



Trapped by the entrepreneurial mindset: Opportunity seeking and escalation of commitment in the Mount Everest disaster



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ABSTRACT

Building on regulatory focus theory and the theory of action phases, we propose that the opportunity seeking of the entrepreneurial mindset is fueled by promotion focus, but transformed from something that liberates individuals from sub-optimal goals into something that traps them in escalation scenarios depending on the stability of environmental conditions faced, the duration of the project, and the specificity of the goal being pursued. Our meta-theoretical process model of escalation of commitment suggests that the decision to persist is set into motion long before individuals engage in the cost-benefit analysis examined in most escalation studies. We argue that, when individuals seek opportunities in a promotion-focused state of goal striving, they are likely to forego contingency planning, which precludes the formation of an exit strategy and leaves them unable to disengage despite an emerging desire to do so. Worse yet, opportunity seeking under the aforementioned conditions delays detection of an action crisis, which increases risk exposure and allows resources, time, and reputation invested to further accumulate, making disengagement that much more difficult once the entrepreneur realizes that a decision is necessary. Using the events of the 1996 Mount Everest disaster made famous by Jon Krakauer's *Into Thin Air*, we illustrate our proposed model and discuss its implications for entrepreneurship, escalation, and self-regulation research.

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Executive summary

Theory has long suggested that entrepreneurs are defined by their ability to identify and exploit opportunities without regard to the resources currently under their control. Often referred to as the entrepreneurial mindset, this ability is believed to liberate entrepreneurs from erroneous preconceptions, such that they can identify and exploit emerging profit opportunities. Anecdotal evidence from research and practice questions these assertions, and suggests instead that entrepreneurs may be particularly susceptible to escalation of commitment. Thus, how is it that individuals revered for identifying and exploiting opportunities regardless of resource constraints could become so committed to a goal that they would throw good money after bad? How does the entrepreneurial mindset – renowned for its adaptability – go from something that liberates individuals from sub-optimal goals to something that traps them in escalation of commitment?

To address these questions, we propose a meta-theoretical process model of entrepreneurial escalation that not only explains the phenomenological effects ascribed to entrepreneurs, but also demonstrates why, under particular conditions, opportunity seeking – thought to be a strength – can become a weakness that makes entrepreneurs especially susceptible to escalation. We illustrate our arguments using the events of the 1996 Everest disaster. Consideration of the events leading up to the Everest

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disaster suggests that there is merit to integrating content- and process-oriented theories of self-regulation to explain the entrepreneurial mindset, escalation of commitment, and the relationship between the two constructs. For process, we draw from the Theory of Action Phases, which delineates between (1) the deliberative mindset, evoked by the task of goal selection and experienced during the motivational phases of action, and (2) the implemental mindset, engendered by the task of goal striving and experienced during the volitional phases of action. For content, we employ Regulatory Focus Theory, which distinguishes between (1) promotion focus, evoked by approach-oriented motives and goals, such as return maximization, and (2) prevention focus, elicited by avoidance-oriented motives and goals, such as risk minimization.

Our analysis suggests that self-regulatory mindsets encourage escalation through both attention and intention. First, by diverting attention away from continued efforts to monitor the environment, the implemental mindset focuses attention on how to complete the goal as opposed to questioning whether it should still be completed given new information regarding changing environmental conditions. Second, promotion focus further exacerbates the problem by allocating attention primarily to information about how to ensure a successful outcome. In doing so, promotion focus delays the realization that one needs to make a decision of whether to disengage, thereby allowing the entrepreneur to continue investing time, energy, and resources into a failing course of action. This encourages escalation by default because, once the entrepreneur realizes that things are not going well, he or she will have to make a decision of whether to abandon goal pursuit, and the costs invested in the project will be all the greater. In contrast, prevention focus discourages escalation by encouraging the entrepreneur to attend to environmental information that suggests that disengagement may be wise. This expedites one's realization that a decision of whether to disengage is necessary and prevents continued investment into a losing course of action. Consequently, costs are relatively smaller than what they would have otherwise been once a decision is made.

The article concludes by examining how the proposed model challenges a number of assumptions in entrepreneurial cognition, escalation of commitment, and self-regulation. In entrepreneurial cognition, for example, the model suggests that the perceived immunity to the odds often observed among entrepreneurs is likely to be a function of goal striving as opposed to some hitherto unidentified but uniquely “entrepreneurial” property. For escalation of commitment, the model highlights how the escalation process is set into motion long before the actual decision to escalate is made, and for self-regulation, the model suggests that regulatory fit might not be as desirable and efficacious under environmental uncertainty as it is under stable conditions because it is too efficient and too automatic when environmental conditions may actually merit deeper consideration. By challenging these and other assumptions, the proposed meta-theoretical model of entrepreneurial escalation explains not only why entrepreneurs are likely to exhibit high levels of persistence, but also why the same conditions (environmental uncertainty) that elicit this persistence are also likely to make entrepreneurs susceptible to the self-regulatory dysfunction known as escalation of commitment.

1. Introduction

Entrepreneurship requires persistence. Too little of it and dreams die prematurely from lack of effort; too much of it and the entrepreneur is left looking like *Moby Dick's* Captain Ahab, willing to sacrifice everything and everyone to catch his white whale. In this article, we examine this ever-present tension of entrepreneurs striving to attain highly desirable goals that can turn into a singular obsession susceptible to escalation of commitment¹ (Brockner, 1992; Staw, 1976, 1997). We propose that the conditions that encourage escalation appear to do so by transforming the entrepreneurial mindset's adaptability - considered by many to be crucial in creating and sustaining a competitive advantage (Hitt et al., 2002; McGrath and MacMillan, 2000) - from a strength into a weakness.

Theory has long suggested that entrepreneurs are defined by their ability to identify and exploit opportunities - superior means-ends frameworks (Kirzner, 1973) - without regard to the resources currently under their control (Stevenson and Jarillo, 1990). This “ability to rapidly sense, act, and mobilize, even under uncertain conditions” is often referred to as the entrepreneurial mindset (Haynie et al., 2010; Ireland et al., 2003: 963–989) and believed to facilitate adaptive efficiency (Moran and Ghoshal, 1999) - replacing sub-optimal goals with superior alternatives made possible by changes in the environment and/or the entrepreneur's understanding of it (Grégoire et al., 2011). Thus, the entrepreneurial mindset is believed to liberate entrepreneurs from erroneous preconceptions such that they can identify and exploit emerging profit opportunities.

Despite such theorizing, anecdotal evidence from the popular press (Collins and Hansen, 2011) and research in entrepreneurship (DeTienne et al., 2008; Holland and Shepherd, 2013) suggests that entrepreneurs may be particularly susceptible to escalation of commitment (Garud and Karnøe, 2001; Gimeno et al., 1997; Hayward et al., 2004; Whyte, 1986). Escalation of commitment refers to “the proclivity for decision makers to maintain commitment to a losing course of action, even in the face of quite negative news” (Sleesman et al., 2012: 541). It manifests as a behavioral pattern of “throwing good money (or resources more generally) after bad” (Sleesman et al., 2012: 541). Although escalation can result in both positive and negative consequences (Kuratko et al., 1997; Luthans et al., 2007; Seligman and Csikzentmihalyi, 2000), we focus on the conditions under which the opportunity seeking of the entrepreneurial mindset paradoxically results in escalation of a goal rendered sub-optimal by environmental change. That is, goal pursuit continues, despite negative feedback about the focal goal's feasibility or desirability or positive feedback about the feasibility or desirability of alternative goals indicating that goal replacement may be wise.

¹ In this article, the terms escalation of commitment and undue persistence are used interchangeably as is customary in the social psychology, cognitive psychology, and management literatures from which we draw. Despite suggestions to the contrary, we have been unable to locate a substantive distinction between the two within these or other literatures.

How is it that individuals revered for identifying and exploiting superior means-ends frameworks regardless of resource constraints could become so committed to a goal that they would throw good money after bad? How does the entrepreneurial mindset – renowned for its adaptability – go from something that liberates individuals from sub-optimal goals to something that traps them in escalation of commitment?

To address these questions, we draw from self-regulation research to specify the conditions under which the entrepreneurial mindset is susceptible to escalation of commitment. Self-regulation refers to “a systematic process of human behavior that involves setting personal goals and steering behavior toward the achievement of established goals” (Zeidner et al., 2000: 751). We integrate process and content approaches to self-regulation to explain the entrepreneurial mindset, escalation of commitment, and the relationship between the two constructs. For process, we draw from the Theory of Action Phases (TAP) (Gollwitzer, 1990, 1996, 1999), which delineates between (1) the deliberative mindset, evoked by the task of goal selection and experienced during the motivational phases of action, and (2) the implemental mindset, engendered by the task of goal striving and experienced during the volitional phases of action. For content, we employ Regulatory Focus Theory (RFT) (Higgins, 1997), which distinguishes between (1) promotion focus, evoked by approach-oriented motives and goals, such as return maximization, and (2) prevention focus, elicited by avoidance-oriented motives and goals, such as risk minimization. We propose that behavioral progression through entrepreneurial action can evoke any one, but not necessarily all, of four different mindsets, each of which yields different phenomenological effects that vary in the degree to which they make an entrepreneur susceptible to escalation, depending on the stability of environmental conditions faced, the duration of the project, and the specificity of the goal being pursued.

2. Challenging assumptions through problematization

Through theoretical integration, we reveal new research questions using a problematization methodology consistent with Alvesson and Sandberg (2011). Problematization encourages “consensus challenging” (McMullen and Shepherd, 2006b) as opposed to “gap spotting” research by seeking “to know how and to what extent it might be possible to think differently, instead of what is already known” (Foucault, 1985: 9). The purpose of problematization is not to evaluate how well some constructs or relationships between constructs represent a particular subject matter, but instead to illuminate and challenge the necessary presuppositions researchers make to develop specific theories about their subject matter (Alvesson and Sandberg, 2011). Thus, “problematization research typically involves a narrow literature coverage and in-depth readings of key texts, with the specific aim of identifying and challenging the assumptions underlying the specific literature domain targeted” (256). Consistent with this aim, we limit our theorizing of the entrepreneurial mindset and escalation of commitment to studies that employ a self-regulatory process approach to goal pursuit under changing environmental conditions in order to validate a number of alternative assumptions. We then engage in “dialectical interrogation” of three overlapping fields to reveal new directions for theory building by identifying, articulating, and challenging a number of assumptions.

Alvesson and Sandberg (2011: 256) identify six methodological principles to problematize assumptions through dialectical interrogation: “(1) identifying a domain of literature, (2) identifying and articulating assumptions underlying this domain, (3) evaluating them, (4) developing an alternative assumption ground, (5) considering it in relation to its audience, and (6) evaluating the alternative assumption ground.” We begin by challenging two assumptions held by entrepreneurial cognition researchers: (1) that the phenomenological effects (e.g., immunity to the odds) which characterize entrepreneurial cognition reflect some unobserved cognitive difference between entrepreneurs and the general population and (2) that the entrepreneurial mindset’s promotion of opportunity seeking precludes the need for contingency planning while simultaneously reducing entrepreneurs’ susceptibility to escalation of commitment. The first represents an in-house assumption, which exists “within a particular school of thought in the sense that [it is] shared and accepted as unproblematic by its advocates” (Alvesson and Sandberg, 2011: 254), whereas the second is an ideological assumption which refers to “various political-, moral-, and gender-related assumptions held about the subject matter (p. 255). For example, Grégoire et al. (2011) point out that differences in entrepreneurial cognition are regularly interpreted as causes of entrepreneurial action, and even when they are seen as effects of the process, they are typically ascribed to something uniquely entrepreneurial about the task. Instead, we propose that phenomenological effects of entrepreneurial cognition may be better attributed to the fact that entrepreneurs are deeply engrossed in something as mundane and ubiquitous as goal striving. Acknowledgement of this possibility reveals that the entrepreneurial mindset experienced during goal striving may be qualitatively different from the entrepreneurial mindset experienced during goal setting, such that the opportunity seeking it promotes can trap instead of liberate entrepreneurs in the suboptimal frames that encourage escalation of commitment. Because the entrepreneurial mindset is regularly assumed to be a universally “good” thing, the potential for such negative outcomes have remained unexamined and unexplored.

Thus, we contribute to the entrepreneurial cognition literature by using (a) situational promotion focus from RFT to explain the adaptability of the entrepreneurial mindset, (b) the implemental mindset from TAP to explain a number of phenomenological effects (e.g., immunity to the odds) commonly observed among - and thought to be unique to - entrepreneurs, and (c) the combination of the two to explain how, when, and why the adaptability of the entrepreneurial mindset can unexpectedly go from liberator to captor. In doing so, we extend McMullen and Shepherd’s (2006a) process theory of entrepreneurial action, which concludes with an individual’s decision to engage in entrepreneurial action. We show that the opportunity seeking of promotion focus undergoes a transformation before and after this decision to commit is made such that the meaning of the opportunity construct changes from new superior goals capable of advancing motives (as in McMullen & Shepherd’s 2006 model) to situations that advance goals (as discussed in McMullen and Dimov, 2013), leaving the entrepreneur adaptable within a goal but not across them.

