

DRAWN TO THE FIRE? THE ROLE OF PASSION, TENACITY AND INSPIRATIONAL LEADERSHIP IN ANGEL INVESTING

Charles Y. Murnieks*
Oregon State University
College of Business
478 Austin Hall, Corvallis OR 97331
Tel: 541-737-4392
Email: charles.murnieks@oregonstate.edu

Melissa S. Cardon
Pace University
Lubin School of Business
861 Bedford Road, Pleasantville NY 10570
Tel: 914-773-3618
Email: mcardon@pace.edu

Richard Sudek
University of California, Irvine
5141 California Ave, Irvine CA 92697
Tel: 714-744-7065
Email: richard@sudeks.com

T. Daniel White
University of Tennessee
Stokely Management Center, Knoxville TN 37996
Tel: 865-974-3161
Email: twhite62@vols.utk.edu

Wade T. Brooks
Willamette University
Atkinson Graduate School of Management
900 State Street, Salem OR 97301
Tel: 503-370-6167
wbrooks@willamette.edu

Keywords: Passion, Tenacity, Inspirational Leadership, Angel Investor

* corresponding author

Acknowledgements: We wish to acknowledge Violetta Gerasymenko, Cheryl Mitteness, Don Neubaum, Rhonda Reger, Travis Clark, Andrew Corbett and three anonymous reviewers for helpful comments in the development of this paper.

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ABSTRACT

Extant research affirms that angel investors seek passionate entrepreneurs but questions surround whether there is value in passion itself, or if it is instead used as a marker for other important characteristics like tenacity and inspirational leadership. Employing both a qualitative and quantitative study, we find that angels value passion in addition to tenacity, as well as both together, when evaluating entrepreneurs for investment. We also find that the entrepreneurial experience of angels positively moderates the value provided by passion and tenacity.

INTRODUCTION

“It's hard to tell with these Internet startups if they're really interested in building companies or if they're just interested in the money. I can tell you, though: if they don't really want to build a company, they won't luck into it. *That's because it's so hard that if you don't have a passion, you'll give up.*”

- Steve Jobs (Entrepreneur & Founder, Apple Inc., *emphasis added*)

“If you love your work, you'll be out there every day trying to do it the best you possibly can, and *pretty soon everybody around will catch the passion from you - like a fever.*”

- Sam Walton (Entrepreneur & Founder, Walmart Inc., *emphasis added*)

Labeled the “fire of desire” that is capable of driving entrepreneurs to achieve great things (Cardon, Wincent, Singh & Drnovsek, 2009: 515), passion is often linked to intense emotional imagery in the new venture context. As the quotes above illustrate, when we think of passionate entrepreneurs, we envision dogged, determined individuals working long hours to overcome daunting challenges in the fight to breathe life into their ventures. We imagine fiery, dynamic leaders giving spirited speeches to employees, customers and investors alike to encourage them to support their venture. A burgeoning body of research is beginning to shed light on the various constructs linked to passion in entrepreneurship. Recent studies show that passion signals the presence of important factors such as tenacious persistence (Cardon, Gregoire, Stevens & Patel, 2013; Cardon & Kirk, 2015) and emotional contagion of positive affect (Breugst, Domurath, Patzelt & Klaukien, 2012; Cardon, 2008). Given both the folklore that surrounds passion and the emergence of supportive research, it is not surprising that passion is considered to be an important criterion for new venture investors during opportunity evaluation (Chen, Yao & Kotha, 2009; Mitteness, Sudek & Cardon, 2012a).

Yet, we are mindful of the distinction between passion itself, and other factors to which it is linked. For example, passion might signal the presence of tenacity or inspirational leadership, but passion is not identical to these constructs, nor are they interchangeable. This raises questions

surrounding *why* investors are concerned about passion among entrepreneurs. Even though we believe passion is appreciated, at least by some potential investors (Mittiness et al., 2012a) and employees (Breugst, et al., 2012), we do not know whether investors value passion as a worthwhile characteristic in and of itself, or because it indicates the presence of other beneficial components. In other words, is entrepreneurial passion a proxy for other factors or is it valued for its own sake? This is our primary research question, one that has not yet been answered in extant literature. We question whether passion truly is the panacea that recent work seems to suggest it is, or whether investors actually care about other factors that are related to, yet still separate from, passion. We are somewhat concerned with the emerging literature that has started to lump many different things into an overall notion of “passion” without conceptual or empirical precision.

