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What Distinguishes Promotion and Prevention? Attaining “+1” from “0” as Non-Gain Versus Maintaining “0” as Non-Loss

Abstract: This paper reviews the history of the distinctions that have been made, and the differences discovered, between promotion and prevention self-regulation. These include, respectively: (1) Nurturance versus security; (2) ideal (hopes) versus ought (duties) self-guides; (3) presence and absence of positive outcomes versus absence and presence of negative outcomes; (4) approaching matches to a desired end-state versus avoiding mismatches to a desired end-state; (5) eager for “hits” versus vigilant against “errors of commission”; (6) speed versus accuracy; (7) global/abstract versus local/concrete; and (8) intuitions versus reasons. A fundamental, “story of 0”, distinction between promotion and prevention self-regulation is then discussed: attaining “+1” from “0” versus maintaining “0” against “-1”, where “0” is a non-gain in the former and a non-loss in the latter. The paper then shows how each of the earlier distinctions and differences between promotion and prevention can be understood in terms of this fundamental distinction.

Keywords: promotion, prevention, regulatory focus, motivation, self-regulation

It has been 20 years since regulatory focus theory proposed a distinction between self-regulation with a promotion focus and self-regulation with a prevention focus (Higgins, 1997, 1998). The background to this distinction was the classic hedonic principle that people are motivated to maximize pleasure and minimize pain. As noted in the original paper, this hedonic or pleasure principle has dominated our understanding of people’s motivation from the ancient Greeks, through 17th and 18th century British philosophers, to modern psychology. Historically, it is the basic motivational assumption of a broad range of psychological theories, including theories of emotion in psychobiology (e.g., Gray, 1982), conditioning in animal learning (e.g., Mowrer, 1960; Thorndike, 1935), decision-making in cognitive and organizational psychology (e.g., Dutton & Jackson, 1987; Edwards, 1955; Kahneman & Tversky, 1979), consistency in social psychology (e.g., Festinger, 1957; Heider, 1958), and achievement motivation in personality (e.g., Atkinson, 1964). As expressed by Freud (1952/1920, p. 365), “It seems that our entire psychical activity is bent upon *procuring pleasure* and *avoiding pain*, that it is automatically regulated by the PLEASURE-PRINCIPLE.”

Regulatory focus theory did not argue that the hedonic principle is wrong. Instead, it argued that the overall

emphasis on valence alone – on just pleasure and pain – misses the fact that there are different kinds of pleasure and different kinds of pain, and the differences between them matter:

“It’s time for the study of motivation to move beyond the simple assertion of the hedonic principle that people approach pleasure and avoid pain. It’s time to examine how people approach pleasure and avoid pain in substantially different strategic ways that have major consequences. It’s time to move beyond the hedonic principle by studying the approach-avoidance principles that underlie it and have motivational significance in their own right. (Higgins, 1997, p. 1280)”

How, then, does the distinction between promotion and prevention self-regulation move us beyond the hedonic principle? It does so in several ways that I review in this paper. But the major objective of this paper is not just to review these different ways but to identify a fundamental promotion-prevention distinction that underlies the other ways that promotion and prevention self-regulation are different. Before identifying and discussing this fundamental promotion-prevention distinction, I must first review the differences between promotion and prevention self-regulation.

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Differences Between Promotion and Prevention Self-Regulation

Over the years, promotion and prevention self-regulation have been distinguished in many different ways. In this section, I will review these different ways in roughly historical order, including promotion versus prevention differences that were empirically discovered.

Nurturance Versus Security

Regulatory focus theory began by assuming that the hedonic principle should operate differently when serving fundamentally different needs; specifically, the distinct *survival* needs of *nurturance* (e.g., nourishment from breast feeding) and *security* (e.g., protection from predators). Human survival requires adaptation to the surrounding environment, especially the social environment (see Buss, 1996). To obtain the nurturance and security they need to survive, children must establish and maintain relationships with caretakers who provide them with nurturance and security by supporting, encouraging, protecting, and defending them (see Bowlby, 1969, 1973). To make these relationships work, children must learn how their appearance and behaviors influence caretakers' responses to them (see Bowlby, 1969; Cooley, 1902; Mead, 1934; Sullivan, 1953). As the hedonic principle suggests, children must learn how to behave with others in order to approach pleasure and avoid pain. But what is learned about regulating pleasure and pain is different for nurturance and security needs. Nurturance is about encouraging growth and development. Security is about being free from danger or threat. Regulatory focus theory proposes that nurturance-related regulation involves a *promotion focus* whereas security-related regulation involves a *prevention focus*.

Ideal Versus Ought Self-Guides

Regulatory focus theory developed from self-discrepancy theory (e.g., Higgins, 1987), which proposed that different modes of caretaker-child interaction increase the likelihood that children will acquire specific kinds of goals and standards used in self-regulation – distinct self-guides. These self-guides represent either (a) their own and significant others' hopes, wishes, and aspirations for them – *ideals*; or (b) their own and significant others' beliefs about their duties, obligations, and responsibilities – *oughts*. Regulatory focus theory proposes that self-regulation in relation to ideals versus oughts differs in regulatory focus. Self-regulation in relation to ideal self-guides involves a promotion focus. Self-regulation in relation to ought self-guides involves a prevention focus.

Presence and Absence of Positive Outcomes Versus Absence and Presence of Negative Outcomes

The difference between ideal versus ought self-regulation is illustrated in how children's experiences of pleasure and pain differ when their interactions with caretakers involve a promotion versus a prevention focus (Higgins, 1991). These different pleasure-pain experiences in turn represent another promotion-prevention distinction:

the psychological situation difference between experiencing the presence and absence of positive outcomes versus the absence and presence of negative outcomes.

