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Recommended Citation

Pathak, S., & Goltz, S. (2021). An Emotional Intelligence Model of Entrepreneurial Coping Strategies. *International Journal of Entrepreneurial Behavior and Research*. <http://doi.org/10.1108/IJEBR-01-2020-0017>
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An Emotional Intelligence Model of Entrepreneurial Coping Strategies

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**(Paper accepted Jan. 18, 2021 at International Journal of
Entrepreneurial Behavior and Research)**

Abstract

Purpose:

The purpose of this article is to recognize emotional intelligence (EI) as a specific emotional competency possessed by entrepreneurs that facilitates their coping with stressors that arise in their day-to-day work. Highlighting the problem-focused and emotion-focused coping strategies employed by entrepreneurs, the paper establishes that EI in entrepreneurs enables the onset of acceptance of the stressful situation and optimism that a stressful situation can be solved.

Design:

The paper reviews literature on the topics related to links between EI, entrepreneurial behaviors and entrepreneurial coping. Subsequently, acceptance-avoidance motivation theory is used to posit that entrepreneurs' EI serves as an antecedent that (1) guides the selection of their coping strategies through the onset of optimism and acceptance of the stressful situation, (2) assists in perceiving those situations as either controllable or uncontrollable, and (3) shapes the actual process through which entrepreneurs cope.

Findings:

The proposed conceptual model asserts that entrepreneurs' EI as reflected in their abilities to perceive, use, understand and regulate emotions, is key to their coping. EI in entrepreneurs assists them in being optimistic about solving a stressful situation and accepting of such situations as well. Thereafter, selection of a problem-focused or emotion-focused coping strategy or both ensues.

Originality:

The current work offers a conceptual model that highlights the role of entrepreneurs' EI in coping, integrates both the cognitive and affective components of coping, and suggests a variety of avenues for future research. This model extends models of coping that categorize coping types to specify the process thought to be involved. Understanding the role of emotional intelligence in coping with stress by entrepreneurs has theoretical and practical implications which are discussed as well.

Keywords: entrepreneurial coping, emotional intelligence, acceptance, optimism, problem-focused coping, emotion-focused coping.

1. Introduction

In today's day and age, effective coping with work-related stress is of primary importance for personal well-being and work performance. Entrepreneurship is no exception (e.g., Uy *et al.*, 2013; Shepherd and Haynie, 2009)--in fact, entrepreneurs typically face more stress than most employees. Entrepreneurship involves high uncertainty (e.g., McMullen and Shepherd, 2006), which is a primary cause of stress (Peters, *et al.*, 2017). For this reason, scholars have suggested that entrepreneurship models should include discussions of the stress process (e.g. Rauch, *et al.*, 2018).

Entrepreneurs describe themselves as “working very fast,” “working very hard,” and not having “enough time to get the job done” (Messler and Capobianco, 2001) and are particularly vulnerable to stress when developing and managing new ventures (Henricks, 1991; Zahra, 2007; Drnovsek *et al.*, 2010). Job demands can provoke mental strain and dissatisfaction (Boyd and Gumpert, 1983; Harris, *et al.*, 1999; Jamal, 1997; Kets de Vries, 1980), and long working hours can lead to feelings of loneliness and social isolation (Akande, 1994; Boyd and Gumpert, 1984; Hannafey, 2003). Aside from the long work hours and social isolation, other causes of entrepreneurial stress include conflicts with partners and employees (Akande, 1994; Boyd and Gumpert, 1983; George and Hamilton, 2011). Also, entrepreneurship is often associated with high levels of autonomy and responsibility as well as risk taking and income and job uncertainty (Boyd and Gumpert, 1983; Covin and Slevin, 1991; Douglas and Shepherd, 2000; Wiklund, 1999). Entrepreneurial stress includes the potential for failure (Landier, 2005), which can trigger the emotions of fear, anxiety, frustration, grief, loneliness, and mental strain (Boyd and Gumpert, 1983; Du Toit, 1980; Patzelt and Shepherd, 2011; Shepherd, 2003; Cardon and Patel, 2015).

When failure occurs, emotional effects include trauma, shame, and guilt (e.g., Cope, 2011; Shepherd, 2003; Shepherd and Cardon, 2009; Ucbasaran *et al.*, 2013).

Although the importance of coping for entrepreneurs' emotional well-being is widely accepted (Stephan, 2018; Uy *et al.*, 2013), coping effectiveness has been called "one of the most perplexing research topics" because of inconclusive findings (Uy *et al.*, 2013). For example, one aspect that is not well understood is that, despite their higher exposure to stressful situations, entrepreneurs sometimes report experiencing lower levels of stress and fewer negative emotions than the employed (Baron *et al.*, 2016; Hessels *et al.*, 2018; Patzelt and Shepherd, 2011). It is known, however, that entrepreneurial task characteristics and contextual factors, such as decision autonomy, role centrality, the number of team members, and size of the initial investment, can affect entrepreneurial coping, such as through their use of autonomy to focus on less risky projects (Drnovsek *et al.*, 2010; Patzelt and Shepherd, 2011). Self-selection has also been used to account for this puzzling finding, with those persisting in entrepreneurship found to be more resilient and perhaps less sensitive to the effects of stress (e.g., Baron *et al.*, 2016). Still, this past research has been limited in the extent to which the emotional *and* cognitive processes found in entrepreneurial coping are explained.

In fact, the state of the research on entrepreneurial coping is consistent with research into entrepreneurship more generally. In their quantitative review of research into entrepreneurship, Ferreira, *et al.* (2017) noted that it remains fragmented. Similarly, Hjorth, *et al.* (2008) called for greater theoretical robustness, including treating entrepreneurship within its social context and drawing on the social sciences for foundations for research. In our view, one indicator of the inadequacy of current models of entrepreneurship is that, although the research has become more theoretical in nature over time, the six conceptual frameworks identified in a recent quantitative

review are predominantly cognitive in focus, such as those concerning knowledge creation and spillover, labor specialization, and decision-making characteristics (Ferreira, et al., 2017). Thus, most existing frameworks neglect the emotional dimensions of entrepreneurship, which may be as important as cognitive ones in explaining behavior (e.g., Baron, 2008; Cardon, *et al.*, 2009; Wolfe and Shepherd, 2016). We believe that this tendency to focus mostly on a cognitive account of entrepreneurship extends to the literature on entrepreneurial coping and may be why coping effectiveness has been a perplexing research topic (Uy *et al.*, 2013). The task and contextual components discussed by Patzelt and Shepherd (2011), for example, don't take into account affective aspects of coping. The Attraction, Selection, Attrition hypothesis discussed by Baron *et al.* (2016) concerns the psychological capital entrepreneurs have that leads them to persist or not, but does not explain how this capital is used in the coping process beyond that entrepreneurs with this capital have the belief they can overcome obstacles. Thus, in our view, neither model includes what scholars have suggested is needed in a model of entrepreneurship--a discussion of the stress *process* (e.g. Rauch, *et al.*, 2018)--meaning an explanation of what happens during entrepreneurial coping or non-coping rather than just the factors that predict or may precede it. This has implications for how the research can be used. Without more understanding of what happens in the coping process itself, it is difficult to provide any advice to entrepreneurs other than to make sure they have high levels of control over task and contextual characteristics of a situation or go into entrepreneurship having high levels of psychological capital to be able to endure the stress. Examining the coping process based on emotions and emotional competency can provide additional insights that would be useful to entrepreneurs.

Additionally, it seems particularly important to consider the affective process found in entrepreneurial coping because of the distinct nature of the profession. First, managers in large

organizations do not have to rely on their personal confidence in making decisions to the extent that entrepreneurs do because they can rely on decision-making tools (Munoz, 2019) and historical performance patterns. Entrepreneurs on the other hand tend to be more likely to rely on optimism in their initial assessment of a situation, and this optimism appears in their decisions to a greater extent than in decisions made by managers in large organizations (Busenitz and Barney, 1997). Optimism enables entrepreneurs to proceed with an idea before all the steps to that specific venture are fully known—in other words, to allow them to “get in on the ground floor” of the venture. Put differently, if entrepreneurs wait until all the "facts" are in, the opportunity they are seeking to exploit will most likely be gone by the time more complete data becomes available (Busenitz and Barney, 1997; Stevenson and Gumpert 1985). Working within this “narrow window of opportunity” therefore also makes them more likely to be operating in uncomfortable situations that can create stress, requiring them be more able to cope with changes and adversities. Although they may generally approach entrepreneurial tasks with optimism, when entrepreneurial endeavors fail, individuals can feel a high degree of negative emotions that affect motivation and learning (Shepherd and Patzelt, 2018; Politis and Gabrielsson, 2009); thus, entrepreneurship can be an emotional rollercoaster given the unpredictability of experiences entrepreneurs face (Baron, 2008; Shepherd and Patzelt, 2018).

