person would experience failure with a setback to “0” because it would represent a nongain, a removal of the previous progress, whereas the satisfactory state of “0” would still count as a success for a prevention-focused person.

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Molden, Lucas, Gardner, Dean, and Knowles (2009) provide intriguing evidence for how different kinds of social losses “count” as promotion versus prevention failures. When asked to describe a time that they “did not belong,” prevention-focused individuals were more likely to describe a time in which they were actively rejected (“-1” or an unsatisfactory state), whereas promotion-focused individuals were more likely to describe a time in which they had been more passively ignored (no opportunity to advance from “0” or a nongain). Similarly, Sassenberg and Hansen (2007) have shown that social discrimination based on “-1” unsatisfactory states increases distress for prevention-focused, but not promotion-focused, participants.

In addition to differences in what *counts* as success or failure, the *intensity* of the experience also differs for promotion and prevention individuals. For a prevention-focused individual who is sensitive to negative unsatisfactory states, “-1” failure is unacceptable in a way that it is not for a promotion-focused individual, and it is experienced more intensely by prevention-focused than promotion-focused individuals (Idson, Liberman, & Higgins, 2000). In contrast, “+1” success is more meaningful and experienced more intensely for promotion-focused than prevention-focused individuals (Idson, Liberman, & Higgins, 2000). This

means that the potential for positive emotional intensity would be greater in the promotion system than the prevention system, that is, a promotion gain of “+1” is more intense than a prevention nonloss of “+1,” whereas the potential for negative emotional intensity would be greater in the prevention system than the promotion system, that is, a prevention unsatisfactory state of “-1” is more intense than a promotion nongain of “-1.”

It should be emphasized, however, that emotional intensity is not the same as level of pleasure or pain. The feeling of peace and calm from prevention success is not as intense as the feeling of joy and elation from promotion success, but this does not mean that the former is necessarily less pleasant than the latter. Similarly, the feeling of sadness and discouragement from promotion failure is not as intense as the feeling of anxiety and worry from prevention failure, but this does not mean that the former is necessarily less painful than the latter. Indeed, the feeling of depression from severe promotion failure is an extremely painful state precisely because its low motivational intensity reflects having no interest in engaging with life, a very painful psychological condition.

The distinct quality of prevention failure impacts how individuals anticipate and respond to failure. For example, prevention-focused individuals appear to be more susceptible to self-handicapping than promotion-focused individuals (Hendrix & Hirt, 2009), presumably because self-handicapping is a tactic for maintaining a current satisfactory state (e.g., the belief that you have high ability). In addition, after experiencing an unfavorable outcome that is represented as an unsatisfactory state, prevention-focused individuals are more upset if the process yielding that outcome was fair than unfair (Cropanzano, Paddock, Rupp, Bagger, & Baldwin, 2008). Cropanzano et al. (2008) suggest that because the fair process does not allow one to easily attribute failure to external causes, it is particularly threatening for prevention-focused individuals (see also Brockner, 2010). As we'll explore in more depth later, however, prevention failure, while painful, can also energize the system. Promotion failure generally provides no such benefit.

As described earlier when discussing the pleasures and pains of promotion and prevention, the *quality* of emotional response to success and failure also differs within the promotion and prevention systems. Success in the promotion system reflects the presence of a positive outcome (a gain or advancement) and results in cheerfulness-related emotions like happiness and joy. In contrast, success in the prevention system reflects the absence of a negative outcome (maintaining a satisfactory state) and results in quiescence-related emotions like peacefulness and calm. Failure in a promotion focus reflects the absence of a positive outcome (nongain or nonadvancement) and results in dejection-related emotions like sadness and disappointment. Because failure in a prevention focus reflects the presence of a negative outcome (an unsatisfactory or dangerous state), it results in agitation-related emotions like anxiety and worry (Higgins, 1997; Shah & Higgins, 2001). Consistent with these distinct emotional sensitivities, individuals in a promotion focus are faster at appraising how cheerful or dejected a given object makes them feel, whereas individuals in a prevention focus are faster at appraising how quiescent or agitated an object makes them feel (Shah & Higgins, 2001). Furthermore, these distinct emotional responses to failure mean that promotion and prevention individuals are differentially motivated by anticipating failure-related dejection versus agitation. Whereas promotion-focused individuals are more motivated to perform well when imagining potential dejection, prevention-focused individuals are more motivated to perform well when imagining potential agitation (Leone, Perugini, & Bagozzi, 2005).

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A particularly significant type of failure that people experience occurs when their actual selves are discrepant from their desired selves—whether these desired selves are represented in the prevention system (ought selves) or the promotion system (ideal selves). In support of distinctive patterns of emotional response to this type of failure, several studies have found that priming ideal (promotion) discrepancies leads to increases in dejection, whereas priming ought (prevention) discrepancies leads to increases in agitation (Boldero, Moretti, Bell, & Francis, 2005; Higgins, Bond, Klein, & Strauman, 1986; Strauman, 1989; Strauman & Higgins, 1987). Not surprisingly, the magnitude of an emotional response to a discrepancy is

related to that discrepancy's magnitude, accessibility, relevance to a particular context, and importance (Higgins, 1999). Simply encountering an individual who resembles a parent can activate self-discrepancies associated with that parent's ideals or oughts for the individual, producing dejected affect for parent-related ideal self-discrepancies and agitated affect for parent-related ought self-discrepancies (see Reznik & Andersen, 2007; Shah, 2003). Additionally, being socially rejected (a prevention negative state) leads to increased anxiety and withdrawal, but being socially ignored (a promotion nongain) leads to sadness and attempts to reengage (Molden et al., 2009).

These differences in the emotional dimensions associated with each system result in characteristic possibilities and vulnerabilities within each system (Brockner & Higgins, 2001; Higgins, 1987, 1997, 2001; Shah & Higgins, 2001). Both prevention- and promotion-focused individuals experience a sense of well-being when they successfully attain a goal. Both prevention- and promotion-focused individuals experience displeasure when they fail. However, the emotional trade-offs within each system are distinct, as we explore in more detail later. Only promotion goals provide the possibility of happiness (in the sense of joyful and ebullient). Only prevention goals provide the possibility of calm (in the sense of peace and serenity). However, within the promotion system, the *price of happiness* is vulnerability to depression. Within the prevention system, the *cost of calm* is vulnerability to anxiety.

