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Why I persist while others leave? Investigating the path from passion to persistence in entrepreneurship

Abstract Although research affirms that entrepreneurial passion (EP) is an important predictor of entrepreneurial persistence, much less is known of the underlying processes through which EP leads to entrepreneurial persistence. Drawing upon the broaden-and-build theory of positive emotions, this study uncovers the mediating effects of entrepreneurial self-efficacy (ESE) and the moderating role of proactive personality between the relationship of EP and entrepreneurial persistence. The results of survey data from 215 small firms in China demonstrate that ESE mediates the link between EP and entrepreneurial persistence. The proactive personality of an entrepreneur also strengthens the direct relationship between EP and ESE and the indirect relationship between EP and entrepreneurial persistence via ESE. The findings contribute to the literature on entrepreneurs' proactive personalities, ESE and entrepreneurial persistence.

Keywords: Entrepreneurial passion. Entrepreneurial self-efficacy. Proactive personality. Entrepreneurial persistence.

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Introduction

"*I have no special talents. I am only passionately curious*." -Albert Einstein

Thomas Alva Edison is undoubtedly one of the prominent figures in modern history and entrepreneurship. After successfully obtaining the patent for his lightbulb, Edison began a quest to find an inexpensive light bulb filament. He opened his own plant in Ogdensburg New Jersey, devoting all his time and money to such project for roughly a decade. He also obtained 47 patents for inventions designed to make the plant run more smoothly. And after all of that, Edison's project still failed.

Nevertheless, one of the inventions created during the process (a newly-designed crushing machine) revolutionized the cement industry and earned Edison back nearly all of the money he lost. His persistence, eventually, paid off.

Persistence is defined as the repetitive struggle in the face of hardships and challenges (Markman et al., 2005) and it is considered a key element for achieving success. Entrepreneurial persistence is also described as a behaviour that involves goal-directed energy (Seo et al., 2004; Wu et al., 2007), where the goal involved is the success of the entrepreneurial venture (Cardon & Kirk, 2015). As a construct, entrepreneurial persistence is particularly crucial as the process of business creation and management is difficult and often engenders countless hours of persistent work (Lomberg et al., 2019). For instance, entrepreneurs tend to tackle numerous problems daily, such as identifying and improving business ideas, obtaining the necessary investments, hiring and supervising employees along with keeping track and adjusting to

environmental changes (Cardon & Kirk, 2015; Klyver et al., 2018; Lomberg et al., 2019). The prominent importance of entrepreneurial persistence has led academic researchers to exert significant efforts in identifying its predictors (Holland & Shepherd, 2013; Lomberg et al., 2019).

Entrepreneurs' passion, which is identified as intense positive feelings and strong identification with the entrepreneurial activities, is one of the most observed drivers of entrepreneurial persistence (Cardon, et al., 2017; Cardon et al., 2013; Cardon et al., 2009). However, despite entrepreneurial passion being documented as an important driver of entrepreneurial persistence, literature has barely begun to uncover the most exciting questions concerning entrepreneurial passion, namely why and under which conditions passion exerts a positive effect on persistence. This direction of research is especially important as work by Delgado García et al., (2015) on emotions in entrepreneurship have encouraged more studies to investigate the cognitive mechanism that connects affective states of entrepreneurs with their behavioral outcomes.

The present study aims to contribute to this intriguing and developing stream of research. Based on the broaden-and-build theory of positive emotions (Fredrickson, 1998, 2001), which considers entrepreneurial emotions, such as passion, as a kind of resource that broaden the repertoire of enduring personal resources (Baron, 2008; Cardon et al., 2012; Zahra & Newey, 2009), we argue that entrepreneurs with a high level of passion (a positive emotion) are likely to determine persistent behaviors.

Through a tailored survey involving 215 entrepreneurs from China, we show how high levels of entrepreneurial passion can push individuals to persist in their behaviors. Additionally, we show how entrepreneurial self-efficacy mediates the relationship between entrepreneurial passion and persistence. Following the stream of literature that postulates entrepreneurial passion as the key element that augments the judgment of

one's positive self-cognitions, like entrepreneurial self-efficacy (Biraglia & Kadile, 2017; Cardon et al., 2009), we argue that high levels of entrepreneurial passion can trigger individuals' entrepreneurial self-efficacy and, in turn, affect the persistence of the entrepreneurs.

Furthermore, this research also proposes proactive personality as a moderator of the effect. As the broaden-and-build theory suggests, certain personalities are more inclined to mitigate the effects of mood and emotions on various crucial aspects of entrepreneurial cognitions. Entrepreneurs with proactive personalities are more sensitive to their inner feelings (Parker & Collins, 2010) and are more likely to benefit from their positive emotions by transferring them into optimistic perceptions of their capabilities as represented by entrepreneurial self-efficacy (Crant, 2000; Parker et al., 2006). We believe that when entrepreneurs with high entrepreneurial passion also have a proactive personality, their intense positive entrepreneurial feelings and positive personality traits (e.g., optimistic and confident) are likely to build their enduring personal resources and broaden momentary thought-action repertoires, ranging from physical and intellectual resources to social and psychological resources (Fredrickson, 2001) to view negative and neutral events (for example, risk-related elements) more positively (Kumar et al., 2016).

In summary, this paper contributes to the existing literature in several ways. First, we contribute to the entrepreneurial passion and entrepreneurial persistence related literature by shedding light on how entrepreneurial passion transfers into entrepreneurial persistence. Even if entrepreneurial passion has often been suggested to play a key role in maintaining entrepreneurial persistence (Cardon et al., 2009), the process through which entrepreneurial passion influences entrepreneurial persistence has not yet been fully uncovered. Based on the broaden-and-build theory of positive emotions, this study suggests that the association between entrepreneurial passion and entrepreneurial

persistence is mediated by entrepreneurial self-efficacy. Second, this study examines the moderating role of proactive personality on the relationship between entrepreneurial passion and entrepreneurial self-efficacy. By doing this, our study is among the first to introduce the role of proactive personality in the context of entrepreneurial passion. Third, our study demonstrates that entrepreneurial passion, as a strong energizing driver that enables entrepreneurs to work hard, persistently, and with dedication toward the realization of their business ideas (Cardon et al., 2009; Vallerand et al., 2003), does not influence all people in the same manner. Entrepreneurs with proactive personality should benefit from their passion more because it not only helps them to develop a feeling of mastery and control over their desired activity, it also stirs their entrepreneurial persistence behavior. Thus, we present a moderated mediation model suggesting that the mediating effect of entrepreneurial self-efficacy on entrepreneurial passion and entrepreneurial persistence varies depending on the particular proactive personality.

Finally, our study contributes to the growing stream of research focusing on the effect of entrepreneurial variables in non-Western societies, particularly China (Kiani et al., 2019; Li et al., 2020; Kiani et al., 2020). We believe that considered the rapid industrial and technological catchup and intense innovative efforts in the Chinese region (Hemmert et al., 2019; Wu, 2012), understanding the role of entrepreneurship in this region is crucial.

In the following paragraphs, we introduce our theoretical background and hypotheses. We then present the methodology and the results of our study, followed by a discussion of the implications our findings can have for both theory and managerial practice.

Theoretical Background and hypotheses development

Entrepreneurial Persistence

The entrepreneurship literature offers the prevailing understanding that entrepreneurial persistence is a function of a variety of predictors (Caliendo et al., 2020; Holland & Garrett, 2015). Both individual entrepreneurial characteristics and attributes of the new venture are among the most projecting aspects of the crucial strategic decision to persist or leave (Ahsan et al., 2020; Wu et al., 2007). This standpoint is also consistent with studies suggesting that startups are imprinted at the time of formation and that this has enduring effects on their structure, strategy, and performance (Unger et al., 2011). Driven by their personalities, motivations, values and goals the entrepreneurs seem to determine the successive expansion of new ventures since they form the basic distinctiveness and outline of their startups (Tietz et al., 2021). The founder effects most persistently and widely considered by entrepreneurship academics comprise, for instance, entrepreneurial dispositions derived from personality aspects, individual capabilities, or from their knowledge and skills (Caliendo et al., 2020). The former reflect the influence of long-run unchanging individual traits, while the latter reflect the impact of human capital accumulated over time. Other attributes had been demonstrated to be significant in preceding studies (Freeland & Keister, 2016). These attributes comprise sociodemographic factors, startup motivations, intergenerational transmissions, and the dissimilarity among opportunity and necessity entrepreneurs (for example, Caliendo et al., 2019), as well as the effects of the macro-environment in which an entrepreneur functions (Millán et al., 2012). Starting from these aspects, in this paper we build our theorizing majorly on an important – yet often overlooked – driver of

persistence: the positive emotional states entrepreneurs experience in managing their diverse roles.

The broaden-and-build theory of positive emotions

The broaden-and-build theory is a clarification of the influence of discrete idiosyncrasies of positive emotions in broadening a person's reactive thought-actions (Fredrickson, 1998, 2001). Such theory postulates two interconnected effects of positive emotions: the broaden effect and the build effect (Conway et al., 2013). In contrast to negative emotions, which lead to immediate and specific actions (for instance, escape when fear arises), the broaden effect of positive emotions improves inclusive and generic emotional resources. For example, positive emotions broaden the attention, scope and ease cognitive flexibility (Baron & Tang, 2011). The build effect of positive emotions is a consequence of their broaden effect. The build effect allows the overall resources granted by positive emotions to accumulate over time. Such resources may gradually shape "patterns of decision-making and actions that reflect investment in intellectual, personal, and social domains" (Conway et al., 2013, p. 21). A large body of research indicates that affect impacts behaviors through cognitive processes that determine how people choose to behave (Forgas, 1995; Isen & Labroo, 2003; Schwarz & Clore, 1996).

Accordingly, reactive thought-actions contribute to building a wide diversity of endurance resources, that is, physical, intellectual, social and psychological capabilities. In contrast, by nurturing negative emotions, the process leads to opposite outcomes: a lessened self-perpetuating downward spiral of depression, pessimism and negative emotions (Fredrickson & Joiner, 2002).

