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# Regulatory focus theory and the entrepreneurial process

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**Abstract**

Regulatory focus theory delineates how people engage in self-regulation, the process of bringing oneself into alignment with one's standards and goals. At any given point in time, people may engage in self-regulation with a promotion focus or a prevention focus. When promotion-focused, people's growth and advancement needs motivate them to try to bring themselves into alignment with their ideal selves, thereby heightening the salience of potential gains to be attained (felt presence of positive outcomes). When prevention-focused, people's security and safety needs prompt them to attempt to bring themselves into alignment with their ought selves, thereby increasing the salience of potential losses to be avoided (felt absence of negative outcomes). For certain aspects of the entrepreneurial process (e.g., generating ideas with the potential to be successful), greater promotion focus is necessary. For other aspects of the entrepreneurial process (e.g., doing the "due diligence" when screening ideas), greater prevention focus is necessary. In addition to providing a framework for future research on entrepreneurship, regulatory focus theory offers some informed speculations about the level and nature of entrepreneurship that may be expected in the aftermath of the September 11 terrorist attacks.


*Keywords:* Regulatory focus theory; Promotion focus; Prevention focus

## 1. Executive summary

We propose that regulatory focus theory may shed light on the entrepreneurial process, in particular, when and why entrepreneurial success may occur. Regulatory focus theory delineates how people engage in self-regulation, the process of bringing oneself into

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alignment with one's standards and goals. At any given point in time, people may engage in self-regulation with a promotion focus or a prevention focus. Promotion- and prevention-focused self-regulation differ along three dimensions: (1) the underlying motives people are trying to satisfy, (2) the nature of the goals or standards that they are trying to attain, and (3) the types of outcomes that are salient to people. When promotion-focused, people's growth and advancement needs motivate them to try to bring themselves into alignment with their ideal selves (based on their dreams and aspirations), thereby heightening the salience of potential gains to be attained (felt presence of positive outcomes). When prevention-focused, people's security and safety needs prompt them to attempt to bring themselves into alignment with their ought selves (based on their sense of duty and responsibility), thereby increasing the salience of potential losses to be avoided (felt absence of negative outcomes).

Rather than suggesting that one regulatory focus orientation is more likely to be associated with entrepreneurial success than the other, we suggest that both promotion and prevention foci are necessary for entrepreneurial success. For certain aspects of the entrepreneurial process (e.g., generating ideas with the potential to be successful), greater promotion focus is necessary. For other aspects of the entrepreneurial process (e.g., doing the "due diligence" when screening ideas), greater prevention focus is necessary. Moreover, the joint presence of promotion and prevention focus may serve as a source of energy (and hence much needed motivation) in response to the myriad forms of both negative feedback and positive feedback that inevitably accompany the entrepreneurial process. In addition to providing a framework for future research on entrepreneurship, regulatory focus theory offers some informed speculations about the level and nature of entrepreneurship that may be expected in the aftermath of the September 11 terrorist attacks.

## 2. Introduction

I have a dream. (Martin Luther King, 1963)

Only the paranoid survive. (Andy Grove, Founder and CEO of Intel, 1996)

These two quotations offer radically different views of the mindset needed for entrepreneurial success. King's famous saying suggests that the successful launching of a new (societal) venture requires leaders to envision a new world order based on ideals and aspirations that are eagerly pursued. Grove's (1996) assertion suggests that the launching and maintenance of a successful (business) venture requires leaders to be constantly vigilant about forces that threaten their organizations' safety and security.

The primary goal of this paper is to provide a conceptual framework that can account for entrepreneurial success. One of our main theses is that Martin Luther King and Andy Grove (1996) are both correct, at least some of the time. Indeed, we propose that it is the *combination* of beliefs and behaviors implied by their comments that makes entrepreneurial success more likely to occur. In offering this proposal, we hope to provide both theoretical and practical insights to the field of entrepreneurship. At the theoretical level, our aim is to help explain *why* certain factors influence the likelihood of entrepreneurial success. At the

practical level, in keeping with Kurt Lewin's famous saying that there is nothing as practical as a good theory, our analysis helps to identify the action steps that individuals and organizations may take to increase their chances of entrepreneurial success.

## 3. Overview

The field of entrepreneurship is of growing interest to organizational scholars and practitioners (Aldrich and Fiol, 1994; Burt, 1997; Lumpkin and Dess, 1996; Thornton, 1999; Venkataraman, 1997). Indeed, recent evidence suggests that interest in the field of entrepreneurship is at an all-time high (Low, 2001). Many business schools in the United States and elsewhere have thriving programs in entrepreneurship. For example, at Columbia Business School, over 20% of MBA elective course enrollments are in entrepreneurship, up from virtually zero a decade ago. Moreover, the definition of entrepreneurial activity now encompasses more than the launching of a new business organization. In their quest to gain or maintain competitive advantage, existing organizations are constantly trying to develop innovative products and processes. Indeed, some scholars argue that the entrepreneurship mindset is the new paradigm for strategic thinking (McGrath and MacMillan, 2000).