Our main contribution is to highlight the importance of separating passion from related ideas and effects, and determining the unique as well as joint effects of each of these concepts, both theoretically and empirically. In pursuing our main inquiry concerning why angel investors might seek passion among entrepreneurs, and whether other similar constructs might be just as, or more important to them, we integrate work surrounding entrepreneurial passion (e.g., Cardon et al., 2009), with work in social psychology on passion for activities in general (e.g., Vallerand et al., 2003; 2013) to assess the relative importance of entrepreneurial passion in conjunction with tenacity and inspirational leadership.

Although various aspects of entrepreneurs’ presentations to angel investors have been examined (Mason & Harrison, 2003; Maxwell, Jeffrey & Levesque, 2011), the specific role that entrepreneurial passion plays in such pitches is still somewhat unclear. Certain studies indicate that passion does lead to increased entrepreneurial effort and venture growth (Baum, Locke &

Smith, 2001; Murnieks et al., 2014; Drnovsek, et al., in press) as well as increased investor interest (Hsu, Haynie, Simmons & McKelvie, 2014; Mitteness et al., 2012a), while others contend that emotional displays of passion are inconsequential (Chen et al., 2009). We know that investors seek entrepreneurs who are conscientious and hard-working (Chen et al., 2009; Haines, Madill & Riding, 2003) but an individual can demonstrate conscientiousness and a strong work ethic without having passion. Thus, it is not clear whether passion is used as a proxy during opportunity evaluation by investors for other traits or attributes they deem valuable, and if so, which specific attributions are seen as highly associated with, yet separate from, passion. We try to shed light on this area by first conducting a qualitative study to better understand angels' thought processes surrounding the importance of passion, including characteristics passion serves as a proxy for during evaluations. We then employ a conjoint decision experiment to examine the relative decision preferences of angel investors concerning entrepreneurial passion and other related constructs, specifically tenacity and inspirational leadership. Since angel investors often use a contingent decision policy, relying on multiple decision factors rather than just one (Maxwell et al., 2011), a conjoint methodology is highly appropriate to investigate the relative impact of each factor in the evaluation policies of the angels in our sample. The combination of qualitative and quantitative methodologies allows us to contribute to the emerging discussion concerning the importance of entrepreneurial passion to angel investors.

This study makes several important contributions to entrepreneurship. First, we dive deeper into the relationship between entrepreneurial passion and investor assessments of new ventures. Our work extends current theory by first inducting the reasons why angel investors seek out passionate entrepreneurs, and what they might view passion as a proxy for, and then testing those reasons in a decision experiment. This is important because the mixed findings in

the literature concerning the importance of passion to potential investors do not delve into the thought processes of those investors in depth to examine why angels are attracted to the notion of passion, or what passion means to them. We examine this inductively, and also test these espoused reasons deductively. In doing so, we are able to offer deeper understanding of whether angel investors value passion itself, or instead look for passion because it serves as a marker for the presence of other desirable traits among entrepreneurs.

Our second theoretical contribution expands the growing body of work in venture investment research surrounding the influence of investor characteristics on evaluations of specific entrepreneurs. Franke, Gruber, Harhoff and Henkel (2006) assert that venture research needs to expand the analysis of decision-making to include consideration of how specific characteristics of investors interact with those of start-ups in systematically different ways. We examine whether idiosyncratic characteristics of investors lead them to divergent views of entrepreneurs (i.e., Mitteness et al., 2012a; Murnieks, Haynie, Wiltbank & Harting, 2011) by testing whether the entrepreneurial experience of angels might impact the weight they place on entrepreneurial passion, tenacity, and inspirational leadership as criteria for investment. Knowing how specific attributes of investors interact in unique ways with those of entrepreneurs provides deeper insight into why some investors view the same entrepreneurs differently than others.

