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Self-regulation and moral awareness among entrepreneurs[☆]

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ABSTRACT

Moral awareness underpins moral reasoning and ethical decision making. This mixed methods study investigates a critical feature of these phenomena among entrepreneurs, namely the influence of social cognitive self-regulation on moral awareness. Results suggest that entrepreneurs with stronger self-regulatory characteristics are more morally aware and relate such awareness to maintaining personal integrity and building inter-personal trust. In contrast, entrepreneurs with weaker self-regulatory characteristics appear less morally aware overall, and focus primarily on moral issues relating to failure and loss. I conclude the paper by discussing the implications for future research and practice.

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1. Executive summary

Moral issues are common in entrepreneurial situations in which different behavioral norms and interests conflict owing to scarce resources, high uncertainty and risk, ill-defined roles and constant competitive pressures. Most commonly, entrepreneurs encounter moral issues when choosing between pursuing self-interest and maintaining normative business ethics.¹ Yet as recent corporate scandals show, some entrepreneurs perform extremely poorly when faced with such ethical challenges. Moreover, some do not even perceive the moral issues that arise in these situations. In that sense, they are morally unaware. Lacking such awareness has significant implications, for if a person is morally unaware, then he or she is most unlikely to consider moral issues in deliberation and decision making. From a normative perspective, lack of moral awareness thus increases the risk of immoral behavior and unethical decision making. Moral awareness is therefore foundational to moral reasoning and ethical decision making.

Moral awareness has been relatively neglected in the entrepreneurship literature to date. Instead, scholars have focused on the latter stages of moral reasoning by entrepreneurs, such as decision making and moral judgment. I address this gap by exploring some of the social cognitive dimensions of moral awareness among entrepreneurs. In particular, I investigate the aspect of social cognition termed “self-regulation,” which describes how people set goals and then self-direct their own thought and behavior towards reaching their goals. Thus defined, self-regulation is important for the study of moral awareness because being aware of the moral content of situations will influence how a person self-regulates the selection of ends and means in goal pursuit. At the same time, a person's self-regulatory characteristics will influence which moral issues they attend to and care about. In this study, I focus on two important features of self-regulation known as self-efficacy and regulatory pride. As I later explain, both are deeply related to moral awareness and together they provide the theoretical foundation for this study.

To explore this topic in relation to entrepreneurship, I report a mixed methods study of 30 founder–manager entrepreneurs. The study employed mixed methods by combining both survey and interview data. Established survey instruments were used to

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¹ In this paper, I equate morals and ethics.

measure aspects of self-regulation, and specifically entrepreneurial self-efficacy and regulatory pride. In addition, interview techniques were used to identify patterns of moral awareness. Each interview was fully transcribed, resulting in a total of 300 pages of text. These interviews were thematically coded over a period of months. Analysis of the combined data supported a division of the entrepreneurs into two groups of weaker or stronger self-regulatory characteristics. Further analysis suggested that entrepreneurs with stronger self-regulatory characteristics are more morally aware and relate such awareness to maintaining personal integrity and building inter-personal trust. In contrast, entrepreneurs with weaker self-regulatory characteristics appear less morally aware overall, and focus primarily on moral issues relating to failure and loss.

These findings have significant implications for future research. Most notably, the findings suggest that self-regulation may influence the type of moral issues that a person is aware of, or the object of moral awareness, and not simply the occurrence and strength of moral awareness. Entrepreneurs with stronger self-regulatory characteristics, for example, appear to be more aware of moral issues relating to personal ideals and potential gains within entrepreneurial situations. This specific finding is a novel contribution to the literature on self-regulation and moral awareness, as well as to the field of entrepreneurship research. Future studies should investigate these relationships, given the central role of self-regulation in goal setting and motivation and the deep connections between self-regulation, decision making and risk taking.

Implications also flow for entrepreneurial education and practice, as the findings suggest that future research may lead to new techniques in moral education and training for entrepreneurs. For example, it is already known that aspects of self-regulation can be enhanced by appropriate interventions. Thus one can speculate that targeted management, educational and training programs might enhance the self-regulatory characteristics that encourage moral awareness among entrepreneurs. If achievable, such techniques could improve the ethical quality of decision making, while at the same time imparting a higher sense of moral purpose and personal integrity to those engaged in entrepreneurial pursuits.

2. Introduction

Moral awareness is an important feature of moral reasoning and moral decision making ([Rest, 1986](#)). Indeed, absent moral awareness, a person is unlikely to incorporate moral considerations into his or her deliberations and decision making. Scholars therefore investigate the origins and workings of moral awareness and its foundational role in moral reasoning (cf. [Butterfield et al., 2000](#)). These issues are significant within entrepreneurial situations where competing values and interests are often intense, as entrepreneurs try to gather resources and make decisions under conditions of high uncertainty and pressure ([Brenkert, 2002](#); [Morris et al., 2002](#)). Entrepreneurs are regularly confronted by moral issues that entail choices between the pursuit of personal gain and causing harm to others, and between maintaining and compromising behavioral norms ([Saravathy, 2002](#); [Venkataraman, 2002](#)). Such moral issues are amplified in the dynamic, competitive environments inhabited by entrepreneurs. At the same time, high profile corporate scandals feed popular concern about the social and ethical risks of entrepreneurship. As a result, scholars increasingly focus on the moral and ethical aspects of entrepreneurship.

However, most empirical studies focus on the latter phases of moral reasoning and behavior among entrepreneurs, such as moral judgment and action, rather than moral awareness itself ([Hannafey, 2003](#); [Joyner et al., 2002](#)). This study addresses that gap by exploring moral awareness among entrepreneurs and the role of social cognitive self-regulation in these processes. By thus focusing on social cognitive factors, the study reflects a widespread interest in the psychological dimensions of entrepreneurship. However, having largely abandoned the search for a typical entrepreneurial personality, recent scholarship has witnessed an increasing interest in the cognitive characteristics of entrepreneurs ([Mitchell et al., 2002](#)). Scholars therefore explore the role of “entrepreneurial cognition,” defined to include mental models, heuristics, intuitions and self-regulatory characteristics ([Baron, 2004](#)). For example, [Busenitz \(1999\)](#) highlights the important role of cognitive bias and heuristics in entrepreneurial decision making. Other studies locate entrepreneurship within a social cognitive framework by exploring the role of self-efficacy, which is the belief in one’s own efficacy in specific task domains ([Bandura, 1997](#); [Boyd and Vozikis, 1994](#); [Chen et al., 1998](#)). Some scholars also link entrepreneurial cognition to morality and ethics, and especially to the influence of founders in shaping the moral climate of new firms ([Morris et al., 2002](#)). Mindful of such literature, this study explores how social cognitive self-regulation may influence moral awareness among entrepreneurs.