Consider first caretaker-child interactions that involve a *promotion focus*. The child experiences the pleasure of the presence of positive outcomes when caretakers, for example, hug and kiss the child for behaving in a desired manner, encourage the child to overcome difficulties, or set up opportunities for the child to engage in rewarding activities. A child experiences the pain of the absence of positive outcomes when caretakers, for example, end a meal when the child throws food, take away a toy when the child refuses to share it, stop a story when the child is not paying attention, or act disappointed when the child fails to fulfill their hopes for them. Pleasure and pain from these interactions are experienced as *the presence or absence of positive outcomes*, respectively. The caretaker's message to the child in both cases is that what matters is attaining accomplishments or fulfilling hopes and aspirations, but it is communicated in reference to a state of the child that does or does not attain the desired end-state – either “This is what I would *ideally* like you to do” or “This is *not* what I would *ideally* like you to do”. The regulatory focus is one of promotion – *a concern with advancement, growth, accomplishment*.

Consider next caretaker-child interactions that involve a *prevention focus*. The child experiences the pleasure of the absence of negative outcomes when caretakers, for example, “child-proof” the house, train the child to behave safely, or teach the child to “mind your manners”. The child experiences the pain of the presence of negative outcomes when caretakers, for example, behave roughly with the child to get his or her attention, yell at the child when he or she doesn't listen, criticize the child when he or she makes a mistake, or punish the child for being irresponsible. Pleasure and pain from these interactions are experienced as *the absence or presence of negative outcomes*, respectively. The caretaker's message to the child in both cases is that what matters is insuring safety, being responsible, and meeting obligations, but it is communicated in reference to a state of the child that does or does not attain the desired end-state – either “This is what I believe you *ought* to do” or “This is *not* what I believe you *ought* to do.” The regulatory focus is one of prevention – *a concern with protection, safety, responsibility*.

Approaching Matches to a Desired End-State Versus Avoiding Mismatches to a Desired End-State

Self-discrepancy theory (e.g., Higgins, 1987) contributed to another distinction between promotion self-regulation and prevention self-regulation – what strategies are used in goal pursuit. People can have the same general goal, such as getting an “A” in a course, but pursue that goal in different ways depending on whether they have a promotion or a prevention focus regarding that goal. For individuals with a promotion focus, getting the “A” is an ideal hope or aspiration. For individuals with a prevention focus, getting the “A” is an ought duty or obligation. According to self-

discrepancy theory, individuals pursuing an ideal emphasize taking actions that approach matches to that desired end-state, whereas individuals pursuing an ought emphasize taking actions that avoid mismatches to that desired end-state.

This difference in strategic emphasis creates a difference in the relevance of different goal pursuit strategies, which should be revealed in differential accessibility and memory for these strategies (see Eitam & Higgins, 2010). In one study (Higgins, Roney, Crowe, & Hymes, 1994), participants were asked to report either on how their hopes and goals have changed over time (priming promotion focus ideals) or on how their sense of duty and obligation has changed over time (priming prevention focus oughts). The participants then read about several episodes that occurred over a few days in the life of another student. In each of the episodes the target was trying to experience a desired end-state and used either the strategy of approaching a match or the strategy of avoiding a mismatch, as in the following examples: (a) "Because I wanted to be at school for the beginning of my 8:30 psychology class which is usually excellent, I woke up early this morning." [approaching a match to a desired end-state]; and (b) "I wanted to take a class in photography at the community center, so I didn't register for a class in Spanish that was scheduled at the same time." [avoiding a mismatch to a desired end-state].

As predicted, when a promotion (*vs.* prevention) focus was induced, the participants remembered better the episodes exemplifying approaching a match to a desired end-state than those exemplifying avoiding a mismatch, whereas the opposite was true when a prevention (*vs.* promotion) focus was induced. Another study (Higgins et al., 1994) found that friendship tactics reflecting a strategy of approaching matches (e.g., "Be supportive to your friends") were selected more by individuals with promotion focus concerns, whereas friendship tactics reflecting a strategy of avoiding mismatches (e.g., "Stay in touch. Don't lose contact with friends") were selected more by individuals with prevention focus concerns.

Eager for "Hits" Versus Vigilant Against "Errors of Commission"

If individuals in a promotion focus are strategically inclined to approach matches to desired end-states, they should be *eager* to attain advancement. In contrast, if individuals in a prevention focus are strategically inclined to avoid mismatches to desired end-states, they should be *vigilant* to assure safety and security. It was hypothesized (Crowe & Higgins, 1997) that this difference would be related to differences in the strategic tendencies found in signal detection (e.g., Tanner & Swets, 1954). Specifically, individuals with promotion eagerness (*vs.* prevention vigilance) should want to accomplish "hits" (i.e., approach a match with a desired end-state). In contrast, individuals with prevention vigilance (*vs.* promotion eagerness) should want to avoid errors of commission (i.e., avoid mismatches with a desired end-state). A study by Crowe and Higgins (1997) supported these predictions.

After a failure, people sometimes imagine how things might have turned out differently had they taken

certain actions or *not* taken certain actions. *Additive* counterfactuals are thoughts about what might have happened if one had one taken a particular action. *Subtractive* counterfactuals are thoughts about what might have happened if one had one *not* taken a particular action. Roese, Hur, and Pennington (1999) tested the prediction that people's regulatory focus would moderate the frequency with which they generate additive versus subtractive counterfactuals in response to a failure. Because additive counterfactuals lead people to imagine how things might have turned out differently had they not missed an opportunity for advancement (for a "hit"), they represent an eager strategy of reversing a past error of omission by taking a particular action. Thus, additive counterfactuals should be preferred by people with a promotion focus. In contrast, because subtractive counterfactuals lead people to imagine how things might have turned out differently had they avoided a mistake (avoided an "error of commission"), they represent a vigilant strategy of reversing a past error of commission by not taking a particular action. Thus, subtractive counterfactuals should be preferred by people with a prevention focus.

In one study conducted by Roese et al. (1999), participants read hypothetical scenarios involving either promotion failures (i.e., failures to attain accomplishment-related goals) or prevention failures (i.e., failures to attain safety-related goals). Participants were then asked, for each scenario, to expand in writing upon a counterfactual stem reading, "If only...". As predicted, participants who had received promotion-framed scenarios were more likely than participants who had received prevention-framed scenarios to generate additive counterfactuals, whereas the reverse was true for subtractive counterfactuals.