Early entrepreneurship research focused on attributes of the founder(s), seeking to determine whether certain individual difference factors (such as the founders' personality, attitudes, and demographics) predict their success in launching new business ventures. This sole focus on the individual entrepreneur was criticized for overpersonalizing the determinants of entrepreneurial success, and fell out of favor (Low and MacMillan, 1988). Later studies emphasized more process-oriented and contextual examinations of the phenomenon (Brittain and Freeman, 1980; Gartner, 1985), and implied that the psychology of the entrepreneur was of little relevance. Most recently, scholars have called for revisiting the psychology of the entrepreneur, and asking why, when faced with the same information, some see opportunities whereas others do not (Venkataraman, 1997). In other words, the current emphasis is to examine the joint influence of individual difference, process, and contextual variables, an approach consistent with the one we are about to take.

Although (and indeed, because) interest in the field of entrepreneurship is at an all-time high, we need to better understand the factors and processes that account for entrepreneurial success. That is, we need to delineate the personal and environmental factors that make entrepreneurial success more versus less likely to occur. Just as important, we need to shed light on the processes through which these factors influence the likelihood of entrepreneurial success.

The present paper offers a framework designed to help predict and explain entrepreneurial success. A considerable amount of psychological theory and research has been devoted to the process of self-regulation, in which people strive to bring themselves into alignment with their intentions, standards, and goals. Self-regulation theory helps to explain when and why people will be more or less successful in their endeavors. The present analysis draws on an influential theory of self-regulation, Higgins' (1998) regulatory focus theory, to delineate when and why entrepreneurial success is more versus less likely to occur.

The remainder of the paper consists of three sections. In Section 4 we provide a definition of entrepreneurial success as well as an analysis of the (multistage) process through which it occurs. Section 5 (main) provides a brief overview of regulatory focus theory (e.g., Higgins, 1998), and considers how the theory may help to account for entrepreneurial success, both across and within the various stages of the entrepreneurial process. Whether people are successful in their self-regulatory efforts generally depends upon three broad categories of factors: (1) resources, as supplied by themselves (e.g., knowledge, skills, and abilities) and their environments (e.g., technology), (2) motivation, that is, the level of effort devoted to task accomplishment, and (3) strategy, that is, the methods, plans, and tactics people use to transform their resources or motivation into successful task completion.

Regulatory focus theory focuses on *how* people go about trying to accomplish their tasks and objectives. The theory calls attention to the motivational and strategic tendencies people draw on in the process of trying to attain their goals. Thus, our use of regulatory focus theory as a framework for explaining entrepreneurial success emphasizes the motivational and strategic factors in entrepreneurial success. It should be noted, however, that resource-based differences in entrepreneurial success are also within the scope of the present analysis, in that motivational or strategic differences associated with regulatory focus factors may influence entrepreneurs' success in attracting and retaining the necessary resources. Although successful self-regulatory activity depends upon people's motivation, strategy, and resources, we are not adopting a strictly individual differences approach in this paper. Rather, the extent to which entrepreneurs enact the motivation, strategy, and resources needed for success is a function of both individual differences and situational variables.

Whereas Section 5 of the paper considers the effects on entrepreneurial success of factors central to Higgins' (1998) regulatory focus theory, Section 6 examines some of the antecedents of these factors. Put differently, Section 5 treats regulatory focus factors as independent variables, whereas Section 6 conceives of them as dependent variables. After all, if the factors central to regulatory focus theory help to explain entrepreneurial success, then it is both theoretically and practically important to delineate their dispositional and situational determinants.

## 4. The process of entrepreneurship

### *4.1. Defining success*

According to the Webster's Ninth New Collegiate Dictionary (1989), entrepreneurship refers to the process of organizing, operating, and assuming the risk for a business venture. Entrepreneurial success refers to the outcome of that process. One way to judge entrepreneurial success is by evaluating the extent to which the venture met the needs of its various stakeholders, such as investors, customers, organization members, the society at large, and the entrepreneurs themselves. The duration of the success is a related consideration, that is, whether success was short-lived or more persistent over time. Closely related to the notion of duration is whether the needs of stakeholders were met in ways that used up the

organization's resources or energy (in which case success is more likely to be short-lived), or whether stakeholders' needs were met in ways that preserved or even enhanced the organization's pool of resources. Although the relevant criteria for success may vary from one entrepreneurial venture to the next, it seems safe to say that the success of an entrepreneurial venture is greater when the needs of more relevant stakeholders are met for longer periods of time. The definition of entrepreneurial success also needs to take into account the frequency of its occurrence. Particularly impressive are those individuals and organizations that engineer successful entrepreneurial ventures on a repeated, rather than one-shot, basis.