3. Theoretical background

Self-regulation is important for the study of moral reasoning, because all persons self-regulate the selection of ends and means within a framework of moral ideals and norms ([Bandura, 1991](#); [Carver and Scheier, 1998](#); [Trevino et al., 2006](#)). For example, [Bandura \(1991, 2006\)](#) has shown that the self-regulatory characteristic known as self-efficacy is positively related to a person’s sense of moral identity, defined as a person’s self-conception in terms of moral values, virtues and standards of behavior ([Aquino and Reed, 2002](#)). [Bandura \(2006\)](#) further explains that individuals consistently self-regulate their own thought and behavior in relation to their sense of moral identity and ethical ideals. Via these interactive processes, social and cognitive factors work together in the creation of moral identity and the adoption of behavioral norms. Within this framework, a person’s sense of being good (having a moral identity) and sense of doing good (acting morally) are jointly emergent through social cognitive processes in situational contexts. From this perspective, the philosophical query ‘Why be good?’ also entails the question ‘Who am I?’ (cf. [Weaver, 2006](#)).

Self-regulatory factors also play a significant role in a person’s moral value judgments ([Higgins, 2005](#)). As Higgins and his colleagues ([Camacho et al., 2003](#); [Higgins, 2005](#)) show, the degree of fit between a person’s self-regulatory orientation and goal

pursuit means influences whether an outcome is viewed as morally right or wrong. If the means of goal pursuit are consistent with the desired ends, then the fit is said to be good, inclining the actor towards positive moral value judgments. In contrast, if the means of goal pursuit are inconsistent with the desired ends, then the fit is said to be poor, inclining the actor towards negative moral value judgments. Moreover, in naturalistic settings containing multiple and conflicting ends and means, achieving value from regulatory fit demands complex moral choices and trade-offs (Higgins, 2000). Entrepreneurs often confront situations of this kind. In the face of such complexity, self-efficacious persons will tend to evaluate and adjust ends and means in relation to moral considerations (Bandura, 1997; Vancouver and Day, 2005). This study explored whether entrepreneurial self-efficacy and regulatory pride trigger similar responses. The following sections of the paper discuss these topics in relation to the existing literature. Before doing so, however, a few key concepts require further clarification.

3.1. Central concepts

3.1.1. Entrepreneur

There are divergent definitions of “entrepreneur” (Shane et al., 2003). One approach focuses on entrepreneurs as agents who enter new markets (e.g., Lumpkin and Dess, 1996). From that perspective, entrepreneurs are people who play a significant role in these processes, whether as founder managers or corporate employees. Another approach focuses on entrepreneurs as the founders of new ventures and this approach typically excludes franchise owners and employees (Low and MacMillan, 1988). Because this study seeks to illuminate individuals’ psychosocial characteristics in relation to moral awareness, I follow others in defining entrepreneurs as individual founder managers of new firms (see Brockhaus, 1980; Forbes, 2005a).

3.1.2. Moral awareness

Like other scholars, I define morals and ethics as having the same meaning (e.g., Jones and Ryan, 1997; Trevino, 1986). Both concepts refer to norms of right, good or acceptable conduct or behavior held by an individual, group or society (Joyner et al., 2002). Assuming this definition, I follow Reynolds (2006:233) by defining moral awareness as “a person’s determination that a situation contains moral content and legitimately can be considered from a moral point of view.” A person can therefore exhibit different patterns of moral awareness in different situations (Trevino, 1986).

3.1.3. Self-regulation

Self-regulation is a topic in the study of social cognition, which is distinguished from non-social cognition by its focus on the interaction between social and cognitive variables (Higgins, 2000). Social cognition is increasingly relevant for management studies as organizational boundaries and networks become more dynamic and societal (Brotherton, 1999). Within theories of social cognition, self-regulation is widely seen as a systematic process of human thought and behavior that involves setting personal goals and steering oneself toward the achievement of those goals (Vancouver and Day, 2005). Self-regulation therefore fulfils an important role in goal-oriented thought and behavior.

3.2. Theories of self-regulation

There are a number of theoretical frameworks employed in the study of self-regulation. They include goal-setting theory (Latham and Locke, 1991), control theory (Carver and Scheier, 1998), social cognitive theories (Bandura, 1997) and self-discrepancy theory (Higgins, 1987, 1998). This study focuses on two such theories: Higgins’ (1998) regulatory focus theory, and Bandura’s (1997) social cognitive theory. Together, these two complimentary theories cover important aspects of self-regulation. Regulatory focus theory itself is primarily concerned with motivation systems, goal frameworks and related affective and cognitive attributes. While social cognitive theory focuses on motivational strength, self-reference and self-reaction processes in goal pursuit. The combination of related theories in this way has been called for by leading scholars of self-regulation (e.g., Higgins, 2000; Wood, 2005) and is recognised as an appropriate way of developing new theory in organizational studies (Whetten, 1989). The following sections discuss the central constructs of each theory.

3.2.1. Regulatory pride

Regulatory pride is defined as a chronic form of a person’s regulatory focus, where regulatory focus is defined as a person’s orientation towards future goals and self-states (Higgins et al., 2001). Regulatory focus is comprised of two types of orientation termed promotion focus and prevention focus which are derived from the hedonic principle that people seek pleasure and avoid pain. (Higgins, 1998). From the perspective of seeking pleasure, promotion focus describes those circumstances where attainment needs prompt people to bring themselves into alignment with an ideal self, conceived in terms of personal growth and fulfillment, thereby increasing the desire to attain gains. Promotion pride thus motivates a person towards ideal self-states, defined in terms of the attaining gains through eagerness means. In contrast, from the perspective of avoiding pain, prevention focus describes those circumstances where security and safety needs prompt people to seek alignment with an ought self, conceived in terms of social norms and duties, thereby increasing the desire to avoid potential losses. Prevention pride therefore motivates a person towards ought self-states, defined in terms of avoiding losses through vigilance means.

As an expression of chronic regulatory focus, regulatory pride occurs as either promotion pride or prevention pride. As Higgins et al. (2001:21) explains: “Promotion pride and prevention pride are conceptualized as orientations to new task goals that derive from a sense of history of past success in promotion and prevention goal attainment, respectively.” People with stronger promotion

pride are less likely to make errors of omission (that is, failing to act), whereas people with stronger prevention pride are less likely to make an error of commission (that is, making a mistake) (Higgins et al., 2001). Higher promotion pride is also positively related to the number of means per goal. That is, if people act from promotion pride, the resulting eagerness orientation inclines them to use more goal means that could lead to gains, whereas people who act from prevention pride possess a vigilance orientation that inclines them to use less unnecessary goal means in order to avoid losses. Because promotion pride orients people towards the use of eagerness means in the pursuit of gains, it is also related to being more risky and opportunity oriented (toward growth and advancements), whereas prevention pride orients people towards the use of vigilance means in the avoidance of losses and is therefore related to being more careful and cautious (toward being responsible and faultless) (Grant and Higgins, 2003).

Some scholars have noted the relevance of regulatory focus and especially promotion focus for entrepreneurship, given that entrepreneurs often focus more on potential gains and approaching success, while focusing less on potential losses and avoiding failure (Baron, 2004; Brockner et al., 2004; Bryant, 2007). Indeed, studies have shown that entrepreneurs are strongly motivated to approach or attain positive task goals (Alvarez and Busenitz, 2001; Shane and Venkataraman, 2000), which is an important feature of promotion pride. While from an effectuation perspective, entrepreneurs are said to maximize goal pursuit means (Sarasvathy, 2001), which is also a characteristic of acting from promotion pride. Additional literature shows the influence of early developmental experiences and family history on stimulating entrepreneurial activity (see Steier et al., 2004; Stewart et al., 1999), and these factors are important determinants of both promotion pride and self-efficacy.