By explaining the entrepreneurial mindset and its relationship with escalation in terms of distinct combinations of self-regulatory mindsets, we develop an alternative assumption ground that challenges an assumption held by researchers of escalation of commitment as well. *Alvesson and Sandberg (2011: 258)* note, “Assumptions to be targeted for challenge must be considered in relation to the groups who hold them and the general intellectual, social, and political situation of a research community. It is a complex issue because the ‘audience’ typically is not a unitary group – primarily because there are often not one but multiple audiences, and the assumptions held by one audience may differ from assumptions held by another audience. It is also likely that one particular audience consists of several subgroups, which makes it even harder to specify the potentially relevant audiences.” We contribute to the subgroup of scholars who study escalation of commitment by offering a meta-theoretical process model that conceives of escalation as an event that unfolds over time, instead of the discrete moment of decision, which has been studied by researchers to date (*Arkes and Blumer, 1985; Conlon and Garland, 1993; Slesman et al., 2012; Soman, 2001; Staw, 1976*) and is rooted in a paradigmatic assumption that is counter to process research (*Gupta et al., 2016; McMullen and Dimov, 2013*). Specifically, we explain how and why the timing of the decision to persist or abandon a goal matters, and how and why both the timing and outcome of the decision are likely to be influenced by the self-regulatory mindsets that one experiences while opportunity seeking. We propose that the groundwork for escalation is often established long before the actual decision to escalate is made and analyze pursuit of highly desired but challenging goals sought under conditions of an uncertain and subsequently deteriorating environment. Such conditions are considered so commonplace in entrepreneurship that the “entrepreneurial mindset” has become synonymous with the ability to adapt successfully to them.

Next, we hold the mirror up to self regulation – the lens we use to challenge assumptions in entrepreneurial cognition and escalation of commitment – to call into question two of its ideological assumptions. Namely, both TAP’s “implementation intentions” and RFT’s “regulatory fit” – key theoretical mechanisms of self-regulation research – are often considered desirable because they facilitate efficient thought and action and feelings of value during goal striving. But, our analysis explains how and why both can obstruct effective decision making under environmental uncertainty, especially if the environment deteriorates.

Finally, when evaluating the alternative assumption ground, *Alvesson and Sandberg (2011)* suggest, “it is important to work with metaphors that are appealing and concepts and formulations that are challenging and provocative.” Accordingly, we draw on a mountaineering metaphor commonly applied to entrepreneurship (see *Valliere and O’Reilly (2007)*) to abductively elaborate on our theoretical framework (*Lee et al., 1999; Shepherd and Sutcliffe, 2011*). Commercial expeditions exhibit many of the quintessential entrepreneurial qualities. They are risky, novel along many dimensions, and generally tough to routinize, making them difficult contexts in which to self-regulate and therefore ideal contexts for the study of self-regulation (*Eisenhardt and Graebner, 2007; Siggelkow, 2007; Weick, 2007*). Using the events of the 1996 Mount Everest disaster made famous by Jon Krakauer’s bestseller *Into Thin Air*, an auto-biographical account of the deadliest day in Everest history, the 1998 IMAX film *Everest*, and the 2015 blockbuster film *Everest*, we illustrate our meta-theoretical process model of entrepreneurial escalation and contextualize our arguments. It is our hope that, by contrasting existing theory with observed events (*Greenwood and Suddaby, 2006: 31; Lepoutre and Valente, 2012: 288*), we might use the disaster to foster “a logic of discovery rather than only a logic of validation” (*Van Maanen, Sorenson, & Mitchell, 2007: 1146*), as others have done in leadership (*Useem, 2001*), teamwork (*Kayes, 2004; Tempest et al., 2007*), and business ethics (*Kayes, 2006*).

The remainder of the article proceeds as follows. First, we introduce the events of the 1996 Mount Everest disaster. Second, we describe the four mindsets that result from integrating TAP with RFT. Third, we return to the events of Everest, which we use as a running example throughout the paper to illustrate our process model of entrepreneurial escalation. Fourth, we examine the two mindsets experienced during goal striving as entrepreneurs undergo the three phases of action often described by TAP and the escalation of commitment literature: contingency planning, environmental monitoring and risk assessment, and cost-benefit analysis. Finally, we discuss the implications of our meta-theoretical process model of entrepreneurial escalation for practice as well as research in entrepreneurial cognition, escalation of commitment, and self-regulation.

3. Escalation on Everest

Climbing today is not only mainstream, it is business, and with that comes the risking tendency for climbing decisions – objectives as well as tactical decisions on a climb – to be business decisions as well. The up side to that is that now climbers – like skiers and sailors before them – can make a living from what they love to do. The down side can be seen in increased crowds at the crags, the proliferation of new regulations aimed at climbers, and today and forevermore, the ‘circus’ at Everest Base Camp (*Christian Beckwith, 1997: “Preface”*).

The death of two veteran guides and three clients in a blizzard atop Mount Everest in May 1996 became one of the most publicized mountaineering disasters in history. Five of the thirty-three climbers who ascended Mount Everest from its south side on May 10, 1996, died in the unexpected blizzard. Adventure Consultants, the market leader offering commercial expeditions up Everest, suffered heavy casualties from the storm. Rob Hall (the founder, owner, and operator of Adventure Consultants), Andy Harris (one of Hall’s guides), and two of Hall’s clients, Doug Hansen and Yasuko Namba, lost their lives, while two of the survivors from Hall’s team, Beck Weathers and Makalu Gau, suffered extensive frostbite and the eventual loss of limbs. Although Mountain Madness, a rival enterprise and new market entrant, fared slightly better than Adventure Consultants, its founder, owner, and

operator, Scott Fischer, also perished in the storm while three of his clients (Sandy Hill Pittman, Charlotte Fox, and Tim Madsen) narrowly escaped death.

In their pursuit of the summit both Hall and Fischer violated their turnaround times, which are optimal stopping points set to ensure that climbers have enough time to return to a point of safety before significant changes in the environment such as darkness or severe weather can occur. As Martin Adams, a Mountain Madness client, points out, “People mistakenly think it was the storm that caused the problem. It wasn’t the storm that caused the problem; it was the time” (Boukreev and DeWalt, 1997: 261). “At Hall’s suggestion, the two guides had agreed that ‘anybody who wasn’t within spitting distance of the summit by two P.M. had to turn around and go down’. But, adds Mountain Madness guide Neal Beidleman, ‘for whatever reason, it didn’t happen’” (Krakauer, 1997: 261).

Given Hall’s conservative, exceedingly methodical nature, many of his colleagues have expressed puzzlement at this uncharacteristic lapse of judgment (Krakauer, 1997: 273). Why, if the weather had begun to deteriorate, had climbers on the upper mountain not heeded the signs? Why did veteran Himalayan guides keep moving upward, ushering a gaggle of relatively inexperienced amateurs – each of whom had paid as much as \$65,000 to be taken safely up Everest – into an apparent death trap (Krakauer, 1997: 5)?

Immediately after the deaths on Mount Everest in 1996, close to a hundred reporters began to research the tragedy (Bromet, 1999). This media frenzy largely validated the first-hand accounts as communicated in five books by people involved in the incident: Krakauer’s (1997) *Into Thin Air*, Weathers and Michaud’s (2000) *Left for Dead*, Boukreev and DeWalt’s (1997) *The Climb*, Gammelgaard’s (1999) *Climbing High*, and Breashears’s (2000) *High Exposure*. Krakauer and Weathers were clients of Hall’s Adventure Consultants, Boukreev was the lead guide for Fischer’s Mountain Madness and Gammelgaard was one of his clients. Finally, Breashears led the IMAX team that played a significant role in the rescue of many of the survivors. See Table 1 for expedition members.

Each author sought to achieve triangulation of the disaster by using multiple sources of Yin’s (1994: 79–90) six forms of evidence for case study research: documents (i.e., letters and personal journals), archival records (i.e., on-line expedition logs, radio logs, and taped debriefings), lengthy interviews, direct observation, participant-observation, and physical artifacts (i.e., body locations, oxygen canisters, etc.). For this reason, each story alone represents a reasonably reliable source of data triangulation (Yin, 1994: 91–94); nevertheless, for the sake of caution, reliability was assumed only when perspective triangulation was also achieved, as evidenced by convergence of personal accounts (Patton, 1987; Stake, 2000: 443). Therefore, consistent with Weick’s (1993) analysis of the Mann Gulch fire, abundant sources of evidence have been used to reconstruct the Everest events (Eisenhardt and Graebner, 2007) to determine whether Rob Hall’s lapse of judgment on Everest – no matter how uncharacteristic of him personally – may have been characteristic of the circumstances he faced in 1996 and that entrepreneurs in general confront on a fairly regular basis.

Although a commercially-guided, high-altitude, mountain-climbing expedition may not be the archetypical business that comes to mind when one thinks “entrepreneurship,” Rob Hall and Scott Fischer were entrepreneurs in just about every sense of the word. Each man was the founder, the owner, and the manager of a new venture (Gartner, 1990; Katz et al., 1993; Zahra, 1993). Because of the nature of their actions during the period of interest, Hall and Fischer exemplified the economic conception of the entrepreneurial function as well. For instance, Fischer was entering a new market (Lumpkin and Dess, 1996; Schumpeter, 1934), while Hall was responding to competition through innovative attempts to improve his product (Baumol, 2002; Schumpeter, 1942). Both had growth intentions (Penrose, 1959) and were seeking control of the market in a newly emerging industry (Déjean et al., 2004). Finally, climbing Everest is not for the faint of heart. It requires the adventurous spirit (Schumpeter, 1934) and risk tolerance (Casson, 2002) often ascribed to the entrepreneurial personality. Thus, the Everest disaster involved entrepreneurial individuals in an entrepreneurial occupation attempting to fulfill the entrepreneurial function through entrepreneurial ventures, but failing to succeed in their endeavors despite, in Hall’s case, having succeeded in the past. Indeed, the 1996 Everest disaster reflects an extreme version of a classic self-regulatory dilemma that is familiar to most entrepreneurs: whether to persist or disengage from goal pursuit under adversity (Markman et al., 2005).

4. A meta-theoretical process model of entrepreneurial escalation

4.1. Deliberative versus implemental mindsets

Despite Klinger’s (1975, 1977) pioneering work suggesting that goal disengagement is a process that begins long before individuals, like Rob Hall and Scott Fischer, make the final decision to abandon their goal, little is known about how the goal disengagement process begins, especially for personal goals (Brandstätter et al., 2013). In response to this void of research, Brandstätter and Schüler (2013) recently introduced the notion of an “action crisis” to refer to the phase of goal striving in which “setbacks have accumulated and failures in making progress towards one’s goal are becoming highly visible” (544). This action crisis comes after one has already invested heavily in goal pursuit and has begun to encounter recurring difficulties such that a decision dilemma emerges of whether to persist or disengage (cf., Carver and Scheier, 2005). Through a number of experiments, Brandstätter and Schüler (2013) find that this phase is accompanied by a specific type of cognitive representation, namely cost-benefit thinking, that is closely akin to the deliberative mindset described by TAP (Gollwitzer, 1990, 2012; Heckhausen and Gollwitzer, 1987).

Table 1
Expedition team members^a.

Expedition	Member	Role	Nationality	
Adventure consultants	Rob Hall	Founder, Owner, Leader and Head Guide	New Zealand	
	Mike Groom	Guide	Australia	
	Andy "Harold" Harris	Guide	New Zealand	
	Helen Wilton	Base Camp Manager	New Zealand	
	Dr. Caroline Mackenzie	Base Camp Doctor	New Zealand	
	Ang Tshering Sherpa	Base Camp Sirdar	Nepal	
	Ang Dorje Sherpa	Climbing Sirdar	Nepal	
	Lhakpa Chhiri Sherpa	Climbing Sherpa	Nepal	
	Kami Sherpa	Climbing Sherpa	Nepal	
	Tenzing Sherpa	Climbing Sherpa	Nepal	
	Arita Sherpa	Climbing Sherpa	Nepal	
	Ngawang Norbu Sherpa	Climbing Sherpa	Nepal	
	Chuldum Sherpa	Climbing Sherpa	Nepal	
	Chhongba Sherpa	Base Camp Cook	Nepal	
	Pemba Sherpa	Base Camp Sherpa	Nepal	
	Tendi Sherpa	Cook Boy	Nepal	
	Doug Hansen	Client	USA	
	Dr. Seaborn Beck Weathers ^b	Client	USA	
	Yasuko Namba	Client	Japan	
	Dr. Stuart Hutchison	Client	Canada	
	Frank Fischbeck	Client	Hong Kong	
	Lou Kasischke	Client	USA	
	Dr. John Taske	Client	Australia	
	Jon Krakauer ^b	Client and Journalist	USA	
	Susan Allen	Trekker	Australia	
	Nancy Hutchison	Trekker	Canada	
	Mountain madness	Scott Fischer	Founder, Owner, Leader and Head Guide	USA
		Anatoli Boukreev ^b	Guide	Russia
		Neal Beidleman	Guide	USA
		Dr. Ingrid Hunt	Base Camp Manager, Team Doctor	USA
		Lopsang Jangbu Sherpa	Climbing Sirdar	Nepal
		Ngima Kale Sherpa	Base Camp Sirdar	Nepal
		Ngawang Topche Sherpa	Climbing Sherpa	Nepal
Tashi Tshering Sherpa		Climbing Sherpa	Nepal	
Ngawang Dorje Sherpa		Climbing Sherpa	Nepal	
Ngawang Sya Kya Sherpa		Climbing Sherpa	Nepal	
Ngawang Tendi Sherpa		Climbing Sherpa	Nepal	
Tendi Sherpa		Climbing Sherpa	Nepal	
"Big" Pemba Sherpa		Climbing Sherpa	Nepal	
Jeta Sherpa		Base Camp Sherpa	Nepal	
Pemba Sherpa		Base Camp Cook Boy	Nepal	
Sandy Hill Pittman		Client and Journalist	USA	
Charlotte Fox		Client	USA	
Tim Madsen		Client	USA	
Pete Schoening		Client	USA	
Klev Schoening		Client	USA	
Lene Gammelgaard ^b		Client	Denmark	
Martin Adams		Client	USA	
Dr. Dale Kruse		Client	USA	
MacGillivray Freeman IMAX/IWERKS	Jane Bromet	Journalist	USA	
	David Breashears ^b	Leader and Film Director	USA	
	Jamling Norgay Sherpa	Deputy Leader and Film Talent	India	
	Ed Viesturs	Climber and Film Talent	USA	
	Araceli Segarra	Climber and Film Talent	Spain	
	Sumiyo Tsuzuki	Climber and Film Talent	Japan	
	Robert Schauer	Climber and Cinematographer	Austria	
	Paula Barton Viesturs	Base Camp Manager	USA	
	Audrey Salkeld	Journalist	U.K.	
	Liz Cohen	Film Production Manager	USA	
	Liesl Clark	Film Producer and Writer	USA	

^a Constructed based upon Krakauer (1997:xix–xxii) and Gillman and Gillman (2000:226–227).