Based on this theory, 'discrete positive emotions', such as 'joy, interest, pride, love and contentment' (Fredrickson, 2001), broaden the repertoire of a person's momentary thought-actions. This can develop the option that a person would act with positive emotions in upcoming circumstances (Fredrickson & Joiner, 2002). Thus, the nurturing of positive emotions should build resource endurance on a social, physical, intellectual and psychological level. These personal resources act as a durable reserve in handling difficulties by undoing negative emotions and improving persistence. We therefore believe that positive emotions like entrepreneurial passion (from now on EP) can have a strong impact on entrepreneurial persistence.

Entrepreneurial Passion and Entrepreneurial Persistence

Vallerand et al. (2003) define passion as a strong desire for a self-defining activity that individuals like, consider essential and in which they spend time and effort. Cardon et al. (2009), formulate EP as an intense positive emotion linked to entrepreneurial activity that is important and significant to the self-identity of an entrepreneur. Their research differentiates among three types of EP related to different sets of activities, such as the EP for founding, developing, and inventing (Cardon et al., 2013). An individual with a founding passion is particularly interested in setting up new companies. An entrepreneur who experiences the founder identity as especially central to his/her self-identity may not like all possible practices related to the founding of a company (for example, filing paperwork might not be that exciting), but because of the identification with the founder identity and the connection between that identity and the particular action, he/she would always involve in the action so that they are acting consistently with the role of founder and to reveal their commitment to the identity of the founder to themselves. People with a passion for the developing primarily focus on operations that involve growing a company, such as expanding the client base or

increasing the number of staff members. Entrepreneurs who are rated high on passion for developing like events such as sales and wide marketing activities, hiring and training new staffs and convincing investors for funding to extend their existing business (Cardon et al., 2013; Cardon et al., 2009). Finally, EP for inventing is described as a strong positive feeling towards identifying and inventing new products and services. EP for inventing is connected with behaviors related to the systematic and active scanning of the marketplace for business improvement and recognizing opportunities in the market (Cardon et al., 2009; Fiet, 2007). Although each of these role identities varies independently from each other, some entrepreneurs may be passionate about all of these role identities, while other entrepreneurs may consider one identity as significantly more vital to them (Cardon et al., 2013).

New ventures are often founded by entrepreneurs who are interested in the initial development of a product or a market but have very limited managerial interests or capacities (Willard et al., 1992). Entrepreneurs whose passion is associated with personal interests are likely to regard the new venture as part of the self (Pierce et al., 2001), and derive sustaining emotional energy from this identity link. Thus, they are likely to commit to complete the start-up process no matter what comes in its way.

Furthermore, entrepreneurs who are passionate about a product or an industry are willing to explore the various requirements of the founder role and strive to meet those requirements to take the nascent enterprise to the operating stage. Building the venture to fruition is desirable not only for the sake of developing the venture per se but also for satisfying entrepreneurs' own interests in life to enact what they like by building a business for their passion. To passion-driven entrepreneurs, this process appears more as a learning journey than developing a project per se. It is also through this journey that passion-driven entrepreneurs can establish their distinctiveness and strengthen their individual identity (Turner et al., 1994).

Passion is also considered to be a resource (Zahra & Newey, 2009) that makes entrepreneurs more focused, attentive, resilient to cope with the risks of firm activities (De Mol, et al., 2016), more motivated to experiment with original designs (Strese et al., 2018) or innovate (Luu & Nguyen, 2020). Furthermore, entrepreneurial passion has been also indicated as a strong predictor of entrepreneurial intentions and activities among non-entrepreneurs (Biraglia & Kadile, 2017; Costa et al., 2018).

Scholars have theorized that positive affective states give individuals access to a wider array of mental faculties that result in more efficient problem-solving strategies (Isen, 1999). As the broaden-and-build theory suggests, positive emotions enlarge the attention scope (Fredrickson, 2001); entrepreneurs are therefore more likely to engage in actions consistent with their current emotions (Baron & Tang, 2011). Individuals facing positive affective situations usually attempt to preserve the positive state (Baron, 2008) and therefore, would more possibly persist with the entrepreneurial journey. Relatedly, a number of scholars, using social-cognitive theory (e.g., Bandura, 1991; Bandura & Cervone, 1983; Locke & Latham, 1990) and control theory (e.g., Carver & Scheier, 1990; 2001), have suggested that positive emotions have important motivational implications for persistence.

We argue that EP, which includes positive and intense emotions aimed at entrepreneurship-relevant identity-centric practices and roles (Cardon et al., 2009), is a driving force in impacting persistent behaviors. Thus, we formally hypothesize that:

Hypothesis 1: Entrepreneurial Passion positively affects Entrepreneurial Persistence.

Entrepreneurial Self-Efficacy as a mediator of the relationship between Entrepreneurial Passion and Entrepreneurial Persistence

Based on the broaden-and-build theory of positive emotions, previous studies have confirmed the instrumental role of entrepreneurial emotions as vital inputs in influencing entrepreneurs' cognitions, behaviors and outcomes (Burke & Reitzes, 1991; Cardon et al., 2012; Drnovsek et al., 2016).

Positive emotions lead to broadened cognitive states (Fredrickson, 1998, 2001) and encourage cognitive flexibility. Over time, these moments of broadened cognition may help to build physical, psychological, and social resources. Individuals' judgments on anticipated task abilities and performance are based on how positively or negatively they feel with respect to that particular task (Rusting, 1999). The extent to which people experience feelings of joy for a certain task stimulates them to focus on the retrieval of task-relevant knowledge (Foo et al., 2009). Affective states or moods are believed to affect decisions and evaluations through broadening attentional scope (Fredrickson & Branigan, 2005; Gasper & Clore, 2002; Rowe et al., 2007; Schmitz et al., 2009) that potentially enhances long term survival.

Overall, these findings suggest that positive affect should contribute to more optimistic beliefs on one's ability to perform and negative affect should be correlated with less positive beliefs (George & Brief, 1996; Kavanagh & Bower, 1985). Similarly, Wood and Bandura (1989) demonstrated that through a person's self-assessment of his or her physiological state (like emotions and arousal levels) self-efficacy can be improved.

Entrepreneurial self-efficacy (ESE), among other entrepreneurial cognitions, is considered to be one of the most important drivers that affect entrepreneurial behaviors (Hmieleski & Baron, 2008; Lent et al., 1984; Newman et al., 2019). Derived from the general self-efficacy theory (Wood & Bandura, 1989), ESE refers to the extent to which an entrepreneur believes that he/she can complete various roles and tasks of entrepreneurship

(Chen et al., 1998). Past research has shown how passion can foster confidence and competence within the different contexts of individual activities (Cardon et al., 2013). Individuals who are passionate about an activity are more likely to develop their skills at it, which not only increases their ability to perform the activity but also augments their self-efficacy beliefs (Baum & Locke, 2004; Biraglia & Kadile, 2017). Furthermore, passionate people are more focused on their goals rather than difficulties and the process to obtain those goals (Warnick et al., 2018); thus it will empower them to discount their own weaknesses by adding power to their ESE.

Interestingly, previous research by Cardon and Kirk (2015) found that EP has a mediating effect between ESE and persistence. In this paper we argue, nevertheless, that EP as a positive emotion is on its own capable of triggering ESE. This prediction goes in line with the general self-efficacy theory (Bandura & Wessels, 1997), which postulates how self-efficacy may develop out of four drivers: *enactive mastery* (namely, a reward through getting a positive outcome); *vicarious experience* (that is, getting confidence in one's own ability by looking at others performing the action); *verbal persuasion* (that entails the positive feedback an individual receives); and finally, *physiological arousal* (namely the emotional states an individual's experiences).

In line with the broaden and build theory, we base our prediction on this last driver and the emotional triggers of ESE. That is, we propose the mediating association on the idea that EP enhances ESE, thereby contributing to entrepreneurial persistence. Emotions such as passion often work alongside cognitions, which have long been acknowledged to provide theoretically rigorous and testable explanations of how entrepreneurs think and why they do some of the things they do (Mitchell & Phillips, 2015), as well as how such behaviors lead to specific outcomes. If entrepreneurial emotions, specifically EP, are seen in the heart of the entrepreneurial process (Santos & Cardon, 2019), entrepreneurial cognitions like ESE can be

seen as a 'willpower' of entrepreneurship as it provides entrepreneurs with the strength necessary to persist despite the obstacles they encounter on their entrepreneurial journeys (Chen et al., 1998). Importantly, while passion itself can drive some of the persistence needed for venture longevity, the cognitive outcomes of passion, such as ESE, shape an enduring additional process by which an entrepreneur may strive and persist. Therefore, we formally hypothesize that:

Hypothesis 2: Entrepreneurial Self-efficacy mediates the relationship between Entrepreneurial Passion and Entrepreneurial Persistence.

The moderating role of proactive personality

Previous research on the broaden-and-build theory suggests that certain personalities are more inclined to moderate the effects of mood or emotions on various crucial aspects of entrepreneurial cognitions, including perception, judgment, decisions, memory, creativity, preference for heuristic thought, and ability to cope with stress, via two underlining mechanisms: mood-dependent retrieval effects (Eich, 1995) and affect-as information (Schwarz, 2012). As discussed above, the role of affect provides a useful theoretical framework for this study. It does not only suggest the significant effect of entrepreneurial emotions, but it also offers a more complete picture by emphasizing the intimate interaction effect between entrepreneurial emotions and cognitions on numerous outcomes in entrepreneurship. It is therefore important to theoretically and practically, identifying personal dispositions that might increase the positive effects of EP on the cognition and consequent persistence of entrepreneurs.

In this study, we propose that an entrepreneur's proactive personality is one such variable that could moderate the link between EP and ESE.

Proactive personality refers to an individual's stable disposition to take responsibility for affecting their environment and bringing change across distinct situations and times (Buil et al., 2019; McCormick et al., 2019). Proactive personality is considered a positive psychological quality, also known as prospective personality. A common characteristic of individuals with a high proactive personality is their reluctance to hold to the status quo. They might therefore actively advocate change, bring it into practice, and do not cave in while experiencing difficulties due to environmental changes.