Within a specific task or decision situation, people in a promotion focus will be more attentive to factors relating to ideal self-states and potential gains, these factors being more readily accessible to consciousness (Higgins, 1998). It follows that people acting from promotion pride may pay greater attention towards, and be more aware of, moral issues relating to ideal self-states and the attainment of future gains (see Lee et al., 2000). For example, an entrepreneur acting from promotion pride may be more aware of moral issues relating to his or her sense of self-fulfillment in the exploitation of new opportunities. In contrast, people acting from prevention pride may pay greater attention towards, and be more aware of, moral issues relating to ought self-states and the avoidance of future losses. For example, a manager acting from prevention pride may be more aware of the moral issues relating to loss of reputation owing to a violation of behavioral norms (cf. Markus et al., 2006). It is important to note, however, that strong promotion pride can co-occur with strong prevention pride, as the two constructs are typically uncorrelated (Higgins et al., 2001). Entrepreneurs may therefore possess both attributes.

3.2.2. Self-efficacy

The second self-regulatory construct considered in this study is self-efficacy, which refers to a person's belief in his or her ability to be efficacious in a specific task domain. It is the central construct in Albert Bandura's (1997) social cognitive theory which claims that human beings possess self-reflective and self-reactive capabilities that enable some control over their thoughts, feelings, motivation and actions. Self-efficacy also relates to other aspects of self-regulation, such as self-confidence, task commitment and motivational strength. It is especially important for advanced cognitive functioning in managing complexity, uncertainty and risk, where agents require greater confidence and commitment to perform more sophisticated cognitive tasks. Importantly, and in contrast to regulatory pride, self-efficacy is not in itself about goal focus, nor is it about the specific skills one has, but rather it concerns judgments of what one can do with whatever skills one possesses to reach one's goals (Bandura, 1997). That is, while regulatory pride relates to the object or focus of a person's strategic goals, self-efficacy relates to a person's level of confidence and commitment to pursue such goals.

Furthermore, self-efficacy in a particular task domain is related to a stronger sense of moral identity and greater success in resisting social pressures to compromise moral values and behavioral norms. In contrast, weaker self-efficacy increases a person's vulnerability to social pressures for moral or ethical disengagement (Bandura et al., 1996). Consequently, highly self-efficacious individuals are more motivated and persevering in the application of proximal self-guides, including personal moral values, and less influenced by distal social norms that may encourage moral disengagement (Bandura, 1991). In addition, people with strong self-efficacy are more likely to be proactive moral agents, meaning that they act to promote moral values and behavioral norms. Whereas, those with weaker self-efficacy are more concerned with inhibiting unethical behavior and preventing the violation of behavioral norms (Bandura, 2006).

A number of these tendencies are similar to those associated with regulatory pride. Most notably, strong self-efficacy appears to be related to acting from promotion pride in the eager attainment of ideal self-states (cf. Spiegel et al., 2004). Promotion pride is also associated with greater self-esteem, optimism and sense of independence (Grant and Higgins, 2003), all of which are associated with strong self-efficacy (Bandura, 1997). In addition, people with high perceived self-efficacy focus on the pursuit of opportunities and positive risk seeking, whereas less self-efficacious people dwell on negative risk avoidance (Bandura and Locke, 2003; cf. Janney and Dess, 2006). Building on such literature and related studies in the field of entrepreneurship (e.g., Forbes, 2005a; Shaver et al., 2001), this study explores the role of entrepreneurial self-efficacy and regulatory pride in moral awareness.

3.3. Self-regulation and moral awareness

As noted earlier, moral awareness is defined as "a person's determination that a situation contains moral content and legitimately can be considered from a moral point of view" (Reynolds, 2006:233). Thus defined, Reynolds (2006) argues that moral awareness is stimulated by a person's attention to two characteristics of situations: the presence of harm, and the violation of behavioral norms. That is, if a situation is perceived to entail harm or the violation of behavioral norms, then a person is likely to acknowledge that the situation contains moral content and will consider it from a moral point of view. However, the extent to

which people perceive such features of situations varies. In that regard, the characteristics of persons also play a role in stimulating moral awareness by predisposing individuals to pay attention to the moral features of situations. People are therefore more or less predisposed to pay attention to harm and the violation of behavioral norms, which in turn stimulate moral awareness. Importantly, self-regulatory characteristics influence patterns of attention and the accessibility of related constructs to consciousness (Fiske and Taylor, 1991; Higgins et al., 1995). The following sections discuss these influences with respect to regulatory pride and entrepreneurial self-efficacy.

To begin with, it is known that regulatory pride influences a person's attention to features of new task situations. A person in promotion pride will tend to focus on those features of situations that relate to ideal self-states and possible gains (Higgins et al., 2001). Such persons will be more exploratory in information search, more risk seeking and focused on future goals. As a result, such persons may be more attentive to harm conceived as the denial of ideal self-states, rather than the violation of behavioral norms conceived as the denial of ought self-states, given the predisposition of persons in promotion pride to focus on ideal self-states as opposed to ought self-states. It then follows that a person in promotion pride may pay more attention to moral issues relating to the denial of ideal self-states and be more inclined towards moral awareness in situations which could result in non-gains (see Shah et al., 1998).

In contrast, a person in prevention pride will tend to focus on those features of situations that relate to ought self-states and possible losses. Such persons will be more cautious in information search, risk averse and focused on near-term goals. This suggests that a person in prevention pride may pay more attention to moral issues relating to the denial of ought self-states and incurring losses. Such persons may also be more attentive to the violation of behavioral norms conceived as the denial of ought self-states, rather than harm conceived as the denial of ideal self-states, given the predisposition of persons in prevention pride to focus on achieving ought self-states as opposed to ideal self-states. As a result, persons in prevention pride may be more inclined towards moral awareness in situations which threaten to deny ought self-states and result in losses.

It should also be noted that a person may possess both strong promotion pride and strong prevention pride. Indeed, the two forms of regulatory focus are typically uncorrelated (Higgins and Spiegel, 2005). In these circumstances, a person may pay attention to moral issues relating to both ideal and ought self-states. He or she would pay attention to harms and violations of behavioral norms that could result in missing gains from a promotion focus and/or incurring losses from a prevention focus, resulting in complex patterns of moral awareness and trade-offs in moral reasoning (Higgins, 2000). How and why such trade-offs occur are important topics in ongoing research regarding self-regulation and moral reasoning, as scholars seek to reconcile the status of moral character and virtue (being a moral person) with processes of moral thought and behavior (thinking and acting morally) (Weaver, 2006).

In addition, a person's degree of entrepreneurial self-efficacy will influence the way in which that person responds to the characteristics of entrepreneurial situations. A person with strong entrepreneurial self-efficacy will tend to exhibit greater confidence and commitment in entrepreneurial situations, as well as a stronger sense of moral identity and greater persistence in maintaining moral values and proximal self-guides (Bandura, 1997; Baum and Locke, 2004). A person with strong entrepreneurial self-efficacy may therefore attend more intensely to harm within entrepreneurial situations. Concerns about threats to moral identity and character may also loom larger for those with strong entrepreneurial self-efficacy (cf. Weaver, 2006), as they might for entrepreneurs with stronger promotion pride (cf. Grant and Higgins, 2003). In contrast, a person with weak entrepreneurial self-efficacy may exhibit a weaker sense of moral identity and lack confidence and commitment in such situations. Nonetheless, such persons may still pay attention to social norms and distal self-guides, reflecting a desire for ethical compliance in entrepreneurial situations. These tendencies may be amplified if the person also possesses strong prevention pride. In summary, both entrepreneurial self-efficacy and regulatory pride deserve detailed investigation in relation to an entrepreneur's sense of moral identity and moral awareness.