A second reason to consider the affective process found in entrepreneurial coping is because normally, organizations serve as constraints on employee expression of emotions (Mumby, 2019), with expectations that certain emotions, and not others, be expressed, meaning that employees have little autonomy in their expression of emotions (Humphrey, 2008; Humphrey, *et al.*, 2019). Entrepreneurs, in contrast, have quite a bit of autonomy because they do not have those externally-imposed constraints and must rely primarily on their own

discernment to regulate their emotions appropriately in their interactions with stakeholders (e.g., employees, customers). Therefore, conceivably, this aspect could have a significant effect on the success of entrepreneurs. Indeed, there is some evidence that an entrepreneur's ability to regulate emotions can affect firm performance (Nambisan and Baron, 2013; Cardon *et al.*, 2009). Exactly why and how this occurs requires more exploration.

Accordingly, the present paper proposes a conceptual framework of entrepreneurial coping that more clearly outlines the coping process. We base the model on the specific set of emotional competencies found in emotional intelligence (EI) given that it has been previously suggested that entrepreneurial EI can help entrepreneurs cope successfully (Boren, 2010) and preliminary evidence from a qualitative study suggests that is likely the case (e.g., Cross and Travaglione, 2003). Our model highlights how individual differences in EI components, the ability to *perceive, express, understand, and regulate/modify* emotional phenomena (Mayer and Salovey, 1997), are likely key contributors to processes involved in entrepreneurial coping. Also, our conceptual framework invokes *approach- and avoidance-motivation theory* for two main reasons. First, this model seems applicable given that discussions of coping in the research literature have considered whether the coping is oriented towards approach or avoidance (Roth and Cohen, 1986). Second, previous research indicates that emotional intelligence levels mediate effects of approach and avoidance tendencies on values and behaviors such as hedonism (e.g., see Athota and O'Connor, 2014), establishing the role EI plays in approach and avoidance, although this was not in the area of coping with stress, nor pertaining to entrepreneurial behavior.

Our model helps integrate and account for previous findings on emotions in the literature as well as the aforementioned puzzling findings concerning entrepreneurs' ability to cope with high levels of stress. It also helps answer the call by Affective Events Theory, which is an

organizing framework for studying affect, for more micro-level process explanations of state affective responses to events (Weiss and Beal, 2005; Weiss and Cropanzano, 1996). AET points out that affective experiences are often episodic, stimulated by changing events, and suggests that more understanding of this dynamic structure is needed, including both the exogenous factors that serve as the shock and endogenous factors related to the responses generated. We examine here the episodic process relating to stressful events found within entrepreneurial experiences; the stressor is the exogenous event and EI and the process it stimulates are the endogenous variables.

Although our model focuses on the coping of entrepreneurs, we acknowledge that an emotional competency model of coping can apply to any individual, both entrepreneurs and managers. However, our model focuses on certain key dimensions such as optimism, acceptance, and readiness to adapt that have been observed to be at elevated levels in entrepreneurs in comparison to managers. Given that these dimensions are linked to levels of emotional intelligence (as will be shown in our theoretical background discussions) and found to be more prevalent in entrepreneurs, we argue that our proposed coping model applies to entrepreneurs more than it does to managers. Additionally, we acknowledge that other factors, such as entrepreneurial experience and knowledge, physical and financial resources, networks and connections, and innate intelligence, are forms of psychological capital that serve to alleviate stress and assist in coping. We don't intend to diminish the role of these factors, but instead suggest that looking into the psychological aspect of coping based on emotions and emotional competency can provide further insights.

Prior to introducing this conceptual model, we review the essential literature on several relevant topics including (a) coping and entrepreneurship, (b) emotions and entrepreneurship,

and (c) EI and coping. This review suggests that EI is a key emotional competency for the coping effectiveness of entrepreneurs. In this review, we also go into more discussion of the approach-and-avoidance motivation framework that serves as the basis for our model.

2. Theoretical Background

2.1. Types of Coping

Coping has been defined as consisting of cognitive and behavioral efforts to manage taxing external or internal demands (e.g., Folkman and Moskowitz, 2004). Most models of coping to date have specified types of coping and examined their effects on measures of well-being. There are various categorizations of coping and these categories overlap considerably. One model of coping emphasizes that coping consists of appraising and exerting control in the situation (Coiro, *et al.*, 2017) and that primary control coping strategies attempt to alter conditions such as the stressor or one's emotional response whereas secondary control strategies focus on adapting such as through acceptance or cognitive restructuring (e.g., Rudolph, *et al.*, 1995; Weisz, *et al.*, 1994). Another typology discusses cognitive coping, which focuses on interpreting the stressful event, behavioral coping which refers to managing its consequences, and emotional coping, which focuses on diminishing its emotional impact (Nieto *et al.*, 2020). Additionally, the research literature has tended to discuss coping as being problem-focused, which consists of altering the source of the stress including planning, taking action, and seeking assistance (Carver *et al.*, 1989), or emotion-focused, in which the stressor is reinterpreted rather than modified (Blankstein and Flett, 1992). (Note: problem-focused coping has also been called "active" coping in the entrepreneurship literature since it involves taking steps that actively addresses venture issues--e.g., Uy *et al.*, 2013.) One discussion in the literature has suggested that the problem- vs. emotion-focused coping categories should be dropped for more descriptive

and specific categories of responses (e.g., Skinner *et al.*, 2003). The terms “problem-focused” and “emotion-focused” coping are retained in our discussion given that these are the predominant terms found in much of the research literature on coping. Notably, the concepts of problem-focused and emotion-focused coping are similar to the notions of judgement-driven and affect-driven behavior that Affective Event Theory discusses in their consideration of responses to events (Weiss and Beal, 2005).

Most individuals use both types of coping, with the particular coping type changing as the situation unfolds (Carver and Scheier, 1994; Folkman and Lazarus, 1985). Also, both problem-focused and functional emotion-focused coping (i.e., acceptance rather than avoidance) are thought to be important, but for different reasons. Problem-focused coping is relevant when the individual perceives an ability to eliminate or reduce the source of stress; positive emotion-focused coping is essential when this is not the case (e.g., Gohm and Clore, 2002). Appraisal theory, which concerns how individuals make situational appraisals (e.g., Lazarus and Folkman, 1984; Schwarzer, 2001), suggests that those who perceive a threat as being out of their control are more likely to engage in emotion-focused coping (e.g., Folkman, 1984). Thus, in stressful situations that are partially modifiable and partially not, both types of coping would be needed. Accordingly, although research indicates that engaged coping strategies are more predictive of well-being than are strategies of disengagement (e.g., Coiro, Bettis, and Compas, 2017), research also indicates that, among engaged coping strategies, having a balance in terms of both instrumental and palliative coping types results in higher well-being than does a one-side profile (Kalouza, 2000). Also, some researchers have suggested that emotion-focused coping may need to occur before problem-focused coping can be effective (e.g., Carver and Scheier, 1994).

Identifying and understanding emotions helps with coping by positively reinterpreting them, leading to planning and action (Gohm and Clore, 2002).

Emotion-focused coping has been viewed by some as being less effective than problem-focused coping (e.g., Blankstein and Flett, 1992), supported by research findings that problem-focused coping is associated with improved mental health and emotion-focused coping is associated with decreased mental health (Chang, *et al.*, 2007; Saklofske *et al.*, 2006). However, this could be a function of the fact that the complementary nature of emotion-focused and problem-focused coping is not often considered. Also, emotion-focused coping, as discussed in the research literature, often refers to methods that include both acceptance and distancing and controlling and avoiding, which confounds the more dysfunctional with the more functional methods of emotion-focused coping (Carver *et al.*, 1989; Gohm and Clore, 2002). Frequent avoidant coping is known to negatively affect well-being (Chao, 2011). Furthermore, rumination on negative emotions can take up valuable cognitive resources needed to respond to the stressful event, such as taking resources away from attention (Beal, Weiss, Barros, and MacDermid, 2005). On the other hand, acceptance, positive reinterpretation of events, and social support are associated with well-being (Linehan, 1994; Menaghan and Merves, 1984; Urry *et al.*, 2004). Therefore, in our discussion, problem-focused and emotion-focused coping are considered together in an integrated fashion, allowing for their complementarity; additionally, effective emotion-focused coping is viewed as involving acceptance rather than avoidance or rumination, or at least avoidance that serves in some way to enable later acceptance. This is because some level of acceptance of the emotions associated with a problem is needed to be able to approach the problem to resolve it and to continue in the situation when the problem is not solvable.