There is another implication of promotion-focused individuals being especially eager for "hits" and prevention-focused individuals being especially vigilant against "errors of commission." Complementing the above counterfactual responses to past failures, imagining future successes and failures should differ in intensity as a function of promotion versus prevention focus. Promotion-focused individuals should be especially motivated when they imagine future successes to be approached (i.e., "hits"), whereas prevention-focused individuals should be especially motivated when they imagine future failures to be avoided (i.e., "errors of commission"). There is also empirical evidence to support these predictions (Idson, Liberman, & Higgins, 2000).

Speed Versus Accuracy

An important strategic component of goal pursuit is people's emphasis on the speed (or quantity) of their task efforts versus the accuracy (or quality) of their efforts. In a pair of studies in which promotion- and prevention-focused participants were asked to complete a series of four "connect-the-dot" pictures, Förster, Higgins, and Bianco (2003) assessed the number of dots participants connected for each picture within the allotted time frame, which constituted a measure of speed of goal completion. They also assessed the number of dots participants *missed*

up to the highest dot they reached for each picture, which constituted a (reverse) measure of accuracy of goal completion. As predicted, promotion-focused participants were faster, (i.e., got through a greater percentage of the pictures in the allotted time), whereas prevention-focused participants were more accurate (i.e., made fewer errors in the portions of the pictures that they had completed).

Förster et al. (2003) also found that promotion-focused participants became faster (i.e., faster to get through a greater percentage of the pictures) as they approached the end of the goal (i.e., as they moved from the first to the fourth picture). In contrast, prevention-focused participants became more accurate at goal completion (i.e., made fewer errors) as they approached the end of the goal. These latter findings reflect the “*goal looms larger*” effect, whereby strategic motivation increases as people get closer to goal completion (see Förster, Higgins, & Idson, 1998). In the Förster et al. (2003) studies, this effect translated promotion-focused people’s eagerness into greater speed of task completion over time, and translated prevention-focused people’s vigilance into greater accuracy of task completion over time.

Global/Abstract Versus Local/Concrete

“Can’t see the forest for the trees.” Seeing the forest is seeing the world in a more global manner, whereas seeing the trees is seeing the world in a more local manner. Whether someone processes things in the world more globally or more locally can be tested using the Navon task (see Navon, 1977). In a common version of this task, participants are asked to respond as quickly as possible when they see a letter, such as an “H” or an “L.” Among the stimulus figures they are shown, there is a large shape that forms that letter (e.g., “H”), and this large shape is itself composed of multiple copies of small shapes that either also form that same letter (“H”) or form a different letter (“S”). People are typically fastest to respond that they see the letter (“H”) when it is both the larger global shape and the smaller local letters that make up the shape.

One study by Förster & Higgins (2005) measured participants’ strength of promotion ideal self-guides and strength of prevention ought self-guides. They were instructed to press a blue response key if the stimulus contained the letter *L*, and to press a red response key if the stimulus contained the letter *H*, and they were asked to respond as quickly as possible. Four of the figures included global targets (an *H* made of *F*s, an *H* made of *T*s, an *L* made of *T*s, and an *L* made of *F*s). Four other figures included local targets (a large *F* made of small *H*s, a large *F* made of small *L*s, a large *T* made of small *H*s, and a large *T* made of small *L*s). The study found that individuals with stronger promotion ideal self-guides were quicker to respond to the large *global* letters and slower to respond to the small local letters, whereas individuals with stronger prevention ought self-guides were quicker to respond to the small *local* letters and slower to respond to the large global letters.

In another study, Förster and Higgins (2005) manipulated whether participants first processed information

globally or locally prior to choosing between two objects. Participants were presented with a series of global letters that were each made up of rows of closely spaced local letters, and were asked to identify either the global letter or the local letter. Then participants were instructed to choose between a mug and a pen by either thinking about what they would gain by choosing the pen or the mug (an eager strategy), or what they would lose by not choosing the pen or the mug (a vigilant strategy). The authors found that those who had just performed the global task assigned a higher price to their chosen object if they used promotion-related eager means to make their decision rather than prevention-related vigilant means, whereas the reverse was true for those who had just completed the local task.

Other studies have found similar differences between promotion- and prevention-focused individuals. Semin, Higgins, Gil de Montes, Estourget, & Valencia (2005) showed that promotion-oriented individuals were more persuaded by messages constructed with *abstract* predicates involving adjectives, whereas prevention-oriented individuals were more persuaded by messages constructed with *concrete* predicates involving action verbs. Keller, Lee and Sternthal (2006) found that advertising messages that address *high*-level, desirability concerns lead to more favorable attitudes among those with a promotion focus, whereas messages that address *low*-level, feasibility concerns lead to more favorable attitudes among those with a prevention focus. In addition, Pennington and Roese (2003) found that when people consider temporally distant future goals (*vs.* proximal goals), which are construed more abstractly (see Trope & Liberman, 2003), promotion concerns receive more emphasis than prevention concerns.

Intuitions Versus Reasons

When making decisions or choices, what kind of information do you prefer to rely on? You could prefer to rely more on reasons for your decision or on intuitions (gut feelings).

Pham and Avnet (2004) examined regulatory focus differences in the preferred manner of decision making and found that individuals with a promotion orientation preferred to rely more on their intuitive feelings whereas those with a prevention orientation preferred to rely more on reasons. Using these findings, Avnet and Higgins (2006) had participants choose between two brands of correction fluids in either an feeling-based manner or a reason-based manner. They found that promotion-oriented participants who chose in a feeling-based manner were willing to pay more for their chosen product than those who chose in a reason-based manner, and the opposite was true for prevention-oriented participants.

This regulatory focus difference in relying on intuitions versus reasons has been found to matter as well when people make moral judgments (Cornwell & Higgins, 2016). A recent advance in moral psychology has been the greater attention given to individuals’ use of more general positive and negative feelings or intuitions in making moral judgments rather than just assuming that moral judgments are based on careful reasoning (Haidt,

2001). Cornwell and Higgins (2016) found that individuals induced into a promotion focus, compared to those induced into a prevention focus, are more severe in making moral judgments rely exclusively on intuitive feelings rather than reasons.