Previous research (Jafri et al., 2016; Parker & Collins, 2010; Seibert et al., 2001) argued that individuals with high proactive personalities are also more sensitive to their inner feelings and their positive emotions facilitate their daily goal pursuits by empowering and encouraging them. As a result, their behaviors and cognitions appear to be a function of their intrapsychic processes and affective states (Buil et al., 2019). The entrepreneurship literature has documented the moderating role proactive personality has on some other venturing related variables. For example, Frese (2009) found that entrepreneurial orientation had a greater impact on entrepreneurial success among individuals with a higher proactive personality. Similarly, Neneh (2019) showed how individuals with more proactive personality are also more likely to translate entrepreneurial intentions into actual venturing. Additionally, research has shown how individuals with proactive personalities do not feel restricted by situational forces (Bateman & Crant, 1993; Sun & van Emmerik, 2015). Rather, their dependence on inner emotions and positive states helps them to remain steadfast in achieving their goals (Fuller Jr & Marler, 2009; Xie et al., 2014).

By bridging together the role of EP has as a positive emotion and positive psychological qualities of proactive personality, in this study we argue that entrepreneurs would benefit more from their passion when they also have a higher level of proactive personality. We believe that the interplay of these two factors (an intense emotional state and

a positive individual trait) may provide them with greater positive feelings of engaging in entrepreneurial activities that could give rise to their judgment of positive personal attributes. Passionate entrepreneurs with proactive personalities reveal personal initiative for identifying new ideas to improve business processes, updating their skills, or better understanding their businesses (Seibert et al., 2001). Furthermore, they are more likely to ask for feedback and advice from their external networks (Crant, 2000), factors that benefit the enrichment of knowledge and skills and potentially generate fruitful collaborations (Kadile & Biraglia, 2020)

Being more exposed and immerse in the business setting, entrepreneurs with passion and proactive personalities may also perceive themselves more favorably (Grant & Ashford, 2008). In turn, these individuals are also more likely to have greater self-confidence (Bandura, 1986) and to get more involved in effortful goal attainment than those who are less passionate or less proactive. Highly proactive individuals with intense positive feelings are in fact unhindered by situational interferences and are capable enough to bring changes to improve their ESE in new undertakings, leading to persisting in their entrepreneurial journey in long run (Fuller Jr. & Marler, 2009; LePine et al., 2000). Conversely, individuals who possess a lower degree of proactive personality are more attuned and responsive to contextual factors than their inner feelings (McCormick et al., 2019). Therefore, these individuals' beliefs in their capabilities could be more hindered by external adversities (e.g., issues in the venturing and management processes) than fueled by their positive emotions. As such, passionate entrepreneurs with proactive personalities should benefit the most from increased ESE.

We therefore predict that a higher (compared to a lower) level of proactive personality an entrepreneur has will boost the mediating effect of ESE on the relationship between EP and entrepreneurial persistence. More formally:

Hypothesis 3: The proactive personality of an entrepreneur moderates the mediating effect of ESE between EP and entrepreneurial persistence. Specifically, the indirect relationship will be stronger when the entrepreneurs have a higher (rather than lower) proactive personality.

Figure 1 visually represents our conceptual framework.

Insert Figure 1 here

Method

Participants and Procedure

We conducted an online tailored survey to test our research model empirically. The current study utilized the "double translation protocol" method (Brislin, 1980) to convert the English questionnaire into Chinese. Two industry specialists (i.e., a university professor and management school colleague) checked the questionnaire. We incorporated their comments and suggestions to provide clear and understandable questionnaire items. Thereafter, a pilot study wherein 10 entrepreneurs participated was conducted to verify the readability and clarity of the questionnaire items. The participants did not report any confusion in answering the survey questions.

We selected new ventures from the Pearl River Delta, the largest and most developed economic and manufacturing hub in China, and used the existing literature as the basis to define new ventures as undertakings below eight years (Tocher et al., 2012). We obtained a list of 1,500 new firms from the *China Company Database* website. We contacted all listed entrepreneurs through their respective HR departments and requested their participation in the survey. We mailed the questionnaires to the entrepreneurs using the three-wave e-mailing

approach with two reminders after two and four weeks. We likewise requested them to answer based on their experience and understanding. Out of the questionnaires distributed, 235 were answered completely (response rate is 15.66%). The response rate is lower when executives or CEOs of the companies are targeted. Several surveys were received unfinished and six surveys were filled by non-founders; thus we excluded them from the final analysis. We excluded 20 responses because of unfilled and unusable questionnaires. A total of 215 valid responses were eventually included in the analysis.

The majority of the new firms in the final sample are manufacturing firms (80%), and others are service firms. In terms of firm assets, 33.4% had under 5 million RMB and 46.51% had over 20 million RMB. As for the employment size, 59.07% of enterprises have employees ranging from 50–300. Besides, 46.98% of enterprises have an annual turnover ranging from 10–30 million RMB Yuan. The mean of firm age was 3.62 (SD=1.55). A total of 64.6% of the 215 entrepreneurs who participated in the survey were male (M_{age}=39; SD_{age}=5.62). 51.16% of respondents had a master's degree, 31.63% had a bachelor's degree, 16.26% had a doctoral degree, and the rest had a lower level of education.

Measures

EP. EP was measured using a scale taken from Cardon et al. (2013). The scale included twelve items. The sample items were "Searching for new ideas for products/services to offer is enjoyable to me" ($\alpha = 0.93$). Participants responded to all measures on a five-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree).*

Proactive personality. This measure was adopted from Bateman and Crant (1993). The scale consisted of five items. Sample items were "No matter what the odds are if I believe in something I will make it happen" and "I am always looking for better ways to do and accomplish things" Cronbach α is ($\alpha = 0.96$).

***Entrepreneurial Persistence*.** The six-item scale was adopted from Cardon and Kirk (2015), and the scale was created based on the measurement of the Tenacity scale from Baum and Locke (2004) (α = 0.89). "I continue to work on hard projects even when others oppose me" represents a sample item.

ESE. ESE measures were adopted from fifteen items developed by Chen et al. (1998). Respondents rated a series of items on a scale of how confident they are in their capability to accomplish each assignment in their role as an entrepreneur (1 = *completely unsure of my ability* to 5 = *completely sure of my ability*) (α = 0.95).

***Control variables*.** We controlled for individual- and firm-level variables. Firm age and firm assets were taken as control variables in our conceptual framework to control for potential liabilities of newness or inertia linked with firm age or assets, which might affect entrepreneurial persistence. Older firms may have a superior organizational performance by gaining more investor funding (Choi & Shepherd, 2005), firm assets can affect new firm's capability to persist and develop, and new firms with more resources have more funds to conduct profitable operations (Williams et al., 1991). Thus, we controlled firm age (the number of years from the firm founding to present), number of employees, annual turnover and firm assets (the number of the firm's total assets) at the firm level. At the individual level, entrepreneurs' age, gender, and education are controlled. Entrepreneurs' age is included to monitor prospective declines in cognitive resources affecting persistence that may be associated with age (Kanfer & Ackerman, 2004). Older entrepreneurs may have more skills in building social links (Tocher et al., 2012), entrepreneurs' gender may affect the making of entrepreneurial networking and the gaining of entrepreneurial assets (Klyver & Grant, 2010), and entrepreneurs' education is a type of general human capital (Cooper et al., 1994). Therefore, the variables may account for some variance in the persistence of a firm.

We tested our hypotheses in two interconnected steps. First, following the work of Hayes and Preacher (2010) and Preacher and Hayes, (2004) we tested the mediation hypothesis using a bootstrap test and the Sobel test. Second, we used *PROCESS* macro designed by (Preacher et al., 2007) to test the overall moderated mediation hypothesis empirically. Through these steps, we were able to test the strength of the hypothesized mediating (indirect) effect of entrepreneur's self-efficacy on the connection between entrepreneur's passion and entrepreneurial persistence at high/low levels of entrepreneur's proactive personality.

Results

Before testing the hypothesized relationships, we performed confirmatory factor analysis (CFA). As shown in Table 1, the proposed four-factor model fit the data well ($\chi^2(659) = 1019.159$, CFI = .940, TLI = .936, RMSEA = .051, SRMR = .054) and offered a significant improvement in chi-square over a one-factor model combining EP, proactive personality, ESE, and entrepreneurial persistence ($\chi^2(665) = 4388.244$, CFI = .426, TLI = .393, RMSEA = .162, SRMR = .169, $\Delta\chi^2$ (6) = 3369.085, $p < .001$). The validities and reliabilities of the measures are shown in Table 2.

Insert Table 1 here

Insert Table 2 here

As the data collected through our survey were obtained from a single-source at one time, it may have a problem of common method bias (Podsakoff et al., 2003). To minimize potential common method variance (CMV) at the beginning of the survey, all the respondents were informed that the questionnaire was anonymous and participation in the study was voluntary. Additionally, we placed the independent and dependent variables in different positions in the

questionnaire. We also checked for potential CMV (Podsakoff & Organ, 1986) by utilizing Harman's one-factor test. In exploratory factor analysis, the outcome indicated four variables with eigenvalues greater than 1 representing 63.82% of the total variance, and the first factor only accounted for 33.81% of the difference.

Additionally, we tested for CMV by using a common latent factor technique, that estimates the common variance as the square of the common factor of each path before standardization (with a threshold set to a maximum of 50%). The results indicate a common variance of around 16.8%, which is far below the recommended threshold. These results, along with the results of CFAs, suggest that CMV is not a major issue in this study. The means, standard deviations, and intercorrelations of all the variables used in the present study are shown in Table 3. The correlations of all the variables of interest relate in the expected direction.

Insert Table 3 here

As suggested by Cardon et al., (2013=, we treat the three dimensions of EP as separate predictors to test their effect. Each of the three dimensions of passion has a positive and significant effect on entrepreneurial persistence ($EP_{Founding}$: B = .27, p < .01; $EP_{Inventing}$: B = .27, p < .01; $EP_{Developing}$: B = .25, p < .01), supporting Hypothesis 1. Furthermore, we found that the three dimensions of EP are also positively related to ESE ($EP_{Founding}$: B = .31, p < .01; $EP_{Inventing}$: B = .26, p < .01; $EP_{Developing}$: B = .28, p < .01). The relationship between ESE and entrepreneurial persistence was also significant (B = 0.28, p <0.01).