^b Written account.

TAP (Gollwitzer, 1996, 1999) delineates between (1) the deliberative mindset, which is evoked by the task of goal selection and experienced during the motivational phases of action, and (2) the implemental mindset, which is evoked by the task of goal striving and experienced during the volitional phases of action. The deliberation of goal setting and the implementation of goal striving are delineated by a decision to commit to a particular course of action. Distinct mindsets are then associated with

the information processing that occurs before and after this decision is made (Gollwitzer, 1990; Heckhausen and Gollwitzer, 1987).

In the pre-decisional phase, the deliberative mindset reigns supreme, and individuals experience an open-minded, relatively even-handed, and accurate appraisal of evidence as they consider the expectancy-value of various action goals. Accordingly, empirical research has demonstrated that the deliberative mindset is characterized by (1) impartial and objective analysis of information about the feasibility and desirability of competing action goals (Beckmann and Gollwitzer, 1987; Gollwitzer and Heckhausen, 1987, Study 2; Gollwitzer and Kinney, 1989; Taylor and Gollwitzer, 1995, Study 3), (2) effective processing of information (Gollwitzer et al., 1990; Heckhausen and Gollwitzer, 1987, Study 1; Schmalt, 1990), and (3) open-mindedness toward all kinds of available information (Gollwitzer and Heckhausen, 1987, Study 1; Heckhausen and Gollwitzer, 1987, Study 2).

Once a decision is made regarding which goal to pursue, individuals enter the post-decisional phase governed by the implemental mindset in which information processing is characterized by a positive appraisal of the goal and a comparatively closed-minded focus on implementation issues, such as when, where, and how to act on one's goal. Accordingly, empirical evidence finds that the implemental mindset leads to (1) an overestimation of the desirability of the chosen goal (Beckmann and Gollwitzer, 1987; Taylor and Gollwitzer, 1995, Study 3), (2) illusory, positive perception of the goal's feasibility (Gollwitzer and Kinney, 1989; Taylor and Gollwitzer, 1995, Studies 1 and 2), (3) unduly optimistic predictions about the future (Gagné and Lydon, 2001), (4) cognitive tuning toward information that relates to the implementation of the chosen goal (Gollwitzer et al., 1990; Heckhausen and Gollwitzer, 1987, Study 1; Schmalt, 1990), and (5) reduced receptiveness toward incoming information (Gollwitzer and Heckhausen, 1987, Study 1; Heckhausen and Gollwitzer, 1987, Study 2). Therefore, in contrast to the deliberative mindset, which is primarily concerned with the question of *whether* to engage in a particular course of action, the implemental mindset is concerned with *how* to implement a goal successfully once it is selected. Attention is allocated toward the tasks of doing and away from the tasks of deliberating what to do and evaluating what one has done (Gollwitzer, 1996).

The phenomenological effects attributed to the implemental mindset are not exclusive to TAP. Similar effects have long been observed by the cognitive dissonance literature (e.g., Akerlof and Dickens, 1982; Festinger, 1962). Indeed, it is not our contention that changes in the phenomenological effects experienced before and after the decision to commit to a goal can be explained only by the mindsets of TAP. Instead, we merely wish to demonstrate empirically as well as theoretically that information processing is punctuated by the decision to commit to a goal. Built upon this premise, TAP offers a significant body of empirical research demonstrating that information processing is detached and impartial prior to goal commitment, but self-serving and partial after it. Therefore, even though we have chosen to infuse our meta-theoretical process model with the mindsets of TAP, the critical assumption is that information processing changes as a result of goal commitment. To the extent that this assumption can be validated with evidence from alternative theories, such as cognitive dissonance, theoretical robustness of our model increases. Thus, our meta-theoretical process model is neither dependent upon, nor exclusive to, TAP. Nonetheless, TAP is a self-regulatory theory of process that has been fruitfully employed by numerous scholars, and thus offers a logical starting point to justify a key assumption of our meta-theoretical process model of entrepreneurial escalation.

Therefore, we begin by integrating Brandstätter and Schüler's (2013) notion of action crisis into Gollwitzer's (1990, 2012) mindset theory of action phases (see Fig. 1). Because we are interested in escalation of commitment, we focus only on the post-decisional phase of Gollwitzer's model, which occurs after commitment has been made to a goal intention such that some degree of commitment exists for the entrepreneur to escalate. The post-decisional phase encompasses implementation-related concerns such as contingency planning, risk assessment, and cost-benefit analysis. During contingency planning, strategies are formulated and if-then contingency plans are made. In the risk assessment phase, environmental feedback and risk are managed as decision makers go about implementing the goal in an uncertain environment. Finally, during cost-benefit analysis individuals decide whether the outcome remains feasible and/or desirable given detection of significant changes in the environment.

Most empirical research to date has employed approaches that preclude the effects of events, such as contingency planning or environmental monitoring from being incorporated into an explanation of escalation (Sleesman et al., 2012). In contrast, we posit that the timing of an escalation decision matters, and that this timing is largely dependent upon the information processing and decision making that transpires during the contingency planning and risk assessment phases that precede an action crisis. Thus, to move beyond a discrete moment of forced decision in which increases in costs (be they economic, social, or psychological) encourage escalation, a process explanation is needed which suggests that *whether* a decision to disengage or persist is made (cost-benefit analysis) depends on *when* that decision is made – i.e., how early a threat is detected – (risk assessment), which in turn depends on *how* that decision is made – by predetermined rules or in situ – (contingency planning), which ultimately depends on *what* information is cognitively accessible to the decision maker (the mindsets employed to manage environmental uncertainty).

To explain the origin of those mindsets, we must introduce one final but necessary ingredient into our explanation of escalation, namely the content of the mindsets experienced. It is this content distinction, we contend, that affects individuals in the midst of goal striving to persist both directly by influencing cost-benefit analysis and indirectly by influencing whether contingency planning occurs, as well as if and when an action crisis is experienced by the entrepreneur.

4.2. Promotion versus prevention focus

Consistent with a host of entrepreneurship scholars (Brockner et al., 2004; Bryant and Dunford, 2008; Hmieleski and Baron, 2008; Wu et al., 2008), we employ Regulatory Focus Theory. RFT posits that, at any given point in time, individuals may engage in self-regulation with a promotion focus or a prevention focus (Baron, 2002; Brockner et al., 2004). When experiencing

A Meta-theoretical Process Model of Entrepreneurial Escalation

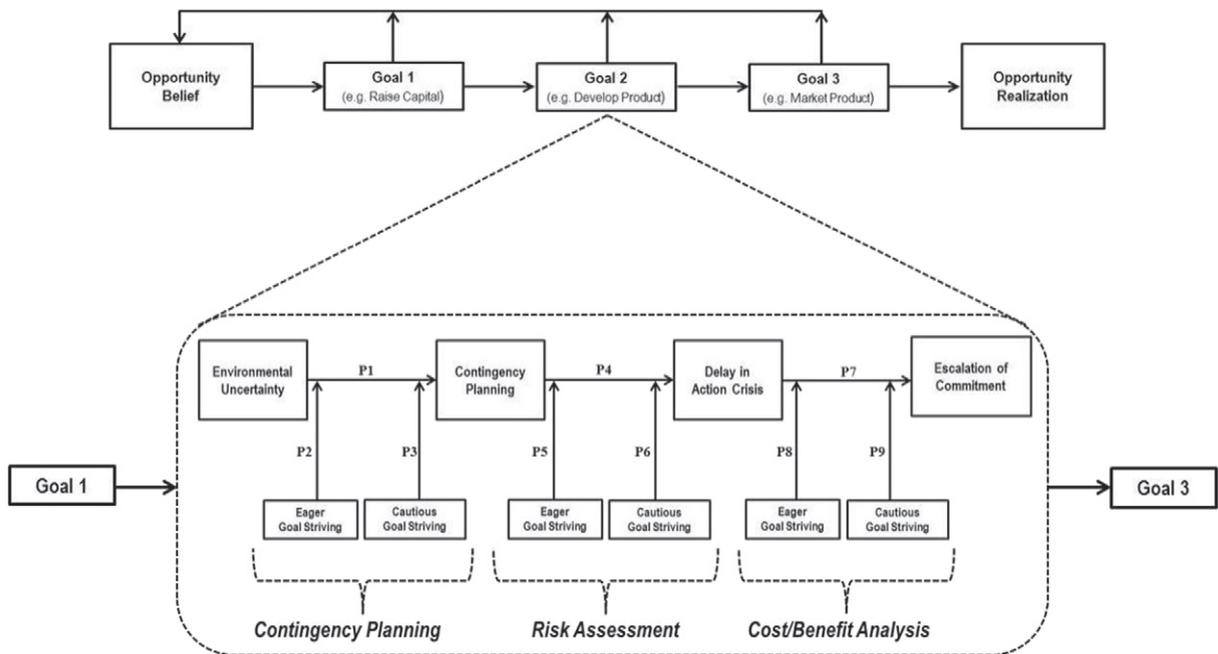


Fig. 1. A meta-theoretical process model of entrepreneurial escalation.

promotion focus, elicited by gain scenarios, nurturance needs, or ideals (Crowe and Higgins, 1997; Friedman and Förster, 2001; Liberman et al., 1999), attention is predominantly allocated to goals such as maximizing the “return” in a risk-return dilemma (McMullen et al., 2009). Individuals experiencing promotion focus tend (1) to employ strategic means that seek to ensure the attainment of hits (true-positives) and seek to ensure against misses (false-negatives) (Crowe and Higgins, 1997), (2) to notice and recall information relevant to success (Higgins and Tykocinski, 1992), (3) to attend to such emotions as happiness and dejection that are related to the successful versus unsuccessful achievement of positive outcomes (Higgins et al., 1997), and (4) to adopt interpersonal strategies oriented toward promoting desired outcomes (Higgins et al., 1994).

In contrast, prevention focus (elicited by loss scenarios, security needs, or a sense of duty) emphasizes goals, such as minimizing the “risk” of a risk-return dilemma (McMullen et al., 2009). Individuals experiencing prevention focus tend (1) to employ strategic means that seek to ensure correct rejections (true-negatives) and to ensure against false alarms (false-positives) (Crowe and Higgins, 1997), (2) to notice and recall information related to the avoidance of failure (Higgins and Tykocinski, 1992), (3) to be more sensitive to emotions such as quiescence and anxiety that are related to the successful or unsuccessful avoidance of negative outcomes (Higgins et al., 1997), and (4) to adopt interpersonal strategies oriented toward preventing negative outcomes (Higgins et al., 1994).

Promotion focus and prevention focus are both necessary for successful entrepreneurship, but for different reasons (Brockner et al., 2004). Promotion focus fuels the potential for action by identifying opportunities to advance motives and goals, whereas prevention focus encourages evaluation of whether this action is prudent. For example, promotion focus engenders an “action bias” (McMullen and Shepherd, 2002) in which individuals making decisions under uncertainty exhibit a greater tolerance for errors of commission – i.e., “false positives” or “false alarms” – in the hope of realizing true positives – i.e., “hits” or “opportunities” (Baron, 2004; McMullen and Shepherd, 2003). However, not all positives are true positives; therefore, due diligence and caution are needed to sift the wheat from the chaff. Such prudence is more consistent with prevention focus. Thus, we do not argue that all entrepreneurs are promotion-focused by personal disposition, nor do we claim that successful entrepreneurship is an exclusively promotion-focused situational state. Instead, it is our contention that the entrepreneurial mindset is at work only when entrepreneurs are engaged in opportunity seeking and thus experiencing promotion focus. This promotion-focused entrepreneurial mindset can yield successful entrepreneurial action but it can also encourage escalation of commitment under certain conditions.