Even this brief review of the literature that distinguishes between promotion and prevention highlights that there are several ways to think about how promotion self-regulation is different from prevention self-regulation. Each distinction tells us something important about how self-regulation in a promotion focus functions differently than self-regulation in a prevention focus. But is there a fundamental difference between promotion and prevention that underlies all these differences? Is there a way to bring all these distinctions and differences together into a single story about promotion and prevention? I believe there is. I begin below with describing a recently proposed distinction (Higgins, 2014) that I argue is fundamental to the promotion-prevention story. Then, in the following section, I will return to each of the distinctions and differences that I just reviewed, and discuss how each of them can be understood in terms of this proposed fundamental distinction.

The Story of “0”

Historically, there was an important transition point from self-discrepancy theory to regulatory focus theory that occurred in the mid 1990’s. Miguel Brendl and I began working on a chapter that addressed the question, “What makes events positive or negative?” (Brendl & Higgins, 1996). When we were just beginning this project, Miguel came into my office with an air of excitement and told me that there was a critical factor for understanding the nature of valence. His insight was that in order to understand the nature of valence, you needed to understand how neutrality was determined. To understand valence, *you need to understand “0”*. This insight set the agenda for our chapter, which now became identifying different principles that determined valence by determining what “0” meant.

With respect to the development of regulatory focus theory, the most relevant principle for judging valence that we reviewed was the principle of goal supportiveness. The principle of goal supportiveness refers to the degree to which an event is judged to support or impede the satisfaction of a set goal, with goal support producing judgments of positive valence and goal impediment to judgments of negative valence. This principle has a long history. Lewin, Dembo, Festinger, & Sears (1944), for example, assumed that a goal separates positively valenced events from negatively valenced events, or an area of success from an area of failure, with the former being approached and the latter being avoided. More recent theories of emotion also assume that reaching versus frustrating a goal (Roseman, 1984; Lazarus, 1993; Ortony, Clore, & Collins, 1988) is experienced positively versus negatively.

Brendl and Higgins (1996) considered what this meant for the difference between the ideal versus ought

systems. [When that chapter was written, regulatory focus was called outcome focus: ideal self-regulation was called positive outcome focus, and ought self-regulation was called negative outcome focus. At a conference I attended in 1995, Marilyn Brewer pointed out these earlier labels were very confusing (or worse), and they were, thankfully, replaced with the currently used labels.] We proposed that given the nature of ideal and ought goals, “0” was actually *not* neutral. Moreover, “0” had a *different* valence for ideal and ought goal pursuit.

We made these proposals because of the nature of goal supportiveness for ideal and ought goal pursuit. For ideal goal pursuit, successfully attaining a positive outcome supports the goal pursuit because it represents the *presence of a positive outcome*, and as such it has positive valence. Not attaining a positive outcome impedes ideal goal pursuit because it represents the *absence of a positive outcome*, and as such it has negative valence. This means that simply maintaining a status quo “0” is *not* experienced as neutral in the ideal system of goal pursuit; instead, it has negative valence because it fails to attain a positive outcome. In contrast, for ought goal pursuit, maintaining a status quo “0” has positive valence because it represents the *absence of a negative outcome*. Thus, once again, “0” is *not* experienced as neutral. But for ought goal pursuit, “0” has positive valence rather than negative valence as for ideal goal pursuit. What has negative valence for ought goal pursuit is failing to maintain a status quo “0”, which represents the *presence of a negative outcome*.

The Distinct Motivational Force of “0” for Promotion Versus Prevention

After the Brendl and Higgins’ (1996) chapter, there were subsequent developments in regulatory focus theory regarding the distinct nature of promotion versus prevention self-regulatory concerns. This led to my writing the *American Psychologist* article called “Beyond Pleasure and Pain” where I formally presented regulatory focus theory for the first time and distinguished it from other approach-avoidance perspectives (i.e., regulatory anticipation; regulatory reference). Beyond introducing the new terminology (e.g., promotion focus; prevention focus), there were other noteworthy changes in the theory that differentiated it from self-discrepancy theory.

Self-discrepancy theory was concerned with self-regulation in relation to self-guides, distinguishing between self-regulation in relation to hopes and aspirations (ideals) versus duties and obligations (oughts). Regulatory focus theory was concerned with distinguishing more broadly between two distinct systems of self-regulation concerned with either growth and nurturance (promotion concerns) or safety and security (prevention concerns). Ideal concerns with hopes and aspirations were part of promotion concerns, but there were other more general concerns, such as concerns with growth and advancing. Ought concerns with duties and obligations were part of prevention concerns, but there were other more general concerns with maintaining safety and security. Promotion concerns with growth and advancement naturally means wanting

to move in a positive direction forward, i.e., to make progress toward a positive gain. Prevention concerns with maintaining safety and security naturally means wanting to stop any threat or danger – to protect the positive non-loss.

Another change introduced in Higgins (1997) was to emphasize more generally the promotion focus preference for eager strategies of goal pursuit rather than just approaching matches to ideal self-guides, and the prevention focus preference for vigilant strategies of goal pursuit rather than just avoiding mismatches to ought self-guides. Related to this change of emphasis was a switch from describing ideal goal pursuit as concerned with the presence and absence of positive outcomes to describing promotion goal pursuit as concerned with ensuring gains and ensuring against non-gains, and a switch from describing ought goal pursuit as concerned with the absence and presence of negative outcomes to describing prevention goal pursuit as concerned with ensuring non-losses and ensuring against losses.

This change was also important because it more naturally highlighted the fact that maintaining a status quo “0” had negative valence for a promotion focus because it was a non-gain, whereas it had positive valence for a prevention focus because it was a non-loss. Admittedly, I did not fully appreciate the full significance of this distinction at the time. What I did appreciate at the time, which led to new tests of regulatory focus theory regarding promotion being more open to new alternatives than prevention (e.g., Crowe & Higgins, 1997; Friedman & Forster, 2001; Liberman, Idson, Camacho, & Higgins, 1999), was that individuals in a promotion state wanted to ensure hits (ensure gains) and ensure against errors of omission (ensure against non-gains) whereas individuals in a prevention state wanted to ensure correct rejections (ensure non-losses) and ensure against errors of commission (ensure against losses). Generally speaking, this would make promotion-focused individuals more open to new alternatives than prevention state individuals. And, importantly, this would be true both for individuals who were chronically promotion- or prevention-focused *and* for individuals who were situationally induced into a promotion or prevention focus. Concerns with gain/non-gain versus non-loss/loss could be momentary in the current situation as well as chronic. In contrast, self-discrepancy theory emphasized congruencies or discrepancies between the current actual self and chronic ideal self-guides and chronic ought self-guides.