Next, following the procedures proposed by Hayes and Preacher (2010), we then tested Hypotheses 2 and 3 by checking the significance of the indirect effects of ESE for each dimension of EP, along with the effect proactive personality has on this effect. The results of the moderated mediation analyses support our predictions: ESE mediates the effect of all the

three dimensions of EP on entrepreneurial persistence. The direct effect of each dimension becomes insignificant (i.e., the number zero is included in the confidence intervals; Shrout & Bolger, 2002) when ESE is taken into account: ($EP_{Founding}$ =.072, SE =.053, CI 95% = [-.033 .176]; $EP_{Inventing}$ =.049, SE =.040, CI 95% = [-.029 .127]; $EP_{Developing}$=.060, SE =.052, CI 95% = [-.043 .162]). Thus, Hypothesis 2 is supported.

To test Hypothesis 3, we look at the moderating effect of proactive personality. Interestingly, when the founding dimension of EP is considered, we did not find any significant direct effect of proactive personality on ESE (*B* = .072, *SE* =.053, CI 95% = [-.033 .176]). Similarly, no interaction effect between EP ad proactive personality was found (*B* = .086, *SE* =.049, CI 95% = [-.011 .184]; Figure 2) and, overall, the moderated mediation index was not significant, (*B* = .024, SE = .016, CI 95% = [-.003 .062]; Table 4), indicating no differences between individuals with a higher and a lower proactive personality.

Insert Figure 2 here

Insert Table 4 here

Concerning the effect of the passion for inventing dimension of passion, the results show a direct effect of proactive personality (*B* = .11, *SE* = .054, CI 95% = [.003 .218]), as well as an interaction effect between passion for inventing and proactive personality (*B* = .082, *SE* =.038, CI 95% = [.008 .156]) on ESE. Figure 3 visually represents the interaction effect.

Such significant relationship is further supported by the index of moderated mediation (*B* =.023, *SE* = .014, CI 95% = [.000 .057], which is also significant. Specifically, the effect is stronger for individuals high (effect $_{high\ (+1SD)}$ = .066, *SE* =.029, CI 95% = [.018, .133]),

rather than low (effect $_{\text{low (-1SD)}}$ = .011, *SE* = .19, CI 95% = [-.026, .049]; Table 5) in proactive personality.

Insert Figure 3 here

Insert Table 5 here

Last, the results for the passion for developing dimension revealed a significant main effect of proactive personality (*B* = .125, *SE* = .053, CI 95% = [.020 .230]), as well as an interaction effect between passion for developing and proactive personality (*B* = .125, *SE* =.053, CI 95% = [.020 .230]) on ESE. Figure 4 visually represents the interaction effect. Such relationship is further supported by a significant index of moderated mediation (*B* = .035, *SE* = .017, CI 95% = [.007 .075]. Specifically, the effect is stronger for individuals high (effect $_{\text{high (+1SD)}}$ = .062, *SE* =.024, CI 95% = [.025, .119]), rather than low (effect $_{\text{low (-1SD)}}$ = .020, *SE* = .24, CI 95% = [-.019, .080]; Table 6) in proactive personality. Taken together, the mediating effect of ESE between EP and entrepreneurial persistence is stronger for individuals with higher levels of proactive personality in two out of three dimensions of EP, supporting Hypothesis 3.

Insert Figure 4 here

Insert Table 6 here

Control variables analysis. Although we did not predict any specific effect of our control variables, the results provide interesting insights. First, none of the sociodemographic variables (gender, age, education) seems to have a significant effect on ESE. Such result may be due to the strong effect EP and proactive personality have in determining ESE.

Conversely, the firm-level variables (like firm age, assets, employment size) seem to significantly impact ESE, even if by a small degree.

More interestingly, when looking at the control variables for our focal dependent variable - entrepreneurial persistence - only annual turnover and gender seem to be the variables significantly affecting persistence. While annual turnover seems to have a relatively small effect, gender strongly impacts persistence regardless of which dimensions of EP are taken into consideration. Due to the coding of the gender variable (0 = female, 1 = male), the negative effect indicates that female entrepreneurs seem to have a stronger level of entrepreneurial persistence compared to their male counterparts. This effect is confirmed by a post-hoc independent sample t-test analysis: female entrepreneurs reported higher level of entrepreneurial persistence than male entrepreneurs (M_{female}= 3.53, SD = .73, M_{male} = 3.00, SD =.83, t (df = 213) = 4.65, p < .001).

Discussion

Entrepreneurs who are passionate about their ventures are more likely to persevere and have a higher chance of success (Lu, 2018), but the reasons for such a link were relatively unexplored. The purpose of our study was to examine the mechanisms through which EP connects to entrepreneurial persistence. Based on the broaden-and-build theory, our results suggest that the EP is related to persistence via ESE. Moreover, the findings demonstrated that the interaction of proactive personality and EP directly affect ESE and indirectly to persistence. Our findings illuminate how current emotional states and personality traits influence self-judgments and consequently impact on individuals' persistence.

Theoretical Contributions

This paper makes several important theoretical contributions to the literature on emotions and EP, ESE and entrepreneurial persistence.

First, prior research has found evidence that passion rather than self-efficacy is a key driver of entrepreneurial action (Murnieks et al., 2014), while other work suggested that self-efficacy is more responsible for entrepreneurial persistence (Hsu et al., 2019). We sought to examine how these variables work together in their influence on entrepreneurial persistence. Specifically, we look at how positive emotions such as EP can impact ESE and in turn affect persistence. These findings elaborate further the theorizing of a number of scholars who argue that EP has a direct impact on individual entrepreneurial cognitions (Cardon et al., 2009; Kiani et al., 2019) and support ideas of Baum and Locke (2004) who argued that the path between passion and outcome variables, such as venture performance, is not direct. Our findings contribute to the entrepreneurial persistence literature by introducing a perspective based on the emotional capabilities entrepreneurs can have. While previous research investigates the role other factors related to the socio-demographic background of the entrepreneurs or factors at a firm-level have on persistence (Freeland & Keister, 2016; Tietz et al., 2021), our study contributes to unravelling the role positive emotions can play in determining how certain entrepreneurs persist more than others.

Second, our research contributes by highlighting the role proactive personality can have in boosting the broaden-and-build effect of positive emotions. While previous research looks at the role work and societal environments have in fostering proactive personality and impact on employee's performance (Buil et al., 2019; McCormick et al., 2019; Neneh, 2019), our study provides evidence on how such personality can also impact the persistence of entrepreneurial activities. The results of our moderated mediation model indicated that ESE's mediating impact between EP and entrepreneurial

persistence varies depending on the proactive personality of an entrepreneur. Specifically, we found that individuals with high EP and high proactive personality were more likely to report higher ESE, positively affecting, in turn, their persistence. These findings are particularly important as they contribute to unravelling potential factors and processes that allow entrepreneurs to strive in situations where ventures face adversities or do not perform as expected.

Third, by looking at how proactive personality interacts with the single dimensions of EP, our research contributes by looking at the nuances of when such proactive personalities help more positive emotional states to generate more ESE and, in turn, persistence. While we find that the effects of passion for inventing and passion for developing are positively affected by a higher proactive personality, such effect did not hold in the case of the passion for founding. This result may be explained considering the different tasks founding a business entails compared to the other two dimensions. Such tasks (for example having to deal with bureaucracy or establishing the company infrastructure of suppliers and distributors) may be too standardized and not particularly fitting for proactive personalities, which are instead more inclined to bring up change and innovations.

Finally, our work contributes to the understanding of the interplay between EP and entrepreneurial persistence in the Asian context. While some previous studies have addressed entrepreneurial performance in East Asia (Ma et al., 2017; Ma et al., 2018), comparatively little is identified on entrepreneurial persistence behavior in a country like China, that is predicted to solidly become the first economy in the World by 2024 (World Economic Forum, 2020). Our results illuminate the scant body of previous research conducted on EP in the Chinese context (Kiani et al., 2019; Li et al., 2020). Academics noted that the diversity of the business environment in different parts of the world requires a direct test of Western-developed management theories in Asian contexts

(Tsui, 2004). Consistent with this notion, our results enhance the understanding that both EP and proactive personality is vital for persistence in China.

Implications for Practice

While the importance of passion in the success of an entrepreneur has been widely discussed, academic research unravelling the consequences of passion on cognitions and behaviors has been scant. This study lends support to the theory that treats passion as an affective experience (Cardon et al., 2009) to explain the effects of passion on entrepreneurial thinking and actions. Such an explanation is important because passion as an emotion can be nurtured to increase one's success. We also demonstrated that entrepreneurs with proactive personalities are more likely to benefit from this type of passion. Thus, we encourage investors to pay attention to entrepreneurs' dispositions, such as proactive personality and suggest that entrepreneurs engage in behaviors that may boost their proactivity concepts. A better understanding of the effects of EP on their persistence may also enable entrepreneurs to harness and leverage it to achieve their goals.

Additionally, the results for the different dimensions of EP provide interesting insights on what type of entrepreneurial roles are more linked to persistence. Since proactive personality seems to have a significant moderating impact only in the inventing and developing dimensions, prospective investors may want to privilege entrepreneurial actions oriented at inventing new products or services or developing existing ones. This aspect is particularly vital in situations where an abrupt change in the business environment (such as the economic crisis in 2008 or the COVID-19 health crisis of 2020) could threaten the ability of the entrepreneurs to carry out their ventures. New types of ventures (for example more environmentally sustainable or technologically advanced) are often suggested as a necessary condition for recovering from such shocks (Bar Am et al., 2020). Being passionate about

inventing new businesses or developing existing ones could place entrepreneurs in a catalyst role towards the general economic and societal recovery.

A final important implication for practice relates to the role that individual differences like gender have in affecting entrepreneurial persistence. Our results show that despite there were no gender differences impacting ESE, female entrepreneurs seem to have a higher level of entrepreneurial persistence than male entrepreneurs. While our sample is not perfectly balanced among males and females, such insight may provide indications on the role female entrepreneurship can bring in relation to the strive and survive of companies.

Limitations and Future Research Directions

This study found an important mediating role of ESE between EP and entrepreneurial persistence relationship, which suggest affective processes in entrepreneurship. However, because we used a correlational study, we cannot claim causality of the relationships. Thus, a longitudinal methodology is needed with experience sampling to establish causal effects. Too much passion is said to be not a good thing because it can blind one to disconfirming proof (Baron et al., 2012). Similarly, too much confidence in oneself is also not a good thing because it can lead to hubris, overconfidence, and escalation of commitment to a weakening course of action (Bazerman et al., 1984; Simon & Shrader, 2012). Therefore, we encourage researchers to explore the "dark side" of EP and ESE.