### *4.2. Delineating the process*

Many laypersons equate entrepreneurship with the act of creating or inventing an idea or concept that ultimately proves to satisfy the needs of multiple stakeholders. For example, Alexander Graham Bell, Henry Ford, and, more recently, Steve Jobs and Bill Gates, helped to create products that have had indelible marks on the lifestyles of people all over the world. While idea generation clearly is an important (early) step in the entrepreneurial process, it is by no means the only one. The inventor of the light bulb, Thomas Edison, once said that success is "one percent inspiration and 99 percent perspiration." Edison's statement suggests that once an idea or concept has been generated, it merely has the potential to be successful. Whether the potential of the idea is realized depends upon how well entrepreneurs (and their constituents) complete the next steps in the process, which is where the "perspiration" of which Edison spoke becomes relevant.

More specifically, once an idea with potential is spawned, it needs to be screened or reality-tested. Some of the hard questions that entrepreneurs need to consider include (but are not limited to) the following:

(1) Is there a market for the product or service?
(2) Will we be able to deliver the product or service to the market?
(3) As we enter the market, what will be our source(s) of competitive advantage?
(4) What are the risks associated with the venture, and how can they best be managed?
(5) Given the likely sizable investment of money, time, and energy that the venture will require, will the returns be worth it? That is, at what point does it make sense to "pull the plug" on the venture, either entirely or in favor of an alternative course of action?

Let us assume that the answers to the questions raised in the screening process indicate that the entrepreneur is justified in going forward. If so, then the next stage of the process consists of procuring the necessary resources: financial, technological, and human, to name a few. Following resource procurement, the entrepreneur then must show that the idea is viable; in other words, they must prove the business model. This stage typically consists of developing a prototype of the product or service, tinkering with it, and then trying it out with a few customers. The next stage (sometimes called the rollout phase) consists of a larger commitment to the production process. At this point entrepreneurs typically must seek

considerably larger infusions of cash, a process that may require them to make much more sophisticated presentations of their idea to would-be investors than they might have done to date. They also need to pay attention to organizing and managing the growing number of employees who usually are added to the ranks in the rollout phase. Assuming that entrepreneurs achieve at least a certain level of success (e.g., their organizations become self-sustaining enough so as to no longer need external financial support to survive), their organizations then enter the next stages in the life cycle: maturity, followed either by renewal and growth, or by decline. (Whereas we have described the stages of entrepreneurship in a linear fashion, it is worth mentioning that the process typically does not play itself out linearly. For example, questions about the viability of the project at an early stage are likely to be considered at later stages as well.)

## 5. Explaining entrepreneurial success: the role of regulatory focus theory

Having described the various stages of a successful business venture, we next consider how regulatory focus theory (e.g., Higgins, 1998) helps to explain entrepreneurial success. Regulatory focus theory takes as its point of departure the well-established law of human behavior that people seek to approach pleasure and avoid pain. A fundamental tenet of regulatory focus theory is that people may approach pleasure and avoid pain in very different ways. The different ways in which people approach pleasure and avoid pain are manifested in two distinct self-regulatory systems, one with a promotion focus and one with a prevention focus.

Promotion- and prevention-focused self-regulation differ along three dimensions: (1) the underlying motives people are trying to satisfy, (2) the nature of the goals or standards that they are trying to attain, and (3) the types of outcomes that are salient to people. When promotion-focused, people's growth and advancement needs motivate them to try to bring themselves into alignment with their ideal selves (based on their dreams and aspirations), thereby heightening the salience of potential gains to be attained (felt presence of positive outcomes). Martin Luther King's "I Have a Dream" speech was designed to spur people into promotion-focused activity. In contrast, when they are prevention-focused people's security and safety needs prompt them to attempt to bring themselves into alignment with their ought selves (based on their sense of duty and responsibility), thereby increasing the salience of potential losses to be avoided (felt absence of negative outcomes). Andy Grove's (1996) assertion that "Only the Paranoid Survive" was designed to bring about prevention-focused activity in Intel.

The multistage process of entrepreneurial success shows that an assortment of motives, beliefs, and behaviors need to be present for entrepreneurial success to occur. Among these needed motives, beliefs, and behaviors, some are better supported by a promotion than a prevention focus, whereas others are better supported by a prevention than a promotion focus. For this reason, we believe that a combination of promotion-driven and prevention-driven motives, beliefs, and behaviors are needed for entrepreneurial success. Let us now consider those aspects of entrepreneurial success (both within and across different points in the

entrepreneurial process) that are supported more by a promotion focus, and those that are supported more by a prevention focus.

### 5.1. Conceiving/creating/inventing the potentially successful idea

Being promotion-focused puts one at a comparative advantage here. Invention requires considering new possibilities, generating alternatives. Several studies have found that individuals in a promotion focus generate more alternatives than individuals in a prevention focus. Crowe and Higgins (1997), for example, examined the impact of promotion and prevention for the case of people deciding how to classify and characterize objects in the world. One task involved sorting a set of fruits and a set of vegetables. For this task, all participants were allowed to choose their own criteria for the groups they created in each set, and the only requirement was that within each category the sorting criterion be consistent across all members of that category. The other task that participants were given involved listing characteristics of different pieces of furniture. For this task, everyone was presented with the names of furniture objects, such as "desk," "couch," or "bed," and was asked to write down all of the characteristics they could think of for each object. Prior to both of these tasks, through an experimental manipulation, participants were induced to be either promotion-focused or prevention-focused.