Although there are various models of coping types and resulting examinations of the relative correlation of coping type with measures of well-being, we know very little about the actual process that the coping strategy stimulates and how it affects well-being. Therefore, our model seeks to fill this gap in the coping literature particularly with respect to entrepreneurship. The proposed model is based on an approach- and avoidance-motivation framework, which has been found to be useful across topics of analysis for over a century (Elliot and Thrash, 2002; 2012). A major advantage of the approach-avoidance framework is that it can account for the two components in motivation, energization and direction, as compared with other motivation theories such as goal setting which usually account for one or the other (Elliot, *et al.*, 2005). This is because it offers an affective component which operates at the broader level to energize behavior and provide a general direction for it and also a cognitive component that serves to refine the direction (Elliot *et al.*, 2006). Notably, the approach-avoidance motivation framework has been applied in several research fields in order to create more comprehensive and integrated models of phenomena that also bring parsimony and additional explanatory power (e.g., Bruning and Campion, 2018; Fleishman, 1984; Gable *et al.*, 2006; Perugini and Bagozzi, 2001). For example, when Perugini and Bagozzi (2001) incorporated approach and avoidance into the theory of planned behavior, it accounted for more variance in behavior than Azjen's (1991) original theory, which focused on intentions only. Similarly, we apply the approach-avoidance framework in order to integrate the literature on coping in entrepreneurs and also to suggest more micro-level processes than have been presented in past typologies of coping strategies.

Approach motivation refers to behavior that is directed by a desired or possible event and avoidance motivation refers to behavior that is directed by a potential undesirable event. For example, McClelland's achievement motivation theory (1951) suggested that there are two kinds

of achievement motivation, one directed toward attaining success and the other toward avoiding failure. The orientation an individual has affects how the individual interprets, evaluates, and acts on information and how the individual responds to situations, such as choosing challenging or easy tasks and engaging in or withdrawing from situations (Ames and Archer, 1987; Dweck, 1986). Another example of the application of this model is in the social domain, in which the affective motives are hope for affiliation and fear of rejection (Elliot *et al.*, 2006). These social motives predicted friendship approach and avoidance goals, which in turn predicted social well-being and changes in physical symptoms respectively (Elliot *et al.*, 2006).

Similarly, we expect that approach and avoidance tendencies play a role in entrepreneurial responses to stress, and our specific research question is whether these tendencies are influenced by an entrepreneur's ability to determine, via high levels of EI, appropriate responses to the stressors even when they may be swamped with negative emotions. In particular, our analysis focuses on those attitudes that allow the entrepreneur to approach a stressful situation successfully rather than avoid it or misinterpret it. The attitudes we discuss in the current analysis mainly include the entrepreneur's acceptance of negative or intense emotions while approaching a stressful situation as well as their optimism that the situation can be resolved. It is acknowledged, however, that this is an initial model specifying the process and there are a myriad of cognitions, emotions, and attitudes associated with entrepreneurial coping effectiveness which could be explored in future model development and research.

Next, discussions of coping, specifically with regard to entrepreneurship, are considered.

2.2. Problem- and Emotion-focused Coping in Entrepreneurship

Similar to the coping literature in general, discussions of entrepreneurial coping have concerned the entrepreneur's use of problem-focused and emotion-focused coping. In fact, the

relationship between self-employment and the reporting of negative emotions has been found to be moderated by problem-focused and emotion-focused coping strategies (Patzelt and Shepherd, 2011). Problem-based coping is also associated with entrepreneurs' well-being and firm performance (Drnovsek *et al.*, 2013). Research by Singh and colleagues (Singh *et al.*, 2007) on coping after a business failure indicated that problem-focused coping primarily dealt with financial issues such as getting out of debt and emotion-focused coping was mostly in the form of avoidance behaviors such as distraction and venting. Problem-focused coping assisted entrepreneurs in securing new employment and dealing with debt and emotion-focused coping helped entrepreneurs deal with their loss by restructuring their lives (Singh *et al.*, 2007). Engagement in problem-based coping strategies appears to be more significant for personal well-being than is engagement in emotion-based coping strategies (Folkman and Lazarus 1985), but as discussed previously this could be due to the limited types of emotion-based coping that have been examined. Additionally, most studies have not discussed specifically how problem-focused and emotion-focused coping arise (e.g., Wolf, 2016) or why they are effective. Skill at applying coping strategies and adaptability in problem-solving appear to be two important aspects in effectiveness. Entrepreneurs with more start-up experience seemed to be better able to use avoidance coping effectively perhaps because they are more skilled at using it to facilitate later problem-based coping (Uy *et al.*, 2013). Also, entrepreneurs who used more adaptive problem-solving strategies were more likely to remain in business longer than their less adaptive colleagues (Buttner and Gryskiewicz, 1993).

Next, emotional intelligence and its association with coping will be discussed.

2.3. Links between Emotional Intelligence and Coping

Emotional intelligence (EI) refers to individuals' ability to manage and understand their own emotions as well as the emotions of others (Bar-On and Parker, 2000). It has been reported that individuals with higher levels of EI experience less perceived stress and higher well-being than those with low EI (Pau and Croucher, 2003), which is thought to be because EI is related to more active coping (Gohm *et al.*, 2005). Research indicates a significant positive association between EI and problem-solving strategies, for example (Por *et al.*, 2011). There is also evidence that EI can help employees with what is called emotional labor, meaning creating the emotions that are expected in the workplace and avoiding the ones that are unwanted (Ashforth and Humphrey, 1993). Employees use "surface" and "deep" acting to manage their emotions in the workplace and emotional intelligence is negatively related to surface acting but positively related to deep acting (Johnson and Spector, 2007; Lee and Ok, 2012; Wen, *et al.*, 2019). Surface acting refers to creating the outer appearance of a feeling; deep acting refers to manufacturing the inner shape of feelings, such as through the use of imagination (Hothschild, 1983). Research indicates that deep acting is more effective and less stressful than surface acting (e.g., Grandey, 2003; Wen *et al.*, 2019), but it is believed that individuals are unable to engage deep acting if they do not know how to regulate their emotions (Grandey, 2000)--thus the need for emotional intelligence.

There are various models of EI; all view EI as consisting of a set of competencies or dispositions that concern understanding and responding to one's own and others' emotions (Bar-On and Parker, 2000). The models differ mostly on whether they view these competencies as being primarily cognitive or including non-cognitive skills and whether they are innate or learned. Initial models include the ability model by Mayer and Salovey (1997), the emotional-

social intelligence model (Bar-On, 1997), and the emotional competencies model (Goleman, 1998). Later, the trait model was also developed (Petrides and Furnham, 2000). The ability and trait approaches of EI are the most commonly used. These approaches are considered complementary (Zampetakis *et al.*, 2009), with the ability approach referring to one's actual ability to identify and use emotion-related information, and the trait approach referring to behavioral dispositions (Petrides and Furnham, 2000) that interact with situations to influence behavior (Shipper *et al.*, 2003). The remaining approaches are either broader or narrower than the ability and trait approaches. Bar-On's (1997) theoretical approach to EI is understood to be wider and more comprehensive than Mayer and Salovey's model (1997; Fernández-Berrocal and Extremera, 2006) because it considers a set of interrelated emotional and social competencies, skills, and facilitators and focuses mostly on noncognitive factors, rather than considering EI as primarily a mental ability (Bar-On, 2006; Fernández-Berrocal and Extremera, 2006). Goleman (1998) focused more narrowly on EI as a determinant of work performance and leadership effectiveness (e.g., Goleman, 2001). His model also considers a component of EI to be the drive to achieve, which is not found in most other models of EI.

Mayer and Salovey's (2009) ability model serves as the basis of our discussion of EI precisely because it is not too narrow nor too broad but also because it has been widely used. More importantly, it fits well with the research that indicates that skill and adaptability are key to applying coping strategies (Buttner and Gryskiewicz, 1993; Uy *et al.*, 2013). We also are interested in the competencies that lead to functional problem-focused and emotion-focused coping, as will be discussed. The emphasis is on broaden-and-build positive spirals generated from acquired skillsets rather than influences of traits, although it is recognized that both are important factors influencing behavior. The Mayer and Salovey (2009) model includes the

ability to perceive emotions in oneself and others and has four key dimensions: 1) perceiving and expressing emotions, meaning the ability to identify and process emotional information in self or others, 2) using emotions, or the ability to harness emotions to guide cognitive activities and solve problems, (3) understanding emotions, which refers to the ability to analyze the cause and effect between events and emotions, and finally, (4) regulating emotions, which concerns the ability to select emotion regulation strategies (Mayer and Salovey, 1997).

Next, research linking emotions and emotional intelligence to entrepreneurship will be discussed.

2.4. The Role of Emotions in Entrepreneurship

Baron (2008) suggested that entrepreneurs will often be influenced by intense emotions in their endeavors given their high levels of passion and commitment. Several studies have investigated the relationship between negative emotions, such as stress, fear of failure, loneliness, mental strain, and grief, and the entrepreneurial process (Byrne and Shepherd, 2015; Doern and Goss, 2014; Patzelt and Shepherd, 2011; Shepherd, 2004; Shepherd *et al.*, 2009; Shepherd *et al.*, 2013; Wolfe and Shepherd, 2016). There have also been investigations of the role that positive emotions, such as passion, excitement, happiness, flow and satisfaction, play in entrepreneurship (Baum and Locke, 2004; Blanchflower *et al.*, 2001; Bradley and Roberts, 2004; Cardon *et al.*, 2005, 2009; Komisar, 2000; Rai, 2008; Schindehutte *et al.*, 2006). Positive emotions appear to be associated with entrepreneurial orientation and successful entrepreneurship (Cardon *et al.*, 2005; Carver and Scheier, 2002).