In addition, other factors could influence entrepreneurial persistence behavior. For example, a firm's research and development funds can directly affect the firm's abilities and desire to persist. Other factors that may influence entrepreneurial persistence include the status of a firm founder or whether the firm was recently established (rather than taken over or inherited from family members.) Thus, we encourage future research to consider this factor in their studies.

Concerning our sample, almost every entrepreneur had a university degree. This may be not representative of all the entrepreneurs in China. Therefore, future research may want to test the role education can have in the effects we found by recruiting with a sample of entrepreneurs with different education levels.

Finally, as this research was conducted in only one country and cultural setting, our study is not able to control for any potential impact that cultural difference may have on our findings. Hence, future research may want to compare our model in different countries and geographical locations to check for potential differences.

Conclusion

This study supports the theory that EP is not an inborn characteristic, but rather an affective experience pertaining to ESE and the roles an entrepreneur is associated with. When identified and nurtured, this affective experience may result in an increased capability to inspire and support entrepreneurial struggles. If entrepreneurs recognize the nature of experience driving them towards specific goals, they may also focus on harnessing this kind of passion. In the end, we conclude staying passionate about what you are doing is extremely important because your passion will give you “wings” to feel strong and capable.

References

Ahsan, M., Adomako, S., & Mole, K. F. (2020). Perceived institutional support and small venture performance: The mediating role of entrepreneurial persistence. *International Small Business Journal.* https://doi.org/10.1177/0266242620943194

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes, 50*(2), 248-287. https://doi.org/10.1016/0749-5978(91)90022-L

Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology, 45,* 1017-1028. https://doi.org/10.1037/0022-3514.45.5.1017

Bandura, A., & Wessels, S. (1997). Self-efficacy: W.H. Freeman & Company.

Bar Am, J., Furstenthal, L., Jorge, F., & Roth, E. (2020). Innovation in a crisis: Why it is more critical than ever, McKinsey & Co., Available at https://www. mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/innovation-in-a-crisis-why-it-is-more-critical-than-ever

Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review, 33*(2), 328-340. https://doi.org/10.5465/amr.2008.31193166

Baron, R. A., Hmieleski, K. M., & Henry, R. A. (2012). Entrepreneurs' dispositional positive affect: The potential benefits–and potential costs–of being "up". *Journal of Business Venturing, 27*(3), 310-324. doi:10.1016/j.jbusvent.2011.04.002

Baron, R. A., & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. *Journal of Business Venturing, 26*: 49-60. doi: 10.1016/j.jbusvent.2009.06.002

Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*(2), 103-118. https://doi.org/10.1002/job.4030140202

Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology, 89*(4), 587-598. https://doi.org/10.1037/0021-9010.89.4.587

Bazerman, M. H., Giuliano, T., & Appelman, A. (1984). Escalation of commitment in individual and group decision making. *Organizational Behavior and Human Performance, 33*(2), 141-152. doi:10.1016/0030-5073(84)90017-5

Biraglia, A., & Kadile, V. (2017), "The Role of Entrepreneurial Passion and Creativity in Developing Entrepreneurial Intentions: Insights from American Homebrewers", *Journal of Small Business Management, 55*(1), 170–188. doi: 10.1111/jsbm.12242

Brislin, R. W. (1980). Expanding the role of the interpreter to include multiple facets of intercultural communication. *International Journal of Intercultural Relations, 4*(2), 137-148 https://doi.org/10.1016/0147-1767(80)90025-5.

Buil, I., Martínez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality. *International Journal of Hospitality Management, 77*, 64-75. https://doi.org/10.1016/j.ijhm.2018.06.014

Burke, P. J., & Reitzes, D. C. (1991). The link between identity and role performance. *Social Psychology Quarterly, 44*: 83–92. https://doi.org/10.2307/3033704

Caliendo, M., Goethner, M., & Weißenberger, M. (2020). Entrepreneurial persistence beyond survival: Measurement and determinants. *Journal of Small Business Management, 58*(3), 617-647. doi:10.1080/00472778.2019. 1666532

Caliendo, M., Kritikos, A., & Stier, C. (2019). The importance of start-up motives for entrepreneurial performance. Working Paper. Potsdam, Germany: University of Potsdam.

Cardon, M. S., Foo, M.D., Shepherd, D.A., & Wiklund, J. (2012). Exploring the heart: Entrepreneurial emotion is a hot topic. Entrepreneurship Theory and Practice, 36(1), 1-10. https://doi.org/10.1111/j.1540-6520.2011.00501.x

Cardon, M. S., Glauser, M., & Murnieks, C. Y. (2017). Passion for what? Expanding the domains of entrepreneurial passion. *Journal of Business Venturing Insights, 8*, 24-32. http://dx.doi.org/10.1016/j.jbvi.2017.05.004

Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2013). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing, 28*(3), 373-396. doi:10.1016/j.jbusvent.2012.03.003

Cardon, M. S., & Kirk, C. P. (2015). Entrepreneurial Passion as Mediator of the Self–Efficacy to Persistence Relationship. *Entrepreneurship Theory and Practice, 39*(5), 1027-1050. doi: 10.1111/etap.12089

Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review, 34*(3), 511-532. https://doi.org/10.5465/amr.2009.40633190

Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review, 97*(1), 19-35. https://doi.org/10.1037/0033-295X.97.1.19

Carver, C. S., & Scheier, M. F. (2001). On the self-regulation of behavior. New York: Cambridge University Press.

Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing, 13*(4), 295-316.doi. 10.1016/S0883-9026(97)00029-3

Choi, Y. R., & Shepherd, D. A. (2005). Stakeholder perceptions of age and other dimensions of newness. *Journal of Management, 31*(4), 573-596. Https://doi.org/10.1177/0149206304272294

Conway, A. M., Tugade, M. M., Catalino, L. I., & Fredrickson, B. L. (2013). The broaden-and build theory of positive emotions: Form, function, and mechanisms. *The Oxford Handbook of Happiness*, 17–34.

Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing, 9*(5), 371-395. doi: https://doi.org/10.1016/0883-9026(94)90013-2

Costa, S. F., Santos, S. C., Wach, D., & Caetano, A. (2018). Recognizing opportunities across campus: The effects of cognitive training and entrepreneurial passion on the business opportunity prototype. *Journal of Small Business Management*, *56*(1), 51-75. doi: 10.1111/jsbm.12348

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*(3), 435-462. https://doi.org/10.1177/014920630002600304

De Mol, E., Ho, V. T., & Pollack, J. M. (2016). Predicting entrepreneurial burnout in a moderated mediated model of job fit. *Journal of Small Business Management*. 56 (3), 392 - 411. doi:10.1111/jsbm.12275

Delgado García, J. B., De Quevedo Puente, E., & Blanco Mazagatos, V. (2015). How affect relates to entrepreneurship: A systematic review of the literature and research agenda. *International Journal of Management Reviews, 17*(2), 191-211. https://doi.org/10.1111/ijmr.12058

Drnovsek, M., Cardon, M. S., & Patel, P.C. (2016). Direct and indirect effects of passion on growing technology ventures. *Strategic Entrepreneurship Journal, 10*(2), 194–213. https://doi.org/10.1002/sej.1213

Eich, E. (1995). Searching for mood dependent memory. *Psychological Science*, *6*(2), 67-75. https://doi.org/10.1111/j.1467-9280.1995.tb00309.x

Fiet, J. O. (2007). A prescriptive analysis of search and discovery. *Journal of Management Studies, 44*(4), 592-611. https://doi.org/10.1111/j.1467-6486.2006.00671.x

Foo, M.-D., Uy, M. A., & Baron, R. A. (2009). How do feelings influence effort? An empirical study of entrepreneurs' affect and venture effort. *Journal of Applied Psychology, 94*(4), 1086-1094. doi: 10.1037/a0015599

Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin, 117*(1), 39–66. https://doi.org/10.1037/0033-2909.117.1.39

Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2,* 300 –319. https://doi.org/10.1037/1089-2680.2.3.300

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218

Fredrickson, B. L., & Branigan, C. A. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion, 19*(3), 313-332. https://doi.org/10.1080/02699930441000238

Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13,* 172– 175. https://doi.org/10.1111/1467-9280.0043

Freeland, R. E., & Keister, L. A. (2016). How does race and ethnicity affect persistence in immature ventures? *Journal of Small Business Management, 54*(1), 210–228. doi:10.1111/ jsbm.12138

Frese, M. (2009). Towards a psychology of entrepreneurship—an action theory perspective. *Foundations and Trends® in Entrepreneurship, 5*(6), 437-496. doi: 10.1561/030000002

Fuller, B. Jr,, & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior, 75*(3), 329-345. doi: 10.1016/j.jvb.2009.05.008

Gasper, K., & Clore, G. L. (2002). Mood and global versus local processing of visual information. *Psychological Science*, *13*, 34–40. https://doi.org/10.1111/1467-9280.00406

George, J. M., & Brief, A. P. (1996). *Motivational agendas in the workplace: The effects of feelings on focus of attention and work motivation*: Elsevier Science/JAI Press.

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior, 28*, 3-34. doi: 10.1016/j.riob.2008.04.002

Hayes, A. F., & Preacher, K. J. (2010). Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear. *Multivariate Behavioral Research, 45*(4), 627-660. https://doi.org/10.1080/00273171.2010.498290

Hemmert, M., Cross, A. R., Cheng, Y., Kim, J.-J., Kohlbacher, F., Kotosaka, M., & Zheng, L. J. (2019). The distinctiveness and diversity of entrepreneurial ecosystems in China, Japan, and South Korea: an exploratory analysis. *Asian Business & Management*, 18(3), 211-247. https://doi.org/10.1057/s41291-019-00070-6

Hmieleski, K. M., & Baron, R. A. (2008). When does entrepreneurial self-efficacy enhance versus reduce firm performance? *Strategic Entrepreneurship Journal, 2*(1), 57-72. https://doi.org/10.1002/sej.42

Holland, D. V., & Garrett, R. P. (2015). Entrepreneur start-up versus persistence decisions: A critical evaluation of expectancy and value. *International Small Business Journal, 33*(2), 194–215. doi:10.1177/0266242613480375

Hsu, D. K., Burmeister-Lamp, K., Simmons, S. A., Foo, M.-D., Hong, M. C., & Pipes, J. D. (2019). "I know I can, but I don't fit": Perceived fit, self-efficacy, and entrepreneurial intention. *Journal of Business Venturing, 34*(2), 311-326. doi: 10.1016/j.jbusvent.2018.08.004

Isen, A. M., & Labroo, A. A. (2003). Some ways in which positive affect facilitates decision making and judgment. In S. Schneider & J. Shanteau (Eds.), *Emerging perspectives on judgment and decision research*: 365–393. New York: Cambridge University Press.