Because the instructions for both tasks do not describe the types of answers that are "correct," generating lots of different alternatives across each task increases people's chances of attaining a "hit" that would result from using the right criteria (whatever it may be) and guards against a "miss" that would result from omitting the right criteria. Therefore, this represents an eagerness strategy and should have been preferred by participants in a promotion focus. In contrast, generating few alternatives across each task increases people's chances of attaining a "correct rejection" that would result from not using the wrong criteria (again, whatever it may be) and guards against a "false alarm" that would result from using the wrong criteria. Therefore, this represents a vigilance strategy and should have been preferred by participants in a prevention focus. The study found that, compared to prevention-focused participants, promotion-focused participants generated more alternatives and used more criteria on the sorting task, and generated more unique dimensions for the characteristic-listing task.

To be inventive or creative, it is important to be open to change, that is, to be willing to consider new possibilities. Liberman et al. (1999) found that people in a promotion focus were more willing than those in a prevention focus to switch to a new activity or to substitute a new object for an object they already possessed. They found, for example, that the classic "endowment effect" (Thaler, 1980) of preferring what one already possesses over something new was greater for individuals in a prevention than in a promotion focus. Indeed, the endowment effect disappeared for individuals in a promotion focus.

Creativity involves not only generating multiple alternatives and being open to change, but also discovering hidden possibilities and novel uses. There is also evidence that people are more creative when they are in a promotion focus than a prevention focus. In a set of studies by Friedman and Forster (in press), for example, participants worked on an ostensibly

unrelated task in which they had to complete a paper-and-pencil maze before they were given measures of creativity. The maze had a cartoon mouse trapped inside and the participants' task was to "find the way for the mouse." Different versions of the maze manipulated the regulatory focus of the participants. In the promotion version, a piece of cheese was depicted as lying outside the maze and thus the participants would be moving the mouse toward nurturance. In the prevention version, an owl was depicted as hovering above the maze, and thus the participants would be moving the mouse toward safety. After completing the maze, the participants were given a hidden pictures test in which they received a series of images of simple objects that were hidden within complex patterns of visual noise. The participants needed to disembed and name each object under conditions that met the criteria for creative insight. The study found that the promotion-focused participants were more creative than the prevention-focused participants. This same result was replicated in another study that used the generation of creative uses for a brick as the measure of creativity.

In sum, good business venture ideas usually are based on some vision, which in turn is typically based on people's ideals and aspirations. In the idea-generating stage one is trying to think (dream) of what could be, reflecting an eagerness orientation in which people are willing to consider a wide range of ideas in order to "ensure a hit," that is, come up with an idea that represents a gain relative to the status quo.

### *5.2. Screening the idea*

Once one moves from the idea conception to the screening or reality-testing stage of the process, it seems that being prevention-focused would be relatively advantageous. That is, screening the idea entails assessing the feasibility of the venture. Put differently, it requires asking the hard questions, which typically call attention to ways in which the venture might fail. For example, upon closer analysis the screening stage may reveal that there really is no market for the venture, or that for any number of reasons the parties will not be able to deliver the product to the market, or that the parties will not be able to manage the risks associated with the venture. In other words, the screening process is akin to a "due diligence" stage that typically requires entrepreneurs to consider, and hopefully ultimately rule out, reasons *not* to go forward. This seems to be the essence of a prevention-focused orientation.

When screening an idea it is important to be careful and accurate. This is not a time to be impulsive or overeager. It is a time to be concerned with "quality" and not just the generation of many possibilities (i.e., "quantity"). Recent studies by Forster et al. (2001a,b) have studied the classic quantity/speed versus quality/accuracy trade-off. People in a promotion focus are eager for "hits" and this strategic eagerness inclines them toward speed and quantity of output. In contrast, people in a prevention focus are vigilant against making mistakes (errors of commission) and this strategic vigilance inclines them toward accuracy and quality of output. Earlier research by Forster et al. (1998) on the classic "goal looms larger" effect (which showed that people and other species exert greater effort as they draw closer to their goal, Lewin, 1935; Miller, 1944) had found that promotion-focused eagerness and prevention-focused vigilance both increased as people moved closer to completing their task. Forster et al. (2001a,b) also tested whether differences between promotion and prevention in

emphasizing speed/quantity versus accuracy/quality would increase as participants moved closer to completing their task.

The task used in the studies involved four pictures taken from a children's drawing book. For each picture, a participant had to connect sequentially numbered dots in order to draw the picture within a given time period. When correctly completed, all pictures depicted cartoon animals. The number of the dot for each picture where a participant ended after the time period was added across the four pictures; this score was the dependent measure of speed (quantity). The number of dots for each picture that a participant missed (i.e., that were not connected) up to the number ended after the time period was added across the four pictures; this score was the dependent measure of inaccuracy (quality).