The research discussed earlier by Roese and Pennington (1999) on additive versus subtractive counterfactuals also highlighted the importance of the distinction between promotion’s gain/non-gain concerns versus prevention’s non-loss/loss concerns. The results of these studies started me thinking about how the motivational force of “0” is different for promotion and prevention. For promotion, inaction and maintaining the status quo “0” is not neutral because it gives up the possibility of a gain. Such inaction is a negative non-gain and leads people to think about what action might have been taken instead to ensure a gain (additive counterfactual thinking). Specifically, promotion-

focused individuals’ concern with gains versus non-gains makes them sensitive to the difference between the status quo and a positive deviation from that state – the difference between “0” and “+1”. For them, staying at “0” is a failure and what is needed, even in imagination, is movement away from “0” to “+1”. For prevention, on the other hand, taking unnecessary action that loses, or risks losing, the satisfactory status quo is a failure and what is needed, even in imagination, is to stop an action that causes a loss and to maintain or restore the satisfactory “0”. This is because prevention-focused individuals’ concern with non-losses versus losses makes them sensitive to the difference between the status quo and a negative deviation from that state – the difference between “0” and “-1”. For them, having taken an action that led to a loss leads them to think about how that action might have been stopped to ensure a non-loss (subtractive counterfactual thinking).

How Prevention Non-Loss/Loss Functions Differently From Promotion Gain/Non-Gain

Recent research on prevention motivational forces by Scholer, Zou, Fujita, Stroessner, and Higgins (2010) has discovered just how strongly prevention-focused individuals want to maintain the safety of the status quo “0” and, if they find themselves in a condition of loss, undo the loss and restore “0”. Using a “two study” paradigm, the participants in one study were paid to complete a battery of questionnaires and were then given a choice to leave or to invest their payment in a second, stock-investment study. They were told that, in general, participants walked away with additional money in the stock investment study but there was a chance that they could lose their money. Most participants decided to invest in the stock investment study.

After making their initial investment decision, participants tracked the performance of their stock over time. At the end of the first round, all participants learned that they had lost not only their original investment but additional money (manipulation checks confirmed that participants did indeed experience their situation as a *real loss*). At this point, participants were given a choice between investing in two stocks for the second round of the study, a relatively risky stock and a conservative stock. The expected value of these stocks was equivalent, but the risky stock was riskier both in the objective sense that its variance was greater and in the subjective sense that participants rated the risky stock as riskier.

The study found that participants who were *more* prevention-focused were *more* likely to choose the riskier stock. But this was not the end of the story. In this first stock investment study, only the risky option had the potential of returning participants to their break-even point. Thus, to restore the status quo “0”, it was *necessary* to choose the risky option. What matters to prevention-focused individuals is to be vigilant and maintain a non-loss. In this first study, a risky tactical option supported being vigilant and restoring a non-loss by returning to “0”. A second study included a different pair of options; *both* the risky and the conservative options had the potential of returning participants to their break-even point, with the

more conservative option being more likely to reach “0” but only “0” and the more risky option being less like to reach “0” but having some potential to go well beyond “0”.

Now the more prevention-focused individuals were *less* likely to choose the risky option because what mattered was restoring a non-loss by returning to “0” and the conservative option was more likely to do that. Another study showed that when strong prevention-focused participants chose the riskier option – because it was the only way to return to “0” – they did not like that option; rather, they *disliked it less* (because they saw it as a necessity). What these studies demonstrate is prevention’s strong motivational force for maintaining the status quo “0”, a satisfactory non-loss, against a “-1”. If it is not maintained and a loss occurs, prevention-focused individuals will do what is necessary, and only what is necessary, to restore it. They are motivated by “0” non-loss rather than by gain “+1”.

The research by Scholer et al. (2010) demonstrated that when presented with a condition of loss, those with a strong prevention focus switch their tactic from conservative to risky if that is what is needed in order to restore the status quo. The question now was whether being in a condition of gain will cause those who are more promotion-focused to make a similar reversal in riskiness: switching from the risky tactics of the status quo to conservative tactics when successfully beyond it at “+1”. Zou, Scholer, and Higgins (2014) reasoned that those who have a strong promotion focus do not simply have a preference for risky over conservative tactics, but that, analogous to what happens in a prevention focus, a risky or conservative tactic is in the service of the underlying motivation; in the case of promotion, moving beyond the status quo “0” to a better “+1” (i.e., in the service of advancement or progress).

As noted earlier, promotion-focused individuals are primarily interested in moving from the status quo “0” to a better state “+1”, and tend to view the possibility of falling below the status quo (“-1”) as not an issue. This is because falling below the status quo is, motivationally speaking, no different from the status quo for promotion-focused individuals – “-1” and “0” are both non-gains. Thus, they will adopt tactics that increase their ability to move away from the status quo to a better state even if those tactics involve the risk of falling below the status quo. In contrast, it was predicted that individuals with a prevention focus would be unaffected by these gains because the domain of gains is pretty much irrelevant to those with a strong prevention focus given that what matters to them is maintaining a satisfactory “0”.

Zou et al. (2014) tested these predictions with a paradigm similar to the one used by Scholer et al. (2010), except that this paradigm involved gains rather than losses (and British pounds rather than American dollars). After their initial stock investment, participants were told that they either had no change, a small gain (£4), or a large gain (£20). Following this report, participants were given the opportunity to make either a conservative (100% chance of staying in the same place) or risky (50% chance of

gaining £5; 50% chance of losing £5) choice. As predicted, those with a strong promotion focus were significantly more likely to choose the risky choice than the conservative choice in the “small gain” condition than in the “large gain” condition. Also as expected, the strength of the prevention focus had no predictive power in conservative versus risky choice selection.