Isen, A. M. (1999). Positive affect. In T. Dalgleish & M. Power (Eds.), *The handbook of cognition and emotion.* (pp. 521-539). New York: Wiley.

Jafri, M. H., Dem, C., & Choden, S. (2016). Emotional intelligence and employee creativity: Moderating role of proactive personality and organizational climate. *Business Perspectives and Research, 4*(1), 54-66. https://doi.org/10.1177/2278533715605435

Kadile, V., & Biraglia, A. (2020). From hobby to business: Exploring environmental antecedents of entrepreneurial alertness using fsQCA. *Journal of Small Business Management*, 1-36. doi: https://doi.org/10.1080/00472778.2020.1719846

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review, 29*(3), 440-458 https://doi.org/10.5465/amr.2004.13670969

Kavanagh, D. J., & Bower, G. H. (1985). Mood and self-efficacy: Impact of joy and sadness on perceived capabilities, *Cognitive Therapy and Research, 9*(5), 507-525. https://doi.org/10.1007/BF01173005

Kiani, A., Ali, A., Kanwal, S., & Wang, D. (2019). How and when entrepreneurs' passion lead to firms' radical innovation: moderated mediation model. *Technology Analysis & Strategic Management*, 32(4) 443-456. https://doi.org/10.1080/09537325.2019.1667972

Kiani, A., Liu, J., Ghani, U., & Popelnukha, A. (2020). Impact of Future Time Perspective on Entrepreneurial Career Intention for Individual Sustainable Career Development: The Roles of Learning Orientation and Entrepreneurial Passion. *Sustainability*, *12*, 3864-3881. https://doi.org/10.3390/su12093864

Klyver, K., & Grant, S. (2010). Gender differences in entrepreneurial networking and participation. *International Journal of Gender and Entrepreneurship, 2*(3), 213-227. https://doi.org/10.1108/17566261011079215

Klyver, K., Honig, B., & Steffens, P. (2018). Social support timing and persistence in nascent entrepreneurship: exploring when instrumental and emotional support is most effective. *Small Business Economics*, *51*(3), 709-734.

Kumar, G., Banerjee, R. N., Meena, P.L. and Ganguly, K. (2016), "Collaborative culture and relationship strength roles in collaborative relationships: a supply chain perspective", *Journal of Business & Industrial Marketing, 31*(5), 587–599. https://doi.org/10.1108/JBIM-12-2014-0254

Lent, R. W., Brown, S. D., & Larkin, K. C. (1984). Relation of self-efficacy expectations to academic achievement and persistence. *Journal of Counseling Psychology, 31*(3), 356–362. https://doi.org/10.1037/0022-0167.31.3.356

LePine, J. A., Colquitt, J. A., & Erez, A. (2000). Adaptability to changing task contexts: Effects of general cognitive ability, conscientiousness, and openness to experience. *Personnel Psychology, 53*(3), 563-593. doi: 10.1111/j.1744-6570.2000.tb00214.x

Li, C., Murad, M., Shahzad, F., Khan, D., Shafique, M. A., Ashraf, S. F., & Kofi Dogbe, C. S. (2020). Entrepreneurial passion to entrepreneurial behavior: Role of entrepreneurial alertness, entrepreneurial self-efficacy and proactive personality. *Frontiers in Psychology, 11,* 1611. doi: 10.3389/fpsyg.2020.01611

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*: Engle wood Cliffs, NJ: Prentice-Hall.

Lomberg, C., Thiel, J., & Steffens, P. (2019) The hare and the tortoise: The impact of action-versus state-orientation on entrepreneurial progress and persistence. *International Small Business Journal, 37*(6), 604–625. https://doi.org/10.1177/0266242619836615

Lu, L. (2018). *Do Displayed Passion and Preparedness Bring Funding for Crowdfunding Projects?* Paper presented at the Academy of Management Proceedings. https://doi.org/10.5465/AMBPP.2018.213

Luu, N., & Nguyen, H. (2020). Entrepreneurial passion and a firm's innovation strategies. *Journal of Small Business Management*, 1-25.

Ma, C., Gu, J., & Liu, H. (2017). Entrepreneurs' passion and new venture performance in China. *International Entrepreneurship and Management Journal, 13*(4), 1043-1068. https://doi.org/10.1007/s11365-017-0435-x

Ma, C., Liu, H., Gu, J., & Dou, J. (2018). How entrepreneurs' Zhong-yong thinking improves new venture performance: The mediating role of guanxi and the moderating role of environmental turbulence. *Chinese Management Studies, 12*(2), 323-345. https://doi.org/10.1108/CMS-10-2016-0219

Markman, G. D., Baron, R. A., & Balkin, D. B. (2005). Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *26*(1), 1-19.

McCormick, B. W., Guay, R. P., Colbert, A. E., & Stewart, G. L. (2019). Proactive personality and proactive behaviour: Perspectives on person-situation interactions. *Journal of Occupational and Organizational Psychology, 92*(1), 30-51. https://doi.org/10.1111/joop.12234

Millán, J. M., Congregado, E., & Román, C. (2012). Determinants of self-employment survival in Europe. *Small Business Economics, 38*(2), 231–258. doi:10.1007/s11187-010-92600

Mitchell, R. L., & Phillips, L. H. (2015). The overlapping relationship between emotion perception and theory of mind. *Neuropsychologia, 70*, 1-10. doi: 10.1016/j.neuropsychologia.2015.02.018

Murnieks, C. Y., Mosakowski, E., & Cardon, M. S. (2014). Pathways of passion: Identity centrality, passion, and behavior among entrepreneurs. *Journal of Management, 40*(6), 1583-1606. https://doi.org/10.1177/0149206311433855

Neneh, B. N. (2019). From entrepreneurial intentions to behavior: The role of anticipated regret and proactive personality. *Journal of Vocational Behavior, 112*, 311-324.

Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior, 110*, 403-419. https://doi.org/10.1016/j.jvb.2018.05.012

Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management, 36*(3), 633-662. https://doi.org/10.1177/0149206308321554

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology, 91*(3), 636–652. https://doi.org/10.1037/0021-9010.91.3.636

Pierce, J. L., Kostova, T., & Dirks, K. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review, 26*, 298–310. https://doi.org/10.5465/amr.2001.4378028

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi: 10.1037/0021-9010.88.5.879

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531-544. https://doi.org/10.1177/014920638601200408

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731. https://doi.org/10.3758/BF03206553

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*(1), 185-227. https://doi.org/10.1080/00273170701341316

Rowe, G., Hirsh, J. B., & Anderson, A. K. (2007). Positive affect increases the breadth of attentional selection. Proceedings of the National Academy of Sciences, USA. *104*(1), 383-388. doi: 10.1073/pnas.0605198104

Rusting, C. L. (1999). Interactive effects of personality and mood on emotion-congruent memory and judgment. *Journal of Personality and Social Psychology, 77*(5), 1073–1086. https://doi.org/10.1037/0022-3514.77.5.1073

Santos, S. C., & Cardon, M.S. (2019). What's love got to do with it? Team entrepreneurial passion and performance in new venture teams. *Entrepreneurship Theory and Practice*, 43(3), 475–504. https://doi.org/10.1177/1042258718812185

Schmitz, T. W., De Rosa, E., & Anderson, A. K. (2009). Opposing influences of affective state valence on visual cortical encoding. *The Journal of Neuroscience, 29*(22), 7199–7207. https://doi.org/10.1523/JNEUROSCI.5387-08.2009

Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433-465). New York: Guilford Press.

Schwarz, N. (2012). Feelings-as-information theory. In P. A. M. Van Lange, A. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 289–308). Thousand Oaks, CA: Sage.

Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology, 54*(4), 845-874. https://doi.org/10.1111/j.1744-6570.2001.tb00234.x

Seo, M., Barrett, L. F., & Bartunek, J. M. (2004). The role of affective experience in work motivation. Academy of Management Review, 29(3), 423−439 https://doi.org/10.5465/amr.2004.13670972

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*(4), 422–445. https://doi.org/10.1037/1082-989X.7.4.422

Simon, M., & Shrader, R. (2012). Entrepreneurial actions and optimistic overconfidence: The role of motivated reasoning in new product introductions. *Journal of Business Venturing, 27*(3), 291-309. doi: 10.1016/j.jbusvent.2011.04.003

Strese, S., Keller, M., Flatten, T., & Brettel, M. (2018). CEOs' passion for inventing and radical innovations in SMEs: The moderating effect of shared vision. *Journal of Small Business Management*, *56*(3), 435-452. doi: 10.1111/jsbm.12264

Sun, S., & van Emmerik, H. I. (2015). Are proactive personalities always beneficial? Political skill as a moderator. *Journal of Applied Psychology, 100*(3), 966-975. doi: 10.1037/a0037833

Tietz, M. A., Lejarraga, J., & Pindard-Lejarraga, M. (2021). Getting your hopes up but not seeing them through? Experiences as determinants of income expectations and persistence during the venturing process. *Journal of Small Business Management, 59*(1), 136-161. doi: 10.1111/jsbm.12472

Tocher, N., Oswald, S., Shook, C., & Adams, G. (2012). Entrepreneur political skill and new venture performance: Extending the social competence perspective. *Entrepreneurship & Regional Development, 24*(5-6), 283-305. https://doi.org/10.1080/08985626.2010.535856

Tsui, A. S. (2004). Contributing to global management knowledge: A case for high quality indigenous research. *Asia Pacific Journal of Management, 21*(4), 491-513. https://doi.org/10.1023/B:APJM.0000048715.35108.a7

Turner, J. C., Oakes, P. J., Haslam, A., & McGarty, C. (1994). Self and collective: Cognition and social context. *Personality and Social Psychology Bulletin, 20,* 454-463. https://doi.org/10.1177/0146167294205002

Unger, J., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing, 26*(3), 341–358. doi: 10.1016/j.jbusvent.2009.09.004

Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology, 85*(4), 756–767. https://doi.org/10.1037/0022-3514.85.4.756

Warnick, B. J., Murnieks, C. Y., McMullen, J. S., & Brooks, W. T. (2018). Passion for entrepreneurship or passion for the product? A conjoint analysis of angel and VC decision-making. *Journal of Business Venturing, 33*(3), 315-332. https://doi.org/10.1016/j.jbusvent.2018.01.002

Watson, D., Wiese D., Vaidya J., & Tellegen A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology, 76*, 820–838. doi: 10.1037/0022-3514.76.5.820

Willard, G. E., Krueger, D. A., & Feeser, H. R. (1992). In order to grow must the founder go? A comparison of performance between founder and non-founder managed high-growth manufacturing firms. *Journal of Business Venturing, 7,* 181-194. https://doi.org/10.1016/0883-9026(92)90025-M

Williams, M. L., Tsai, M., & Day, D. (1991). Intangible assets, entry strategies, and venture success in industrial markets. *Journal of Business Venturing, 6*(5), 315-333.