In one study, regulatory focus was operationalized as an individual difference variable, whereas in another study regulatory focus was operationalized situationally, via an experimental manipulation. In both studies, Forster et al. (2001a,b) found that speed/quantity increased as those high in promotion focus moved closer to task completion whereas there was no such increase for those high in prevention focus. Moreover, both studies showed that accuracy/quality increased (mistakes decreased) as those high in prevention focus moved closer to task completion whereas accuracy/quality actually decreased as those higher in promotion focus moved closer to task completion. The speed/quantity effect and the accuracy/quality effect were independent of one another.

### *5.3. Procuring resources*

We believe that procuring resources requires a combination of promotion- and prevention-focused activities. On the promotion front, getting others to provide financial resources requires the ability to make a persuasive case to potential investors. This may well require framing the venture in terms of ideals and aspirations, something lofty that will make investors choose the venture over others. On the prevention front, presentations to would-be investors may need to be quite sophisticated. Sophomoric mistakes in presentation style may well turn investors off. So, getting financial (and other sources of) support from would-be providers may require more than a lofty vision; those seeking support need to show would-be providers that they "have their act together," that they can be trusted to do things competently and with good intentions. This may require the appeals made to would-be backers to go off smoothly, or "without a hitch" (in a timely fashion, with no technical flaws, at the right time and place, etc.). Prevention focus (with its emphasis on not making mistakes, ensuring non-losses) may put one at a comparative advantage for this aspect of the appeal process.

There is another reason why either promotion or prevention can be advantageous in persuading others, depending upon the situation. Cesario and Higgins (2001) have found that people experience an advocated plan as more convincing and are more willing to support it when the strategic style of the plan fits their own chronic strategic preference. A plan simply "feels right" to a person when there is a fit between his or her own regulatory focus and the plan's strategic style, such as an eager plan that is presented to a promotion person or a vigilant plan that is presented to a prevention person (see Higgins, 2000).

Cesario and Higgins found that when people "feel right" about a plan because of such fit they support it more. These findings suggest that those seeking support for an entrepreneurial venture are well-advised to learn as much as they can about the regulatory focus orientation of the parties from whom they are seeking support, and to tailor the request for support accordingly. Based on the Cesario and Higgins findings, we predict that the greater the congruence between the style of the request (with respect to the strategies being advocated) and the regulatory focus orientation of would-be supporters, the more likely it is that support will be provided.

### *5.4. The rollout process: proving the business model*

As in the procurement stage, we believe that a combination of promotion and prevention focus is necessary for the rollout process. For example, the rollout process (or at least the point in time prior to the rollout process) may require the building of an organization. To motivate people at this stage (when the organization may have few tangible rewards to offer), entrepreneurs probably will have to use their visionary skills (built on ideals and aspirations) to keep employees' "eyes on the prize." Therein lies the need for promotion-focused behavior. In addition, just as in the "sweating the details" stage of the procurement process, it is necessary to make sure that all of the mundane tasks associated with implementing the vision proceed as smoothly as possible. Most of these tasks are not "rocket science." Rather, it is often simply a matter of not making mistakes, to which a prevention focus is directed.

Recent studies by Wing-hong Lam and Chiu (in press) on creativity provide evidence of the combinatory value of promotion and prevention at different stages of working on new ideas. Consistent with previous studies on regulatory focus, they found that people in a promotion focus generated more creative ideas than those in a prevention focus. They then raised the question of what would happen next if there were obstacles or difficulties in actually using these ideas. Previous research by Shah and Higgins (1997) had found that individuals in a promotion focus functioned like classic maximizers of value and expectancy—which posits that *both* value and expectancy have to be high for motivation to be high (Vroom, 1964). Shah and Higgins found that individuals in a prevention focus are quite different. When value is high people experience the activity as a necessity, as something that they must do. Thus, they can be strongly motivated even when expectancy is low. Applying these findings, Hong predicted and found that when obstacles and difficulties arose in the subsequent use of creative ideas, thereby lowering the likelihood of success in using these valued resources, prevention-focused individuals persevered more than promotion-focused individuals.

Earlier we described how Liberman et al. (1999) found that promotion-focused individuals are more open to change, that is, are more willing to try something new. That is, when a task requires people to generate new options being promotion focused is advantageous. The research by Lam and Chiu (in press) that we just described shows how prevention-focused individuals will persevere more in the face of difficulties. Such perseverance also has benefits. These two sets of findings raise an important issue concerning the entrepreneurial process—when is change flexibility and its reverse inflexibility, and when is nonchange perseverance

and its reverse irresolution? One of the important decisions that has to be made at various stages in the entrepreneurial process is whether to persist with some already chosen course of action that has yet to bear fruit, versus to ''cut bait'' and do something different. Note that this type of judgment may apply to the whole entrepreneurial venture, and it also may apply to the various smaller-scale decisions embedded within the entire venture. One important example of such judgments is the case of ''sunk costs.''