RFT is one of many self-regulatory theories by which the aforementioned content distinction could be made. For example, Kruglanski et al. (2000) offer an alternative self-regulation theory with which our meta-theoretical process model could be infused. It employs notions of assessment and locomotion. Assessment involves the comparative aspect of self-regulation such as when individuals appraise performance or critically evaluate alternative goals or means to decide which to pursue, whereas locomotion addresses movement from state to state and governs commitment of the psychological resources employed to initiate and maintain goal pursuit without undue distractions or delays (Kruglanski et al., 2000). Thus, our framework is not exclusive to RFT; for other possibilities we refer readers to various handbooks on self-regulation (e.g., Kruglanski and Higgins, 2007; Vohs and Baumeister, 2013). However, RFT offers sufficient empirical evidence to substantiate its claims while going beyond the hedonic principle (people are motivated to approach pleasure and to avoid pain) to examine the mindsets that people use to realize strategic ends (e.g., Higgins, 1997).

4.3. Boundary conditions of the model

Before examining how process and content mindsets influence entrepreneurial escalation, we wish to make explicit the boundary conditions of our model. As individuals move from the goal setting to the goal striving of TAP, their more ambiguous motives manifest in the form of specific goals. This transition from goal setting to goal striving represents a progression from ambiguity to specificity as distal motives become more proximal, such that the entrepreneurial journey consists of a series of more specific goals important for opportunity realization (McMullen, 2015). As opposed to the ambiguous motives discussed by early entrepreneurship researchers, such as the need for achievement (McClelland, 1967), manifestations of the will to power – e.g., empire building, proving oneself superior to others, etc. (Schumpeter, 1934), or the effectuation of ends using available means (Sarvasvathy, 2001), our model (Fig. 1) examines one of a host of specific goals concerning the completion of a concrete project (Casson and Wadeson, 2007). Together, these goals comprise a non-linear progression through entrepreneurial action known as the entrepreneurial journey (McMullen, 2015; McMullen and Dimov, 2013; Shepherd et al., 2010). Thus, our model (the enlarged part of Fig. 1) emphasizes a goal striving stage of the TAP in which some degree of commitment to a specific goal has been made, such that escalation of this commitment is possible.

In addition to specificity, we assume that the goal presents a “behavioral conflict scenario” in which its desirability is high but its perceived feasibility is low (Brandstätter and Frank, 2002). The goal is highly desirable because of its intrinsic and instrumental value, advancing the entrepreneur's distal motives in a proximal way that interests the entrepreneur (Gagné and Deci, 2005). However, the goal is also perceived to be low in feasibility for a number of reasons. It is considered to be personally challenging, testing the entrepreneur's ability and resilience, such that it becomes ego relevant to the extent that others attribute its successful completion to the entrepreneur's skill and/or grit (Baumeister, 1996; Bryant, 2007; Duckworth et al., 2007). Despite such attribution, however, the outcome of the goal remains uncertain because of its contingency on the complicit behavior of others (McMullen, 2010) and the stability of environmental conditions over time, neither of which is fully controlled by the entrepreneur. Thus, we assume that the feasibility of goal attainment, no matter how desirable, is uncertain due to factors both within and outside of the entrepreneur's control (Baron, 1998).²

In addition to these TAP-related assumptions, we also make a number of RFT-related assumptions about the goal being pursued. First, we assume that the goal is predominantly approach-oriented, and therefore more congruent with promotion focus, such that the entrepreneur is seeking to identify opportunities that facilitate return maximization or attainment of some desired outcome as opposed to avoidance-oriented in which the entrepreneur would focus on preventing undesired outcomes by seeking to detect threats that might increase one's exposure to risk or potential for loss (e.g., McMullen et al., 2009). Second, we assume that environmental uncertainty is high enough to evoke this promotion focus situationally such that states rather than traits regulate thought and action. RFT posits dispositional explanations of promotion and prevention focus as well (e.g. Hmieleski and Baron, 2008), but dispositional effects are believed to exert their greatest influence under stable environmental conditions,³ whereas state-based explanations gain predictive validity under conditions of environmental uncertainty (Wu et al., 2008) like those often confronted by entrepreneurs (Ireland et al., 2003; Knight, 1921; McMullen and Shepherd, 2006a, 2006b). Given our focus on escalation and our assumption that one must have already committed to a goal in order to escalate this commitment, we now examine the interactions between the implemental mindset evoked by goal specificity and either promotion or prevention focus, paying particularly close attention to the eager goal pursuit or cautious goal pursuit likely to be experienced by decision makers during goal striving.

4.4. Mindset interactions of process and content

We propose that the process (deliberative and implemental) and content (promotion and prevention) distinctions described above interact to produce four distinct mindsets, which are shown in Fig. 2. These mindsets yield different phenomenological effects that influence a decision maker's susceptibility to escalation differently, given the environmental conditions and assumptions identified above.

The eager goal striving pictured in Quadrant 1 of Fig. 2 is the result of the interaction between promotion focus and an implemental mindset. In pursuit of a desired end, promotion focus elicits a state of eagerness that limits the individual's attention to certain forms of information (“hit” or “misses”) at the expense of attending to other forms of information (“correct rejections” or “false alarms”). Additionally, by noticing and recalling information that is relevant to success, promotion focus evokes an optimistic view of uncertainty (Higgins and Tykocinski, 1992). Consequently, planning involves best-case scenarios in which environmental conditions suitable to goal completion are anticipated (Higgins et al., 1997). This contributes to motivation by amplifying many of the implemental mindset's phenomenological effects, such as positive illusions of the goal's desirability and feasibility, optimistic predictions about the future, and an unequivocal behavioral orientation (Gollwitzer, 1996). Therefore, promotion

² Our primary focus in this paper is on effective goal pursuit of risky projects under environmental uncertainty. Though it is beyond the scope of this paper, distinguishing between goals that are uncertain (and therefore uninsurable) versus risky (and therefore insurable) and determining whether doing so requires additional moderators to our model may be a fruitful line of future inquiry. We would like to thank an anonymous reviewer for this insight.

³ We do not mean to imply that individual differences are unimportant. Quite the contrary, RFT offers the potential to examine whether situational regulatory focus and dispositional regulatory focus interact to influence escalation jointly. Researchers may wish to extend the current model to an interactional model by examining whether chronic regulatory focus or other individual differences further moderate the relationships examined. For instance, locomotion (Kruglanski et al., 2000), grit (Duckworth et al., 2007), and positive self-concept (Judge et al., 1998) are obvious possibilities as each could influence the tendency to escalate. We thank an anonymous reviewer for this insight.

Action Phase Mindset, Regulatory Focus, and their Joint influence on Goal Pursuit

<p style="text-align: center;">Regulatory Focus</p> <p style="text-align: center;">Delineated by content according to the hedonic principle which states that individuals are motivated to approach pleasure and to avoid pain.</p> <p>Action Phase Mindsets</p> <p>Delineated by process which shows that different tasks tend to elicit different thought processes</p>	<p style="text-align: center;">Promotion Focus (Eager Goal Pursuit)</p> <ol style="list-style-type: none"> (1) Employs strategic means that seek to ensure the attainment of hits (true-positives) and seek to ensure against misses (false negatives) (2) Notices and recalls information relevant to success (3) Attends to such emotions as happiness and dejection that are related to successful versus unsuccessful achievement of positive outcomes (4) Adopts interpersonal strategies oriented toward promoting desired outcomes 	<p style="text-align: center;">Prevention Focus (Cautious Goal Pursuit)</p> <ol style="list-style-type: none"> (1) Employs strategic means that seek to ensure correct rejections (true-negatives) and to ensure against false alarms (false-positives) (2) Notices and recalls information related to the avoidance of failure (3) Is more sensitive to emotions such as quiescence and anxiety that are related to the successful or unsuccessful avoidance of negative outcomes (4) Adopts interpersonal strategies oriented toward preventing negative outcomes
<p style="text-align: center;">Deliberative Mindset (Goal Setting)</p> <ol style="list-style-type: none"> (1) Impartial and objective analysis of information about the feasibility and desirability of competing action goals (2) Effective processing of information (3) Open-mindedness toward all kinds of available information 	<p style="text-align: center;">Quadrant 3 <u>Eager Goal Setting</u></p> <p style="text-align: center;">Strength:</p> <p style="text-align: center;">Alert to opportunities to replace the goal; Proactive</p> <p style="text-align: center;">Weakness:</p> <p style="text-align: center;">Setting unfeasible or sub-optimal goals</p>	<p style="text-align: center;">Quadrant 4 <u>Cautious Goal Setting</u></p> <p style="text-align: center;">Strength:</p> <p style="text-align: center;">Careful planning</p> <p style="text-align: center;">Weakness:</p> <p style="text-align: center;">Analysis paralysis (Difficulty starting)</p>
<p style="text-align: center;">Implemental Mindset (Goal Striving)</p> <ol style="list-style-type: none"> (1) An overestimation of the desirability of the chosen goal (2) Illusory positive perception of the goal's feasibility (3) Unduly optimistic predictions about the future (4) Cognitive tuning toward information that relates to the implementation of the chosen goal (5) Reduced receptiveness toward incoming information 	<p style="text-align: center;">Quadrant 1 <u>Eager Goal Striving</u></p> <p style="text-align: center;">Strength:</p> <p style="text-align: center;">Alert to opportunities to achieve the maximal goal (maximizing return)</p> <p style="text-align: center;">Weakness:</p> <p style="text-align: center;">False Alarms; Escalation of commitment (Difficulty stopping)</p>	<p style="text-align: center;">Quadrant 2 <u>Cautious Goal Striving</u></p> <p style="text-align: center;">Strength:</p> <p style="text-align: center;">Vigilant to threats to minimal goal (minimizing risk)</p> <p style="text-align: center;">Weakness:</p> <p style="text-align: center;">Misses; Susceptible to becoming "over-cautious" or bureaucratic</p>

Fig. 2. Action phase mindsets, regulatory focus, and their joint influence on goal pursuit.

focus' allocation of attention toward the maximal goal (return maximization) and away from the minimal goal (risk minimization) should intensify the implemental mindset's tendency to focus attention on advancement of the goal.

The cautious goal striving pictured in Quadrant 2 of Fig. 2 is the result of the interaction between prevention focus and an implemental mindset. In pursuit of a desired end, prevention focus elicits a state of cautiousness that seeks to ensure true-negatives and to ensure against false-positives as time unfolds (Crowe and Higgins, 1997; Higgins, 2000). Additionally, by noticing and recalling information that is relevant to failure, prevention focus evokes a pessimistic view of uncertainty (Higgins and Tykocinski, 1992). Consequently, planning revolves around worst-case scenarios in which numerous difficulties to goal completion are expected to be encountered (Higgins et al., 1997). This mitigates the implemental mindset's phenomenological effects. Thus,

prevention focus' allocation of attention toward the minimal goal and away from the maximal goal should weaken the implemental mindset's tendency to focus one's attention, thereby enhancing awareness of environmental changes that impact the expectancy-value of the minimal goal. Although this increase in an individual's sensitivity to minimal-goal-related environmental stimuli – i.e., opportunities and threats to the minimal goal – comes at the expense of efficient pursuit of the maximal goal, it should also enhance effective decision making by encouraging early awareness of deteriorating environmental conditions that impair the expectancy-value of the goal, expediting the decision to disengage from goal pursuit.

5. Everest as illustration

Zeidner et al. (2000) suggest that research may benefit by comparing studies of individuals experiencing self-regulatory dysfunctions to “the adaptive self-regulatory processes of experts who are known for their self-discipline and success” (p. 758). They add, “One possible direction for future research is to construct more elaborate and refined processual models (theories) of self-regulation that allow us to make focused predictions of the relationship between self-regulation and other conative, affective, and cognitive factors as they unfold over time” (p. 756). However, in a report of meta-analysis of escalation studies, Sleesman et al. (2012: 557) found “very few studies that were longitudinal or conducted in field settings, as most research has been cross-sectional lab studies.” They go on to “urge researchers to look for new ways to study the determinants of escalation.” Accordingly, the unfolding of the disastrous sequence of events on Mount Everest allows for elaboration of just such a model while also providing an ideal illustration of the self-regulatory dysfunction of an expert known for his past self-discipline and success. For instance, Krakauer (1997: 78–79) notes:

Hall's Adventure Consultants compound served as the seat of government for the entire Base Camp of Mount Everest, because nobody on the mountain commanded more respect than Hall. Whenever there was a problem – a labor dispute with the Sherpas, a medical emergency, a critical decision about climbing strategy – people sought Hall's advice, which he generously dispensed, even to the very rivals who were competing with him for clients, most notably Scott Fischer.

In the five years leading up to the disaster, the traffic on all of the Seven Summits (the tallest mountain on each continent) had multiplied at an astonishing rate, and with it, the number of commercial enterprises peddling guided ascents. As a professional climber, Hall summited Mt. Everest for the first time in May 1990. By 1993, Hall's Adventure Consultants was the undisputed leader of the emerging industry, and by 1996, Adventure Consultants had successfully led 19 clients to the summit without a single fatality (Kormakur, 2015).

Prior to May 10, 1996, Hall had never sacrificed safety for the summit. Safety had been a top priority for Adventure Consultants and was communicated in the brochures sent to potential clients. “We will not drag you up a mountain – you will have to work hard – but we guarantee to maximise the safety and success of your adventure” (Krakauer, 1997: 43). To minimize the risk of “summit fever” (escalation of commitment), Hall had embraced a climbing philosophy known as legalism. Just as Ulysses tied himself to the mast of his ship to preclude the Sirens' song from tempting him to crash his ship on the rocks (Elster, 1979), legalism employed turnaround times (e.g., “If I have not summited by 2 P.M., then I will abandon my summit bid”) to protect climbers from their own poor judgment on the mountain.