Evidence of distinct patterns of intergoal inhibition supports the unique dynamics of emotional vulnerabilities within each system. Shah, Friedman, and Kruglanski (2002) found that individuals selectively showed greater intergoal inhibition for goals that could alleviate emotional distress. Shah et al. found that when participants were depressed, they showed greater intergoal inhibition for one type of focal goal—*ideal* goals—the goals that would result in happiness and satisfaction if obtained. Similarly, when participants were anxious, they selectively showed greater intergoal inhibition when the focal goal was an *ought* goal. In other words, participants were more likely to shield and protect a goal from competing goal alternatives when that goal could alleviate their emotional stress if it were attained.

One significant implication of the relation between regulatory focus concerns and emotional responses to success and failure is that it creates the possibility that individuals may be thwarted by misaligned emotional expectancies. To the extent that individuals experience successful self-regulation as being about *both* achieving the desired end state (e.g., going to the gym three times a week) *and* achieving the desired affective state (e.g., happiness), the impact of successes may be undermined if individuals expect promotion-related emotions from prevention successes (and vice versa). Individuals often have beliefs or hopes about how achieving a particular goal will make them feel (e.g., if I can go to the gym three times this week, I'll feel really happy). Someone who sets prevention goals and expects to be happy will be sorely disappointed.

In addition, setting promotion goals does not guarantee happiness either. The risk of aiming for happiness is that individuals become vulnerable to depression (Strauman, 2002; Strauman et al., 2006; Vieth et al., 2003). Indeed, it is when the motivational system is particularly strong (when promotion really matters to you) that individuals are most vulnerable to failures within the system (Higgins et al., 1997). Strauman (2002), in his self-regulation theory of depression, proposed that the chronic failure of promotion-focused individuals to meet promotion goals is a causal factor in the onset of depression. While the potential highs in promotion may be very high indeed (Idson et al., 2000, 2004), the lows embody the very depths of desolation. Several studies now support the link between failures in the promotion system and depression (Eddington et al., 2009; Jones, Papadakis, Hogan, & Strauman, 2009; Miller & Markman, 2007; Papadakis, Prince, Jones, & Strauman, 2006; Strauman et al., 2006; ↪ Vieth et al., 2003) and suicidal ideation (Cornette, Strauman, Abramson, & Busch, 2009).

While promotion-focused individuals may be particularly susceptible to depression, coping styles and implicit beliefs about the nature of the failure may moderate the vulnerability (Cornette et al., 2009; Jones et

al., 2009; Papadakis et al., 2006). In two studies, individuals who engaged in rumination and who had failures in the promotion system were more likely to show depressive symptoms. Individuals who had a more reflective coping style appeared to be buffered from the link between promotion failure and depression (Jones et al., 2009; Papadakis et al., 2006). Additionally, individuals who believed that their promotion failures (actual-ideal discrepancies) were stable and unchanging were most likely to show a relation between promotion failure and suicidal ideation (Cornette et al., 2009). Like reflective coping, belief in transitory failure appeared to provide a buffer against depression (Cornette et al., 2009). Together, these studies suggest that it is the “chronic and catastrophic” promotion failures that are likely to push individuals toward depression (Vieth et al., 2003, p. 249).

Self-system theory (SST) is a recently developed structured psychotherapy to treat the depression that is associated with individuals who have chronic promotion goals and are failing (Vieth et al., 2003). SST incorporates many principles from other forms of therapy such as cognitive therapy, interpersonal psychotherapy, and behavioral activation therapy. However, SST uses these principles in service of helping patients to identify their promotion and prevention goals, their strategies for attaining them, the obstacles they have encountered in goal pursuit, and how they can do things differently and/or more effectively. In a randomized trial comparing SST with cognitive therapy (Beck, Rush, Shaw, & Emery, 1979), SST, for individuals with a poor promotion effectiveness, was found to lead to reduced symptoms for depression and decreased dysphoric responses to promotion goals compared to cognitive therapy (Strauman et al., 2006). The effectiveness of SST speaks to the importance of understanding the trade-offs and vulnerabilities within a given motivational system.

The success of SST also supports the idea that some awareness of the trade-offs within systems may also be beneficial. As part of the educational and goal-setting aspects of the theory, therapist and client discuss the implications of the different concerns of the promotion and prevention systems. Interestingly, Vieth et al. (2003) describe a case study in which the client was under the mistaken impression that attaining prevention goals would lead to the happiness and satisfaction that she dearly wanted. Part of the usefulness of the therapy for her (and for other clients) appears to be learning that succeeding or failing at promotion versus prevention goals has distinct emotional consequences.

Less work has been done to examine the link between the prevention system and anxiety disorders (for a recent review, see Klenk, Strauman, & Higgins, 2011). However, some empirical evidence does suggest that chronic actual-ought discrepancies do predict certain patterns of anxiety (Scott & O'Hara, 1993; Strauman, 1989; Strauman et al., 2001). For instance, Strauman (1989) reported that social phobics had higher actual-ought discrepancy scores relative to depressed or control participants. Furthermore, social phobics exhibited increased agitation in response to actual-ought discrepancy priming relative to depressed or control participants. Scott and O'Hara (1993) extended this work to show that university students diagnosed with any one of a number of anxiety disorders (generalized anxiety disorder, panic attacks, agoraphobia, social phobia, or obsessive-compulsive disorder) also had higher actual-ought discrepancy scores than nonanxious or depressed students.

There is no doubt that failure in both the prevention and promotion systems is painful, albeit in different ways. However, as noted earlier, failure within the prevention system is not only painful but also unacceptable in a way that promotion failure is not, in the sense that prevention-focused individuals experience returning to a satisfactory “0” state as being a *motivational necessity*. This has significant implications for the actions that prevention-focused individuals are willing and motivated to take when in an unsatisfactory negative state. For prevention-focused individuals, a state of “-1” is intolerable; they should be willing to do *whatever is necessary* to get back to “0” or the status quo. “0” does not hold the same significance for promotion-focused individuals. While ultimately they are motivated to get to “+1,” any progress away from “-1” is in service of that end; the status quo (“0”) holds no special meaning as the state they want to reach. Consequently, when individuals are in an unsatisfactory state of “-1,” it is prevention-

focused individuals, rather than promotion-focused individuals, who have been found to be especially motivated to take risks that have the possibility of returning them to the status quo (Scholer, Zou, Fujita, Stroessner, & Higgins, 2010). For prevention-focused individuals, at “-1,” failure carries with it an increased likelihood of engaging in actions that are perceived as necessary to restore “0,” even if they are risky.