4. Methods

4.1. Research design

Regulatory pride and entrepreneurial self-efficacy have already been researched using survey techniques and quantitative methods (e.g., Camacho et al., 2003; Chen et al., 1998), yet neither variable has been studied in relation to moral awareness among entrepreneurs. For these reasons, I decided on a mixed methods approach. Existing quantitative methods were used to investigate regulatory pride and entrepreneurial self-efficacy, while qualitative methods were employed to uncover patterns of moral awareness among the sample of entrepreneurs. Both sets of data were then combined during analysis to investigate the influence of self-regulation on moral awareness, thus qualifying the study as mixed methods. Scholars have called for such varied methods to explore the complexities of entrepreneurial phenomena (e.g., Davidsson, 2004).

Various configurations of mixed methods are possible. As in this study, mixed methods can focus on relatively narrow research questions using small samples that are purposively selected to explore embedded processes (Creswell, 2003). Adopting this approach, the study employed established survey techniques to measure self-efficacy and regulatory pride, while moral awareness was explored using interview techniques. Analysis of the survey data was used to group the interviews in terms of the interviewees' self-regulatory characteristics. Analysis of the interview data generated coding frequencies for moral awareness that were amenable to basic statistical analysis. Both sets of data were thus analyzed in combination (see Miles and Huberman, 1994). Analysis of the combined data supported a division of the entrepreneurs into two groups of weaker or stronger self-regulatory characteristics. The study was therefore philosophically pragmatic, in assuming that reality is ontologically heterogeneous and can

be investigated using mixed methods. That is, mixed methods studies do not assume a single category of reality, such as the quantifiable objective world or the interpreted subjective world, but rather heterogeneous categories of such realities (Creswell, 2003).

Regarding sampling, the 30 entrepreneurs were purposively selected to represent a range of industries and stages of company growth. They had all been founder managers who retained a significant role in their venture. They were drawn from a variety of technology and service sectors. Seven of the entrepreneurs had been leading their companies for more than five years, 13 for between three and five years and 10 for less than two years. Four had failed and were trying again. They possessed a range of ages, education levels, industry backgrounds and seven were women. Ten of the companies were start-ups less than three years old, while five were late expansion stage over eight years old. All were based in one region of Australia. The sample of entrepreneurs is summarized in Table 1.

4.2. Measures and data collection

The survey component of the study employed pre-existing instruments to measure the two self-regulatory constructs that were discussed earlier, and pre-published factors were applied to the results. The instrument items and factor loadings are given in Appendix A. Promotion pride and prevention pride were measured using an instrument called the Regulatory Focus Questionnaire (Grant and Higgins, 2003; Higgins et al., 2001). It consists of 11 self-report questions relating to both parental and non-parental contents. Six of the items refer to promotion-oriented characteristics, and five to prevention-oriented characteristics. Entrepreneurial self-efficacy was measured using an instrument called the Self-Efficacy Scale (Scherer et al., 1989). It consists of five self-report questions. However, it should be noted that some scholars argue that aspects of the entrepreneurship task domain are not captured in this instrument and propose alternatives (cf. Boyd and Vozikis, 1994; Chen et al., 1998). However, none of these alternatives have shown consistently stronger reliability and validity.

To obviate potential self-report bias, the interviewees were told that the study was broadly about decision making and they were kept unaware that it was exploring self-regulatory processes and moral awareness. Semi-structured interviews were conducted with all 30 entrepreneurs lasting approximately 1 h each. The researcher adopted a non-participant observer role and used the same interview guide throughout (Miles and Huberman, 1994). The interview questions used are given in Appendix B. They covered a range of decision-making tasks and none explicitly refer to morals and ethics. At the end of each interview, interviewees were invited to talk openly about related topics. Each then answered the survey questionnaire that included the two survey instruments described earlier which measure entrepreneurial self-efficacy and regulatory pride, plus questions regarding their background, demographic profile, experience, their current role and history of involvement in the company.

5. Results

5.1. Interview results

The interviews were digitally recorded and fully transcribed, resulting in approximately 300 pages of transcript that were entered into an electronic database indexed by interviewee and question number. I then thematically coded all interviews using the qualitative data analysis tool called NVivo (a computer application), while simultaneously listening to and reading the transcripts. This technique supported analysis of both the content and style of the interviews. For example, it was possible to identify when an interviewee was pensive and paused, or when he or she became excited and spoke more assertively. Coding was iterative over a number of months as interviews were gathered.

Interviews were coded for references to various aspects of decision making, and especially moral awareness which was indicated by the explicit recognition of moral content in terms of potential harm or violation of behavioral norms (Reynolds, 2006). For example, a number of the interviewees mentioned concerns about potential violation of behavioral norms in deciding whether or not to collaborate with other parties. As one remarked, "Yes, and also ethics, that's important to me as well. If I'm doubtful about how someone operates I just don't go near them." While some mentioned concerns about potential harm in relation to treating staff and competitors fairly. In this regard, one said, "...in our business which is health care, the safety and the feelings and the concern for the patient, the person, is paramount." Numerous similar coding references were identified using relevant keywords such as "ethics" and "morals," "trust" and "honesty." Table 2 summarizes the major key words used in coding for moral awareness and gives examples of coded references.

Table 1

Summary of entrepreneur cases.

Company age years	Industry sector	Gender	Role tenure years	Highest education	Personal age years
(0–5) 43%	Biotech 37%	Female 23%	(<1) 17%	Certificate 3%	(20–29) 3%
(6–10) 37%	ICT 46%	Male 77%	(1–2) 17%	1st degree 27%	(30–39) 27%
(11–15) 10%	Services 7%		(3–5) 43%	2nd degree 57%	(40–49) 40%
(16–20) 7%	Retail 10%		(6–9) 13%	Other 13%	(50–59) 27%
(21+) 3%			(10+) 10%		(60+) 3%

N = 30.

Table 2
Major coding key words.

Key words	Example references ^a
Ethics and morals	"Ethics, that's important to me as well. If I'm doubtful about how someone operates I just don't go near them." (Norm) "That's the struggle I have because I deal with people who have lower levels of ethics. It's like playing someone in tennis when they keep cheating." (Norm)
Values	"We protected people should anything be wrong with the product, and what have you, a sort of ethical consideration there." (Harm) "So values, I guess in terms of people, I do try when I'm working with people, I do try to assist no matter how hard it might be for them, assist their professional growth." (Harm) "Yes, principles and values, that guides my decision making, like ethics and morals, what's best for the company, what's best for the longevity of the company." (Harm)
Honesty	"You can see very clearly with me is, it shows the honesty and the openness and the transparency of who I am." (Norm)
Justice	"And I've got quite a few projects going on at the moment, one in business and a couple in a sort of social justice sort of environment or those sorts of areas that I work on." (Harm)
Safety	"Our business which is health care, the safety and the feelings and the concern for the patient, the person, is paramount." (Harm)
Trust	"Somebody was a rogue and a charlatan, regardless of how good the opportunity was, I wouldn't do it. I've seen a lot of those, where I just didn't trust them and I thought these guys are shysters." (Norm)
Spirituality	"Some of this for me goes to the heart of my character and are in some ways almost spiritual questions. The nature of my life and my quest as a human being." (Harm)
Integrity	"I will never compromise my integrity, no matter how hard that decision is, and that's just me. I will never be dishonest, those things are really, really important to me." (Norm)

^a Terms in brackets after each reference indicate whether it was classified primarily as a moral issue relating to potential harms (Harm) or relating to potential violation of behavioral norms (Norm).