Also, research indicates that high levels of emotional competencies are associated with entrepreneurial orientation and successful entrepreneurship (Padilla-Meléndez *et al.*, 2014; Pradhan and Nath, 2012; Rhee and White, 2007). Specifically, they appear to be associated with

effective problem solving and coping with stress in entrepreneurs. Emotions appear to enhance entrepreneurial creativity, including opportunity recognition (Baron, 2008), and are thought to play a constructive role in problem solving, such as an entrepreneur's ability to turn past experiences into present solutions through heuristic processing (Baron, 2008). There is also research suggesting that positive emotions can help entrepreneurs deal effectively with the persistent stress that often plagues them (Cardon *et al.*, 2005; Carver and Scheier, 2002). Wolf (2016) found that emotion-focused coping helped with problem-focused coping, such as in identifying solutions to problems by pausing for a while and doing something different rather than obsessing, which is consistent with research suggesting that emotion-focused coping helps problem-focused coping (Carver and Scheier, 1994) because emotions can be reinterpreted, leading to action (Folkman, 1984; Gohm and Clore, 2002).

Emotional intelligence in particular is thought to positively affect entrepreneurship in a number of different ways, including by providing increased emotional resilience in the face of obstacles, more effective handling of intense emotions, increased innovation, improved negotiation and leadership skills, and increased understanding of customer needs (Humphrey, 2013). There is some direct evidence of this relationship: research indicates that EI in entrepreneurs is associated with increased creativity and the formation of entrepreneurial intentions (Ahmetoglu *et al.*, 2011, Zampetakis *et al.*, 2009). Also, emotional intelligence in entrepreneurs has been found to affect their external networking behavior which in turn influences performance (Naudé *et al.*, 2014). There are also indirect indications that EI should influence various aspects of entrepreneurship. Researchers have linked EI to social skills such as accurately perceiving other's needs, making good first impressions, and influencing others in interpersonal interactions (Mayer *et al.*, 2004). Social skills are important for developing

business networks and contribute to entrepreneurial success (Baron and Markman, 2000; Cardon *et al.*, 2012). Also, EI is associated with being aware of and managing one's internal states, impulses, and resources (Goleman, 1995), which can enhance the entrepreneur's ability to recognize opportunities (Baron, 2008), aid decision making in emotionally turbulent situations (Baron, 2013; Brundin and Gustaffson, 2013), and enable adaptive responses to unpredictable events (Mayer *et al.*, 2004; Prentice and King, 2013).

Furthermore, indications are that the different branches or components of ability EI might serve to improve different aspects of entrepreneurial effectiveness. Prior work in entrepreneurship suggests that an entrepreneur's ability to *regulate their emotions* can have a direct impact on entrepreneurial firm performance (Nambisan and Baron, 2013; Cardon *et al.*, 2009); also, both the *regulation and utilization of emotions* branches have been found to contribute to the entrepreneurial self-efficacy that then leads to intentions to become an entrepreneur (Mortan *et al.*, 2014). *Emotional expression* in entrepreneurs appears to be important for obtaining funding: one study found angels used displayed passion as a factor in their investment decisions (Cardon *et al.*, 2009). *Emotional expression* also presumably underlies findings that entrepreneurs with higher EI levels are more able to display the inspirational behaviors that inspire followers (Yitshaki, 2012). Furthermore, research on EI components in non-entrepreneurial populations is informative. The *emotion regulation* or management branch has been found to allow for coping more effectively with situational demands, and the branch of EI that *facilitates thinking* has been found to enhance creativity (Parke *et al.*, 2014). The *understanding* branch appears to have an effect on the degree to which anxiety can bias decision making, with individuals with higher EI more able to resist the bias to take less risk with increased anxiety ability (Yip and Côté, 2013).

Our review of the literature suggests research has established that first, emotions play an important role in entrepreneurship, and second, emotional competencies, including those found in EI, are associated with the improved problem solving, social skills, and emotional regulation needed for coping with stress. However, currently these studies create a fragmented understanding of the role of EI since there has been no coherent explanation of why or how this might be the case. Although there are discussions of the coping process in other fields, particularly within research on mental health (e.g., Compas, et al., 1997; Compas et al., 1999), there is no clear model of the coping process in entrepreneurs. The model we propose may be useful in filling these gaps in the literature.

3. Model Development and Hypotheses

3.1. Role of EI Components in Entrepreneurial Coping

Entrepreneurial emotions have been thought to be a function of: the core affective states of entrepreneurs, the affective reactions their ventures elicit, entrepreneurs' attributions for their affective states, and their processing of those emotions, called emotional meta-experiences (Cardon *et al.*, 2005). The proposed model focuses on the last three of these. Specifically, it is believed that high levels of EI will be associated with coping with adverse conditions (Quintillan and Pena-Legazkue, 2019) through specific components of EI that each help with problem-focused or emotion-focused coping. The authors posit that three of the components of EI, perceiving and expressing emotions, using emotions to guide cognitive activities and solve problems, and understanding the cause and effect between events and emotions, should be useful primarily during problem-focused coping (see Figure 1). From an evolutionary perspective, the function of emotions is to help to resolve the problem that elicited it (Lench and Carpenter, 2018); thus, emotions are often one of the first signals that something is wrong. Strong EI,

particularly the perceiving emotions component, would allow one to recognize these emotional cues. The role of the next two components of EI in problem-focused coping, using emotions to guide problem-solving and to understand causes and effects, is relatively straightforward. These should be key factors aiding problem diagnosis and solution generation. It is also expected that the final component of EI, regulating emotions, should be useful. Managing emotions or overriding them when they are not adaptive leads to more effective decisions (Fulmer and Barry, 2018). In particular, emotion regulation should help emotion-focused coping during the two times in the response process when emotion regulation can occur. First, the emotionally intelligent are thought to be more able to buffer, rather than react to, the strong emotional reactions of others (Thompson *et al.*, 1999). Second, when strong emotions do occur, EI can help emotions be acknowledged and dealt with rather than avoided (e.g., Salovey *et al.*, 1995). For example, research indicates that attention to the emotional experience is associated with obtaining social support (Gohm and Clore, 2002). Hence, it is proposed that:

Proposition 1: *a) Entrepreneurs' levels of the emotional competencies of using, perceiving, and understanding emotions will be positively associated with their levels of problem-focused coping; b) their levels of the emotional competency of regulating or modifying emotions will be positively associated with their levels of emotion-focused coping.*

Following, the dynamics expected to occur with problem-focused and emotion-focused coping are discussed (illustrated in Figure 1).

3.2. Acceptance and Optimism as Mediators

There are two key attitudes that mediate the relationship between EI and well-being. Note that research indicates that optimism and acceptance are both important factors in dealing with difficult life circumstances, with each independently explaining a significant amount of the variance in distress (e.g., Wright *et al.*, 2011). The authors believe each is associated with a

different type of coping strategy and that each strategy is appropriate for dealing with different types of situations (i.e., factors under or not under the individual's control). However, emotion-focused coping *precedes* the attitude (acceptance) and problem-focused coping *follows* the attitude (optimism). Following, these hypothesized processes will be discussed.

3.3. Emotion-focused Coping Generating Acceptance by Entrepreneurs

Coping with emotions can take a variety of forms. As discussed, unfortunately, much of the research on coping confounds different types of emotion-focused coping; hence it is imperative to distinguish between the two of them more clearly: avoidance and acceptance. Typically, avoidance is considered in tandem with approach (e.g., Elliot and Thrash, 2002). Approach strategies refer to methods that help orient an individual toward a threat in order to be able to take appropriate action (e.g., Roth and Cohen, 1986). To be able to reverse the avoidance produced by strong aversion to a threat, some level of acceptance, which is one type of approach tendency (Roth and Cohen, 1986), needs to occur. Therefore, the authors focus specifically on acceptance rather than other approach tendencies because research and experience suggest it is necessary to generate acceptance before other approach tendencies (such as problem solving) can occur. Following, this process is considered in more detail.

Avoidance by humans is pervasive (Hayes *et al.*, 1996). Avoidance refers to when an individual is not willing to stay in contact with particular emotions, thoughts, and memories (Hayes *et al.*, 1996), and can manifest physically, such as by leaving a room, or psychologically, such as through repressing emotions or blame shifting (Hayes, *et al.*, 1996). In organizations, avoidance manifests in political behaviors such as playing dumb, scapegoating, and passing the buck (Ashforth and Lee, 1990) and in resistance to change such as slowing down, committing errors, and deliberately sabotaging (Judson, 1991). Avoidance adversely affects long term

adaptation and well-being (Suls and Fletcher, 1985) through fewer attentional resources (Bond and Hayes, 2002) and narrow and ineffective repertoires of behavior (Hayes and Strosahl, 2004). Therefore, avoidance is considered ineffective in the long term (Suls and Fletcher, 1985).