## Keeping the Engine Revved: Strategic Preferences and Life Experiences

Success and failure not only result in different emotional responses in the promotion versus prevention systems, but they also have distinct implications for the strategic inclinations that sustain each system and the motivational experiences that are associated with these strategic inclinations (i.e., eager and vigilant experiences). For promotion-focused individuals, failure is not only negative affectively, but it also reduces the strategic eagerness that sustains or fits the promotion system. In contrast, success is both affectively positive and sustains eagerness within the promotion system.

For prevention-focused individuals, on the other hand, failure poses no threat to the system's preferred strategic orientation. While failure in the prevention system is very emotionally negative, it increases the strategic vigilance that fits prevention (Idson et al., 2004). Success, however, while emotionally positive within the prevention system, has the potential to disrupt strategic vigilance that sustains the system's optimal effectiveness. Vigilance is hard to maintain in a state of calm and quiescence. Thus, while the pure promotion-focused individual would be wise to seek a life of half-full glasses in order to maintain eagerness, the pure prevention-focused individual would be better off seeing life's glasses as half-empty in order to maintain vigilance. The trade-offs, of course, are that the promotion-focused individual runs the risk of seeing good where there is none while the prevention-focused individual runs the risk of seeing no good when it's there.

To the extent that the strategic vigilance of prevention-focused individuals can become energized through failure, prevention-focused individuals should generally show better performance after failure feedback or when anticipating failure. 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, whereas prevention-focused individuals showed the opposite pattern—better performance after failure feedback than after success feedback (see also Idson et al., 2000, 2004; Van-Dijk & Kluger, 2004). But there is also a trade-off of failure for prevention-focused individuals. Because their increased vigilance after failure reduces the numbers of possible causes they consider for their failure, they are more likely than promotion-focused individuals to engage in self-serving attributions after failure (Molden & Higgins, 2008).

Notably, it is not the case that promotion-focused individuals simply give up after initial failure; rather, they are likely to respond to failure in ways that protect their eagerness for future performances. For example, after failure feedback in an ongoing performance situation, promotion-focused individuals show only slight decreases in expectancies for future performance (Förster, Grant, Idson, & Higgins, 2001). In addition, after failure they use tactics to maintain a positive self-evaluation, which supports the eagerness that serves their promotion (Scholer, Ozaki, & Higgins, 2011). Promotion-focused individuals are also more likely to generate additive (eager) counterfactuals when reflecting on past failures (Roese, Hur, & Pennington, 1999), and, indeed, when they engage in upward counterfactuals that sustain eagerness they perform better on subsequent tasks (Markman, McMullen, Elizaga, & Mizoguchi, 2006). Promotion-focused individuals also protect themselves against negative feedback by being generally optimistic (Grant & Higgins, 2003) and having high self-esteem (Higgins, 2008). Moreover, there is some evidence that promotion-focused individuals can be less distracted by negative feelings after making an error, such as



action-oriented promotion-focused individuals being buffered from the negative impact of speed-related errors on subsequent trials (de Lange & van Knippenberg, 2009).

In contrast to promotion-focused individuals, prevention-focused individuals, in order to maintain their vigilance, respond to failure by lowering expectancies *even more* (Förster et al., 2001), and by maintaining relatively less positive self-evaluations in ongoing performance situations (Scholer, Ozaki, et al., 2011). Prevention-focused individuals are also more likely to generate subtractive (vigilant) counterfactuals when reflecting on past failures (Roese et al., 1999), and they perform better on subsequent tasks when they employ counterfactuals that sustain vigilance (Markman et al., 2006). Unlike promotion pride, prevention pride is uncorrelated with self-esteem (Higgins, 2008).

p. 72 As noted earlier, these different strategic preferences in promotion and prevention create unique vulnerabilities within each system. The stronger the system, the more likely the individual is to embrace the preferred strategy, leaving the individual even more vulnerable to the potential downsides. Promotion-focused individuals may, at times, be overly optimistic and overeager (even manic), when a dose of realism would serve them well. Promotion-focused individuals may be less attentive to failure and areas that need improvement, which has the potential to reduce the effectiveness of learning. Promotion-focused individuals, for instance, are more likely to develop illusions of control regarding uncontrollable outcomes (Langens, 2007). While these illusions of control can help buffer them against the harsh realities of the world (Taylor, Lerner, Sherman, Sage, & McDowell, 2003), such illusions can, at times, be problematic. Eagerness carried too far simply leaves them untethered to reality.

Promotion-focused individuals are also vulnerable to the strategic nonfit of failure to their system. Accumulated failures deliver such a punch of nonfitness to the system from reduced eagerness that it can begin to break down, producing the anhedonia of depression (no interest in anything) discussed earlier (Strauman, 2002; Strauman et al., 2006). Prevention-focused individuals, on the other hand, may be overly attentive to negative signals, when a dose of optimism would serve them well. They may not give themselves or others enough credit for success and may be less likely to adopt those positive illusions that can buffer against a number of negative health outcomes (Taylor et al., 2003). Furthermore, while strategic vigilance generally serves them well, taken too far it may be problematic, even to the extent of producing pathological generalized anxiety disorder (Higgins, 2006; Klenk et al., 2011). Thus, while strong promotion and prevention systems both provide many benefits, the strengths do not come without the possibility of downsides in life experiences as well.

## Trade-offs in Commitment Versus Exploration

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Effective self-regulation requires both an ability to stay the course (even when sometimes difficult) as well as an openness to change course when necessary. Staying the course involves commitment, whether that is commitment to a goal, individual, or group. Openness to changing courses involves exploration, whether that is exploring other goals, other products, or other relationships. The prevention system, all else being equal, excels at commitment. The promotion system, all else being equal, excels at exploration. In this section, we explore the trade-offs of each system in turn; what are the benefits and costs of a system that pushes for commitment versus a system that embraces exploration?