Though regularly used among commercial and noncommercial expeditions, turnaround times had crystallized into the crux of a philosophical debate on Everest between members of two camps, the *situationalists* and the *legalists*. Mountain Madness guide, Anatoli Boukreev (Boukreev and DeWalt, 1997:155) : elaborates,

The situationalists argue that in leading a risky adventure, no system of rules can adequately cover every situation that might arise, and they argue that rules on some occasions should be subordinated to unique demands that present themselves. The legalists, believing that rules can substantially reduce the possibility of bad decisions being made, ask that personal freedom take a backseat.

Prior to the 1996 expedition Hall had been a strict legalist, as evidenced by his decision to turn Doug Hansen around just 330 ft (100 m) short of the summit in 1995, but ambivalence in committing to a turnaround time in 1996 suggests that Hall had defaulted to a situationalist climbing philosophy the year of the disaster. Krakauer (1997: 232) states that “At Base Camp before the summit bid, Hall had contemplated two possible turnaround times – either 1:00 P.M. or 2:00 P.M.” But, he adds:

[Hall] never declared which of these times his team was to abide by – which was curious, considering how much he'd talked about the importance of designating a hard deadline and sticking to it no matter what. We were simply left with a vaguely articulated understanding that Hall would withhold making a final decision until summit day, after assessing the weather and other factors, and would then personally take responsibility for turning everyone around at the proper hour. By mid-morning on May 10, Hall still hadn't announced what the turnaround time would actually be.

Meanwhile, Scott Fischer's team was similarly uncertain. Lene Gammelgaard, a Mountain Madness client, noted that, had there been rules, she would have followed them.

Okay we're an expedition. If we'd agreed to rules, no matter what, I would have played by those rules. No matter what. However, Gammelgaard has said, I never heard anything whatsoever about a turnaround time on summit day. The only time I heard that we had a turnaround point was the first day going through the Icefall, and everybody played by that rule (Boukreev and DeWalt, 1997: 167).

Both men appeared reluctant to commit publicly to a firm turnaround time for fear of missing an opportunity to summit. In Hall's case, this led to flirtation with, if not conscious subscription to, a situationalist climbing philosophy. Fischer, on the other hand, explicitly communicated a situationalist strategy with his guides, Beidleman and Boukreev.

Motivated by the need to ensure safety/prevent danger, legalism appears to engender prevention focus. Both legalism and prevention focus seek to avoid false alarms (false-positives) and to ensure correct rejections (true-negatives). And as a result, both sacrifice some possible opportunities to achieve the maximal goal (summit) to ensure the minimal goal (safety). Because this legalist climbing philosophy is experienced during goal striving, it would appear to be susceptible to the influence of the implemental mindset as well (consistent with Quadrant 2 of Fig. 2) such that implementation intentions would take the form of turnaround times established to minimize threats to safety (the minimal goal), as was the norm on Everest. Just as legalism appears to engender prevention focus, situationalism appears to engender promotion focus. Both situationalism and promotion focus emphasize successful attainment of the maximal goal. Both seek to ensure hits (true-positives) and to ensure against missed opportunities (false-negatives). Therefore, both suffer from an increased exposure to false alarms (false-positives) as they seek to maximize exploitation of opportunities to achieve the maximal goal (summit) by tolerating more threats to ensure the minimal goal (safety). This situationalist climbing philosophy is consistent with Quadrant 1 of Fig. 2.

Hall's reduced commitment to legalism as evidenced by his abnormally ambivalent attitude toward turnaround times, combined with his intensified desire to ensure that no opportunities to summit were missed, strongly suggests that Hall was employing a situationalist climbing philosophy by default if not consciously in 1996. With this change in climbing philosophy comes a likely shift from prevention focus to promotion focus, and thus the influence of a different mindset on one's decision making under environmental uncertainty. For example, Hall led Everest expeditions in 1995 and 1996. In 1995, his emphasis was on ensuring the minimal goal of safety, even at the expense of missed opportunities to summit. Prior to 1996, Hall had strongly committed to legalism and turnaround times were treated as rules that trumped judgment. Consequently, all evidence suggests that in 1995 he pursued the summit with caution. Krakauer notes:

[1996] was [Doug Hansen's] second shot at Everest with Hall. The year before, Rob had forced him and three other clients to turn back just 330 feet below the top because the hour was late and the summit ridge was buried beneath a mantle of deep, unstable snow. "The summit looked sooooo close," Doug recalled with a painful laugh. "Believe me, there hasn't been a day since that I haven't thought about it." He'd been talked into returning this year by Hall, who felt sorry that Hansen had been denied the summit and had significantly discounted Hansen's fee to entice him to give it another try. (Krakauer, 1997: 88)

Compare this to 1996 when both Hall and Fischer exhibited ambivalent commitment to turnaround times as the judgment relied upon by situationalism trumped rules. Such laxity about turnaround times had not been standard practice for Fischer any more than it had been for Hall. In a feature story that appeared in the *Seattle Weekly* six weeks before summit day, Fischer discussed turnaround times.

Every climber has a set of personal guidelines he or she follows, little Stay Alive Rules. One of Fischer's is the Two O'Clock Rule. If you aren't on top by two, it's time to turn around. Darkness is not your friend. (Boukreev and DeWalt, 1997: 168)

Nevertheless 2:00 P.M. had come and gone by over two hours when when base camp overheard a radio conversation between Hall and his guide Andy Harris still discussing how to send climber Doug Hansen down the mountain.

In seeking every opportunity to get their clients to the summit, even at the expense of increased exposure to danger, it appears that both guides may have been engaged in eager goal striving. "As the veteran American guide Peter Lev told *Climbing* magazine after the disastrous events on Everest, "We think that people pay us to make good decisions, but what people really pay for is to get to the top" (Krakauer, 1997: 294). Krakauer notes that "Hall's easygoing façade masked an intense desire to succeed – which he defined in the fairly simple terms of 'getting as many clients as possible to the summit' (1997: 190).

Expeditions involve goal pursuit of the summit under a behavioral conflict situation (a goal that is high in desirability but low in feasibility). Brandstatter and Frank (2002: 1367) suggest "...mindsets unfold their effect especially in behavioral conflict situations where no clear cues are available as to which kind of behavior is appropriate (e.g., Should I continue or stop goal striving?). In such a case, the respective activated mindset, should focus the person on the mindset-specific aspects (e.g., for the implemental mindset, a positive appraisal of the goal) and structure behavior accordingly." Indeed, "Hall had become so adept at running climbers of all abilities up and down Everest that he got a little cocky, perhaps. He'd bragged on more than one occasion that he could get almost any reasonably fit person to the summit, and his record seemed to support this" (Krakauer, 1997: 354). However, prior to 1996 Hall had experienced uncommonly good weather. Krakauer (1997: 354) notes:

"Season after season," confirmed David Breashears, who has been on more than a dozen Himalayan expeditions and has himself climbed Everest three times, "Rob had brilliant weather on summit day. He'd never been caught by a storm high on the mountain." In fact, the gale of May 10, though violent, was nothing extraordinary; it was a fairly typical Everest squall. If it had hit two hours later, it's likely that nobody would have died. Conversely, if it had arrived even one hour earlier, the storm could easily have killed eighteen or twenty climbers.

Past success with the weather likely contributed to an overestimation of the feasibility of the goal. As 2 P.M. came and went, the sure loss of goal abandonment was compounded by the fact that Hall's business was not getting its clients to the summit while

Fischer's was. [Krakauer \(1997: 243\)](#) notes, "...it was obvious Hall was profoundly disappointed that five of his eight clients had packed it in – a sentiment that I suspected was heightened by the fact that Fischer's entire crew appeared to be plugging toward the summit."

Because of a benevolent environment (good weather) and the absence of competition in the past, success or failure could be attributed entirely to human error. Fischer communicated this belief in an interview with Seattle writer Bruce Barcott shortly before leaving for Everest.

I believe 100 percent I'm coming back...My wife believes 100 percent I'm coming back. She isn't concerned about me at all when I'm guiding because I'm gonna make all the right choices. When accidents happen, I ...think it's always human error. So that's what I want to eliminate. I've had lots of climbing accidents in my youth. You come up with lots of reasons, but ultimately it's human error ([Krakauer, 1997: 84](#)).

Overemphasis of human error, however, fails to pay enough respect to the importance of favorable environmental conditions in determining whether an expedition or project is successful. This discourages the actor from devoting enough attention to contingency planning and to monitoring relevant changes in the environment and leaves him narrowly, and somewhat exclusively, attending to the volitional concerns of how, when, and where to complete the goal. [Kahneman and Lovallo \(1993: 25\)](#) calls this an *inside view* and juxtaposes it against a more statistical approach known as the *outside view*.

An inside view forecast is generated by focusing on the case at hand, by considering the plan and the obstacles to its completion, by constructing scenarios of future progress, and by extrapolating current trends. The *outside view* ...essentially ignores the details of the case at hand, and involves no attempt at detailed forecasting of the future history of the project. Instead, it focuses on the statistics of a class of cases chosen to be similar in relevant respects to the present one. The case at hand is also compared to other members of the class, in an attempt to assess its position in the distribution of outcomes for the class ([Kahneman and Tversky, 1979](#)).

The primary problem with the inside view is that it creates the potential for the development of unrealistic expectations of feasibility. By focusing on the case at hand and perceiving oneself as immune to the odds, it becomes relatively easy to rationalize continued pursuit of goals that a deliberative mindset would discard as no longer feasible. [Krakauer \(1997: 356–357\)](#) makes an interesting observation along these lines:

If you can convince yourself that Rob Hall died because he made a string of stupid errors and that you are too clever to repeat those same errors, it makes it easier for you to attempt Everest in the face of the rather compelling evidence that doing so is injudicious. In fact, the murderous outcome of 1996 was in many ways simply business as usual. Although a record number of people died in the spring climbing season on Everest, the 12 fatalities amounted to only 3 percent of the 398 climbers who ascended higher than Base Camp - which is actually slightly below the historical fatality rate of 3.3 percent.

[Krakauer \(1997: 30–31\)](#) goes on to admit,

As an avid student of mountaineering history, I knew that Everest had killed more than 130 people since the British first visited the mountain in 1921- approximately one death for every four climbers who'd reached the summit- and that many of those who died had been far stronger and possessed vastly more high-altitude experience than I.

But when he confessed his doubts to Hall, he readily accepted Hall's assurance that "it's worked thirty-nine times so far, pal, and a few of the blokes who've summited with me were nearly as pathetic as you" ([Krakauer, 1997: 91](#)).

Hall's perceived immunity to the odds is consistent with previous research on perceptions and biases of entrepreneurs. For example, [Cooper et al. \(1988\)](#) analyzed data from 2994 new entrepreneurs to find that 81% perceived their prospects as very favorable, projecting their odds of success at 7 out of 10 or better, and that 33% projected odds of 10 out of 10. Yet, when considering the prospects for other businesses like their own, the same entrepreneurs perceived significantly lower odds. Cooper and colleagues concluded that entrepreneurs' assessment of their own likelihood of success was dramatically detached from past macro-statistics and from perceived prospects for peer businesses. [Krakauer \(1997: 64\)](#) illustrates a similar phenomenon occurring among the guides on Everest:

During a conversation at base camp talk drifted to the inherent risks of climbing - and guiding - Everest. Litch remembers the discussion with chilling clarity: Hall, Harris, and Litch were in complete agreement that sooner or later a major disaster involving a large number of clients was 'inevitable.' But, said Litch- who had climbed Everest from Tibet the previous spring - 'Rob's feeling was that it wouldn't be him; he was just worried about 'having to save another team's ass.'

How do individuals dismiss such odds and convince themselves that they are the exception, not the rule? [Cooper et al. \(1988\)](#) explain the phenomenon among entrepreneurs by suggesting (1) that decision-makers tend to bolster the attractiveness of an option once it has been chosen, and (2) that entrepreneurs tend to believe they control their own destinies. We do not disagree with these explanations, but we believe they reflect the fact that entrepreneurs are typically involved in goal striving and therefore experiencing the effects of the implemental mindset. Moreover, entrepreneurial action encompasses high levels of novelty and uncertainty that give rise to behavioral conflict scenarios in which desirability is high and feasibility is low. Because self-regulatory

mindsets are particularly influential in these types of scenarios (Brandstätter and Frank, 2002), could it be that Hall and Fischer were under the spell of the promotion-focused implemental mindset and its various phenomenological effects for the first time? Because neither man appears to have been employing a legalist climbing philosophy, neither could rely on prevention-focused implementation intentions to ensure safety, despite Hall's strict adherence to them in 1995. How had such zealous commitment to planning for the worst been seemingly supplanted by simply hoping for the best?

In the pages that follow, we answer this question by unpacking the three phases of our meta-theoretical process model of entrepreneurial escalation: contingency planning, risk assessment, and cost benefit analysis. We then infuse eager goal striving and cautious goal striving discussed earlier and depicted in Fig. 2 to each phase to develop theoretical propositions as to how and why these mindsets influence the likelihood of escalation of commitment. We now turn to a discussion of the first phase: contingency planning.

6. Contingency planning

Because escalation unfolds over time, Fig. 1 portrays contingency planning as influential in the decision to persist or abandon later in the process. We argue that eager goal striving and cautious goal striving shown in Quadrant 1 and 2 of Fig. 2 explain the degree of contingency planning that occurs, which ultimately affects the decision of whether to escalate commitment.