The iterative process of coding continued for a number of months. I continually analyzed the interviews to identify patterns in the coding and/or relationships between themes as evidenced by co-occurring or proximal codes. This was also done in NVivo using code matrix intersections, proximity analysis, the analysis of keywords and cross-case comparisons. This process led to further coding and is standard practice in the analysis of qualitative data in mixed method studies (Teddlie and Tashakkori, 2003). The number of distinct codes also evolved and grew over time, which is typical of such analytic methods (Creswell, 1998). Most importantly, the analysis generated a count of coding references for moral awareness for each participant.

5.2. Survey results

The survey instruments used in this study have been shown to have construct validity and reliability across a number of studies (Grant and Higgins, 2003; Higgins et al., 2001; Scherer et al., 1989). Regarding their use in this study, Kolmogorov–Smirnov tests, box plots and histograms showed normal distribution for all self-regulatory construct variables. Factor analysis was performed using the traditional methods of principle components analysis with Varimax rotation. All items loaded correctly, most loading significantly onto single factors ($R^2 > 0.4$), although two items loaded marginally ($R^2 > 0.2$) (see Ford et al., 1986). I then tested the internal reliability of the construct variables: promotion pride ($\alpha = 0.63$), prevention pride ($\alpha = 0.79$), entrepreneurial self-efficacy ($\alpha = 0.68$). Regarding these results, it should be noted that the study was exploratory using a small sample ($N = 30$) (see Cortina, 1993), and there was a relatively small number of items for each factor (< 7). In addition, earlier studies using the same instruments and larger samples have shown stronger reliability ($\alpha > 0.7$). I next generated descriptive statistics for these construct variables. Owing to the relatively small sample and the retention of non-extreme outliers, nonparametric Spearman correlations were used. Table 3 shows these results. The reported scores are the factored scores divided by the number of related items for each construct.

With regard to the significance of each self-regulatory construct as a component of self-regulation among entrepreneurs, Table 3 shows that promotion pride is strongly related to entrepreneurial self-efficacy ($r = 0.42$, $p < .05$, $r^2 = 0.17$), showing a large effect. A scatter plot showed the relationship was linear. The inter-correlation of promotion pride and entrepreneurial self-efficacy among entrepreneurs was also moderately significant ($\alpha = 0.66$). In that regard, analysis of the survey data suggested an association between promotion pride and entrepreneurial self-efficacy among the entrepreneurs, and also suggested that promotion pride is stronger than prevention pride among the same group. These results also conform with the theoretical arguments and empirical findings in the literature (e.g., Baron, 2004; Brockner et al., 2004; Forbes, 2005b).

Based upon the foregoing analysis of the survey data, and noting supporting evidence from the literature, I derived a ranking of the entrepreneurs in terms of their scores for the construct variables of promotion pride and entrepreneurial self-efficacy. To derive

Table 3
Means, standard deviations and spearman correlations.

Variable	M	SD	1	2
1. Promotion pride	2.29	0.31		
2. Prevention pride	2.05	0.54	–0.14	
3. Entrepreneurial self-efficacy	3.84	0.65	0.42*	0.10

$N = 30$; * $p < 0.05$; All effects are two-tailed tests.

this ranking, I first ordered the entrepreneurs in terms of their scores for both construct variables. For each variable, I then divided the 30 entrepreneurs into two sub-groups of 15 members based upon their relative scores for each variable. This resulted in 15 entrepreneurs in the lower group for each construct variable, and 15 in the higher group. The derivation of these rankings is an example of data transformation within a concurrent nested mixed methods strategy (Creswell, 2003), where results from quantitative methods can be incorporated into the results derived from a study's qualitative methods.

I then calculated a second ranking using a different method. I re-calculated the scores for both construct variables assuming the highest score for each was equal to 1.00. The revised scores were then added together for each entrepreneur, resulting in a combined score with a highest possible value of 2.00. Results showed that the combined scores were evenly spread across the range of 1.16 to 1.93. I then ordered the 30 entrepreneurs based on these scores and compared the results to the ranking derived using the first method. Inspection showed that both methods generated very similar ranking outcomes in terms of combined promotion pride and entrepreneurial self-efficacy. Using the second method, 10 of the lower 15 entrepreneurs had below median scores for both variables and all had a below median score for at least one of the variables. In contrast, 11 of the upper 15 entrepreneurs had above median scores for both variables and all had an above median score for at least one of the variables.

Based upon the results of these two ranking methods, I divided the sample into a group of 15 entrepreneurs who possessed relatively weaker entrepreneurial self-regulatory characteristics, and another group of 15 with relatively stronger entrepreneurial self-regulatory characteristics. Two groups of 15 members each allows for basic statistical comparison. The resulting rankings are shown in Table 4. It is important to note, however, that this ranking process was only performed after thematic coding of all the interviews was complete, in order to avoid potential coding bias. This approach is typical of mixed method studies that integrate quantitative and qualitative results in order to expand the analysis, especially when the different methods used in the study focus on closely related phenomena (Creswell, 2003).

5.3. Analysis of the combined data

Having generated an overall self-regulation rank based upon promotion pride and entrepreneurial self-efficacy, I then linked the survey and interview data by entering the coding frequencies for moral awareness for each entrepreneur into the database containing the survey data (cf. Maritan, 2001; Miles and Huberman, 1994). Inclusion of these data resulted in a dataset containing quantitative measures of the three self-regulatory construct variables (promotion pride, prevention pride and entrepreneurial self-efficacy), plus coding frequencies for moral awareness. I then performed ANOVA tests to compare variance between the stronger and weaker self-regulatory groups for these variables. As one would expect, because the two groups were distinguished in terms of promotion pride and entrepreneurial self-efficacy, there was significant variance for both variables ($F(1, 28)$, $s p's < .000$), but no

Table 4
Entrepreneurial self-regulation rankings.