## If It's Not Broke, Don't Fix It

A number of aspects of the prevention system converge to make prevention-focused individuals more likely to stay committed to a current course of action and less open to change in general. Increased prevention focus is associated with increased valuation of security and decreased valuation of openness to change (Higgins, 2008; Leikas, Lönnqvist, Verkasalo, & Lindeman, 2009; Vaughn, Baumann, & Klemann, 2008). Prevention-focused individuals, concerned with duties and obligations, are particularly likely to construe goals and actions as necessities (Shah & Higgins, 1997). To the extent that existing goals and loyalties are perceived as duties that *must* be upheld, prevention-focused individuals should cling more tightly to what they have (cf. Brickman, 1987). Furthermore, duties and obligations often involve responsibility to *others*. A number of studies have found support for an association between prevention focus and interdependent self-construals, such that prevention-focused individuals are more likely to view themselves within the context of a broader social network (Aaker & Lee, 2001; Lee, Aaker, & Gardner, 2000) and are more motivated by leadership styles that emphasize a sense of organizational duty and self-sacrifice (Choi & Mai-Dalton, 1999). Additionally, the prevention individual's acute sensitivity to loss and preference for vigilant strategies creates reluctance to take leaps that might expose him or her to potentially greater losses (Crowe & Higgins, 1997; Idson & Higgins, 2000).

Several studies support the idea that prevention focus is associated with commitment to the status quo (Chernev, 2004; Crowe & Higgins, 1997; Jain, Lindsey, Agrawal, & Maheswaran, 2007; Liberman, Idson, Camacho, & Higgins, 1999). For instance, prevention-focused participants are more likely to want to continue working on an interrupted task rather than begin a new one (Liberman et al., 1999). The endowment effect, in which people value an object more simply because they possess it, is uniquely associated with the prevention, but not promotion, system (Liberman et al., 1999). When prevention-focused individuals' initial preference in a consumer choice paradigm is framed as the status quo, they are particularly likely to stick with their initial choice (Chernev, 2004). Prevention-focused people's commitment to "the way things are" is also reflected in their relative reluctance to adopt new technology relative to promotion-focused people (Herzenstein, Posavac, & Brakus, 2007). This preference for the status quo appears to be due both to enhanced sensitivity to potential losses (Liberman et al., 1999) and increased motivation to minimize possible regret if things do not go well (Chernev, 2004).

To justify commitment to a chosen course of action (status quo or otherwise), prevention-focused people may sometimes see the world as a zero-sum game (i.e., if Product A is good, then Product B is bad). Disparaging alternatives and enhancing a chosen path is one way to increase commitment to that choice (cf. Gollwitzer, Heckhausen, & Steller, 1990). A study comparing the effect of different comparative frames in advertising on prevention- versus promotion-focused participants illustrates this well (Jain et al., 2007). Jain et al. (2007) compared the effectiveness of two possible comparative frames—positive versus negative. Positive comparative frames suggest that the advertised (target) brand is better than its comparison, whereas negative comparative frames suggest that the comparison brand is worse than the advertised (target) brand. The negative frame effectively marks the comparison brand as unacceptable, suggesting that the target brand is the safe, right one to choose.

Not only did prevention-focused participants evaluate the target brand more positively in the negative frame condition, but their ratings of the target and comparison products were also negatively correlated. In other words, as prevention-focused participants endorsed the target brand, they were more likely to disparage the comparison brand. Furthermore, the way in which prevention-focused participants approached the task suggested underlying vigilance against the perceived "other" (cf. Shah, Brazy, & Higgins, 2004); prevention-focused participants were more likely to evaluate the comparison brand first and remembered more advertised information about the comparison brand relative to the advertised brand (Jain et al., 2007). Consistent with this logic, prevention-focused individuals are also more likely to give more negative product evaluations, relative to promotion-focused individuals, when presented with two-

sided product endorsements (e.g., the juice is natural but expensive) than with one-sided product endorsements (e.g., the juice is natural) (Florack, Ineichen, & Bieri, 2009).

When making decisions or comparing options, prevention-focused individuals are also likely to consider relatively few alternatives (Crowe & Higgins, 1997; Liberman et al., 2001; Molden & Higgins, 2004), consistent with a worldview that is less open to change (Higgins, 2008; Vaughn et al., 2008). By considering fewer possibilities, prevention-focused individuals are less likely to choose a wrong path or be tempted by alternate paths rather than doing just what is necessary. For instance, when sorting objects prevention-focused participants organize the objects into fewer categories than promotion-focused participants (Crowe & Higgins, 1997). Prevention-focused individuals generate fewer hypotheses when trying to explain someone else's behavior and are more likely to endorse only one (Liberman et al., 2001). Prevention-focused people in relationships pay less attention to romantic alternatives than promotion-focused participants (Finkel, Molden, Johnson, & Eastwick, 2009). Thus, by limiting the paths that they consider, prevention-focused individuals have a better chance of *protecting commitments* they have already made.

Prevention-focused individuals also consider fewer explanations for their successes and failures than promotion-focused individuals (Molden & Higgins, 2008). Although prevention-focused individuals may be motivated to consider fewer alternatives in order to minimize the possibility of mistakes, a restricted option set can sometimes increase error or bias. While prevention-focused individuals considered fewer explanations for successes and failures, these tended to be more self-serving (Molden & Higgins, 2008).

Part of the reason that prevention-focused individuals may be less open to considering a number of alternatives is that prevention-focused individuals are relatively more content with “safe” options that promise neither extreme highs nor lows (Zhang & Mittal, 2007). When given a choice between an enriched option (option with extreme values on its attribute—e.g., movie with great art direction but mind-numbing plot) versus an impoverished option (option with average values on its attributes—e.g., movie with average cinematography and average plot), prevention-focused individuals prefer the impoverished option (Zhang & Mittal, 2007). Because prevention-focused individuals weight the negative aspects more heavily, an option with average values wins out (Zhang & Mittal, 2007). This is also consistent with work that has shown that prevention-focused individuals, unlike promotion-focused individuals, are not trying to maximize outcomes in the world. In other words, the classic expectancy  $\times$  value effect on goal commitment is not observed for prevention-focused individuals (Shah & Higgins, 1997). When the world is construed in terms of duty and obligations, a relatively low expectancy does not necessarily diminish commitment for an important goal. If a goal is really valuable, such as maintaining a certain GPA being experienced as a *necessity*, then expectancy becomes irrelevant. And, again, there is a trade-off. While this prevention-focused orientation can support greater commitment to significant goals, the potential downside is that preferences and choices might not be optimized.