Environmental uncertainty is often used to describe the increasing complexity of a perpetually changing competitive environment (Duncan, 1972). Because such changes make planning difficult, they elicit response uncertainty from entrepreneurs seeking to determine what is happening, how it will affect them, and what they should do about it (McKelvie et al., 2011). As a result, entrepreneurs may be reluctant to engage in planning owing to doubt about the predictability of their circumstances (Sarasvathy, 2001). This can delay response (Lipshitz and Strauss, 1997) and encourage them to procrastinate in making difficult decisions (Eisenhardt, 1989) about whether to initiate or abandon entrepreneurial action (Holland and Shepherd, 2013; McMullen and Shepherd, 2006a, 2006b).

Reluctance to plan often stems from an assumption that exploitation of current opportunities will preclude exploitation of future opportunities that may be currently obscured by environmental uncertainty. Scholars have sought to address this fear of commitment by emphasizing the growing need for managers to employ an entrepreneurial mindset (Haynie et al., 2010; Ireland et al., 2003; McGrath and MacMillan, 2000). Inspired by Kirzner's theory of entrepreneurial alertness (1973, 1997), the entrepreneurial mindset rests on an opportunity-based conception of entrepreneurship in which entrepreneurs are individuals who identify and exploit opportunities, defined as environmental contingencies that allow replacement of what have become sub-optimal goals with new superior means-ends frameworks. Thus, managers experiencing an entrepreneurial mindset may not feel compelled to plan because the opportunity seeking behavior engendered by the entrepreneurial mindset prepares them to notice and seize opportunities revealed by the dissipation of environmental uncertainty (Companys and McMullen, 2007; McMullen et al., 2007).

The perceptual and behavioral readiness used to notice and seize opportunities are attributes of the entrepreneurial mindset – defined as the “ability to rapidly sense, act, and mobilize, even under uncertain conditions” (Ireland et al., 2003: 963–989). This mindset, in turn, requires cognitive adaptability – the “ability to be dynamic, flexible, and self-regulating in one's cognitions given dynamic and uncertain task environments” (Haynie et al., 2010: 218) and metacognition – the ability “to be self-reflective and consider alternative cognitive strategies in light of a changing environment (Flavell, 1979, 1987; Schraw and Dennison, 1994)” (Haynie et al., 2012: 239).

The entrepreneurial mindset engenders promotion focus by employing strategic means that seek to exploit opportunities and to ensure against missed opportunities (Crowe and Higgins, 1997). Although promotion focus can be dispositional or situational (Higgins, 1997; Higgins et al., 2001), prior research suggests that conditions of high environmental uncertainty, such as those where the entrepreneurial mindset is most attractive to entrepreneurs, tend to elicit states of situational regulatory focus that overpower dispositional effects and other individual differences considered important to entrepreneurship (Wu et al., 2008). In addition, our analysis suggests (a) that the entrepreneurial mindset is not the same construct during goal setting as it is during goal striving, owing to the fact that situational promotion focus undergoes a transformation across action phases and (b) that not all entrepreneurs experience an entrepreneurial mindset when they initiate a project under uncertainty, meaning that some entrepreneurs will be less susceptible to escalation than others.

The promotion focus of the entrepreneurial mindset experienced during goal setting (Quadrant 3 of Fig. 2) is unbounded by any specific goal, and therefore its flexibility of thought enables replacement of one goal with another as changing environmental conditions reveal superior means ends frameworks. This is highly consistent with Kirzner's (1973, 1979, 1985) entrepreneurial alertness – situational awareness that is motivated but undeliberate and experienced prior to the goal striving of Fig. 1. Entrepreneurial alertness described by the management literature is different (e.g., Tang et al., 2012); instead of distal motives, the entrepreneur is committed to a specific goal intention and, as a result, experiences the partiality of an implemental mindset.

Fig. 1 portrays the process experienced by the entrepreneur after he or she has undergone this transformation of commitment from ambiguous motive to specific goal. This commitment triggers the implemental mindset which is likely to have implications for the nature of the perceptual and behavioral readiness experienced when in a state of promotion focus. For example, once the entrepreneur decides to commit to a particular goal intention, goals are no longer subservient to new opportunities to advance motives in superior ways. Instead, opportunities become relegated, redefined, and delimited to situations that allow advancement of a specific goal, such that opportunities become subservient to goals. In such instances, the promotion focus of the entrepreneurial mindset still fuels the perceptual and behavioral readiness needed for opportunity seeking behavior under environmental

uncertainty, but the opportunities sought are interpreted exclusively through the lens of the goal intention. This shift in perception triggered by the decision to commit to a particular goal frequently goes unnoticed and under-theorized, leaving entrepreneurs to assume that the entrepreneurial mindset's promotion focus will produce the same results during striving (shown in Fig. 1) it did during goal setting (not shown in Fig. 1), despite scope limitations introduced by goal selection.

The false belief that the entrepreneurial mindset will be as effective under goal striving as it was under goal setting is likely to discourage entrepreneurs experiencing a state of situational promotion focus from engaging in contingency planning. Planning for negative contingencies is a type of proactive behavior that involves the formulation of exit strategies in case the environment deteriorates such that the reward of continuing goal pursuit no longer outweighs the risk. Exit strategies prepare the entrepreneur for appropriate disengagement from goal pursuit (DeTienne, 2010), and thus minimize any future losses from a delayed reaction to environmental changes. However, the proactive behavior of planning for negative contingencies is practically eliminated by the entrepreneurial mindset. By emphasizing the opportunities as opposed to the threats hidden by uncertainty, the entrepreneurial mindset forgoes contingency planning, allocates attention toward efforts to avoid missed opportunities, and ensures that the entrepreneur responds to any opportunities revealed in the future by a changing environment (see Quadrant 1 of Fig. 2). This can lead potentially negative outcomes to be overlooked and contingency plans to be ignored for best-case scenarios.

Given the above, we expect environmental uncertainty to discourage contingency planning among individuals who are experiencing the situational promotion focus of the entrepreneurial mindset because these individuals are pursuing a desired end-state, which encourages them to enter the goal striving stages of Fig. 1 under the entrepreneurial mindset's promotion-focused influence. Thus,

Proposition 1. Environmental uncertainty discourages contingency planning among individuals experiencing the entrepreneurial mindset.

Proactive behavior still occurs as a function of the entrepreneurial mindset, but it is decidedly optimistic about the entrepreneur's prospects under uncertainty. For example, entrepreneurs often employ improvisation – “the deliberative extemporaneous composition and execution of novel action” as a means of adapting to environmental change (Hmieleski and Corbett, 2008: 484). Improvisation can be comprehensive and proactive, following a “script” while allowing deviation from it, but when guided by the entrepreneurial mindset, the imaginative content of this improvisation remains subject to promotion focus's optimistic expectations of uncertainty and emphasis on opportunity identification. As Tversky and Kahneman (1974: 1128) note:

Imaginability plays an important role in the evaluation of probabilities in real-life situations. The risk involved in an adventurous expedition, for example, is evaluated by imagining contingencies with which the expedition is not equipped to cope. If many such difficulties are vividly portrayed, the expedition can be made to appear exceedingly dangerous, although the ease with which disasters are imagined need not reflect their actual likelihood. Conversely, the risk involved in an undertaking may be grossly underestimated if some possible dangers are either difficult to conceive of, or simply do not come to mind.

In addition to these overlooked distinctions between the nature of situational promotion focus before and after committing to pursuit of a goal, situational regulatory focus can also vary across entrepreneurial projects. For example, Hall expressed concern over Fischer's entry. For nearly two years Fischer tried to coax Krakauer to climb Everest as a member of his team, only to have Hall offer Krakauer's magazine a “significantly better deal” (Krakauer, 1997: 86). Hall candidly explained to Krakauer (1997: 87) that the reason was the bounty of valuable advertising Hall would reap from the deal he had struck with *Outside*, the magazine for which Krakauer was commissioned to write. Hall notes:

It's an American audience. Probably eighty or ninety percent of the potential market for guided expeditions to Everest and the other Seven Summits is in the United States. After this season, when my mate Scott has established himself as an Everest guide, he'll have a great advantage over Adventure Consultants simply because he's based in America. To compete with him we'll have to step up our advertising there significantly.

Media attention (Sandy Hill Pittman was also reporting her experience on Fischer's team for an NBC Internet site), and competitive pressure converged to transform 1996 into a significant expedition demanding a successful outcome. As Slesman et al. (2012) note, “At the interorganizational level of analysis, social pressures from outside actors may also influence the choice of whether to escalate or de-escalate. For example, the competitive dynamics in markets may either lock firms into courses of action or lead them to exit previous courses as they respond to the competitive actions of rivals” (Chen et al., 2007).

Despite their desire to maximize opportunity identification and exploitation under uncertainty, entrepreneurs can engage in goal striving while experiencing a state of situational prevention focus (Quadrant 2 of Fig. 2) or a state of situational promotion focus (Quadrant 1 of Fig. 2), regardless of dispositional tendencies. Each project promises its own risks and rewards, and these factors influence the state of situational regulatory focus that an entrepreneur is likely to experience upon committing to a goal intention. For example, despite the fact that the goal of summiting was the same in 1996 as it was in 1995, the mix of motives appears to have changed and with it, the situational regulatory focus and strategic means employed to achieve the goal.

Thus, situational characteristics unique to each and every project influence an entrepreneur's emphasis on risk versus return and, as a result, whether situational promotion focus and hence eager goal striving is more or less salient than situational prevention focus and cautious goal striving. To the degree that cautious goal striving is experienced, contingency planning will become more likely, decreasing the entrepreneur's susceptibility to escalation of commitment. If salient enough, this cautious goal striving may even negate the influence of situational promotion focus otherwise evoked by pursuit of a desired end-state by encouraging

automatic reliance on rules (Wood and Williams, 2014), such as turnaround times. In such cases, contingency planning can preclude the potential for escalation by preventing exclusive reliance on the situationally influenced judgment of the entrepreneurial mindset.

Based on the above, it seems that characteristics of specific goals themselves are likely to evoke situational promotion focus or situational prevention focus during goal striving, which in turn, affects whether individuals experiencing the entrepreneurial mindset will engage in contingency planning under environmental uncertainty. Thus,

Proposition 2. Eager goal striving discourages contingency planning under environmental uncertainty.

Proposition 3. Cautious goal striving encourages contingency planning under environmental uncertainty.

7. Environmental monitoring and risk assessment

7.1. Risk exposure as a function of the duration of goal pursuit

As long as the environment behaves as or better than expected, forgoing contingency planning is not likely to lead to escalation. As the entrepreneur attends to goal striving, the implementation intentions generated by the implemental mindset should ensure that opportunities to advance the goal are not missed (Gollwitzer and Moskowitz, 1996). But the implementation intentions and phenomenological effects of an implemental mindset are more effective at facilitating the pursuit of shorter goals for which the risk exposure at goal completion is relatively similar to the risk exposure assumed at goal commitment. The longer the time lapse between costs incurred and benefits received, however, the greater the probability that the environment will change. If the environment changes for the worse, the entrepreneur may face a loss situation by default because the commitment associated with attaining a particular goal begins to grow not only from goal-related expenses, but also from increases in risk exposure resulting from unanticipated negative changes in the environment.

Entrepreneurs commit to a particular goal assuming a certain level of risk exposure. Likewise, climbing “is an activity that idealizes risk taking; the sport’s most celebrated figures have always been those who stick their necks out the farthest and manage to get away with it” (Krakauer, 1997: 358). The same could be said for entrepreneurship and entrepreneurial heroes, who are lionized for beating the odds (Timmons, 1989). However, like climbers, entrepreneurs can find their assumptions violated by unanticipated negative changes in the environment. As environmental conditions deteriorate, they can cause an action crisis by reducing the likelihood of successful goal attainment, decreasing the payoff of the goal being pursued, or increasing the risk that must be borne to secure the desired payoff. Upon recognition of these negative changes, an action crisis emerges in which the entrepreneur must evaluate whether the expected return is worth the increased risk exposure. Before such a decision can be made, however, one must become aware of the need to make it. Unfortunately, this awareness is delayed by the implemental mindset’s allocation of attention *toward* volitional concerns and *away from* motivational concerns caused by these unanticipated negative changes in the environment. Whereas contingency planning may guarantee the eventual reevaluation of the goal at a predetermined time, as was the case with the turnaround times used on Everest, no such point of reevaluation exists without contingency planning, leaving entrepreneurs to rely on situational awareness to alert them to the need to reevaluate the continued feasibility and desirability of the goal they are pursuing. Thus,

Proposition 4. Forgoing contingency planning is likely to delay an action crisis.

7.2. Awareness of increasing risk exposure

When opportunity seeking in the risk assessment stage of Fig. 1, entrepreneurs are engaged in the implemental mindset of goal striving such that their attention is focused on implementation concerns. Entrepreneurs engaged in cautious goal striving are less susceptible to the implemental mindset’s phenomenological effects as shown in Quadrant 2 of Fig. 2. This makes them far less susceptible to confirmation bias and strategic myopia than entrepreneurs engaged in eager goal striving.