Subsequent studies showed that the effect of being less likely to choose the risky choice in the “large gain” (vs. “small gain”) condition was only true when the gain was subjectively experienced as being quite large – large enough to be experienced as *progress*. When sufficient progress has been made that it is perceived as a definite “+1” gain, those with a strong promotion focus are motivated to keep their definite “+1” gain and not risk it unnecessarily. This mechanism was confirmed by subsequent studies by Zou and colleagues (2014) who found that the tactic switching from risky to conservative among promotion-focused individuals was mediated by their perception of progress. When perceived progress was high, the motivation to continue adopting a risky tactic dropped significantly.

Comment

The “Story of 0” says that the experience of pursuing a goal with a promotion focus is different than pursuing a goal with a prevention focus. While approaching the desired end-state, the experience in a promotion focus is advancing toward the goal, eagerly making progress, choosing “hits”. The experience in a prevention focus is maintaining the goal pursuit activity, vigilantly avoiding mistakes, “correctly rejecting” bad options. These are very different experiences.

Attaining “+1” from “0” (Non-Gain) Versus Maintaining “0” (Non-Loss)

Now the question is whether each of the distinctions and differences between promotion and prevention that I reviewed earlier can be understood in terms of this proposed fundamental distinction between the promotion motivation to attain “+1 from “0” (attain a gain from a non-gain) versus the prevention motivation to maintain “0” against “-1” (maintain a non-loss against a loss)? Let us reconsider those distinctions and differences in light of this fundamental distinction while remembering that both promotion and prevention involve approaching pleasure and avoiding pain: for promotion, approaching gain (pleasure) and avoiding non-gain (pain); for prevention, approaching non-loss (pleasure) and avoiding loss (pain).

Nurturance Versus Security

As stated earlier, nurturance is about encouraging growth and development, whereas security is about being free from danger or threat. Regulatory focus theory proposed that nurturance-related regulation involves a promotion focus whereas security-related regulation involves a prevention focus. To encourage growth and development is to encourage moving from the current status

quo “0” to something better “+1”. To be free from danger or threat is to maintain a current safe status quo “0” against a non-safe “-1”.

Ideal Versus Ought Self-Guides

Children will acquire specific kinds of goals and standards used in self-regulation – distinct self-guides, and these self-guides represent either (a) their own and significant others’ hopes, wishes, and aspirations for them – *ideals*; or (b) their own and significant others’ beliefs about their duties, obligations, and responsibilities – *oughts*. Regulatory focus theory proposes that self-regulation in relation to ideal self-guides involves a promotion focus, and self-regulation in relation to ought self-guides involves a prevention focus. To hope is to want something positive to happen or be true in the future. An ideal is a standard of excellence to hope to attain. Thus, it involves wanting to move from the current status quo “0” to something better “+1” in the future. A duty or obligation is to be bound or committed to meet an agreement. You cannot do less than your duty and you need to maintain your duty. It is what you ought to do. Thus, it involves wanting to maintain your agreement, the current status quo “0” against a lesser “-1”.

Presence and Absence of Positive Outcomes Versus Absence and Presence of Negative Outcomes

As discussed earlier, the difference between ideal versus ought self-regulation is illustrated in how children’s experiences of pleasure and pain differ when their interactions with caretakers involve a promotion versus a prevention focus. When children succeed in promotion they experience the presence of a positive outcome, and when they fail they experience the absence of a positive outcome. If you succeed in moving from the status quo “0” to “+1”, you experience the presence of a positive outcome (a gain). If you fail to do so, you experience the absence of a positive outcome (a non-gain). When children succeed in prevention they experience the absence of a negative outcome, and when they fail they experience the presence of a negative outcome. If you succeed in maintaining a satisfactory status quo “0” against a “-1”, you experience the absence of a negative outcome (a non-loss). If you fail to do so, you experience the presence of a negative outcome (a loss).

Approaching Matches to a Desired End-State Versus Avoiding Mismatches to a Desired End-State

Self-discrepancy theory contributed to distinguishing between different strategies of goal pursuit. Individuals who pursue a promotion ideal do so by approaching matches to that desired end-state. Individuals who pursue a prevention ought do so by avoiding mismatches to that desired end-state. Wanting to take actions that approach matches to a desired end-state constitutes wanting to move from the current status quo “0” to a better “+1” state. Wanting to take actions that avoid mismatches to a desired end-state constitutes wanting to ensure no movement away from the current status quo “0” state to a worse “-1” state.

Eager for “Hits” Versus Vigilant Against “Errors of Commission”

Individuals in a promotion focus are strategically *eager* to attain advancement, whereas individuals in a prevention focus are strategically *vigilant* to assure safety and security. Individuals with promotion eagerness (*vs.* prevention vigilance) want to accomplish “hits” (i.e., approach a match with a desired end-state). In contrast, individuals with prevention vigilance (*vs.* promotion eagerness) want to avoid errors of commission (i.e., avoid mismatches with a desired end-state). To be eager means wanting to do or have something very much, and is associated with yearning, longing, and hoping. To be vigilant means to keep careful watch for possible danger or difficulties. Being strategically eager is to work toward a future that is more positive than the present, to work for “hits”, which is to work toward a future “+1” that is better than the current status quo “0”. Being strategically vigilant is to work to maintain a satisfactory, safe, status quo “0” against something worse “-1”, to be careful to avoid doing something that would lose the current, safe, status quo “0” (an error of commission).

Speed Versus Accuracy

Studies testing regulatory focus theory have found that promotion-focused people emphasize speed over accuracy, whereas prevention-focused people emphasize accuracy over speed. Why should this be? When you begin a goal pursuit, such as working on a task, you begin at the current status quo “0”. If you are in a promotion focus, you would currently be in a non-gain. That is a painful state for promotion. As such, you would not want to remain in it for long. You would prefer to move away from “0” toward “+1” as soon as possible, and once you got started you would like to make progress, reach a “+1” gain as soon as possible. You emphasize speed even if you make some mistakes along the way. After all, mistakes might produce a move toward “-1”, but “-1” is no worse than “0” because they are both non-gains. Thus, you emphasize speed over accuracy.