The relation between regulatory focus and responses to sunk costs has been recently studied by Higgins et al. (2000). According to McClelland et al. (1953) and Atkinson's (1964) classic theory of achievement motivation, a new achievement task elicits a feeling of pride among individuals with a subjective history of success, which in turn produces anticipatory goal reactions that energize and direct behavior to approach the new task goal. Higgins et al. distinguished between two kinds of achievement pride—promotion pride and prevention pride. Individuals who believe they have had a history of successful promotion have promotion pride and anticipate success using eagerness on a new task. Individuals who believe they have had a history of successful prevention have prevention pride and anticipate success using vigilance on a new task.

Higgins et al. (2000) examined two different examples of sunk costs. Participants in one study (Study 1a) were asked to imagine they had spent US$100 on a ticket for a weekend trip to Michigan. Several weeks later they buy a US$50 ticket for a weekend trip to Wisconsin, and they think they will enjoy the Wisconsin trip more than the Michigan trip. They then discover that the two trips are for the same weekend! The sunk-costs error would be to choose the more expensive Michigan trip even though it would be enjoyed less. Promotion-pride participants were less likely to make this error than prevention-pride participants. Participants in another study (Study 1b) were asked to imagine that they were the president of an airline company that had invested US$10 million into building a plane undetectable by radar. When the project is 90% completed, they discover that another firm is marketing a radar-blank plane that is also faster and more economical than their plane. The sunk-costs error would be to continue to invest the last 10% of the research funds to finish their clearly noncompetitive plane. Prevention-pride participants were less likely to make this error than promotion-pride participants.

Whether greater promotion pride or prevention pride leads to more of a willingness to cut bait in response to negative feedback and go in a different direction seems to depend upon how people come to perceive that their initial course of action is not faring well. In some instances, negative feedback is perceived because people learn of the accessibility of a better alternative course of action. The accessibility of the better alternative essentially frames the choice as one of either taking it (winning, or ensuring a hit) or not (not winning, or making an error of omission). Given these two options, it is understandable that greater promotion pride led to more of a willingness to cut bait and switch to the new alternative. After all, promotion focus is about ensuring hits, even if it means ignoring sunk costs. This was the finding in the first study (Study 1a).

In other instances, negative feedback is perceived because people learn about a better alternative course of action that is not accessible to them. The inaccessibility of the better alternative frames the choice as one of either persisting with the original course of action

(losing, or making an error of commission) or not (not losing, or avoiding an error of commission). Given these two options, it is understandable that greater prevention pride led to more of a willingness to abandon the initial course of action, in spite of the sunk costs. After all, prevention focus is about ensuring correct rejections (“do not make the mistake of going any further”). This was the finding from the second study (Study 1b). Once again, we see evidence of both promotion focus and prevention focus leading to more effective self-regulation, in this case, depending upon how people’s views of the negative feedback concerning their initial course of action may have influenced the framing of the subsequent decision.

### *5.5. Regulatory focus effects across stages of the entrepreneurial process*

One more point illustrates the utility of regulatory focus theory in accounting for entrepreneurial success, in this case, *across* rather than within various stages in the entrepreneurial process. One of the observations made about successful entrepreneurial ventures is that they require “boundless energy” of the people involved in it. Regulatory focus theory may provide some insights into how this boundless energy is supplied.

One of the intriguing differences between people being in a promotion focus versus a prevention focus is the effect of success or failure in their goal pursuits on their subsequent motivational intensity. Idson et al. (2000) found that the motivational intensity of individuals in a promotion focus was maintained or even increased by success (e.g., high-intensity “joy”) but was reduced by failure (e.g., low-intensity “discouragement”). In contrast, the motivational intensity of individuals in a prevention focus was maintained or even increased by failure (e.g., high-intensity “worry”) but was reduced by success (e.g., low-intensity “relaxed”). Similarly, Idson et al. (2000) found that for individuals with a history of attaining their personal goals, success on a current task produced greater motivational intensity than failure for promotion-focused individuals but failure produced greater motivational intensity than success for prevention-focused individuals.

When promotion-focused, then, success energizes and failure de-energizes. When prevention-focused, failure energizes and success de-energizes. This asymmetry between promotion and prevention focus has important implications for motivational maintenance. At any given point in time, people are likely to perceive the feedback about how the venture is faring to be positive to some degree and negative to some degree. Moreover, their perceptions of the relative degree of positive feedback and negative feedback are likely to shift from time to time. Note, however, that the asymmetric effect of success–failure feedback on the energy or activation levels associated with promotion and prevention focus suggests that *regardless* of how well the venture is perceived to be doing, the energy or activation needed to move forward will always be there, *provided that* people involved in the venture bring both a promotion *and* prevention focus to it. That is, when the feedback is predominantly negative, then the energy associated with a prevention focus will be supplied. When the feedback is predominantly positive, then the energy associated with a promotion focus will be supplied. This is not to say that the *same* person in the venture has to provide both a promotion focus and prevention focus. Rather, as long as both foci are represented (even if by different people

involved in the venture), then energy in response to evaluative feedback (either negative or positive) should be present.