Avoidance or suppression of unwelcome emotions or thoughts may occur initially and may even be temporarily effective. For example, entrepreneurs with prior start-up experience were found to effectively use avoidance immediately after experiencing a stressor (Uy *et al.*, 2013). This is thought to be because “taking a break” from the stressor can help alleviate stress and lead to re-energizing, facilitating later active coping (Uy *et al.*, 2013). However, functional emotion-focused coping is needed for longer term effectiveness, since approach tendencies such as acceptance and coping are essential for change and well-being (Goltz, 2018; Linehan, 1994; Urry *et al.*, 2004; Uy *et al.*, 2013). Emotion-focused coping consists of examining and dealing with the emotions rather than repressing them. Acceptance has been defined as an active willingness to embrace and hold what life offers (e.g., Luoma *et al.*, 2017). Therapies that work on acceptance promote contact with and responding to the present moment through viewing it as temporary (e.g., Hayes, 2004; Luoma, *et al.*, 2017). In organizational change, for example, the acceptance stage is characterized by more positive feelings toward the new environment and also can include looking ahead to the next stage (Friedrich and Wustenhagen 2017).

In discussing the coping process, Carver, Scheier, and Weintraub (1989) suggested that acceptance is important during two aspects of stress and coping. During primary appraisal, the process of perceiving a threat, acceptance of the threat as being real occurs; during secondary appraisal, which is bringing to mind a potential response to the threat, acceptance of the lack of an active and effective response to the stressor occurs (Carver *et al.*, 1989). They also suggested that acceptance is especially important when the stressor has to be accommodated rather than

when it can be easily changed. Thus, individuals who are able to accept the difficult circumstances they encounter rather than avoid them are going to be more able to adjust, particularly when the causes of the stressors are not under the individual's control.

Based on the aforementioned research, we expect that higher levels of emotional regulation in individuals with high EI will allow more functional emotion-focused coping to occur, with acceptance being an important outcome (see Figure 1). A recognition of the need for effective emotional-focused coping is found in the literature on entrepreneurship: self-compassion, self-kindness, and mindfulness have been suggested as ways to accept rather than avoid or detach from negative emotions associated with entrepreneurial failures (Shepherd and Patzelt, 2018). This allows individuals to use the failure to learn rather than ruminating and being self-absorbed (Shepherd and Patzelt, 2018). Mindfulness, for example, allows for a distancing between self and the failure to be able to accept the event without self-criticism (Shepherd and Patzelt, 2018), which results in an increased ability to discern and learn from important information about project failure (Shepherd and Cardon, 2009).

Acceptance is likely to be generated as a result of “emotional meta-experience” (EME)—the conscious processing of emotional experience by entrepreneurs that Cardon *et al* (2005) refer to. In particular, although there usually is an initial emotional reaction to an experience, a secondary appraisal assessing the initial reaction also occurs (e.g., see DeMasio, 2003; Russell, 2003). This appraisal consists of trying to understand and process the initial reaction. For example, if the entrepreneur is typically positive, a strong negative reaction may not make a lot of sense, creating cognitive dissonance. The secondary appraisal allows the entrepreneur to integrate these various experiences and create a consistent narrative (Cardon, *et al.*, 2005).

Detaching from negative emotions and using them to learn is one way in which core affective states and episodic emotions can be integrated. Hence, it is proposed that:

Proposition 2: *The degree to which entrepreneurs perceive that they are unable to control a stressor will be positively associated with their levels of reactive (emotional, or emotion-focused) coping.*

Proposition 3: *Entrepreneurs' use of reactive (emotional or emotion-focused) coping will be positively associated with their levels of acceptance of the stressor.*

However, acceptance in itself is not normally sufficient to deal with stress or difficulties, since acceptance is more appropriate for events that are out of the individual's control. Stress can also be caused by events that are in part under the individual's control. In this case, acceptance of emotions and the events that caused them could result in inaction when action is needed. Following, the dynamics occurring with problem-focused coping, which is a more appropriate strategy when the entrepreneur has some control over the difficult situation, will be discussed.

3.4. Optimism Leading to Problem-focused Coping in Entrepreneurs

Optimism has been defined as generalized positive outcome expectancies (Scheier and Carver, 1985) and can be thought of as a version of confidence pertaining to life (Scheier and Carver, 1992). Optimists are confident they will attain their goals and positive outcomes in the future (Carver and Scheier, 2002; Tiger, 1979) and are more likely to make external attributions for causes of bad events and internal ones for causes of good events (Buchanan and Seligman, 1995). For example, although very few entrepreneurs make it and the majority either fails or obtains meager returns (Åstebro *et al.*, 2014), in the US alone, over a half a million people a year are entrepreneurs (Parker, 2009). This difference between expected utility and entrepreneurship rates is thought to occur because entrepreneurs are higher on optimism, exhibiting a preference

for the skewed chances that characterize entrepreneurship (Åstebro, *et al.*, 2014; Åstebro *et al.*, 2015; Bernoster *et al.*, 2018; Macko and Tyszka, 2009; Puri and Robinson, 2007).

Studies have found a positive relationship between optimism and coping (e.g., Sohl and Moyer, 2009; Uskul and Greenglass, 2005). Optimists are more likely to forecast and act proactively to stressors (Riulli and Savicki, 2003). Specifically, optimism is associated with strategies aiming to eliminate, reduce, or manage stressors or emotions rather than strategies that avoid the problem and emotions associated with it (Nes and Segerstrom, 2006). Essentially, studies have found that optimists tend to be what has been called “approach copers” and pessimists tend to be “avoidance copers” (Scheier and Carver, 1985, 1992, 2017).

However, researchers believe optimism comes in two forms--trait and state optimism (e.g., Luthans and Youssef, 2007). Trait optimism is a relatively enduring characteristic that results in increased vigor and resilience (Kluemper *et al.*, 2009). State optimism, in contrast, is changeable and learnable (Kluemper *et al.*, 2009; Seligman, 1998) and concerns fairly specific expectations about outcomes in a particular context (Kluemper *et al.*, 2009). Most of the research to date has been on effects of optimism as a trait; however, it is thought that trait optimism leads to more general outcomes like better mental and physical health and state optimism affects more context specific outcomes, such as work-related ones (Kluemper *et al.*, 2009). For example, research on trait optimism indicates that, although it leads individuals to be more likely to become entrepreneurs, it can also be a disadvantage, resulting in poorer performance (e.g., Hmielski and Baron, 2009), such as by being associated with increased escalation of commitment to a failing course of action (Åstebro *et al.*, 2007; Bernoster *et al.*, 2018).

Since the authors are interested in entrepreneurs' responses to stress and since state optimism affects more context specific outcomes (Kluemper *et al.*, 2009), in the proposed model, state rather than trait optimism is the primary variable of interest. As stated previously, the three components of EI relating to problem solving (perceiving, using, and understanding emotions) most likely help entrepreneurs identify what factors they can control. Additionally, research indicates they help in problem solving such as by decreasing anxiety and increasing creativity (e.g., Parke *et al.*, 2014; Yip and Côté, 2013). Once entrepreneurs are able to determine that they can solve a situation that is creating stress because of their greater EI levels, this *creates a state of optimism that the situation can be changed*. This state of optimism is different from the trait optimism that leads many entrepreneurs to take up entrepreneurship; however, this state optimism still proceeds according to the self-regulatory model of how optimism works (Carver and Scheier, 1981). When a gap between goals and a situation is perceived and the individual perceives the gap can be reduced, the individual will cope with the problem actively rather than giving up (Carver and Scheier, 1981; Lee *et al.*, 1993). In other words, the gap is dealt with using approach rather than avoidance tendencies.

It seems particularly important for entrepreneurs to have high levels of the components of EI related to problem specification that can generate state optimism when the situation is in fact under their control and adaptive problem solving is needed since problem-focused coping appears to be important in moving entrepreneurs successfully farther down the road in terms of entrepreneurial stages. Buttner and Gryskiewicz (1993) found that, whereas innovation is important for starting ventures, entrepreneurs who used more adaptive problem-solving strategies were more likely to remain in business longer than their less adaptive entrepreneurial colleagues. Less adaptive entrepreneurs tend to be more innovative but fail more often and tend

to have a series of start-ups, possibly because they don't have the coping skills to handle administrative issues (Buttner and Gyskiewicz, 1993; Ronstadt, 1986; Tandon, 1987).