Entrepreneurial self-regulation rank	Case ID	Promotion pride rank	Entrepreneurial self-efficacy rank	Combined scores
1	E29	1	1	1.16
1	E25	1	1	1.16
1	E01	1	1	1.23
1	E06	1	1	1.40
1	E28	1	1	1.41
1	E20	1	1	1.45
1	E19	1	1	1.45
1	E07	1	1	1.47
1	E17	1	1	1.50
1	E04	1	1	1.51
1	E21	1	2	1.53
1	E05	1	1	1.56
1	E09	2	1	1.61
1	E02	1	2	1.62
1	E15	1	2	1.64
2	E10	2	1	1.67
2	E22	2	2	1.70
2	E23	2	1	1.71
2	E12	2	2	1.72
2	E08	2	1	1.76
2	E13	2	2	1.76
2	E14	1	2	1.77
2	E16	2	2	1.79
2	E03	2	2	1.80
2	E24	2	2	1.81
2	E30	2	2	1.82
2	E18	2	2	1.83
2	E11	2	2	1.87
2	E27	2	2	1.89
2	E26	2	2	1.93

1 = Weaker ranking; 2 = Stronger ranking.

significant variance for prevention pride ($F(1, 28), p > .9$). The results showed significant main effects for references to moral awareness ($F(1, 28) = 5.35, p < .05$). Overall, the results suggest that stronger entrepreneurial self-regulation is positively related to moral awareness among the sample of entrepreneurs. Further analysis showed that entrepreneurs with stronger self-regulation were more than twice as likely to exhibit moral awareness ($M = 4.27, SD = 3.20$), when compared to the weaker group ($M = 1.93, SD = 2.25$). This result accords with previous studies of self-regulation (see [Bandura et al., 1996](#); [Grant and Higgins, 2003](#)).

In addition, members of the stronger self-regulation group made almost three times as many references to moral issues relating to eager attainment goals and ideal self-states ($M = 2.67, SD = 2.47$), as opposed to vigilant avoidance goals and ought self-states ($M = 0.93, SD = 0.88$). For example, one member of the stronger self-regulation group said, “there’s a strong ethical sort of view of myself and the things that I’d like to do, but they kind of get compromised sometimes in the different situations I find myself in just by business.” These results suggest that self-regulation influences the type of moral issues that a person is aware of, or the object of moral awareness, and not simply the occurrence and strength of moral awareness. In particular, the results suggest that entrepreneurs with stronger self-regulatory characteristics are more aware of moral issues relating to harm against ideal self-states and gains.

Analysis also showed that a few entrepreneurs possessed both strong promotion pride and strong prevention pride. These entrepreneurs were concurrently aware of moral issues relating to both ideal and ought self-states. For example, an entrepreneur who possessed strong prevention pride as well as strong promotion pride explained that his strategic choices relied on the following criteria: “if it matches what we are as a company, it doesn’t go outside ethically what we’re trying to do, or financially what we’re trying to do, then we go.” That is, he exhibited a prevention orientation by seeking to avoid the violation of ethical norms (that is, to achieve ought self-states), as well as a promotion orientation in seeking to pursue opportunities that did not violate such norms (that is, to achieve ideal self-states). These results are not unusual, as studies show that people may possess both strong promotion and prevention orientations ([Higgins et al., 2001](#)).

Nonetheless, most entrepreneurs appear to possess stronger promotion pride and entrepreneurial self-efficacy in relation to positive goal attainment (cf. [Brockner et al., 2004](#)). The question then arises, when and why does a strong sense of promotion pride (rather than prevention pride) become positively related to a sense of entrepreneurial self-efficacy? It may be because entrepreneurs typically focus on attaining gains rather than avoiding losses, noting that gains are also a focus of people acting from strong self-efficacy ([Bandura, 2001](#)). However, the findings of this study do not answer these questions. Nor does the study explain the degree to which these self-regulatory characteristics are antecedents or consequents of experience in entrepreneurial pursuits. Nonetheless, given that self-efficacy is related to the acquisition of domain mastery, then some aspects of entrepreneurial self-efficacy and its relation to promotion pride will probably develop after a person embarks on his or her entrepreneurial career.

5.4. Analysis of themes in the combined data

The consistent dominance of promotion pride suggests that many entrepreneurs have a relatively strong sense of past success in positive goal attainment. Importantly, their sense of promotion pride appears positively related to a sense of entrepreneurial self-efficacy. Their history of past success in positive goal attainment appears related to a sense of self-efficacy for entrepreneurial tasks. As a result, they could be expected to approach entrepreneurial decision tasks, such as opportunity selection, with a stronger sense of self-efficacy associated with eagerness to attain gains and ideal self-states. Furthermore, they will be habitually orientated towards eager approach means for entrepreneurial goals, rather than vigilant avoidance means. They will also tend to greater confidence in using more decision means, accepting more risk and seeking to avoid errors of omission that could result in missing potential gains.

Further analysis of the grouped interviews uncovered additional results that are summarized in [Table 5](#). To begin with, entrepreneurs with stronger self-regulation displayed greater moral awareness in relation to inter-personal trust. For example, one member of this group said she sought to make “connection with people and see that what’s in their head is similar to what’s in mine, there’s congruence if you like between the values and between the aspirations.” By seeking to understand others’ values, she thereby exhibited moral awareness when assessing potential business partners. Some members of the weaker group also linked moral issues to the selection of new business partners. As one said, “it’s about fit of values, and are these the kind of people I want to do business with.” These findings broadly accord with the literature, insofar as promotion-focused individuals show an inter-group

Table 5

Self-regulation and moral awareness among entrepreneurs.

Entrepreneurial self-regulation group	Main types of moral awareness
Stronger	Moral values and good ethical behavior seen as important in building trust between team members and business partners Maintaining personal moral values and good ethics seen as important features of self-identity and personal integrity Awareness of higher moral purpose linked to an altruistic seeking to give back to the wider community Awareness of moral values and ethical behavior as important attributes of effective leadership Awareness that good business ethics are important features of strategic decision making and building a collective vision for the firm
Weaker	Another’s moral weakness or uncertainty as a reason to reject a potential business opportunity or business partner Dishonest or unethical behavior seen to increase the risk of future losses Dishonest or unethical behavior seen as a risk to reputation, social capital networks and access to resources

bias (Shah et al., 2004) and self-efficacy is positively related to heightened moral awareness (Bandura, 1991).

Moral awareness was also commonly related to the maintenance of moral identity and personal integrity among the stronger self-regulatory group. For example, one interviewee said he was constantly “trying to relate people and integrity and stuff, because I think integrity’s an important part of decision making.” Another member of the stronger group stated it explicitly: “I will never compromise my integrity, no matter how hard that decision is, and that’s just me. I will never be dishonest, those things are really, really important to me.” While another member of that group said, “I want to uphold a certain level of business ethics and just do the good thing...when it’s a hard decision coming then this one has a louder voice, remember there is vision, but don’t be evil.” Such references occurred with lower frequency among entrepreneurs with weaker self-regulatory characteristics, suggesting they are less aware of moral issues relating to personal identity and integrity. These findings are supported by the literature, in that promotion pride is positively associated with the pursuit of ideal self-states, a sense of higher purpose and concern for personal values (Camacho et al., 2003; Grant and Higgins, 2003; Higgins et al., 2001).

Another common aspect of moral awareness among members of the stronger self-regulation group was the relevance of moral issues for effective team building and collective decision making. They sought to build teams with a sense of shared responsibility and commitment (cf. Brockner et al., 2004). For example, one said, “we can live with mistakes that are made with the right intentions and perhaps not the right information. What we don’t like is no decisions; we don’t like people who don’t have a highly developed sense of responsibility.” Another explained that she was committed to building and leading a team based on mutual trust and shared values: “I think faith has an enormous correlation with motivation. It’s very hard to inspire people about what they do, when they don’t believe what they do is going to be acted on, or they’re not contributing to something that’s moving forward.”