It is different if you are in a prevention state, however. Again you begin at the status quo “0”, but now you would currently be in a non-loss, which is a pleasant state for prevention. You are fine with remaining in the pleasant state of non-loss. While involved in the goal pursuit, such as working on a task, you want to ensure that you do not make mistakes that would move you away from “0” toward a “-1”. You want to be accurate and avoid mistakes, even if that means working slowly, in order to ensure that you remain in the satisfactory “0” state and not move to “-1”. Thus, you emphasize accuracy over speed.

Global/Abstract Versus Local/Concrete

Individuals with a promotion focus are more responsive to global input than local input, whereas the opposite is true for individuals with a prevention focus. Similarly, the construal level of individuals with a promotion focus is more abstract, more psychologically distant, than the construal level of individuals with a prevention focus. Why

would this be? Individuals in a promotion focus want to move from the present status quo “0” to a future “+1”. They are focused on the future and attaining a new, different, and better state. This future temporal and spatial focus increases abstraction and psychological distance (Trope & Liberman, 2003, 2010). In contrast, individuals in a prevention focus want to maintain a satisfactory present status quo “0”. They are focused on the present, watching guard in the here and now. This present, here and now temporal and spatial focus reduces abstraction and psychological distance (Trope & Liberman, 2003, 2010). It is local and concrete.

A comment

What I have just described is the usual state of affairs when we begin with a current status quo “0”. What would happen if the current state was “-1” or “+1” instead? As discussed earlier, we know from the studies on people making choices between relatively risky versus conservative options that individuals can switch their choices when they are making decisions beginning with “-1” (Scholer et al., 2010) or with “+1” (Zou et al., 2014) rather than beginning with “0”. We know, for example, that when prevention-focused individuals begin with “-1”, they will choose a risky option if that is necessary to get back to “0” (i.e., restore safety). In this situation, they want to move from the present state of “-1” to the future, different state of “0”. They do *not* want to remain in the here-and-now state. Might this increase their abstraction and psychological distance? We also know that when promotion-focused individuals begin with “+1” (i.e., after having made definite progress), they will choose the more conservative option that increases the likelihood of remaining at “+1”. In this situation, they want to stay at the present state of “+1”. They do *not* want to risk the here-and-now state of having made definite progress. Might this decrease their abstraction and psychological distance? These questions need to be addressed in future research.

Intuitions Versus Reasons

Individuals with a promotion focus versus a prevention focus also differ in the kind of information they prefer to rely on. Individuals with a promotion focus prefer to rely on intuitive feelings whereas individuals with a prevention focus prefer to rely on reasons. Why is that? Let’s begin with individuals with a prevention focus. When they begin with a current status quo “0”, they want to remain in that state. It is, after all, a pleasant non-loss state. Their system says, “Why should I leave this pleasant state where I am safe and secure?” Their system demands that there be reasons to justify any choice that could risk losing the current status quo “0”. Reasons also provide concrete answers that fit their concrete, here-and-now psychological state.

Now let’s consider individuals with a promotion focus. As mentioned in the previous section, promotion-focused individuals have a broad, abstract, and future orientation (i.e., high psychological distance) because they want to move from the present, here-and-now status quo “0” to a different, better “+1” state in the future. Given this, relying on intuitions makes sense because intuitions themselves have

a more global, broader scope. In addition, an intuition will provide a “quick and ready insight” that relates to “basic truths” (Webster’s Ninth New Collegiate Dictionary, 1989). Speed is emphasized in promotion, and basic truths are emphasized when construal involves high psychological distance (Trope & Liberman, 2010), as it does in promotion. With intuition, the answer, the essential truth, is known immediately without the need for evidence (reasons).

Another comment

As I noted in the previous section, what happens in promotion and prevention when the current status quo state is “0” can be different from what happens when the current state is “-1” or “+1”. This is true for making choices between relatively risky and conservative options, and, as noted, this could be true as well for how global, abstract, or psychologically distant is promotion and prevention construal under the different conditions of beginning at “0”, “-1”, or “+1”. It should be noted here that perhaps this is also the case for the extent to which promotion relies on intuitions and prevention relies on reasons. Perhaps individuals with a prevention focus would rely less on reasons when the current state is “-1”, and individuals with a promotion focus would rely less on intuitions when the current state is “+1”. And, while we are considering these different beginning conditions, it is possible that individuals with a prevention focus would emphasize accuracy less (and speed more) when the current state is a painful “-1”, and individuals with a promotion focus would emphasize speed less (and accuracy more) when the current state is a pleasant “+1”. These additional possibilities regarding what might happen when the story begins at “-1” or “+1” rather than beginning at “0” need to be addressed in future research.

A final comment

When I began working on regulatory focus theory in the mid-1990’s, I did not have a story of “0”. Indeed, as I mentioned earlier, I made the mistake originally of naming the two foci positive outcome focus and negative outcome focus. Thanks to Marilynn Brewer, I began searching for alternative labels that better captured what I had in mind, making sure that *both* labels were *positive* terms referring to desirable self-regulation, as *ideal* self-guides and *ought* self-guides had been in self-discrepancy theory. It might seem surprising to the reader, but it took me awhile to find labels that I really liked. In addition to both referring to desirable self-regulation, I liked that promotion and prevention both started with “pr” and ended with “tion” because that would make them easier to remember as a pair – promotion:prevention as easy to learn paired associates. Without fully appreciating it then, I now also realize that promotion, i.e., “the act or fact of being *raised* in position or rank” (Webster’s Ninth New Collegiate Dictionary, 1989; my italics) is attaining “+1” from status quo “0”; and prevention, i.e., “to keep [something negative] from happening” (Webster’s Ninth New Collegiate Dictionary, 1989), is maintaining a satisfactory status quo “0” against a “-1”. So the story of “0” was there from the start in the labels themselves. What luck!