Optimism, in fact, has been found to be correlated with problem-focused coping and this is the case particularly when stress is perceived to be controllable (Scheier *et al.*, 1986; Scheier *et al.*, 2001; Strutton and Lumpkin, 1992). This state optimism contrasts with the trait optimism that can blindly lead entrepreneurs to persist in a failing course of action in circumstances that may or may not be under their control (Åstebro *et al.*, 2007; Bernoster *et al.*, 2018). It also contrasts with pessimism, which is associated with disengagement behaviors rather than approach- and problem-focused tendencies (Scheier *et al.*, 2001).

The Broaden-and-Build theory of positive emotions (Fredrickson, 1998, 2001) helps explain this process further. This model suggests that negative emotions narrow behavioral repertoires momentarily and positive emotions broaden them. Narrowed responses may channel energy more forcefully and with fewer distractions, but broadened cognitions and behavioral repertoires allow for a larger set of resources and responses for dealing with the stressor. Consistent with this model, research indicates optimism is related to the ability to manage uncertainty well primarily because of flexibility during changing circumstances (Aspinwall *et al.*, 2001; Carver *et al.*, 1989; Scheier *et al.*, 1994). Coping in terms of flexibility in goals has been found to mediate the relationship between optimism and most well-being measures (Hanssen, *et al.*, 2015). Psychological flexibility is not only associated with the ability to change in response to the environment, but also with job attitudes and performance in organizations (e.g., Bond and Bunce, 2003; Bond and Flaxman, 2006; Bond *et al.*, 2006).

Note that in the case of problem-focused coping, in contrast to emotion-focused coping, the attitude—optimism in this case--occurs before the coping strategy, when the individual

realizes the factors creating the stressor are controllable and that he or she has the resources to change them (see Figure 1). Positive emotions have been found to enable successful coping with negative emotions (Lau-Gesk and Mukherjee, 2017). (This may be due to an accurate assessment or may be due to personality dimensions, such as overconfidence.) At that point, the problem-focused coping strategy kicks into high gear, with resources being applied to change the situation. Optimism, like acceptance, may be generated in part as a result of EME—the secondary appraisal that follows an initial emotional reaction to help the individual create an integrated narrative (see discussion by Cardon, *et al.*, 2005). However, it is believed that the assessment of the controllability of the stressor is key to creating the optimism that precedes problem-based coping. Hence, it is proposed that:

Proposition 4: *The degree to which entrepreneurs perceive they can control a stressor will be positively associated with their level of optimism they can alleviate the stressor.*

Proposition 5: *The level of entrepreneurs' state optimism they can alleviate a stressor will be positively associated with their level of problem-focused coping.*

Although the authors have treated situations requiring emotion-focused and problem-focused coping separately thus far, this has primarily been a simplification for purposes of presenting components of the model so it can be more easily understood. The reality is that most situations causing stress will require both emotion-focused and problem-focused strategies because in most cases, both controllable and uncontrollable factors are operating, although most likely in varying proportions. Next, the process of coping in these mixed situations will be discussed.

3.5. Use of Mixed Coping Strategies by Entrepreneurs

When stressors are being influenced by both controllable and uncontrollable factors, it is expected that, to be most effective at coping, acceptance of the uncontrollable factors must occur before any response to the controllable ones. This is consistent with the literature suggesting

emotion-focused coping may need to occur before problem-focused coping can be effective (e.g., Carver and Scheier, 1994). Research has found, for example, that positively reinterpreting emotions can help with planning and action (Gohm and Clore, 2002). Also, there is research evidence that emotions can reduce problem-solving capabilities: strong affect, both positive and negative, stimulates individuals to process information more superficially, relying more on heuristic cues about how information was delivered which can be misleading, such as by using stereotyping, rather than relying on information content (for a review, see Lerner *et al.*, 2015).

As discussed earlier, the acceptance of uncontrollable outcomes occurs with the secondary appraisal of an initial emotional reaction, when the individual tries to understand and process it. This allows a strong emotional experience to be integrated within the individual's ongoing narrative, allowing for some level of detachment from the event (Cardon, *et al.*, 2005). Thus, in situations containing both controllable and uncontrollable factors, acceptance of the uncontrollable factors and the emotions they generate should occur prior to problem-solving in response to the controllable factors in order to allow for the most effective coping to occur. When this does not occur, the problem-solving strategies are likely to be influenced significantly by more superficial factors, resulting in less ability to appropriately deal with the situation. Additionally, levels of EI in an individual will make it more likely that the more effective sequence will occur. This is because, as discussed earlier, the emotion regulation component of EI allows for strong emotions to be acknowledged and dealt with rather than avoided (e.g., Evans and Allen, 2002; Salovey *et al.*, 1995). Hence, it is proposed that:

Proposition 6: *In situations in which entrepreneurs perceive stress as both controllable and uncontrollable, the processing of emotional reactions to the uncontrollable factors (i.e., emotion-focused coping resulting in acceptance) prior to responding to the controllable ones (i.e. problem-focused coping generating optimism) will be more effective than will processing them at a later point.*

Proposition 7: *Entrepreneurs with higher levels of EI will be more likely to generate acceptance of uncontrollable factors prior to their problem-focused coping with controllable factors than will entrepreneurs with lower levels of EI.*

3.6. Trait Optimism Effects as Compared with EI Effects

We have discussed how state and trait optimism are two different concepts and that our model concerns the state optimism that is generated when high EI levels allow the individual to detect that a stressor is controllable. However, it is useful to explore how this effect may differ from the effects of trait optimism on entrepreneurial coping. The process our proposed model identifies is a discernment process that allows the entrepreneur to realize when optimism is appropriate and when it is not. This is different from trait optimism, in which the entrepreneur goes into the stressful situation with optimism whether it is warranted or not. This distinction is important to consider in entrepreneurial coping given the finding of Baron *et al.* (2016), that increased psychological capital such as resilience (Manfield and Newey, 2018) and optimism allows entrepreneurs to persist because they are less likely to feel the effects of stress. The optimism that Baron *et al.* (2016) discussed, therefore, is trait optimism rather than state optimism. The question then becomes: does our model predict anything different than the Attraction, Selection, Attrition model used by Baron *et al.* (2016)? We believe it does. As indicated earlier, although trait optimism may help entrepreneurs both enter and persist in entrepreneurship, it also can result in poorer performance. The disadvantage of trait optimism is that entrepreneurs may persist or escalate when it is not appropriate to do so (Åstebro *et al.*, 2007; Bernoster *et al.*, 2018), such as when situational factors causing the stress are uncontrollable and not temporary. In other words, trait optimists might be overly optimistic. High EI in contrast to high trait optimism allows the entrepreneur to generate state optimism when it is appropriate rather than escalating or persisting when it is not appropriate. Note, for

example, that research has found that high EI levels as compared with low EI predicts more moderate emotional reactions to events, which is thought to be due to the more accurate attributions for those events (Dasborough, 2019). Therefore, we include here two propositions that concern this distinction.

Proposition 8: *In situations in which the factors causing stress are controllable, both entrepreneurs who have high levels of state optimism and entrepreneurs who have high levels of EI will be more effective at handling the stress than entrepreneurs who have low levels of these variables.*

Proposition 9: *In situations in which the factors causing stress are uncontrollable, entrepreneurs who have high levels of EI and moderate or low levels of trait optimism and entrepreneurs who have high levels of trait optimism and moderate or low levels of EI may report similar levels of optimism, coping and well-being, however, the former group will be more effective at responding to the stressor (e.g., de-escalating commitment to a course of action when it is appropriate) than will the latter.*

Note as well that the distinction we make between the effects of state and trait optimism are exactly what the Affective Events Theory called for (e.g., Weiss and Cropanzano, 1996). They were concerned that effects of trait affect were receiving more attention in the research literature (such as on job satisfaction) than effects of state affect, when it is the state affect that accounts for responses to discrete events.

3.7 Cultural Differences in Emotion Interpretation and EI

Although emotions have been found to be universal, including the fact they have both positive and negative characteristics, differences have been found across cultures in terms of how emotions are interpreted (e.g., An, Ji, Marks, and Zhang, 2017). For example, Asians are more likely to embrace fear and sadness than are individuals from Western countries, seeing them as having some usefulness (An et al., 2017), although they don't tend to display negative emotions in public as readily as do Westerners (Matsumoto, 1992). Also, Westerners tend to expect emotions to continue whereas Asians are more likely to expect them to change (An et al., 2017).

Similarly, EI has been found to have both culturally-specific and culturally-general elements (Sharma, Deller, Biswal, and Mandal, 2009). For example, the development of self-regulation is embedded within a cultural context (Trommsdorff, 2009) and cultural differences in EI have been found in a number of studies (e.g., Fernandez-Berrocal *et al.*, 2005; Ryan, *et al.*, 2012).

This raises the question of how these differences might affect the process found in the proposed model. Some of the cultural differences with respect to emotions and emotional intelligence will result in predictable main effects of EI already considered in the model (and therefore we have not offered any new propositions here for those situations). As an example, cultural differences in emotional regulation should lead to differences in use of appropriate emotion-focused coping strategies when stressors are uncontrollable; higher EI cultures would be expected to have higher acceptance and coping in these situations. Also, differences across cultures in the perception and understanding of emotions should lead to different levels of state optimism when stressors are controllable which would then lead to different levels of appropriate responding.