Nonetheless, greater commitment to important goals does have a number of benefits. Prevention-focused individuals who are chronically or temporarily concerned about health issues are more likely to engage in health care-taking behaviors, such as monitoring their health or signing up for cancer screenings (Uskul, Keller, & Oyserman, 2008). Fuglestad et al. (2008) also found that prevention-focused individuals were more successful at *maintaining* changes after successful initiation (weight loss and smoking cessation) than were promotion-focused individuals. Because successful behavior maintenance for changes like weight loss and smoking cessation requires being vigilant against backslides (Rothman, 2000), prevention-focused individuals may be particularly equipped for these kinds of challenges. Indeed, prevention-focused individuals outperform promotion-focused individuals under conditions in which they must resist distraction in order to stay focused on a focal task (Freitas, Liberman, & Higgins, 2002).

It is important to note that commitment to duties and obligations sometimes means that prevention-focused individuals will actually initiate action or change *more* quickly than promotion-focused individuals.

If the current state is deemed to be an unacceptable, unsatisfactory state or if change itself is represented as a duty or responsibility, prevention-focused individuals may be especially likely to take action. Necessities and duties cannot be put away for another day. Individuals who are told that a product can prevent something negative (versus achieve something positive) remember more about the product and are more likely to sign up to test the product, as long as goal relevance is high (Poels & Dewitte, 2008). Prevention-focused participants initiate work on important goals (e.g., applying for a fellowship) earlier than promotion-focused participants (Freitas, Liberman, Salovey, & Higgins, 2002). Furthermore, because prevention-focused individuals are sensitive to loss, they will be motivated to do whatever it takes to get out of a current unacceptable state. For instance, when individuals have fallen below the status quo, as 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 et al., 2010). Thus, when change allows an individual to avoid losses, prevention-focused individuals should be especially motivated to take action.

The dynamics discussed in the previous paragraph highlight an important issue. Prevention-focused individuals are not arbitrarily committed to embracing the status quo and eschewing risk and change. It is not a love affair with the status quo itself, but with what the status quo represents. These preferences serve their underlying motivation to achieve security and act in accordance with duties and obligations. When things are going well and the world appears relatively safe, conservative biases in action (i.e., avoiding errors of commission) support the prevention system (Crowe & Higgins, 1997; Friedman & Förster, 2001). However, when things are not going well, the tactics that support the system may shift (Scholer & Higgins, 2008). For instance, while erring on the side of misses in a signal detection paradigm supports prevention motivation when the targets are neutral or positive, this tactical approach is folly when the targets are negative. Under these circumstances, prevention focus is associated with a risky bias (i.e., avoiding errors of omission); missing a negative signal (e.g., the potential mugger across the street) would be a serious threat to safety (Scholer, Stroessner, & Higgins, 2008).

The concern with missing negative signals and a desire to “play it safe” has a number of upsides for prevention-focused individuals. Prevention-focused individuals are more likely to fiercely defend that to which they are committed, whether that is a favorite product, their goals, or their close relationships. Prevention-focused individuals are likely to vigilantly monitor against potential health threats and to maintain health changes because of their vigilance against potential slippage. Because prevention-focused individuals are less likely to even consider how green the grass is on another hill, they are more likely to be content with the hill on which they stand, which is a definite plus for their marital partners.

p. 75 However, putting aside the issue of marriage for a moment, sometimes other hills do offer better grass or better vistas. Prevention-focused individuals may miss opportunities to improve their situation because they are content with “good enough”—they are content with “0” being satisfactory and “+1” not being necessary. Furthermore, perceptions of current states can be amiss, and prevention-focused individuals may be more likely to stay in suboptimal states that they’ve categorized as “0” even though, in fact, they are negative. For instance, returning to marriage, prevention-focused individuals may be more likely to stay in bad or even abusive relationships, both out of a sense of duty and a belief that the relationship is “good enough.” In sum, the significant benefits of high commitment within the prevention system do not come without a price.

## Always on the Make

The promotion system pushes for exploration in the service of advancement. The promotion individual, especially sensitive to gains, is aware of the possible greener grass that might be just over the next hill. Furthermore, the preferred eager strategies of promotion-focused individuals suggest a world of better possibilities and opportunities. Motivated by the difference between “0” and “+1,” promotion-focused individuals seek out many options in their aim for the ultimate experience. Consistent with this view, openness to experience (cf. John & Srivastava, 1999) has been shown to positively correlate with the promotion system (Higgins, 2008; Vaughn et al., 2008). Increased promotion focus is also negatively associated with values related to stability and tradition (Leikas et al., 2009).

The promotion individual's eagerness to pursue all possible paths means that promotion-focused individuals are less likely to stay committed to the status quo. Relative to prevention-focused individuals, promotion-focused individuals are more willing to give up an activity they are working on or a prize they currently possess for a new activity or prize (Chernev, 2004; Crowe & Higgins, 1997; Liberman et al., 1999). Promotion-focused individuals also value the desired end state of having all the latest and greatest technology more than prevention-focused individuals (cf. Herzstein et al., 2007; Higgins, 2002) and are more likely to accept information technology changes at work (Stam & Stanton, 2010). Promotion-focused individuals own more new high-tech products than prevention-focused individuals and are more likely to buy cutting-edge, but not conventional, products (Herzstein et al., 2007). Promotion-focused individuals' tendency to adopt new technology appears to be driven by their likelihood of seeing possibilities and opportunities, rather than lurking dangers and risks, when given minimal or ambiguous information. When the risks of a new product were made salient, promotion-focused individuals were no more likely than prevention-focused individuals to buy the product (Herzstein et al., 2007).

In search of the ultimate experience, promotion-focused individuals prefer extreme highs, even at the risk of some extreme lows, rather than a middling experience. When given a choice between enriched versus impoverished options, promotion-focused participants chose options with extreme attribute values (both positive and negative) rather than impoverished options with average attribute values (Zhang & Mittal, 2007). The greater attractiveness of enriched options appears to be due to the promotion system's greater weighting of positive versus negative attributes. When positive attributes are weighted more heavily, the enriched option trumps the impoverished one (Zhang & Mittal, 2007). Consistent with this, promotion-focused individuals are the epitome of the classic maximizer (Shah & Higgins, 1997); that is, promotion-focus individuals make decisions and evaluate commitment to goals using a value  $\times$  expectancy calculation.