References to social altruism also occurred frequently among the stronger self-regulation group. They wanted their endeavors to reduce social harm and contribute to collective well being. Indeed, they had a strong desire to give back to the community. For example, one entrepreneur said her ambitions were “always tied to the greater good if you like of what could be accomplished.” Another said, “Putting something back is I think that’s the driver. Maybe it comes down to some of those instincts, as a kid I always thought we’re on this planet to do something, not to take something, to put something back.” This was echoed by another member of the stronger group, who said, “I’m passionate about creating a business and making something from nothing into something where people are employed and they grow and we create jobs for people and you create an enterprise. That’s my passion in life.” Another explained that, “I’ve got quite a few projects going on at the moment, one in business and a couple in a sort of social justice sort of environment or those sorts of areas that I work on. And I do that out of my ethical framework.” Such remarks were common among those with stronger self-regulatory characteristics. Furthermore, as suggested by the literature (Bandura, 1991, 2006; Grant and Higgins, 2003; Weaver, 2006), these entrepreneurs linked their altruism to the pursuit of personal ideals and sense of moral identity.

Regarding prevention-focused goals, both the stronger and weaker self-regulation groups exhibited moral awareness in relation to the violation of behavioral norms that could result from unethical business partners and dishonest practices. As one member of the weaker self-regulation group explained, “if somebody was a rogue and a charlatan, regardless of how good the opportunity was, I wouldn’t do it.” A member of the stronger group agreed, when she remarked, “ethics, that’s important to me as well. If I’m doubtful about how someone operates I just don’t go near them.” Such moral awareness was typically related to commercial losses that could result from the violation of normative business ethics, thus prompting rejection of partners that could not be trusted (cf. Higgins, 2002). Specific instances referred to harms such as loss of reputation, exclusion from trusted networks and loss of access to resources. Not surprisingly, these patterns of moral awareness display a prevention orientation, namely the vigilant avoidance of losses and compliance with behavioral norms. In this way, prevention pride appears to underpin moral awareness and moral reasoning in the avoidance of negative opportunity risks and errors of commission that could lead to future losses.

6. Discussion

The study’s findings suggest that self-regulation plays an important role in determining both the object and strength of moral awareness among entrepreneurs. However, these influences appear to vary, depending on a person’s particular self-regulatory characteristics. Most notably, some entrepreneurs possess relatively strong self-regulation in terms of promotion pride and entrepreneurial self-efficacy which appear to reflect past success in positive goal achievement (Bandura, 1997; Baum and Locke, 2004; Brockner et al., 2004; Higgins et al., 2001). Such entrepreneurs tend to approach entrepreneurial tasks with a stronger sense of self-efficacy and eagerness to attain ideal self-states and potential gains. As a consequence, these entrepreneurs appear to pay more attention to harm directed against ideal self-states and potential gains, and therefore exhibit moral awareness about such issues. Some of these entrepreneurs also possess strong prevention pride, although it does not appear to be strongly related to their sense of entrepreneurial self-efficacy. Nonetheless, when acting from a prevention orientation, these entrepreneurs pay attention to violation of behavioral norms relating to ought self-states and potential losses, and therefore exhibit moral awareness about such issues as well. These proposed relationships between promotion pride, prevention pride, entrepreneurial self-efficacy and moral awareness among entrepreneurs are depicted in Fig. 1.

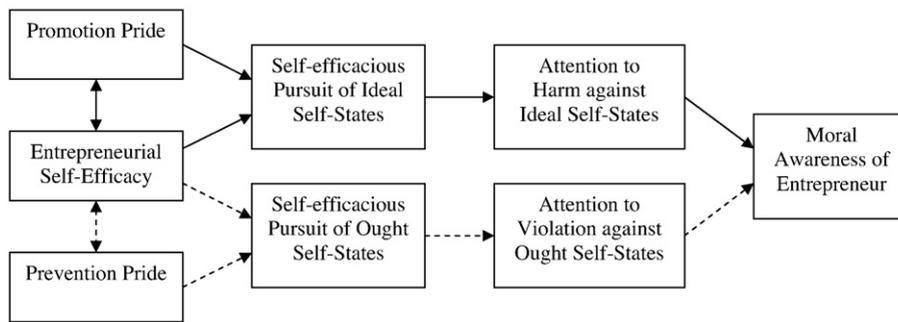


Fig. 1. Model of self-regulation and moral awareness among entrepreneurs. (Broken lines indicate weaker effects).

6.1. Implications for research

The findings of the study have implications for research into moral awareness and its role in reasoning and ethical decision making among entrepreneurs. In particular, scholars debate the relevance of contextual and personal factors in explaining moral awareness and moral reasoning (see Trevino et al., 2006; Weaver, 2006). Some argue that these processes are predominantly personal and that situational variance is evidence of weak morals and relativistic ethics (Brenkert, 2002). However, the findings of this study point to a complex relationship between social cognitive factors in determining a person's moral awareness as a basis for moral reasoning. Moreover, this does not necessarily imply moral weakness or relativism (Bandura, 1991). On the contrary, the findings suggest that strong self-regulatory characteristics are positively related to moral awareness.

In particular, the findings suggest a positive relationship between self-regulation, moral awareness and an entrepreneur's sense of moral identity and purpose. Indeed, those with stronger self-regulatory characteristics drew frequent connections between the moral content of situations and their sense of moral identity and personal integrity. These findings are supported by earlier studies which demonstrate that people in promotion focus are motivated towards ideal self-states with a greater sense of purpose (Grant and Higgins, 2003). Within entrepreneurial situations, therefore, self-regulation may play an important role in the development of moral identity among founding teams (Dodd, 2002; Weaver, 2006). Future research should investigate these relationships, and in particular, how founders' self-regulatory characteristics might influence the emergence of collective purpose, shared moral identity and the adoption of behavioral norms in entrepreneurial firms (see Kark and Van Dijk, 2007).

In addition, the study highlights the positive relationship between moral awareness and inter-personal trust among entrepreneurs. This topic is important because trust plays a major role in entrepreneurial team building and risk taking (Forlani and Mullins, 2000; Morris et al., 2002). Within the wider literature, scholars have noted that trust is partly determined by social cognitive factors, rather than being seen as a stable personality variable (Schoorman et al., 2007). This study adds to that literature by suggesting that social cognitive self-regulation plays a role in trust formation via the mediating influence of moral awareness. Moreover, the findings suggest that these processes vary depending on the strength of a person's entrepreneurial self-efficacy and regulatory pride. Future studies should therefore investigate the influence of these factors on the development of inter-personal trust in entrepreneurial firms.

The study also highlights the combined influence of promotion pride and prevention pride on moral awareness among entrepreneurs. Such combined self-regulatory characteristics appear to underpin complex patterns of moral reasoning and trade-offs, as entrepreneurs balance the avoidance of harm and the pursuit of ideal self-states from a promotion focus, against the avoidance of violations and the pursuit of ought self-states from a prevention focus. These findings may shed new light on the resolution of moral dilemmas in entrepreneurial situations which often entail complex moral choices. Indeed, the combination of different regulatory orientations may prompt attention to both harm and the violation of behavioral norms, thereby moderating the overly eager and potentially amoral pursuit of opportunities (cf. Higgins, 2000, 2005). Considered more broadly, these findings suggest that scholars of morals and ethics should consider how the combination of different self-regulatory characteristics (such as promotion pride and prevention pride) may help to answer the two questions stated earlier: 'Why be good?' and 'Who am I?' (see Weaver, 2006).