Other cultural factors are likely to have moderating effects on the process found in the model. For example, if individuals from Asian countries are not as bothered by negative emotions as are those from Western countries as the research indicates, the need for EI to increase acceptance of negative emotions becomes less critical for coping effectiveness. This is also going to be the case if negative emotions are seen as more changeable than permanent—in other words, acceptance and optimism are already inherent in the (culturally generated) perception of the situation and additional emotional regulation is unnecessary. However, the opposite is also true—in cultural contexts in which emotional experiences are viewed as being more negative and stable, the predicted effects should be stronger. We consider these two

cultural contexts that are likely to moderate the effects found in our model in Propositions 10 and 11 (although we did not portray this in Figure 1):

Proposition 10: *In cultural contexts in which the experience of negative emotions is perceived more negatively, differences among entrepreneurs in EI will be more likely to result in differences in coping than in cultural contexts in which the experience of negative emotions is perceived more positively.*

Proposition 11: *In cultural contexts in which negative emotions are perceived as being fairly stable, differences among entrepreneurs in EI will be more likely to result in differences in coping than in cultural contexts in which the experience of negative emotions is seen as more changeable.*

Following, we provide a general discussion of the proposed model followed by highlighting its contributions and implications.

4. Discussion

Recent studies suggest that role characteristics, including autonomy, social support, role centrality, team size, and founding capital, help with acceptance of and coping with the negative emotional consequences of entrepreneurship (Drnovsek, *et al.*, 2010; Patzelt and Shepherd, 2011; Shepherd, 2003; Shepherd *et al.*, 2009). These studies offer insights into the two known coping strategies employed by entrepreneurs but limit their analyses to contextual elements. There are various situations that could trigger negative emotions in an entrepreneur such as shame and dejection, including failing to close a negotiation, being denied funding or experiencing business failure, and having to keep pace with rapid change. Coping with these stressors may not always be related to the task characteristics of entrepreneurs. The authors suggested an extension to this literature by identifying a key emotional competency, an entrepreneur's EI, that is believed to generate certain helpful attitudes and guide the selection of coping strategies. The authors posit that the specific components of entrepreneurs' EI facilitate the identification of stressors as either controllable or uncontrollable and lead to the selection of

problem-focused or emotion-focused coping strategies. Any given entrepreneur may not have the threshold of competencies across all four EI dimensions to be able to consistently select the most effective coping strategy pertaining to any given situation of stress. Periodic evaluation of an entrepreneur's EI using measurement tools, such as Wong and Law's (2002) short but validated EI scale, would reveal if competencies in one or more dimensions of EI need improvement. Given that emotional intelligence is possible to teach and develop (Dulewicz and Higgs, 2004; Pool and Qualter, 2012), presumably with training in EI entrepreneurs could make more appropriate selections of coping strategies given the situation, resulting in more effective coping.

With regard to the coping *process*, the proposed conceptual model suggests that the perceiving, using and understanding components of ability EI facilitate the application of problem-focused coping through inducing optimism that a given stressful situation (or stressor) could be coped with or overcome, whereas the regulating of emotions component enables the selection of emotion-focused coping first, leading to emotions of acceptance of the stressor. The underlying mechanism is asymmetric in that certain dimensions of EI (perceiving, using and understanding) induce emotions of optimism before the problem-focused coping strategy is chosen and the remaining dimension of EI (regulating) enables the selection of emotion-focused coping before inducing emotions of acceptance of stressors. Whereas previous research established problem-focused and emotion-focused coping strategies as moderators of the relationship between entrepreneurship and the reporting of fewer negative emotions (Patzelt and Shepherd, 2011), the proposed model offers a more detailed step-by-step account of the entrepreneurial coping process which can serve to help integrate the fragmented literature. Additionally, a strength of the proposed model is that it is consistent with previous research and

theory on approach-avoidance motivation. Next, the contributions that the proposed model makes to the literature will be discussed.

4.1. Contributions to Theory on Entrepreneurial Emotions

First, this study initiates a discussion of the processing of negative emotions during coping. Studies on entrepreneurship have mostly considered positive and negative emotions separately and also at one point in time rather than dynamically across time. Studies on positive emotions indicate an association between entrepreneurship and experiencing high levels of passion (Baum and Locke, 2004; Cardon *et al.*, 2005, 2009; Smilor, 1997) as well as experiences of excitement, happiness, and flow and greater levels of job and life satisfaction (Blanchflower *et al.*, 2001; Bradley and Roberts, 2004; Komisar, 2000; Rai, 2008; Schindehutte *et al.*, 2006; Thompson *et al.*, 1992). Studies on negative emotions indicate that negative emotions such as depression lead to entrepreneurial exit (Hessels *et al.*, 2018). The proposed model, in contrast, proposes that negative emotions resulting from stressors can be processed using emotional intelligence, leading to the presence of a more positive outlook, or at least fewer negative emotions, and, as a result, effective or ineffective coping behavior. The current work has focused on emotions associated with situational stressors; future research could examine EI and the processing of other situations, both those related to entrepreneurship and more generally, such as in negotiations, conflict management, leadership, and networking.

4.2. Contributions to the Literature on Coping with Stress

As discussed, previous studies on entrepreneurial coping have adopted a contextual approach by examining factors such as the autonomy of self-employment and role centrality. However, empirical studies using the contextual approach to entrepreneurial coping show mixed results. Patzelt and Shepherd (2011) found a negative relationship between entrepreneurship and

experiencing negative emotions, including that this relationship is stronger for those who use problem-focused coping as well as for those who use emotion-focused coping. Dronvsek *et al* (2010) found that entrepreneurs who engage in problem-focused coping report higher personal well-being and venture performance but observed no empirical support for a relationship between emotion-focused coping and personal well-being. Buttner and Gryskiewicz (1993) found that entrepreneurs who used more adaptive problem-solving strategies were more likely to remain in business longer than their less adaptive colleagues, concluding that problem-focused coping is more instrumental to success than emotion-focused coping. Combining a contextual approach with an individual skills approach will not only help resolve mixed findings from using the contextual approach alone but also lead to better guidance about when and how to train entrepreneurs to more effectively cope with stressors. For example, the authors have suggested that entrepreneurs with low EI could receive training to improve their EI and coping behaviors. However, this may not be effective in a strong context that overwhelms effects of how the entrepreneur copes. Future research could consider the effectiveness of combining these two approaches in terms of building better coping strategies in entrepreneurs.

Central to using a problem-focused coping strategy is the perception of control, however even controllable stressors could be perceived as being uncontrollable. Future research is needed to determine exactly how entrepreneurs use their emotional competencies to identify one from the other. Attribution theory indicates that attributions about the controllability of events are key to understanding the emotional reaction that follow success and failure (Weiner, 2018).

Although attribution research concerns how most people make attributions about controllability, it has not considered the role of emotional intelligence in determining the controllability of an event. Also, there is still much room for examining what exactly happens when a stressor is

perceived as controllable or uncontrollable beyond what has been outlined in the current model. For example, research suggests that controllable threats can adversely affect problem-solving ability, including through: (a) temporal narrowing, (b). premature closure, and (c). non-systematic scanning (Keinan, 1987) and that uncontrollable stressors can lead to: (a) episodic frustration, (b). cognitive exhaustion, and (c). capacity reduction (Hecker and Sedek, 1999). Future work could examine how EI enables an individual in overcoming these detrimental effects.

4.3. Contributions to the Literature on the Well-being of Entrepreneurs

Entrepreneurs are continually subject to stress, such as facing the potential for failure (Henricks, 1991; Zahra 2007; Drnovsek *et al.*, 2010). Coping strategies have been found to affect both emotional well-being (Fredrickson and Joiner, 2002) and physiological well-being (Patel, *et al.*, 2018). Given that entrepreneurship entails high levels of uncertainty, instability, and the threat of potential losses, an inability to regulate negative emotions can lead to threats to physical health (Lewin-Epstein and Yuchtman-Yaar, 1991). This is underscored by a recent study on self-employment and allostatic load (AL) – a complex set of neuroendocrine, cardiovascular, immunological, and metabolic changes that occur as a result of stressors. The study found that AL mediates the relationship between self-employment and physical health, with individuals who were self-employed for longer periods having higher AL and the use of problem-focused coping strategies being associated with lower AL (Patel, *et al.*, 2018). AL when left unresolved can lead to “wear-and-tear” on the body, which can be the precursor to a host of serious physical and mental health conditions (Gonzalez-Mulé and Cockburn, 2017). The importance of understanding the process by which problem-focused coping helps alleviate stress and therefore AL among the self-employed is therefore paramount. The proposed conceptual model suggests

that entrepreneurs' emotional competencies can predispose them to select problem-focused and emotion-focused coping strategies when they are appropriate, which should lead to reduced AL.