Wood, R. E., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review, 14*(3), 361-384. https://doi.org/10.5465/amr.1989.4279067

World Economic Forum (2020). China could overtake the US as the world's largest economy by 2024, Published 20th July 2020, Available online at https://www.weforum.org/agenda/2020/07/largest-global-economies-1992-2008-2024/ [Accessed 9th December 2020].

Wu, J. (2012). Technological collaboration in product innovation: The role of market competition and sectoral technological intensity. *Research Policy, 41*(2), 489-496. doi: 10.1016/j.respol.2011.09.001

Wu, S., Matthews, L., & Dagher, G. K. (2007). Need for achievement, business goals, and entrepreneurial persistence. *Management Research News, 30*, 928–941. https://doi.org/10.1108/01409170710833358

Xie, J., Chu, X., Zhang, J., & Huang, J. (2014). Proactive personality and voice behavior: The influence of voice self-efficacy and delegation. *Social Behavior and Personality: an International Journal, 42*(7), 1191-1200. https://doi.org/10.2224/sbp.2014.42.7.1191

Zahra, S. A., & Newey, L. R. (2009). Maximizing the impact of organizational science: Theory-building at the intersection of disciplines and/or fields. *Journal of Management Studies, 46*, 1059-1075. https://doi.org/10.1111/j.1467-6486.2009.00848.x

Table 1

Results of Confirmatory Factor Analysis

	$\chi 2$	df	CFI	TLI	RMSEA	SRMR
Four-factor model[a]	1019.159	659	.940	.936	.051	.054

Note: CFI = Comparative Fit Index; TLI = Tucker Lewis Index; RMSEA = Root Mean Square Error of Approximation. SRMR=Standardized Root Mean Square Residual. $^{**}P < 0.01$,

a Four-factors: Entrepreneurial passion, Proactive personality, Entrepreneurs' self-efficacy, Entrepreneurial persistence.

Table 2

Reliability and Validity Analysis

Variable Name	Items	Loading	CA	CR	AVE
EP for Inventing	4	0.80–0.94	0.92	0.92	0.74
EP for Founding	4	0.68–0.74	0.80	0.80	0.50
EP for Developing	4	0.74–0.79	0.85	0.85	0.58
Entrepreneurial Self-efficacy	15	0.67–0.92	0.95	0.95	0.58
Proactive Personality	5	0.90–0.92	0.96	0.96	0.82
Entrepreneurial Persistence	6	0.68–0.83	0.89	0.89	0.57

Note: loading = standardized loading; CA = Cronbach's alpha; CR = composite reliability; AVE = average variance extracted.

Table 3

Means, standard deviation, and correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	0.63	0.48													
2. Age	39.00	5.62	.09												
3. Education	2.87	0.71	.02	.45**											
4. Firm Assets	2.75	0.76	-.03	.34**	.60**										
5. Firm Age	3.62	1.55	-.06	.36**	.64**	.88**									
6. Employment Size	206.26	136.90	-.08	.29**	.06	.05	.05								
7. Annual Turnover	27.40	49.04	-.15*	.17*	.09	.15*	.17*	.06							
8. EPI	3.75	1.36	-.29**	-.09	-.05	.00	.08	.19*	.16**	(.92)					
9. EPF	3.94	1.00	-.24**	-.07	-.03	.06	.09	.13*	.21**	.67**	(.80)				
10. EPD	4.08	0.99	-.23**	-.03	.07	.05	.10	.10	.18*	.67**	.65**	(.85)			
11. Proactive Personality	3.74	1.36	-.20**	-.04	.00	.04	.05	.22**	.09	.38**	.41**	.30**	(.96)		
12. ESE	3.93	1.00	-.10	.14*	.14*	.05	.14*	.33**	.17*	.26**	.31**	.28**	.24**	(.95)	
13. Entrepreneurial Persistence	4.07	1.00	-.30**	.18**	.17*	.11	.17*	.26**	.25**	.27**	.27**	.25**	.37**	.44**	(.89)

Note: N=215. M = mean; SD = standard deviation. Reliability estimates appear in parentheses across the diagonal $^{*}P < .05$, $^{**}P < 0.01$ (two-tailed).

Table 4
Moderated Mediation Analysis of EP for Founding

Predictors	Entrepreneurial Self-efficacy				Entrepreneurial Persistence			
	B	SE	LL	UL	B	SE	LL	UL
Constant	3.119**	.449	2.234	4.004	1.608**	.420	.780	2.437
1. Gender	.014	.123	-.229	.257	-.401**	.103	-.605	-.197
2. Age	.007	.013	-.018	.032	.012	.010	-.009	.032
3. Education	.151	.112	-.071	.373	.096	.094	-.090	.282
4. Firm Assets	-.415*	.161	-.731	-.098	-.083	.137	-.354	.188
5. Firm Age	.173*	.082	.011	.336	.038	.070	-.100	.176
6. Employment Size	.002**	.001	.001	.003	.001	.000	.000	.001
7. Annual Turnover	.002	.001	-.001	.004	.002	.001	.000	.004
8. EP for Founding	.246**	.068	.111	.380	.072	.053	-.033	.176
9. Proactive Personality	.088	.056	-.022	.198				
10. EP for Founding x Proactive Personality	.086	.049	-.011	.184				
11. Entrepreneurial Self-efficacy					.277**	.058	.162	.393

Direct and indirect effects	Effect	SE	LL	UL
Direct effect of EP for Founding on Entrepreneurial persistence	.072	.053	-.033	.176
Conditional indirect effect of EP for Founding on Entrepreneurial persistence				
Low Proactive personality	.040	.026	-.003	.101
High Proactive personality	.096	.034	.043	.179
Index of moderated mediation	.024	.016	-.003	.062

Note: EP = Entrepreneurs' passion. The 95% confidence intervals for the conditional indirect effects, the difference in the conditional indirect effects, and the conditional total effects were calculated using Monte Carlo bootstrapping with 10,000 repetitions. SE = standard error, LL = lower limit, UL = upper limit. The 95% bias corrected bootstrapped confidence interval does not include zero; * $p < .05$, ** $p < .01$ (two-tailed)

Table 5
Moderated Mediation Analysis of EP for Inventing

Predictors	Entrepreneurial Self-efficacy				Entrepreneurial Persistence			
	B	SE	LL	UL	B	SE	LL	UL
Constant	3.114**	.457	2.213	4.015	1.558**	.422	.726	2.391
1. Gender	.056	.128	-.196	.308	-.394**	.105	-.600	-.187
2. Age	.005	.013	-.020	.029	.012	.010	-.009	.032
3. Education	.139	.113	-.084	.363	.095	.095	-.091	.281
4. Firm Assets	-.393*	.164	-.716	-.070	-.064	.138	-.337	.208
5. Firm Age	.175*	.084	.009	.342	.030	.071	-.109	.170
6. Employment Size	.002**	.001	.001	.003	.001	.000	.000	.001
7. Annual Turnover	.002	.001	.000	.005	.002*	.001	.000	.004
8. EP for Inventing	.136**	.052	.034	.239	.049	.040	-.029	.127
9. Proactive Personality	.111*	.054	.003	.218				
10. EP for Inventing x Proactive personality	.082*	.038	.008	.156				
11. Entrepreneurial Self-efficacy					.285**	.057	.172	.398
Direct and indirect effects					Effect	SE	LL	UL
Direct effect of EP for Inventing on Entrepreneurial persistence					.049	.040	-.029	.127
Conditional indirect effect of EP for Inventing on Entrepreneurial persistence								
Low Proactive personality					.011	.019	-.026	.049
High Proactive personality					.066	.029	.018	.133
Index of moderated mediation					.023	.014	.0003	.057

Note: EP = Entrepreneurs' passion. The 95% confidence intervals for the conditional indirect effects, the difference in the conditional indirect effects, and the conditional total effects were calculated using Monte Carlo bootstrapping with 10,000 repetitions. SE = standard error, LL = lower limit, UL = upper limit. The 95% bias corrected bootstrapped confidence interval does not include zero; * $p < .05$, ** $p < .01$ (two-tailed).