There is another way in which promotion and prevention will complement one another. The asymmetrical effects of success and failure for promotion and prevention apply to anticipated success and failure as well as actual success and failure (see Idson et al., 2000). It is an advantage for people in a promotion focus to anticipate success because this positive expectancy will maintain their motivational intensity (high eagerness). Thus, Martin Luther King's speech combines being promotion-focused with the anticipation of success, thereby leading to high motivational intensity. In contrast, it is an advantage for people in a prevention focus to anticipate failure because this negative expectancy will maintain their motivational intensity (high vigilance). Andy Grove's (1996) assertion that "only the paranoid survive" combines being prevention-focused with the anticipation of failure, thereby leading to high motivational intensity. Consistent with this motivational maintenance perspective, Forster et al. (2001b) found that following task success on an initial trial, individuals in a promotion focus greatly increased their expectancy of succeeding on the next trial, whereas prevention-focused individuals did not. Following task failure on an initial trial, prevention-focused individuals greatly increased their expectancy of failing on the next trial whereas promotion-focused individuals did not. There is also evidence that high promotion-pride individuals are optimists with high self-confidence, whereas high prevention-pride individuals are defensive pessimists with more moderate self-confidence.

This difference in the use of expectancies to maintain motivational intensity has important implications for the entrepreneurial process. When individuals in a promotion focus raise their expectancies of success to maintain their eagerness, they can become overeager and underestimate the challenges and difficulties ahead. Because high expectancies of success reduce the motivational intensity of individuals in a prevention focus, they may want to constrain the overly optimistic forecasts of their promotion partners, thereby making the final expectancies more accurate. Similarly, when individuals in a prevention focus lower their expectancies of success to maintain their vigilance, they can become hypervigilant and overestimate the problems of a venture. For the sake of their own motivational maintenance, their promotion partners may want to constrain these doomsday forecasts, again making the final expectancies more accurate. Once again, this reasoning shows how it would be advantageous to have both a promotion and a prevention focus represented in a venture.

## 6. Antecedents of regulatory focus

Given the central premise of this paper—that regulatory focus factors influence the likelihood of entrepreneurial success—it is important to identify the antecedents of people's tendencies to be promotion- and prevention-focused. As stated at the outset, people's regulatory focus orientations depend on both dispositional and situational factors. Consequently, organizations can shape its members' levels of promotion and prevention focus in two (not mutually exclusive) ways. One method is through selection. By choosing people to

be organization members (or by assigning existing members to entrepreneurship-related tasks) on the basis of their regulatory focus orientations, managers may increase the likelihood of entrepreneurial success. The second method is by creating organizational conditions that influence its members' regulatory focus orientations. Elsewhere we have discussed some of the many organizational factors that may contribute to a work climate that employees experience as promotion-focused or prevention-focused (Brockner and Higgins, 2001). For example, managers may influence members' regulatory focus through the use of language and symbols. The more that the rhetoric of authorities focuses on ideals (e.g., continuously reminding employees of the exciting vision that the organization is trying to enact), the more likely will organization members develop a promotion focus. The more that the rhetoric focuses on responsibilities (e.g., such as the mutual ones that employers and employees have to each other), the more likely will organization members adopt a prevention focus. Moreover, reward systems in which the emphasis is on recognizing people for a job well done (and withholding recognition when the job is not well done) is likely to elicit a promotion focus. On the other hand, reward systems in which the focus is on sanctioning people for a job that is not well done, and not sanctioning them (or doing little) when the job is well done should give rise to a prevention focus.

The present analysis, as well as events transpiring subsequent to the Brockner and Higgins (2001) paper, suggests the need for two important extensions to our earlier consideration of the antecedents of regulatory focus. First, there may be a distinction between those factors that influence regulatory focus strength and those that influence regulatory focus pride. Regulatory focus strength refers to the extent to which a particular orientation is salient, meaningful, or important. Regulatory focus pride refers to individuals' subjective history of success in that domain. It is entirely possible for people to assign significance to their self-regulatory efforts in a given domain without necessarily seeing themselves as successful in that domain (e.g., people who are high in promotion strength and low in promotion pride). Similarly, it is possible for people to see themselves as successful in a self-regulatory domain without necessarily assigning much importance to their efforts in that domain (e.g., people who are high in prevention pride and low in prevention strength).

The need to differentiate between strength and pride is suggested by studies that have examined the relationship between regulatory focus and various behaviors pertinent to the entrepreneurial process. Some studies showed that the behavior was influenced by regulatory focus strength. For example, creating new ideas that may ultimately translate into a successful entrepreneurial venture is affected by promotion strength (Crowe and Higgins, 1997; Friedman and Forster, in press; Liberman et al., 1999). Moreover, the ability to overcome obstacles when it comes to implementing creative ideas also depends upon regulatory focus strength, in this instance, prevention strength (Hong, 2001). However, other studies have shown that it is regulatory focus pride that influences people's entrepreneurship-related behaviors. For example, whether people persist with a previously chosen, albeit failing, course of action was shown to depend upon promotion pride (if a better alternative was available) or prevention pride (if the better alternative was not available; Higgins et al., 2000).