This desire for maximization is also observed in the promotion-focused individual's consideration of multiple alternatives and options when making decisions. Promotion-focused participants employ a greater number of categories when sorting objects relative to prevention-focused participants (Crowe & Higgins, 1997; Liberman et al., 2001; Molden & Higgins, 2004). When considering multiple options, promotion-focused individuals can embrace one option without derogating others; in other words, finding positives in Object A does not mean that Object B is negative or even needs to be discounted (Liberman et al., 2001). Unlike prevention-focused individuals, promotion-focused individuals are more persuaded by positive comparative frames (frames that suggest the advertised (target) brand is better than the comparison brand). Furthermore, their ratings of the target brand are uncorrelated with their ratings of the comparison brand. In other words, they can prefer one product while still acknowledging benefits in the other (Jain et al., 2007).

Being able to see the good in multiple paths, however, can bring challenges to relationships. As maximizers, promotion-focused individuals are more likely to ask themselves whether current relationships make the cut. Promotion-focused individuals report paying more attention to romantic alternatives and being more proactive about pursuing them relative to prevention-focused individuals. Even when in a long-term

relationship, promotion-focused individuals show more positive evaluations of romantic alternatives than prevention-focused individuals. Although it is generally the case that individuals evaluate romantic alternatives less positively when they are committed to their current relationship, this effect is attenuated for promotion-focused individuals (Finkel et al., 2009). While the promotion-focused individual might be more likely to initially see the good in someone, he or she is also more likely to turn away and see the better in someone else.

Because promotion-focused individuals are more likely to make decisions in accordance with potential gains, they may open themselves up to unintended losses. Again, there is a trade-off. At times, an ignorance or inattention to losses can be beneficial. For instance, promotion-focused individuals are more successful at initiating certain health changes such as weight loss and smoking cessation, and Fuglestad et al. (2008) suggest that this is because successful initiation of such behaviors is often motivated by the perception of substantial gains (Foster, Wadden, Vogt, & Brewer, 1997). Thus, promotion-focused individuals may rise to the initiation challenge more eagerly than prevention-focused individuals.

Yet seeing the world through gains-colored glasses can also get promotion-focused individuals in trouble. When one is focused on possible gains (e.g., getting to enjoy this divine torte), it can be easy to miss the possible losses (e.g., not fitting into one's favorite jeans tomorrow). For example, promotion-focused individuals who tend to be chronic thrill-seekers are more likely to engage in health-detrimental behaviors, such as using stimulants to "push through" an illness (Uskul et al., 2008). If good health is seen as just another positive outcome (and not a necessity), it may be more likely to be overridden by other, conflicting goals. Promotion-focused individuals may not as easily resist tempting distractions (Freitas et al., 2002). Sengupta and Zhou (2007) have also shown that impulsive eaters, relative to nonimpulsive eaters, are more likely to show promotion system activation upon exposure to a tempting food; this activation mediates the effect of impulsivity on choice of the tempting food.

Promotion-focused individuals hold the world on a string. It can be a beautiful world, full of hope, possibility, and promise. Any peak experience may be topped tomorrow and the promotion-focused individual believes that you should never stop looking. Because of this worldview, promotion-focused individuals are less likely to miss opportunities and more likely to extract all that they can from what the world has to offer (Galinsky, Leonardelli, Okhuysen, & Mussweiler, 2005). Yet promotion-focused individuals run the risk of always being on the make and never being satisfied with what they have. At times, promotion-focused individuals may have trouble committing to relationships, goals, or objects because of the nagging possibility that still more could be gained. Promotion-focused individuals may also run into trouble because they have not paid enough attention to negative signals. For instance, promotion-focused individuals may minimize accrued losses by focusing on the gains. Furthermore, because they are less concerned with the difference between "-1" and "0," promotion-focused individuals may be less likely to take action when things, in fact, are not satisfactory.

## Trade-offs in Performance

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Both promotion and prevention-focused individuals are motivated to perform well. As we've discussed previously, the systems are differentially sensitive to a number of factors that have the potential to influence performance—different kinds of desired end states (nurturance versus safety), outcomes (success versus failure), and strategies (eagerness versus vigilance). In this section, we discuss additional differences between the systems that impact productivity and performance. While the promotion system values speed, the prevention system values accuracy (Förster, Higgins, & Bianco, 2003). A promotion-focused individual is more likely to see the big picture, whereas a prevention-focused individual is more likely to see the dots of paint (Förster & Higgins, 2005; Semin, Higgins, de Montes, Estourget, & Valencia, 2005). Promotion focus facilitates creativity, while a prevention focus facilitates performance on analytical tasks (Friedman & Förster, 2001; Seibt & Förster, 2004). As we develop later, these differences have distinct advantages and disadvantages within each system. Furthermore, unlike some of the trade-offs that we've discussed in earlier sections, these trade-offs are often more closely tied to specific situations; for example, whether enhanced creativity will be a boon or a bust typically depends on the demands of a given task.

p. 77 The promotion system is associated with greater creativity (Crowe & Higgins, 1997; Friedman & Förster, 2001) and a tendency to engage in more global processing (Förster & Higgins, 2005), including the use of more abstract language ↴ (Semin et al., 2005). Eager strategies coupled with openness to novel and diverse ideas facilitate creative performance on many kinds of tasks. For instance, promotion-focused participants perform better than prevention-focused participants on creative insight problems and on tasks that require creative generation (e.g., generating creative uses for a brick).

The enhanced creativity of promotion-focused participants appears to be due, at least in part, to the fact that promotion-focused participants are less likely to be blocked by recently activated information that can interfere with novel production (Friedman & Förster, 2001). In addition, a promotion-focused individual is more likely to see the forest beyond the trees; global processing facilitates moving beyond concrete details in order to see new possibilities (Förster & Higgins, 2005). Consistent with this, promotion-focused individuals do better on tasks that require relational elaboration (Zhu & Meyers-Levy, 2007) and are better at “expanding the pie” in integrative negotiations (Galinsky et al., 2005). But what happens when there are obstacles to carrying out the creative task successfully and persistence is needed despite the likelihood of success being low? Once again there is a trade-off. The trade-off is that promotion-focused individuals generate more ideas than prevention-focused individuals, but prevention-focused individuals persevere in the creative project more than promotion-focused individuals in the face of obstacles (Lam & Chiu, 2002).