References

- Atkinson, J.W. (1964). *An introduction to motivation*. Princeton, N.J.: D. Van Nostrand.
- Avnet, T., & Higgins, E.T. (2006). How regulatory fit impacts value in consumer choices and opinions. *Journal of Marketing Research*, 43, 1–10.
- Brendl, C.M., & Higgins, E.T. (1996). Principles of judging valence: What makes events positive or negative? In: M.P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 28, pp. 95–160). New York: Academic Press.
- Bowlby, J. (1969). *Attachment* (Attachment and loss, Volume 1). New York: Basic Books.
- Bowlby, J. (1973). *Separation: Anxiety and anger* (Attachment and loss, Volume 2). New York: Basic Books.
- Buss, D. (1996). The evolutionary psychology of human social strategies. In: E.T. Higgins and A.W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 3–38). New York: Guilford.
- Cooley, C.H. (1964). *Human nature and the social order*. New York: Schocken Books. (Original work published 1902)
- Cornwell, J.F.M., & Higgins, E.T. (2016). Eager feelings and vigilant reasons: Regulatory focus differences in judging moral wrongs. *Journal of Experimental Psychology: General*, 145, 338–355.
- Crowe, E., & Higgins, E.T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational Behavior and Human Decision Processes*, 69, 117–132.
- Dutton, J.E., & Jackson, S.E. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review*, 12, 76–90.
- Edwards, W. (1955). The prediction of decisions among bets. *Journal of Experimental Psychology*, 51, 201–214.
- Eitam, B., & Higgins, E.T. (2010). Motivation in mental accessibility: Relevance of a Representation (ROAR) as a new framework. *Social and Personality Psychology Compass*, 4, 951–967.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, Ill.: Row, Peterson.
- Förster, J., Higgins, E.T., & Bianco, A.T. (2003). Speed/accuracy decisions in task performance: Built-in trade-off or separate strategic concerns? *Organizational Behavior and Human Decision Processes*, 90, 148–164.
- Förster, J., & Higgins, E.T. (2005). How global vs. local perception fits regulatory focus. *Psychological Science*, 16, 631–636.
- Förster, J., Higgins, E.T., & Idson, L.C. (1998). Approach and avoidance strength during goal attainment: Regulatory focus and the “goal looms larger” effect. *Journal of Personality and Social Psychology*, 75, 1115–1131.
- Freud, S. (1952). *A general introduction to psychoanalysis*. New York: Washington Square Press. (Original work published 1920).
- Gray, J.A. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system*. New York: Oxford University Press.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340.
- Higgins, E.T. (1991). Development of self-regulatory and self-evaluative processes: Costs, benefits, and trade offs. In: M.R. Gunnar and A. Sroufe (Eds.), *Minnesota symposium on child psychology* (pp. 125–165). Hillsdale, N.J.: Erlbaum.
- Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280–1300.
- Higgins, E.T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In: M.P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 30, pp. 1–46). New York: Academic Press.
- Higgins, E.T. (2014). Promotion and prevention: How “0” can create dual motivational forces. In: J.W. Sherman, B. Gawronski, & Y. Trope (Eds.), *Dual-process theories of the social mind* (pp. 423–435). New York: Guilford Press.
- Higgins, E.T., Roney, C.J.R., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance: Distinct self-regulatory systems. *Journal of Personality and Social Psychology*, 66, 276–286.
- Idson, L.C., Liberman, N., & Higgins, E.T. (2000). Distinguishing gains from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology*, 36, 252–274.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263–291.
- Keller, P., Lee, A.Y., & Sternthal, B. (2006). *Construing fit to judgment: The effects of regulatory focus and level of construal*. Working paper, Kellogg School of Management, Northwestern University.
- Lazarus, R.S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44, 1–21.
- Lewin, K., Dembo, T., Festinger, L., & Sears, P.S. (1944). Level of aspiration. In: J. McHunt (Ed.), *Personality and the behavior disorders* (Vol. 1, pp. 333–378). New York: Ronald Press.
- Mead, G.H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Mowrer, O.H. (1960). *Learning theory and behavior*. New York: John Wiley.
- Navon, D. (1977). Forest before trees: The precedence of global features in visual perception. *Cognitive Psychology*, 9, 353–383.
- Ortony, A., Clore, G.L., & Collins, A. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.
- Pennington, G.I., & Roese, N.J. (2003). Regulatory focus and temporal distance. *Journal of Experimental Social Psychology*, 39, 563–576.
- Pham, M., & Avnet, T. (2004). Ideals and oughts and the reliance on affect versus substance in persuasion. *Journal of Consumer Research*, 30, 503–518.
- Roese, N.J., Hur, T., & Pennington, G.L. (1999). Counterfactual thinking and regulatory focus: Implications for action versus inaction and sufficiency versus necessity. *Journal of Personality and Social Psychology*, 77, 1109–1120.
- Roseman, I.J. (1984). Cognitive determinants of emotion: A structural theory. *Review of Personality and Social Psychology*, 5, 11–36.
- Scholer, A.A., Zou, X., Fujita, K., Stroessner, S.J., Higgins, E.T. (2010). When risk-seeking becomes a motivational necessity. *Journal of Personality and Social Psychology*, 99, 215–231.
- Semin, G.R., Higgins, E.T., Gil de Montes, L., Estourget, Y., & Valencia, J.F. (2005). Linguistic signatures of regulatory focus: How abstraction fits promotion more than prevention. *Journal of Personality and Social Psychology*, 89, 36–45.
- Sullivan, H.S. (1953). *The collected works of Harry Stack Sullivan (Vol. 1): The interpersonal theory of psychiatry*. Edited by H.S. Perry and M.L. Gawel. New York: W. W. Norton & Co.
- Thorndike, E.L. (1935). *The psychology of wants, interests, and attitudes*. New York: Appleton-Century-Crofts.
- Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, 110, 403–421.
- Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, 117, 440–463.
- Webster’s Ninth New Collegiate Dictionary (1989). Springfield, MA: Merriam-Webster.
- Zou, X., Scholer, A.A., Higgins, E.T. (2014). In pursuit of progress: Promotion motivation and risk preference in the domain of gains. *Journal of Personality and Social Psychology*, 106, 183–201.