Table 6

Moderated Mediation Analysis of EP for Developing

Predictors	Entrepreneurial Self-efficacy				Entrepreneurial Persistence			
	B	SE	LL	UL	B	SE	LL	UL
Constant	3.149**	.445	2.271	4.026	1.614**	.421	.784	2.444
1. Gender	.054	.124	-.191	.299	-.405**	.103	-.609	-.201
2. Age	.004	.012	-.021	.028	.011	.010	-.009	.031
3. Education	.141	.111	-.078	.359	.083	.094	-.103	.268
4. Firm Assets	-.354*	.161	-.672	-.037	-.071	.138	-.343	.201
5. Firm Age	.149	.083	-.013	.312	.037	.070	-.102	.175
6. Employment Size	.002**	.001	.001	.003	.001	.000	.000	.001
7. Annual Turnover	.002	.001	-.001	.004	.002*	.001	.000	.004
8. EP for Developing	.22**	.065	.093	.348	.060	.052	-.043	.162
9. Proactive Personality	.125*	.053	.020	.230				
10. EP for Developing x Proactive Personality	.125**	.046	.034	.216				
11. Entrepreneurial Self-efficacy					.283**	.058	.169	.398
Direct and indirect effects					Effect	SE	LL	UL
Direct effect of EP for Developing on Entrepreneurial persistence					.060	.052	-.043	.162
Conditional indirect effect of EP for Developing on Entrepreneurial persistence								
Low Proactive personality					.020	.024	-.019	.080
High Proactive personality					.062	.024	.025	.119
Index of moderated mediation					.035	.017	.007	.075

Note: EP = Entrepreneurs' passion. The 95% confidence intervals for the conditional indirect effects, the difference in the conditional indirect effects, and the conditional total effects were calculated using Monte Carlo bootstrapping with 10,000 repetitions. SE = standard error, LL = lower limit, UL = upper limit. The 95% bias corrected bootstrapped confidence interval does not include zero; * $p < .05$, ** $p < .01$ (two-tailed).

Figure 1: Conceptual Framework

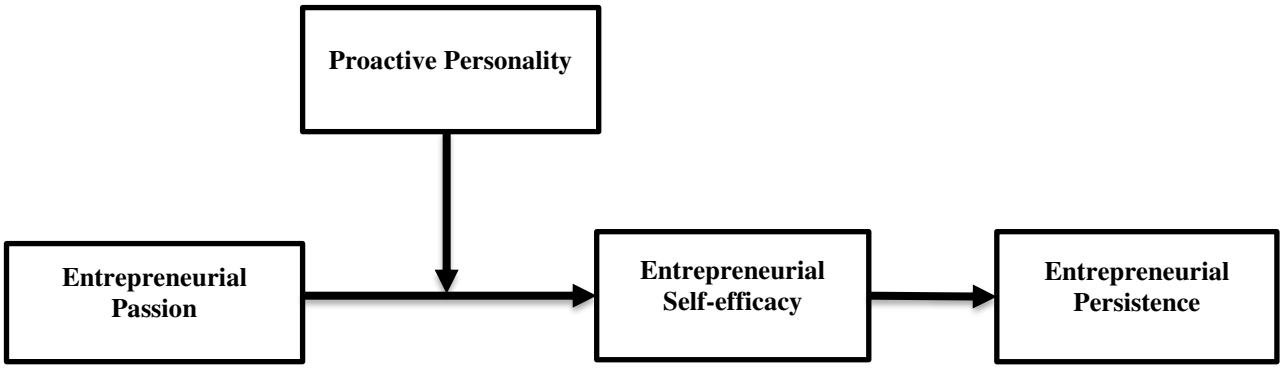

Figure 2: Moderating effect of Proactive personality on the relationship between EP for Founding and Entrepreneurial self-efficacy

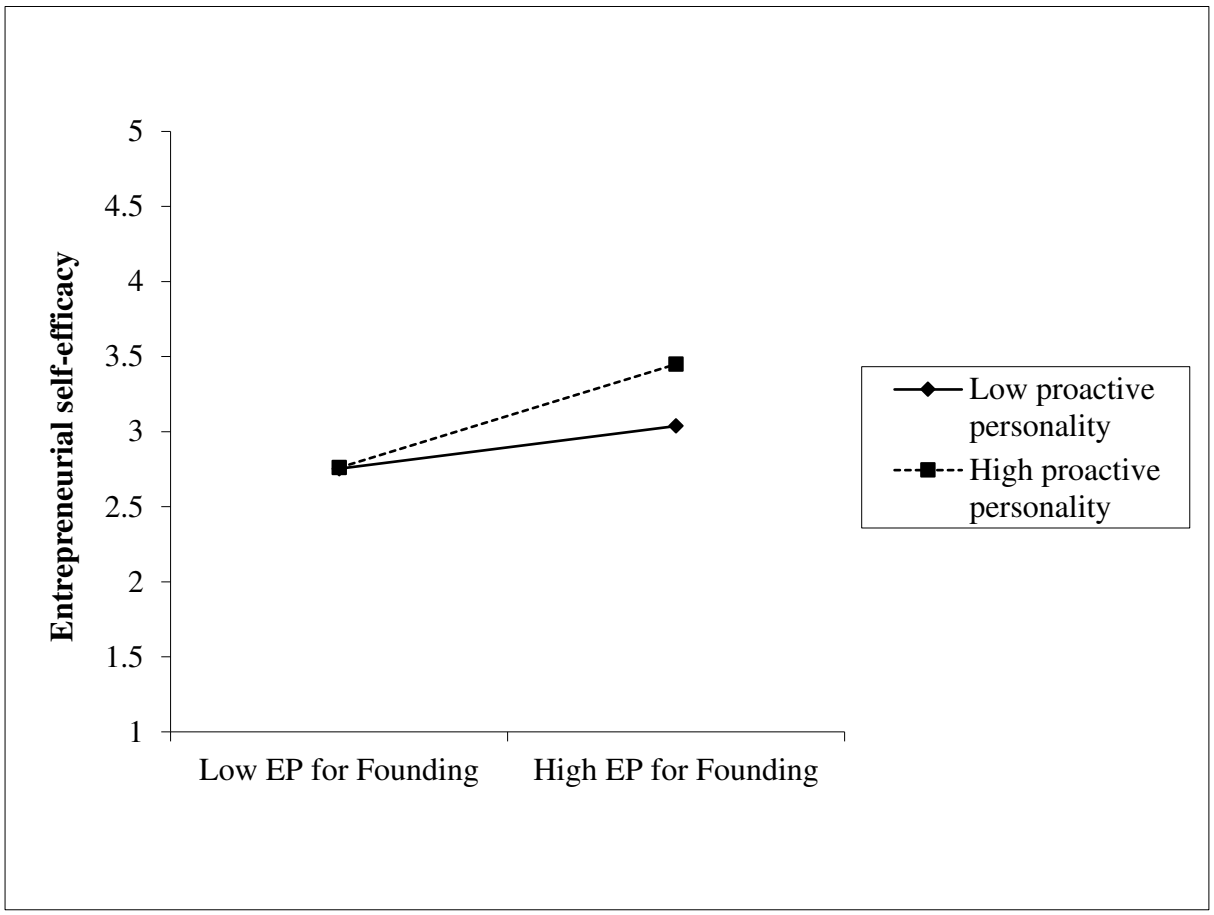

Figure 3:
Moderating effect of Proactive personality on the relationship between EP for Inventing and Entrepreneurial self-efficacy

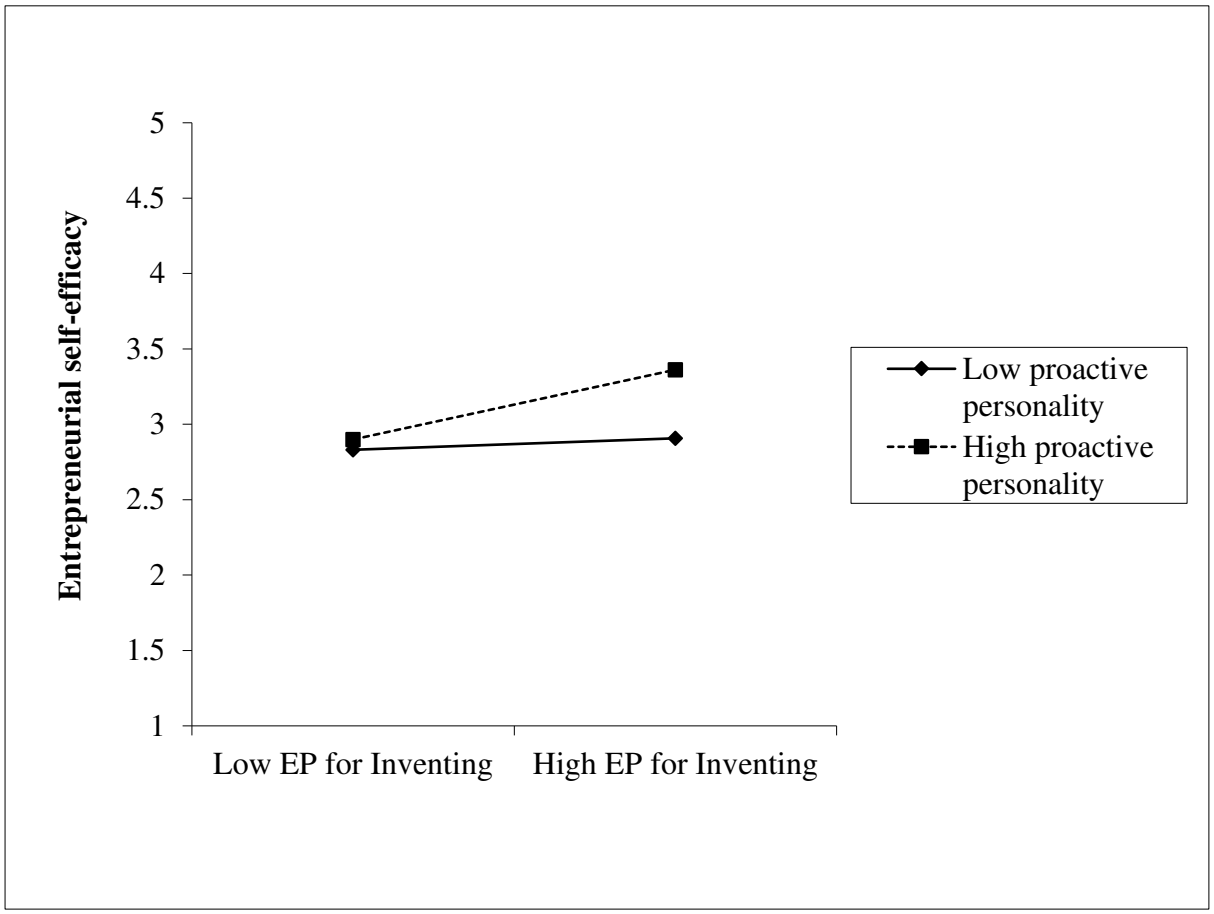

Figure 4:

Moderating effect of Proactive personality on the relationship between EP for Developing and Entrepreneurial self-efficacy