And there is another trade-off from a promotion focus as well. When tasks demand creativity, being in a chronically or temporarily promotion-focused state will serve one well. However, there are times when seeing the world more abstractly and globally can be problematic. Important details and errors can be missed. Sometimes the insight comes precisely from attention to concrete, logical connections. Weighting the abstract more heavily can even lead promotion-focused individuals to focus less on the concrete, pragmatic functions of products they are considering (Hassenzahl, Schöbel, & Trautmann, 2008).

Prevention-focused individuals, on the other hand, focus on the concrete more than the abstract, see the local rather than global features, and tend to perform worse on creative tasks and better on tasks that require analytical processing (Förster & Higgins, 2005; Friedman & Förster, 2001; Seibt & Förster, 2004; Semin et al., 2005). The vigilance of the prevention system against making mistakes works against taking some of the risks, opening up, and seeing the big picture that can support creative thought. For instance, prevention focus has been associated with increased perseverance on initially activated information, blocking the subsequent production of more novel responses (Friedman & Förster, 2001). But relative to promotion-focused individuals, prevention-focused individuals do better on tasks that require item-

specific elaboration (Zhu & Meyers-Levy, 2007). Prevention-focused individuals focus on the concrete components of a visual scene; they are faster at identifying the smaller letters that make up a larger letter, whereas promotion-focused individuals show the opposite pattern (Förster & Higgins, 2005). A local processing approach supports a prevention-focused individual's concern with vigilantly maintaining security. To guard against possible danger and loss, it is necessary to be thoroughly aware of one's surroundings (e.g., Has someone moved that vase to the left?) and be prepared for action (e.g., There might be an intruder in the house). Additionally, local processing facilitates analytical thinking (Friedman, Fishbach, Förster, & Werth, 2003) and that may be one of the reasons that prevention-focused individuals tend to perform better on those kinds of tasks (Friedman & Förster, 2001; Seibt & Förster, 2004). Additionally, prevention-focused individuals are good at maintaining, that is, committing to, the necessary constraints involved in analytical reasoning.

The prevention system's focus on the concrete is also related to the prevention system's emphasis on accuracy in performance (Förster et al., 2003). Most tasks require some combination of speed (there is some deadline at some point) and accuracy (work riddled with errors is generally unacceptable). Prevention-focused individuals weight accuracy more heavily; a job well done is a job done without error (or at least minimized error). Across multiple studies, Förster et al. (2003) found that prevention focus was associated with greater accuracy and slower performance. Furthermore, the closer participants got to the goal, the more these effects were intensified. Prevention-focused participants are also more likely, relative to promotion-focused participants, to use a rereading strategy when they encounter confusing text (Miele, Molden, & Gardner, 2009). When rereading provides the possibility of clarification, this strategy relates to better performance. When rereading cannot clarify, however, this strategy is unrelated to performance, suggesting that prevention-focused individuals will sometimes be more likely to invest resources in thoroughness that is not rewarded.

p. 78 This motivational concern with accuracy is also reflected in the prevention system's greater concern with safety (Henning et al., 2009; Van Noort, Kerkhof, & Fennis, 2008; Wallace & Chen, 2006; Wallace et al., 2008). Whether or not this focus on accuracy and safety is beneficial for performance depends on the demands of the situation. In many situations, accuracy and thoroughness in performance is valued. At times, however, in order to manage multiple demands, it is better to simply get a task done adequately, rather than complete only part of it well. Additionally, while high production and safe production can often coexist, there are times when one must be sacrificed for the other. Wallace et al. (2008) found that under normal conditions, prevention focus was related to good safety performance and was unrelated to productivity performance. Under high task complexity, however, the trade-offs between these concerns became hard to avoid, with prevention also becoming related to decreased productivity performance (the classic quality vs. quantity trade-off).

In contrast to the prevention system, the promotion system values speed in performance (Förster et al., 2003). The more quickly a task can be completed, the more quickly an individual can move on to the next potential gain. A job well done is a job done quickly and efficiently. Promotion-focused individuals generally perform faster and with less accuracy than prevention-focused individuals, with these effects intensifying the closer participants get to a goal (Förster et al., 2003). Similarly, promotion focus is associated with increased productivity performance (Wallace & Chen, 2006; Wallace et al., 2008).

The promotion system is also associated with increased reliance on affective information when making decisions and forming evaluations, which may be due, at least in part, to the fact that affect-based heuristics tend to be less effortful and faster (Pham & Avnet, 2009). Under the right conditions, this emphasis on speed can serve the promotion-focused individual very well, sometimes not even at the cost of accuracy. For instance, Förster et al. (2003) found that, as predicted, promotion-focused individuals were faster at finishing a proofreading task compared to prevention-focused individuals. This speed, however, was actually associated with better performance for finding "easy" mistakes; while promotion-focused



individuals were less likely to spot tricky or difficult errors, they were *more* likely to catch the obvious problems. At other times, however, the trade-offs are more evident. Sometimes what matters most is that a task is done right, even if that requires more time. When task complexity is high, promotion focus is associated with increased productivity performance and decreased safety performance (Wallace et al., 2008). Being less concerned about safety can have potentially devastating impacts on overall production if a serious mistake is made or a significant accident occurs.

## Constraining the Systems

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Being “more” motivated, in terms of increased promotion or prevention system activation, is not unequivocally a good thing. While increased strength of either the promotion system or the prevention system can have beneficial effects for well-being and self-regulation, one system is not better than the other, nor does increased motivation within a system come without costs. Rather, as we've explored in this chapter, with the increased benefits of more motivation come distinctive vulnerabilities. Some weaknesses/costs exist regardless of an individual's situation. For instance, in general, increased promotion focus is related to increased risk of depression (Strauman, 2002). Some costs emerge only under specific conditions. For example, the prevention system's concern with accuracy will be particularly problematic in situations that value speed or output quantity, not thoroughness or output quality. Additionally, some vulnerabilities may emerge when individuals are out of step with the dominant motivational orientation in their culture, as when well-being is reduced for individuals high in promotion focus who live in a culture such as Japan that is low in promotion as an aggregate (Fulmer et al., 2010) or for individuals high in prevention focus who live in a culture such as Italy that is low in prevention. These individuals can “feel wrong” in and disengage from the situations within their culture that are a nonfit for them (cf. Higgins, 2008). In many different ways, then, it is clear that the pure, unconstrained forms of each system present challenges.