Whereas it may be tempting to believe that the antecedents of regulatory focus strength will have much in common with the antecedents of regulatory focus pride, this need not be the case. For example, Higgins (1998) and his colleagues have developed individual difference measures for both constructs. Strength is measured by how quickly people can make regulatory focus judgments; the less time needed to make the judgment, the greater the regulatory focus strength. For example, promotion strength is based on how quickly people describe their ideal self, as well as how quickly they evaluate their actual self in relation to their ideal self. Pride is measured by a self-report scale (Higgins et al., 2000), including such items as, "I feel like I have made progress toward being successful in my life" (promotion pride), and "How often did you obey rules and regulations that were established by your parents?" (prevention pride). Interestingly enough, the correlation between the individual difference measures of strength and pride hovers around zero. In other words, the dispositional antecedents of regulatory focus strength and pride are quite different from one another, and it is entirely possible that the situational antecedents of strength and pride may be distinct as well.

Second, the September 11 terrorist attacks (and their aftermath) suggest that the antecedents of promotion focus and prevention focus may not merely be a function of dispositional and organizational factors. Situational factors external to the organization also need to be considered. The terrorist attacks have had a profound impact on the prevention-focused motives of safety and security, and in so doing have affected nearly every aspect of our day-to-day lives. It is fitting, therefore, for us to conclude by speculating about some possible effects of the heightened state of prevention focus (elicited by the terrorist attacks) on entrepreneurial activity. One scenario, more pessimistic in nature, is that there may be a decline in the *level* of entrepreneurship in those parts of the world most directly affected by the terrorist attacks. A second and more optimistic possibility is that the overall level of entrepreneurship may not decline, but the *nature* of entrepreneurial ventures may change to meet new customer demands.

### *6.1. Level of entrepreneurship*

One of our main conclusions is that entrepreneurial success requires a judicious combination of promotion- and prevention-focused activities. If the terrorist attacks have greatly heightened people's concerns with safety and security, then people may have fewer resources (psychological and tangible) to devote towards promotion-focused pursuits. In a TV interview several weeks after the terrorist attacks, civic leaders in the Middle East and Northern Ireland commented on what it is like to live with concerns about safety and security on an everyday basis. One of them noted that in such an environment people are apt to lose sight of their dreams and aspirations. In other words, high levels of prevention focus may be incompatible with the level of promotion focus needed for entrepreneurial success. If so, there may be less entrepreneurial activity in general (and successful entrepreneurial activity in particular) in the wake of the September 11 attacks.

Of course, this dire prediction can be made for other reasons as well. Macroeconomic arguments would suggest that even before the attacks, the U.S. economy was in decline. In other words, it was not a good time to be thinking about starting a business venture. The

present analysis offers an alternative basis for predicting a downturn in entrepreneurship *in addition to* (not instead of) the macroeconomic argument. It is not simply that economic conditions are unfavorable. If the September 11 attacks have had the psychological effect of reduced promotion focus, then one of the key ingredients needed for entrepreneurial success may be less prevalent.

### *6.2. Nature of entrepreneurship*

An alternative possibility is that the overall level of entrepreneurial activity may not be adversely affected by the terrorist attacks. However, the nature of entrepreneurial ventures may undergo a systematic change, with more of them designed to address customers' concerns with safety and security. In the aftermath of the attacks a number of products have been offered to address people's concerns about future terrorist acts (e.g., including bioterrorism). Of course, one important question is whether these products actually are efficacious. Another important question is whether people's concerns about future terrorist activity will lead to more *generalized* concerns with safety and security, thereby creating heightened demand for existing prevention-focused products and services. For example, it has been reported that handgun sales have risen disproportionately in the months following the September 11 attacks. Will we also see an increase in the sale of home-protection systems? Will automobiles that tout safety or CD players that emphasize reliability become more desirable? Will people buy more insurance policies? Moreover, entrepreneurial ventures into new products and services may also proliferate (some successfully, most not) to satisfy people's possibly heightened concerns with the prevention-focused needs of safety and security.

## 7. Conclusion

In considering the relationship between regulatory focus theory and entrepreneurship, we also hope to stimulate future research drawing on regulatory focus theory to predict and explain successful entrepreneurial activity. Previous research on entrepreneurship has been criticized as being either atheoretical (Low and MacMillan, 1988) or not theoretically focused (Low, 2001). Regulatory focus theory provides a well-developed framework to better understand the various motives, beliefs, and behaviors that ultimately dictate whether a given entrepreneurial venture will be successful. Most of the empirical tests of regulatory focus theory have been conducted under controlled laboratory conditions, with college students serving as participants. Thus, future field-based research is needed to evaluate the external validity of our suggestion that regulatory focus theory will aid both scholars and practitioners in their varied quests to better understand the entrepreneurial processes and its associated outcomes. As suggested elsewhere (Brockner and Higgins, 2001; Brockner et al., 2002), regulatory focus theory may have much to offer to the field of organizational behavior more generally; we look forward to future efforts to integrate the two.

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