As implemental mindsets, both eager goal striving and cautious goal striving generate implementation intentions – if-then contingency plans that specify how people will behave if certain performance opportunities arise (“If I encounter Situation X, then I’ll perform Behavior Y!”; Gollwitzer, 1999). As noted in Quadrant 1 of Fig. 2, because eager goal striving also involves promotion focus that welcomes the uncertainty of the future and the opportunities for advancement that it is expected to offer, it makes individuals anxious to get started and likely to view contingency planning as unnecessary and undesirable. Consequently, eager goal striving employs implementation intentions that are not much more specific than goal intentions – i.e., “if I see an opportunity, I will seize it.” This suggests that the promotion-focused implementation intentions of eager goal striving may encourage an attitude of perceptual and behavioral readiness, by not specifying the X in “If X, then Y.” Thus, under the influence of situational promotion focus, an individual is likely to forgo contingency planning during goal striving (as depicted in Quadrant 1 of Fig. 2).

Dreading the uncertainty of the future and the risks that uncertainty is expected to hide, prevention focus is concerned with risk mitigation and engenders a strong desire to engage in contingency planning. As a result, the prevention-focused implementation intentions of cautious goal striving are likely to be different and considerably more detailed than those experienced under

eager goal striving, as noted in Quadrant 2 of Fig. 2. For example, the entrepreneur may specifically declare: “If my only choice to secure funding after another year of operation is by personally guaranteeing the bank loan, then I will abandon the venture rather than jeopardize my family’s financial security.” Prevention-focused implementation intentions are formed as pre-commitments used to protect the individual from temptation and to preclude courses of action that could appeal to an implemental mindset, but not a more impartial deliberative mindset. As was the case for Hall in 1995, prevention-focused implementation intentions can preclude the potential for escalation by using rules, rather than judgment to trigger disengagement automatically. But even weaker commitments to turnaround times may snap individuals out of their implemental trance, returning them to a more motivational state in which progress may be evaluated less partially (Brandstätter and Schüler, 2013). Thus, forgoing contingency planning is likely to delay an action crisis because of increasing, but unmonitored, risk exposure from a deteriorating environment. Eager goal striving exacerbates this tendency whereas cautious goal striving reduces it. Thus,

Proposition 5. Eager goal striving further delays an action crisis.

Proposition 6. Cautious goal striving reduces the delay in action crisis.

8. Cost-benefit analysis

A delay in action crisis allows for the costs associated with a particular project to continue to grow, which makes the decision to abandon goal pursuit that much more difficult once an action crisis occurs.

8.1. The difficulty of reclassifying sunk costs in long-term projects

Loss scenarios encourage a preference for risk seeking until the decision maker has met some target threshold (Kahneman and Tversky, 1979). Goals serve as thresholds by acting not only as the return sought but also as the reason for bearing production costs (Cyert and March, 1963). Consequently, an uncompleted goal prevents production costs from being treated as sunk because they are mentally categorized as investments rather than expenses until evidence overwhelmingly disconfirms the likelihood that they will produce the expected return (Bragger et al., 2003). Therefore, just as expectations of future returns distinguish investments from expenses in financial accounting, a similar process influences “mental accounting” during goal striving. This mental re-categorization from investment to expense, however, is challenging (Thaler, 1999), especially when individuals fail to set a mental accounting budget or find it difficult to track expenses (Heath, 1995; Tan and Yates, 2002).

If commitment grows with the time spent in goal striving, then anything that delays awareness of negative feedback is likely to encourage escalation. For example, sunk costs (Arkes and Blumer, 1985; Moon, 2001a, 2001b) and time invested (Soman, 2001) are costs of abandonment that grow from delay, further increasing the desirability of outcome attainment for decision makers who do not want to appear wasteful (Sleesman et al., 2012). Additionally, experience (Bragger et al., 2003; Garland et al., 1990) is likely to increase over time, making the entrepreneur more likely to believe that he or she can overcome negative feedback and succeed, thereby increasing the likelihood of escalation. Finally, delays in noticing negative feedback can cause entrepreneurs to perceive an even closer proximity to project completion, encouraging escalation as decision makers substitute a completion goal for their original project goal (Conlon and Garland, 1993). Thus, the implemental mindset’s neglect of motivational concerns caused by unanticipated changes in the environment, when combined with the difficulty of reclassifying costs from investments to expenses once these changes are noticed, is likely to encourage escalation of commitment. Therefore,

Proposition 7. A delay in the entrepreneur’s action crisis encourages escalation of commitment.

8.2. Gain-loss versus net wealth framing as a matter of regulatory fit

Upon having an action crisis, cautious goal strivers are more capable than eager goal strivers of reclassifying the costs of goal pursuit from unrealized to realized losses because their cautious striving encourages the use of a net wealth frame used in decision making as opposed to the gain-loss frame encouraged by eager striving. A gain-loss frame emphasizes what is lost if an entrepreneur fails to attain the desired outcome (on Everest this could be 4 months, \$65,000, reputation, future clients, etc.). In contrast, a net wealth frame considers these costs in the context of what might also be lost if the entrepreneur is wrong in his decision to continue goal pursuit both in the moment (e.g., safety, avoidance of death, frostbite, lack of guilt) and over time (e.g., future opportunities to summit or grow old). We posit that this net wealth versus gain-loss framing is a function of regulatory fit between the end sought and the means used to pursue it.

To date, empirical investigation of regulatory focus has been conducted almost exclusively in relation to desired end-states, and this has served to confound scholars’ understanding of regulatory focus with regulatory reference (Higgins, 1997). Although both principles are considered to be approach- or avoidance-oriented, an entrepreneur can employ approach-oriented means (promotion) or avoidance-oriented means (prevention), regardless of the nature (desired or undesired) of the end-state evaluated. Regulatory fit is experienced when there is congruency between the approach-avoidance orientation of strategic means and ends. Promotion focus is congruent with a desired end-state. Pursuit of a desired end-state under promotion focus evokes eagerness (Bohns et al., 2013; Higgins, 2015; McNeill et al., 2012) as entrepreneurs experience regulatory fit, and this eagerness is likely

to be more intense in an implemental mindset than in a deliberative mindset owing to the goal commitment experienced during goal striving. Because of regulatory fit, eagerness engenders a gain-loss framing in which the information considered in cost-benefit analysis (see Stage 3 of Fig. 1) concerns the benefit of attaining the desired end-state and the cost of failing to attain the desired end-state, with little-to-no consideration of the costs and benefits of inaction. In contrast, cautiousness does not experience regulatory fit and is more likely to employ net wealth framing during cost-benefit analysis. This net wealth framing considers the costs and benefits of taking action owing to the desired end-state being sought, but its prevention focus allocates some attention to the costs and benefits of inaction (i.e., minimizing risk exposure).

Like promotion focus, prevention focus is also capable of regulatory fit, but in reference to undesired, as opposed to desired, end-states. Avoidance of an undesired end-state under prevention focus evokes vigilance (Bohns et al., 2013; Higgins, 2015; McNeill et al., 2012) as individuals experience regulatory fit (Crowe and Higgins, 1997). As a result of this regulatory fit, vigilance is characterized by a narrow gain-loss framing in which the information considered in cost-benefit analysis concerns the benefit of avoiding the undesired end-state and the cost of failing to avoid the undesired end-state. Thus, prevention focus does not universally guarantee net wealth framing, which appears to be a function of regulatory *misfit* between means and ends. A lack of regulatory fit would appear therefore to diminish some of the phenomenological effects generated by an implemental mindset such that an individual comes closer to the impartial analysis of a deliberative mindset. This observation suggests that the deliberative mindset in an action crisis might differ from that experienced in the goal setting of Q3 or Q4 of Fig. 2.

Recently, Brandstätter and Schüler (2013) questioned whether the implemental mindset evoked by goal striving would continue to dominate once individuals began to experience an action crisis. They found that the phenomenological effects of an implemental mindset seemed to be attenuated as the cost-benefit thinking more indicative of a deliberative mindset became more cognitively accessible. However, they point to a study conducted by Nenkov and Gollwitzer (2012) in which participants who were committed to a goal were asked to elaborate on the “pros” (benefits) and “cons” (costs) of that goal. Nenkov and Gollwitzer (2012) found that participants clung to a partial analysis, even when an even-handed deliberation was requested. Indeed, their results suggest that deliberation during goal striving favors a defensive focus on the “pros” of goal pursuit and is therefore likely to encourage escalation despite the possibility that a more objective analysis would suggest the wisdom of disengagement. This led Brandstätter and Schüler (2013: 551) to note: “It would be interesting to investigate whether, under what conditions, and how cost-benefit thinking in an action crisis also increases commitment to the goal in question thus leading to a kind of ‘escalation of commitment’ situation.” They conclude: “Another interesting research question would be whether a deliberative mindset embedded in the implemental phase of goal striving is of a different nature to the deliberative mindset before taking a decision. That is, would the former be likewise associated with an unbiased and realistic processing of desirability and feasibility information? Or, would it rather carry characteristics of biased information processing, as it is typical for the implemental mindset” (551). We contend that is indeed less partial than an implemental mindset but by no means as impartial as the deliberative mindset of goal setting.

For example, neither Hall nor Fischer ever questioned the date scheduled for ascent, May 10, 1996. In fact, while the Hall and Fischer teams were spending the night of May 7 at Camp II, the IMAX/IWERKS team was above them at Camp III, preparing to make a bid for the summit on May 9, but Viesturs said that when they awoke, they had a change of mind.

We spent a windy, windy night at Camp III and got up, and it was still windy up high...And David [Breashears] and I both knew that it wasn't the window we were waiting for...So, we said, 'What the hell! We'll go down; we have time; we have patience; let these guys [below us] do their climb and we'll come back up when the weather is more stable and better.' (Boukreev and DeWalt, 1997: 138)

Encountering Boukreev, Viesturs remembers that he and some of his fellow expedition members were a little embarrassed.

We shook hands and said hello, have a good time; it was very cordial...We felt a bit sheepish coming down. Everybody is going up and we thought, “God, are we making the right decision?” But, we just said, “Well, this is our decision.” Here this whole group is going up, smiley, happy faces, and we're going down, deciding that it wasn't time yet for us to go to the summit. (Boukreev and DeWalt, 1997: 138)

Everyone except Andy Harris, a Rob Hall guide, thought a summit bid the next day was a bad idea. “Two tents. Two different expeditions. Eight climbers. Six votes: bad idea,” says, Anatoli Boukreev (Boukreev and DeWalt, 1997). However, as Madsen and Fox note, dissension was made moot by Fischer's response,

“Well, we're not set up to make two attempts. We're only going to make one attempt.” Which was a big surprise for everybody, because we paid all this money and we only get one shot at it!...I thought that's not what the advertising said. (Boukreev and DeWalt, 1997: 132)

Believing that they had only one shot at the summit and that the shot should come on a date that had brought Hall so much luck in the past, on the eve of the summit bid, the guides planned on giving the weather 24 hours in anticipation of a calm after the squall. However, no delay was necessary. Overnight, the wind subsided and the sky cleared. Both teams would make their attempt on the summit on May 10, 1996.

Situationalism appeared to have presented the guides their promotion-related opportunity to summit after all. But unlike Ed Viesturs' IMAX team, which had the resources it needed to wait for ideal conditions and thus the capability of engaging in

impartial cost-benefit analysis, Hall and Fischer faced resource constraints as a result of forgoing sufficient contingency planning. If they were indeed experiencing eager striving and reliance on the entrepreneurial mindset's perceptual and behavioral readiness, then, ironically, it was now precluding exploitation of opportunities that could have maximized the guides' net wealth and odds of success. Without the option to wait for a better opportunity, Hall and Fischer, only a few hours later, found themselves facing a decision between forgoing the summit or exposing their teams to greater risk to life and limb. Unlike Viesturs, neither Hall nor Fischer had the luxury of relying on impartial cost-benefit analysis in making their decision to escalate, and perhaps unsurprisingly they both arrived at different decisions than Ed Viesturs, as both marched themselves and their clients into "the death zone" (elevations over 25,000 ft or 7620 m).

Therefore, lack of contingency planning and continuous monitoring of a deteriorating environment appears to have ensured that the guides and their clients had suffered and borne incredible costs with no back up plan. They were not equipped to try again despite the highly likely chance that the weather on a day chosen weeks before would not cooperate. If eager goal striving was at play, it had not only made Hall and Fischer susceptible to partial analysis, but also effectively eliminated any alternatives to failure, creating a situation in which both men were highly willing to believe this partial analysis and the distorted picture of risk-return it presented. Because of their desire to continue goal pursuit, entrepreneurs are prone to experience eagerness during an action crisis, and because of regulatory fit, this eagerness is susceptible to gain-loss framing and, by extension, escalation of commitment. In contrast, cautious goal strivers experience regulatory misfit, and thus net wealth framing, making them less susceptible to escalation. Thus,

Proposition 8. Eager goal striving further encourages escalation of commitment.

Proposition 9. Cautious goal striving discourages escalation of commitment.