The findings also have more general implications for research into entrepreneurship. Many researchers in this field investigate singular dependent variables, such as individual personality traits or cognitive constructs (e.g., Brockhaus, 1980; Chen et al., 1998; Forbes, 2005b), assuming they might identify factors which can explain some portion of the variance in entrepreneurial decision making (Busenitz et al., 2003). In contrast, the findings of this study suggest that regulatory pride and entrepreneurial self-efficacy work together in determining the moral awareness of entrepreneurs. This suggests that scholars need to look beyond singular factors in order to explain moral reasoning and patterns of ethical (or unethical) decision making among entrepreneurs (see Sarasvathy, 2002). For similar reasons, researchers should not prematurely assume that all entrepreneurs are the same with respect to their social cognitive attributes and moral awareness. Rather, scholars should be prepared for patterns of difference. Indeed, entrepreneurs with strong self-regulatory characteristics appear to be more morally aware and display different patterns of

moral awareness. Such apparent heterogeneity stands in contrast to much of the literature, in which entrepreneurs are often treated as a group that displays common patterns of thought and behaviour (Ireland et al., 2005).

The study also contributes towards research into self-regulation and moral reasoning more broadly. Bandura and his colleagues (1991, 1996) argue that self-efficacy is positively related to a person's level of self-monitoring and self-reaction and strengthens a person's commitment to moral standards and resistance of violations of behavioral norms. As a novel contribution to this literature, the study suggests that self-regulation may influence the type of moral issues that a person is inclined to monitor and react towards, or in other words, the object of person's moral awareness. In particular, when acting from strong self-efficacy and promotion pride, a person may be more inclined to pay attention to, and exhibit awareness of, moral issues relating to ideal self-states and potential gains.

7. Conclusion

This exploratory mixed methods study has illuminated the positive relationship between self-regulation and moral awareness, and the impact these factors might have on moral reasoning among entrepreneurs. However, given the non-random, relatively small samples used in the study, its findings are not used to make definitive claims about the general population of entrepreneurs. In addition, because the study was conducted by a single researcher, and the data gathered from entrepreneurs and companies based in one geographic region, the results are limited in terms of their generalizability to other markets and cultures. Despite such limitations, by using a mixed methods approach, the study was able to explore its research questions in greater depth and in detail. Implications flow for future practice and research.

Regarding practice, it is already known that a person's self-regulatory characteristics, including aspects of promotion focus and self-efficacy, can be enhanced by interventions and situational priming (Bandura, 1997; Higgins, 2002). Therefore, it may be possible to design educational and training techniques that strengthen the self-regulatory characteristics which foster moral awareness. For example, in formal classroom settings within business schools, experiential learning exercises could be designed to strengthen the link between a student's sense of promotion pride and his or her entrepreneurial goals. These exercises could incorporate self-efficacy training as well, thereby enhancing both aspects of self-regulation in combination (cf. Baum and Locke, 2004). If this can be achieved, and assuming a positive relationship between self-regulation and moral awareness, then such educational experiences may influence the object and strength of students' moral awareness, and hopefully improve the quality of their future decision making in the entrepreneurial task domain (see Reynolds, 2006). Comparable techniques might also be developed to influence moral awareness and moral reasoning within more established firms.

Regarding future research, the study highlights the combined influence on moral awareness of two related self-regulatory factors: regulatory pride and entrepreneurial self-efficacy. Findings suggest that when promotion pride and entrepreneurial self-efficacy are strong, they incline entrepreneurs to stronger moral awareness. In fact, for entrepreneurs with such self-regulatory characteristics, moral awareness appears to be related to the pursuit of ideal self-states, personal integrity and inter-personal trust. In contrast, entrepreneurs with weaker self-regulatory characteristics appear less aware of moral issues overall. Furthermore, among some entrepreneurs, strong promotion pride combined with strong prevention pride appears to play a role in balancing trade-offs between ideal and ought self-states in the resolution of moral dilemmas. If future research confirms these findings, it may then be possible to identify the self-regulatory characteristics that incline entrepreneurs to adopt more positive moral values and comply with normative ethical standards in decision making. That knowledge could be used in practical and educational settings to encourage moral awareness and strengthen ethical behavior among both nascent and established entrepreneurs.

Appendix A. Survey instrument items²

Regulatory Focus Questionnaire: items 1, 3, 7, 9, 10 and 11 are used to derive measures for promotion pride; items 2, 4, 5, 6 and 8 are used to derive measures for prevention pride.

1. Compared to most people, are you typically unable to get what you want out of life? (–0.65)
2. Growing up, would you ever “cross the line” by doing things that your parents would not tolerate? (–0.8)
3. How often have you accomplished things that got you “psyched” to work even harder? (0.37)
4. Did you ever get on your parents' nerves often when you were growing up? (–0.65)
5. How often did you obey the rules and regulations that were established by your parents? (0.56)
6. Growing up, did you ever act in ways that your parents thought were objectionable? (–0.84)
7. Do you often do well at different things you try? (0.54)
8. Not being careful enough has gotten me into trouble at times. (–0.55)
9. When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do. (–0.51)
10. I feel like I have made progress toward being successful in my life. (0.81)
11. I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them. (–0.53)

Entrepreneurial Self-Efficacy Scale

² Factor loadings are shown in brackets for each instrument item.

1. Can you successfully complete the necessary marketing tasks related to owning your own business (consider selling, selecting a location, advertising, customer service)? (0.64)
2. Can you successfully complete the necessary accounting tasks related to owning your own business (consider obtaining financial resources, bookkeeping, monitoring accounts, budgeting)? (0.42)
3. Can you successfully complete the necessary personnel tasks related to owning your own business (consider employee selection, discipline, motivation, job analysis)? (0.76)
4. Can you successfully complete the necessary production tasks related to owning your own business (inventory, quality control, manufacturing, layout of facilities)? (0.84)
5. Can you successfully complete the necessary organizational tasks related to owning your own business (consider planning, coordinating projects, assessing performance of the business)? (0.81)

Appendix B. Semi-structured interview questions

1. What is your own approach to decision making when decisions have to be made quickly with limited information?
2. What is your own approach to decision making when the outcome is very uncertain and risky?
3. What is your own approach to decision making when you feel strongly about the issues?
4. In your own decision making, when do you rely on your intuitions or previous experience and when do you perform systematic analysis before making decisions?
5. In your decision making, how do you typically decide which opportunities you will try to exploit?
6. In your own decision making, how do you approach pursuing future gains, versus avoiding future losses?
7. Across the range of responsibilities you have – financial, strategic, HR, marketing, etc. – how confident are you in making decisions in those areas?
8. How important is decision making as part of your role in the company, relative to other aspects of the role such as leadership?
9. Why did you choose to become an entrepreneur?
10. Overall, what do you think are your main strengths and weaknesses as a decision maker?
11. Is there anything you would like to say about this topic or any other thoughts that come to mind?

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