Moreover, continually enduring aversive stimuli without the ability to either escape or avoid them or cope with them through the abilities associated with high EI may induce behaviors of learned helplessness. Such behaviors often lead to clinical depression and related mental illness from a real or perceived absence of control over the outcome of a situation (Seligman, 1975). Hence, the ability to use EI to perceive situations as controllable or uncontrollable and devise effective coping strategies protects entrepreneurs from significant levels of both physical and mental illness.

Aside from contributions to the research literature in various areas, the proposed model has important practical implications, which are discussed next.

4.4. Practical Implications

One of the most significant implications of this study pertains to the outcomes of entrepreneurial coping, specifically concerning the coping cycle time in entrepreneurs, meaning the amount of time it takes to go through the cycle that begins with the stressor, continues through implementation of the coping strategies, and ends with recovery from the stressor and improved well-being. To date, discussions of outcomes of effective coping have largely concerned increases in mental and physical health, particularly well-being (Liu *et al.*, 2012). This has been true for both problem-focused coping and emotion-focused coping (e.g., Gloria and Steinhardt, 2016; Kaluza, 2000). Problem-focused and emotion-focused coping are associated with well-being in the literature on entrepreneurs as well (Stephan and Roesler, 2010; Patel *et al.*, 2018; Dronvsek *et al.*, 2010). However, although physical and mental well-being are important outcomes, these are not the only key outcomes of effective coping that should receive research

attention. Effective coping strategies allow an individual to be able to move quickly beyond the stressful experience. Recovery from work stress using methods such as detachment, relaxation, master, control, and affiliation appears to be an important mediator of the stress-well-being relationship (e.g., Newman *et al.*, 2014; Sonnentag and Fritz, 2007, 2015). For example, detachment from work during nonwork hours can enhance recovery (Sonnentag and Fritz, 2015). In contrast, ineffective coping strategies such as continually avoiding dealing with the stressor serve to prolong the stress rather than resolve it (e.g., Bond and Hayes, 2002; Hayes and Strosahl, 2004; Suls and Fletcher, 1985). The proposed model implies that emotional intelligence allows the individual to more quickly identify what is and isn't controllable in the situation and respond appropriately with effective, rather than ineffective, strategies. Increased EI leads to either an early optimism that the stressor can be overcome, or the early acceptance of an uncontrollable or less controllable stressor. In contrast, the entrepreneur could end up wasting valuable time when pessimistic about the existence of potential solutions, although in reality they might exist. Similarly, an avoidance of emotionally dealing with uncontrollable stressors delays coping and could even end entrepreneurship whereas acceptance enables coping and continuing with entrepreneurial activities. Coping cycle time is important in that a quick recovery over depression, anxiety, and other negative emotions can help entrepreneurs persist in entrepreneurship.

Stress faced by entrepreneurs has the potential for emotional responses such as depression and anxiety, leading to capacity reduction and cognitive exhaustion. Under such circumstances, entrepreneurs may allocate their remaining attentional resources to rumination about the stress or be distracted by irrelevant features of the task because of an impairment of mental processes that disrupts the ability to search for solutions. For example, a negative

emotional response following an unfavorable prior exit from an entrepreneurial project may prevent entrepreneurs from engaging in subsequent activities. The model suggests how entrepreneurs' EI can help them overcome these effects of stress and negative emotions. The fact that EI can be developed and learned means that careful monitoring of where entrepreneurs fall short in one or more of the dimensions of EI can be used to overcome and further improve their effectiveness in selecting and applying a situation-specific coping strategy. In today's day and age when robotization and automation cast a threat of taking over jobs (Thurik *et al.*, 2013), the maintenance and promotion of entrepreneurs' good emotional and physiological well-being become utterly important and have implications for entrepreneurs' ability to "stay in the game."

5. Limitations

The conceptual model is not without limitations that serve to provide avenues for future research. First of all, empirical research on the model is needed, such as by collecting survey data on entrepreneurs' EI levels and testing the relationship between key components of their EI and entrepreneurial coping behaviors and strategies. Qualitative studies of effective and ineffective coping in entrepreneurs with differing levels of EI could also be useful in examining the model. Attention to accurate operationalization of each of the conceptual variables will be needed, such as by using existing trait EI instruments and measurements of problem-focused and emotion-focused coping strategies. Other operationalizations may be more challenging, such as the measurement of acceptance and the assessment of state rather than trait optimism. Also, the model makes some assumptions that will need to be checked--for example, it was assumed the components of EI are beneficial in terms of emotion- and problem-focused coping with stress. There may be situations in which they play a more neutral role or are harmful.

Second, EI probably plays a role in the processing of several other emotions, not just those directly associated with controllable and uncontrollable situational stressors such as the state optimism and acceptance included in the proposed model. Emotions not considered are those that are more long-term in nature, or what Cardon *et al* (2005) refer to as core affective states of entrepreneurs. For example, recent studies have proposed that depression and being under constant stress profoundly influence entrepreneurial self-efficacy (ESE), which may eventually lead to forced exit (Hessels, *et al.*, 2018). Future research could consider how the proposed model might be extended to accommodate more long-term emotions as possible moderating variables and/or ESE as a mediator of the relationship between entrepreneurs' EI and their coping strategies.

Third, the model could be expanded by exploring key traits affecting the hypothesized relationships. Effects of trait optimism (as opposed to state optimism) on the ability to detect controllability and to generate state optimism and acceptance, for example, would be an interesting avenue to explore. Other potential moderators are the so-called "dark side" traits of entrepreneurs (Haynes *et al.*, 2015). For example, a lack of flexibility and egoism can lead to venture failure (Beaver and Jennings, 2005) and entrepreneurial ego can result in an overriding desire for success and unrealistic optimism (Kuratko and Hodgetts, 2007). These traits may serve to overwhelm any advantages attainable through high EI.

Fourth, the model presented considered limited contextual effects, namely differences in emotional expression and emotional intelligence across cultures. However, differences in optimism found within cultures, while small (e.g., Fischer and Chalmers, 2008), may also affect the process described in the model. Differences in uncertainty avoidance across cultures would be expected to have a larger effect, such as in terms of how easily optimism or acceptance is

generated (e.g., Belkhamza and Wafa, 2014). One must also consider that the characteristics of entrepreneurs found within different societies are different (e.g., Hayton, George, and Zahra, 2002; Thomas and Mueller, 2000). All of these contextual factors may serve to diminish, increase, or otherwise modify the roles of the components found in the proposed model and should be considered in future research.

Fifth, although we expect that generally entrepreneurs will be high in emotional intelligence, we understand that the requirements of entrepreneurs will differ depending on the industry and that entrepreneurs are likely to differ in terms of their specific emotional competencies accordingly. This is a topic that could be explored in future research and it may be that our EI-based coping model will need tweaking to account for these differences, namely that specific dimensions of EI may be more or less related to coping given different types of entrepreneurship. For example, the fact that perceiving and expressing emotions are more related to innovativeness and growth aspirations, the using of emotions more to problem solving and creativity, the understanding of emotions more to risk-taking, and the modifying emotions more to channeling frustrations and anger into constructive actions may all have a bearing on how different types of entrepreneurs would cope differently.

Finally, the model is limited in that focuses on entrepreneurs' assessment of the controllability of factors causing stress. Attribution theory also discusses how individuals assess whether causation is internal or external and whether it is stable or changing (Weiner, 2018). In the authors' view, both these additional factors help the individual determine controllability—for example, an entrepreneur may be less able to control external factors than internal ones and less motivated to try to control changing factors than stable ones. Therefore, for purposes of simplification, the authors chose to discuss controllability only. Future research could extend the

model to more explicitly consider the other aspects of determining causation found in attribution theory.

Although we acknowledge these various limitations, we believe the model can be powerful in filling a gap in the literature, namely about the process of entrepreneurial coping. We conclude by highlighting the key components of the model.

6. Conclusion

The central tenet of this paper is that EI is a specific emotional competency of entrepreneurs that puts into play a set of processes for effectively responding to stressors. Past research established EI as playing an important role in several entrepreneurial behaviors including coping. Supported by the approach-and-avoidance motivation theory and utilizing the ability EI model, an integrative conceptual framework of entrepreneurial coping was presented that includes the four emotional competencies of *perceiving and expressing*, *using*, *understanding*, and *regulating and modifying* emotions as antecedents that (1) guide the selection of their coping strategies through onset of *optimism* and *acceptance* of stressful situations, (2) assist in perceiving those situations as either controllable or uncontrollable, and (3) shape the actual process through which entrepreneurs cope. The proposed conceptual model represents a first step towards a better understanding of how EI facilitates entrepreneurial coping; future research could use EI to explain career adaptability and success more generally, or specific tasks such as conflict management, networking, and negotiations.

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Figure 1 Conceptual model of emotional intelligence and coping