Because of these challenges, constraints on the systems are important, both for effective self-regulation and optimal well-being (Higgins, 2011). Constraints allow for the systems to be kept in check. Constraints allow for flexible responding, such that promotion or prevention moments can shine brighter, less tarnished by potential downsides. Idealism can be reigned in by reminders of duties or possible dangers. Performance can be optimized when one balances the need for speed with a concern for accuracy.

p. 79 Constraints can come in a number of different forms. Constraints can come from within regulatory focus (e.g., prevention system constraining the promotion system) and from other motivational systems (e.g., regulatory mode; Kruglanski et al., 2000). Constraints can come from within an individual (e.g., their own prevention and promotion orientations interacting) or in dynamics that emerge in dyads or groups (cf. Bohns et al., 2011; Levine, Higgins, & Choi, 2000). Constraints can emerge from interactions between different chronic tendencies or between chronic tendencies and situational presses.

Within dyads and groups, the promotion and prevention systems can exert valuable constraining forces on each other. For instance, imagine a team that needs to create a new product idea and present it to a client. Team members who are promotion focused will tend to be better at generating innovative and creative ideas, but they may be likely to overlook potential problems or to miss errors in their presentation. Their creative contributions will result in a better output if they are balanced by prevention-focused members who are more likely to thoroughly analyze proposals for possible challenges and errors. Thus, teams made up of members with complementary regulatory focus may get the benefits of each system with fewer of the costs (cf. Bohns et al., 2011). Having a partner or team member with a complementary regulatory focus may also allow individuals to engage strategically in an activity in ways that fit both their orientation and the orientation of their partner, such as cooking a meal together and having the prevention partner take on the vigilant tasks and the promotion partner take on the eager tasks (Bohns et al., 2011). Given that regulatory

focus orientations can be manipulated within groups (e.g., Levine et al., 2000), it is possible to create work environments that optimize the benefits of each system (for a locomotion plus assessment case of this, see Mauro, Pierro, Mannetti, Higgins, & Kruglanski, 2009). Exploring the most effective ways to do this is an exciting avenue for future research.

Even *within* individuals, the promotion and prevention systems, because they are orthogonal, can exert constraining influences on one another. In other words, individuals can be chronically strong in both the promotion *and* prevention systems. However, less is known about what factors make such high-promotion/high-prevention individuals more or less effective self-regulators. Simply being chronically strong in both systems may not be enough; it may also be important to have the skills to identify which system best serves particular task demands and to be able to *flexibly* switch between systems. Exploring what factors—both within an individual and within environments—make it more or less likely that the dual strength of the systems can be utilized is an important question that remains to be explored.

Additionally, it is an open question how chronic and situationally induced temporary accessibility of the systems may work together dynamically in terms of constraining forces. For instance, how is a chronic promotion-focused individual served by a leadership style that induces prevention focus? On the one hand, such a situation can be problematic if the individual is in a consistent state of regulatory nonfit (Higgins, 2000). On the other hand, if the organization's primary objectives revolve around security, creating a prevention-focused environment at work may place important constraints on promotion-focused employees who would otherwise be less naturally inclined to attend to such issues. As another example, adding a coworker's prevention concern with reducing errors of commission to a personal promotion concern with reducing errors of omission could enhance someone's decision-making discriminability.

Though the promotion and prevention systems may place important constraints on each other, constraints can also come from other motivational systems. For example, individuals also differ in the extent to which they are motivated by two different aspects of self-regulation—initiating and maintaining smooth movement from state to state (locomotion) and comparing and critically evaluating options (assessment), a distinction highlighted in regulatory mode theory (Higgins et al., 2003; Kruglanski et al., 2000). Locomotors prefer action over inaction, such that they would rather do almost anything rather than nothing (Higgins et al., 2003). The locomotion system's preference for action can potentially provide a useful constraint on the prevention system's desire for thorough and careful analysis. Individuals who are chronically high in both prevention and locomotion may be better off than individuals who are chronically high in prevention and assessment, for instance. This latter combination may be particularly problematic in creating individuals who will carefully assess without end—going over and over a decision without being able to take action (e.g., being “lost in thought”).

p. 80 Though constraints on the systems are important, it is also important to recognize that sometimes what matters in terms of effective performance or well-being is not whether individuals are in a prevention-versus promotion-focused state, but whether individuals are in a state of regulatory fit, that is, pursuing goals using means that fit their underlying motivational orientation (Higgins, 2000). For instance, while in some situations prevention-focused individuals may be better at exhibiting self-control (e.g., resisting temptations) relative to promotion-focused individuals (Freitas et al., 2002), there are other situations in which both prevention- and promotion-focused individuals can be successful in exhibiting self-control when they use strategic means that fit their underlying orientation (Hong & Lee, 2008). Similarly, while in some situations promotion-focused individuals may be more open to change relative to prevention-focused individuals (Higgins, 2008), being in a state of regulatory fit may make *both* promotion- and prevention-focused individuals more flexible and open to alternatives. For instance, Maddox, Filoteo, Glass, and Markman (2010) found that individuals in regulatory fit showed better set shifting (abandoning a current rule for a new applicable rule) on a Wisconsin Card Sorting task relative to individuals in nonfit.

## Concluding Comments

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On the one hand, both promotion- and prevention-focused individuals can be successful in life pursuits; on the other hand, both promotion and prevention-focused individuals can experience difficulties. Having a lot of either promotion or prevention motivation does not guarantee a smooth ride; rather, there are trade-offs to being strongly motivated in either system. Having *more* motivation, then, is not always better. Having more motivation simply means that one is likely to experience both the upsides and the downsides of a particular motivational system. What those upsides and downsides are depends on whether an individual is in a promotion or prevention state. And how beneficial the upsides are or how detrimental the downsides are depends on the particular demands of the situation or task. What may matter most for effective self-regulation is having the *right* motivation that fits the demands of a particular situation, and understanding that even then, there can be trade-offs. Exploring how to negotiate these trade-offs in order to maximize the benefits and minimize the costs will continue to be an interesting and significant question going forward. As we hinted at earlier, we believe that the answer to effective self-regulation will need to go beyond promotion and prevention and add locomotion and assessment to the picture (Higgins, 2011). Future research will need to investigate how promotion, prevention, locomotion and assessment motivations function together effectively. It is this full organization of motivations, *working together*, that is critical.

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