9. Implications for research and practice

Mountaineering tends to draw men and women not easily deflected from their goals. By this late stage in the expedition we had all been subjected to levels of misery and peril that would have sent more balanced individuals packing for home long ago. To get this far one had to have an uncommonly obdurate personality. Unfortunately, the sort of individual who is programmed to ignore personal distress and keep pushing for the top is frequently programmed to disregard signs of grave and imminent danger as well. This forms the nub of a dilemma that every Everest climber eventually comes up against: in order to succeed you must be exceedingly driven, but if you're too driven you're likely to die. (Krakauer, 1997: 233)

For all its sensationalism, the 1996 Everest disaster represents a familiar story and a fairly common dilemma for many entrepreneurs – i.e., deciding whether to abandon a goal when environmental uncertainty makes determining its continued feasibility and desirability difficult to impossible. Even though the lives of most entrepreneurs do not depend exclusively on their ability to exercise good judgment, the survival of their organizations as well as their personal wealth and the well-being of their families and friends does. Thus, consideration of the events leading up to the Everest disaster suggest that there is merit to integrating RFT and TAP. In doing so, we proposed a meta-theoretical process model of entrepreneurial escalation that not only explains the phenomenological effects ascribed to entrepreneurs, but also demonstrates why, under particular conditions, opportunity seeking – thought to be a strength – can become a weakness that makes entrepreneurs especially susceptible to escalation. Thus, our model contributes to ongoing conversations in a number of related literatures.

First, our model contributes to theory development in entrepreneurship by extending McMullen and Shepherd's (2006a) process model of entrepreneurial action. By equating the notion of opportunity belief in the entrepreneurial action process (McMullen and Shepherd, 2006a; Shepherd et al., 2007; Grégoire et al., 2010a, 2010b; Grégoire et al., 2011) with the goal concept in self-regulation, we note that McMullen and Shepherd's (2006a) model primarily emphasizes the goal-setting, or "feedforward" phase of self-regulation in which an individual notices a third-person opportunity – an opportunity for someone – and decides that it is a first-person opportunity for him or her, thereby initiating action by forming a goal intention. In contrast, our model addresses the relatively neglected feedback phase of self-regulation, which begins with the decision to exploit the opportunity, continues as the entrepreneur navigates environmental change, and concludes with completion, escalation, or abandonment of various goals comprising the overarching entrepreneurial opportunity. In doing so, we note that the nature of opportunities and the occurrence of phenomenological effects often ascribed to entrepreneurs are likely to depend upon the phase of action in which the entrepreneur is engaged.

Second, we contribute to theory development on escalation of commitment. At some point, most entrepreneurs are likely to face the classic self-regulatory dilemma of whether to abandon goal pursuit under adversity (Markman et al., 2005). Instead of a snapshot approach to identifying the determinants of escalation of commitment, we offer a meta-theoretical process model that conceives of escalation as an event that unfolds over time, becoming more likely the longer the project. Because most entrepreneurial opportunities cannot be exploited instantaneously (Dimov, 2011), time and agency are essential factors of success, necessitating self-regulation and adaptation as one seeks to complete the project under environmental change (McMullen and Dimov, 2013). The longer the project, the more time spent in goal striving, and the greater the potential for the environment to deteriorate before re-evaluating the expectancy-value of a goal. As a function of the various costs invested, commitment

grows with time, making the entrepreneur more susceptible to escalation once this deterioration is noticed and a decision must be made about whether to persist. Unlike in laboratory studies of escalation, however, there is no guarantee in the field that individuals will recognize that there is a need for a decision about whether to abandon a goal. Thus, we suggest that the timing of this decision matters and that it is likely to be influenced by regulatory focus during the volitional phases of action. Whereas cautious goal striving is likely to discourage escalation by (1) encouraging contingency planning, (2) allocating attention to monitor environmental threats to the minimal goal during risk assessment, and (3) eliciting net wealth framing during cost-benefit analysis, eager goal striving is likely to encourage escalation of commitment by (1) discouraging contingency planning, (2) allocating attention toward noticing and seizing opportunities to advance the maximal goal and away from efforts to monitor environmental threats to the minimal goal during risk assessment, and (3) eliciting gain-loss framing during cost-benefit analysis.

Finally, the proposed model contributes to self-regulation researchers interested in whether implementation intentions of the implemental mindset encourage effective self-regulation in behavioral conflict situations. The decision to abandon goal pursuit has a different approach-avoidance orientation than the decision to persist. By integrating the TAP and RFT, we explain why mixed findings may be due to regulatory fit. Although the questions of whether “to abandon goal pursuit” and whether “to persist in goal pursuit” are often treated as though they are the same decision, the framing of the two questions evoke different approach-avoidance orientations and therefore interact with regulatory focus differently. We suggest that the implemental mindset may be more effective in behavioral conflict situations when regulatory fit is not experienced because the misfit will prevent efficient information processing and encourage more mindful deliberation.

9.1. Implications for entrepreneurship research

Our analysis suggests that interactions are likely to occur when one pursues desired end-states (e.g., an entrepreneurial opportunity) using approach-oriented means (e.g., promotion focus). This interaction appears to encourage efficient thought and action, which is often discussed as a good thing among self-regulation researchers (e.g., Brandstätter and Frank, 2002). However, behavioral conflict scenarios, like the ones faced by most entrepreneurs, are typically low in feasibility and therefore likely to demand mindful practice as one proceeds (Corbett and McMullen, 2006). Consequently, the efficient thought that accompanies a congruency between ends and means – Higgins' (2000) regulatory fit – is not necessarily an entrepreneur's friend when environmental conditions are highly uncertain.

It appears that, ideally, entrepreneurs should pursue opportunities with skepticism. Collins (2001) labels this approach the “Stockdale Paradox” in which one confronts the brutal facts that the goal is probably unfeasible, yet somehow still retains hope that he or she will succeed. This paradox represents a prevention-focused pursuit of a desired end-state in which the costs borne to generate a desired return are viewed as expenses with the hope that they will become re-classifiable as investments in the off chance that one actually succeeds. Sarasvathy (2001) describes similar tactics in her notion of “affordable loss,” where entrepreneurs only risk what they are willing to lose as they seek to test a market hypothesis that promises some uncertain return on investment. Our model complements Collins' and Sarasvathy's observations by explaining why such tactics are not only beneficial but possibly necessary to avoid escalation of commitment.

This does not mean that we recommend unadulterated use of prevention focus. Entrepreneurs' frequent reliance on prevention focus runs the risk of producing a bureaucratic culture – see Quadrant 2 of Fig. 2. Although individuals may be able to make a rapid transition between promotion and prevention focus, their organizations may not. Consequently, inexperienced employees could be left to rely on their own judgment for the first time under the worst of all possible conditions, as was the case on top of Mount Everest. Somewhat unbeknownst to Hall, Adventure consultants may have developed a prevention-focused culture as a result of operating under a strict legalist philosophy that had regularly adopted interpersonal strategies oriented toward preventing negative outcomes – strategies that are characteristic of prevention focus (Higgins et al., 2001). However, without any discussion, debate, or communication with the team, Hall changed to situationalism, which elicited a need to adopt interpersonal strategies oriented toward promoting desired outcomes – strategies that engender promotion focus (Higgins et al., 2001). Without Hall at the helm, inexperienced clients and unsure guides were unable to apply sound judgment in the most critical time to their survival. Firms often find themselves in a similar predicament when a charismatic entrepreneur leaves (Collins, 2001) or when new organizational activities unintentionally challenge implicitly held assumptions used for sensemaking (Weick, 1993). Thus, our analysis suggests that entrepreneurial and organizational regulatory focus may diverge over time. This could contribute to entrepreneur-organization misfit (Brigham et al., 2007) in terms of the type or strength of regulatory focus that is employed by the organization versus preferred by the entrepreneur. We believe this could be a promising line of inquiry for future research.

How can entrepreneurs pursue opportunities with eagerness while not falling prey to escalation of commitment? Some possibilities, such as setting milestones to ensure re-visitation of the expectancy-value of the goal or implementing systems to ensure devil's advocacy (Allison, 1971), could help to assuage the unconscious effects of mindset interactions on decision making. Milestones provide an opportunity to return to a deliberative mindset if only briefly to re-evaluate the expectancy-value of an uncompleted goal. Similarly, devil's advocacy is a process that could encourage contingency planning that puts in place alternative plans that make abandonment possible when the entrepreneur experiences an action crisis. In addition, prior research has shown that affect can serve to mitigate escalation. For example, in an experimental research design, participants that simply imagined escalation-related regret shortly before a critical business decision were less likely to escalate (Ku, 2008). This re-affirms the importance of devil's advocacy in which a member of the decision making team could be assigned to this dissenting role and charged with the task of asking that the decision maker imagine what the regret would feel like if such escalation were to

occur. Firms could also implement a more drastic structural solution in which decision makers rotate tasks such that the individual who is responsible for deciding whether to continue or withdraw is someone other than the individual who was responsible for making the initial investment decision. Not only does this deny the initial decision maker the opportunity to escalate, but also it provides him or her the opportunity for self-affirmation through successful completion of a different goal, which has been shown to be effective in de-escalation (Sivanathan et al., 2008). Future research should examine whether successful entrepreneurs rely more regularly than unsuccessful entrepreneurs on these types of structural solutions to protect themselves from escalation.

Finally, the proposed framework suggests that the term “opportunity” may be more complex than previously recognized in the entrepreneurship literature. Our model reveals that an opportunity prior to the establishment of a goal is conceptually distinct from an opportunity encountered during goal striving. Predecisional opportunities are equivalent to goal intentions or “opportunity beliefs” (Grégoire et al., 2010a; McMullen, 2015). They are means to fulfilling some distal and more ambiguous motive. Postdecisional opportunities, by contrast, are action-enabling environmental circumstances (McMullen et al., 2014). They are situations that allow one to convert a goal intention into goal completion by enabling behavior (McMullen and Dimov, 2013). This is important not only for conceptual clarification, but also because the attention that is allocated to identify postdecisional opportunities appears to come at the expense of questioning the continued feasibility and desirability of the predecisional opportunity. Ironically, this suggests that “being entrepreneurial” during goal striving could lead entrepreneurs to seek opportunities by investing time and energy searching for ways to achieve a goal when they should be searching for superior goals to replace the goal that changing environmental conditions have now rendered.

9.2. Implications for escalation of commitment and self-regulation

We acknowledge that it is very difficult to distinguish unwarranted escalation from reasonable escalation especially under environmental uncertainty. Henderson et al. (2007) insightfully observe:

It is important to note that some escalation researchers (e.g., Bragger et al., 2003) argue that continued commitment in the face of failure need not always be viewed as a problem, and instead see escalation as a rational part of decision making. According to this perspective, when uncertainty is high regarding whether failure will be followed by even more failure, people should maintain commitment in order to collect more information to resolve this uncertainty.

Bragger et al.'s (2003) logic is deeply rooted in a consequentialist philosophical approach to decision making, which proposes that costs are borne because of the benefits they are expected to produce. However, if the future is assumed to be uncertain (unknowable with certainty because of the time lapse between costs borne and benefits received), then costs are investments that can never be wholly reclassified from asset to expense. This raises the question of whether production costs can ever be truly sunk in a world of uncertainty given that their full future benefit cannot be known a priori. This makes it logically difficult, if not impossible, to discriminate unwarranted escalation from reasonable escalation.

However, there is a clear difference between reasonable escalation and unwarranted escalation when one steps away from the logic of philosophy and into the domain of practice. That is, individuals experience a state of regret and emotions such as guilt or shame that usually accompany unwarranted escalation, but not reasonable escalation. On Everest, for instance, there was a right way and a wrong way to summit the mountain. The right way was to pay one's dues by adequately preparing oneself for a summit bid and demonstrating the patience and discipline to deny oneself the summit should the conditions preclude a reasonably safe summit bid (Breashears, 2000). Failure to demonstrate this kind of discipline was labeled “summit fever” – acknowledging a state in which a climber was willing to sacrifice illogically anything to attain the summit – i.e., the ends justified the means. People who practiced this, however, were labeled dangerous, and their reputations were badly impaired, which cost them financially if they were seeking to make a living as commercial guides (Boukreev and DeWalt, 1997). Indeed, one of the reasons why Hall was so highly respected in the industry was because of his reputation for discipline (Krakauer, 1997). Thus, violating a turnaround time, without having compelling justification for doing so, could be construed as an act of escalation on Everest and not reasonable persistence. When such violations did occur, they were typically accompanied by a sense of moral regret and guilt by the climber (a sense that they acquired the summit in an improper way) and/or social regret and shame (in that others considered the climber to be undisciplined and dangerous). This echoes Slesman et al.'s (2012: 553) observation that “the social pressures generated by norms can be a significant determinant of behavior (Ajzen, 1991), especially if the norms emanate from a group with which an individual strongly identifies (Terry and Hogg, 1996).” Because we used a self-regulatory approach to escalation, we were able to recognize some of the phenomenological effects of affect on entrepreneurial escalation, but as entrepreneurship scholars (Baron, 2008; Shepherd, 2015), escalation scholars (Slesman et al., 2012), and the Everest disaster suggests, many of these emotions are social in origin. Thus, future research may benefit greatly by further emphasis of the role of socially-influenced affect in entrepreneurial cognition and decision making during opportunity exploitation.

10. Conclusion

Entrepreneurial action is characterized by novelty and uncertainty as entrepreneurs seek to profit by transforming their beliefs into reality (Autio et al., 2013; Corbett and McMullen, 2006). Because this process unfolds over time, entrepreneurs must pursue opportunities diligently while recognizing that environmental change may render these opportunities unfeasible or undesirable, despite the entrepreneur's best efforts. By better understanding how and why mindsets emerge and influence entrepreneurs

during the goal striving of entrepreneurial action, we hope to have identified some of the antecedents and consequences of entrepreneurial cognition (Grégoire et al., 2011) to identify mechanisms that could allow entrepreneurs to engage in opportunity seeking without succumbing to escalation of commitment.

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