In the sections that follow, we review extant work surrounding passion in the venture investing context. We augment this with a qualitative study aimed to elucidate the role of passion and its importance from angel investors. Next, we integrate the findings of the qualitative study with other research in entrepreneurship and social psychology to develop hypotheses regarding the influence of passion, tenacity, and inspirational leadership on angel investor decisions about

opportunities. We test these hypotheses in a conjoint decision experiment, and present our results as well as offer a discussion of the implications of our findings.

THEORETICAL DEVELOPMENT

Despite the fact that early research on passion tended to view it as a component of intimate love (e.g., Sternberg, 1986) or as an element of goal achievement (e.g., Frijda et al., 1991), the last decade has seen a significant amount of work dedicated to examining it as a unique construct. This can be attributed, in part, to the work of Vallerand and his colleagues (e.g., Vallerand et al., 2003; 2007; 2008) who have examined passion for a wide range of hobbies and activities, Baum and his colleagues (i.e., Baum & Locke, 2004; Baum, Locke & Smith, 2001; Shane, Locke & Collins, 2003) who developed early work on passion in the entrepreneurial context, and Cardon and her colleagues (e.g., Cardon et al., 2005, 2009, 2013) who have focused more tightly on understanding entrepreneurial passion. Vallerand et al. (2003; 2013) define passion as a strong inclination towards a self-defining activity that people like, find important, and in which they invest time and energy. Cardon et al. (2009) conceptualize entrepreneurial passion as consciously accessible intense positive feelings related to the entrepreneurial activities that are meaningful and salient to the self-identity of the entrepreneur. In accordance with both Vallerand et al. (2003) and Cardon et al. (2009), we define entrepreneurial passion as an intense, positive inclination toward entrepreneurial activities salient to an individual's identity. Following these scholars, we do not conceptualize passion as a trait, but rather as an affective and motivational phenomenon that an entrepreneur experiences when engaging in identity-relevant activities.

In this study, we focus on angel investors. Angel investors are private, wealthy individuals who invest in new ventures using their own money (Benjamin & Margulis, 2000;

Sudek, 2006). Angels represent a significant source of funds for young ventures. In 2014, 73,000 ventures received over \$24 billion in angel investments (Sohl, 2015) in the U.S. Perhaps more important than contributing the earliest infusion of external capital for the business, angels also provide valuable guidance and coaching, and their involvement serves as a signal to other, larger investors (like venture capitalists, Kaiser et al., 2007) that the venture is worth consideration. In fact, Madill, Haines and Riding (2005) find that having angel investors improves the chances of a firm receiving future venture funding by nearly 50%. We focus on angel investors because previous research shows that entrepreneurial passion generally matters more to these types of investors than to venture capitalists (Hsu et al., 2014). Building on the growing body of research surrounding passion, the majority of scholars conclude that entrepreneurial passion exerts an important influence on angel evaluations of new ventures. For example, Hsu et al. (2014) and Sudek (2006) both find that angel investors consider an entrepreneur's passion to be an important criterion during investment evaluation. Their findings are reinforced by Mitteness et al. (2012a), who show that greater perceived passion results in significantly increased evaluations of funding potential by some investors.

It is interesting to note that even though these studies establish the importance of entrepreneurial passion to angel investors, questions about *why* this is true have received less attention. From the theoretical work of Cardon (2008) and Cardon et al. (2009) we can deduce that angels might value passion because it is purported to lead to greater creativity and persistence, and it is contagious, spreading throughout a venture and energizing the employees. Empirical work by Murnieks et al. (2014) and Cardon and Kirk (2015) shows that passion links to increased effort, although the direction of these effects has recently been questioned by Gielnik, Spitzmuller, Schmitt, Klemann, and Frese (2015), who argue that effort leads to passion

rather than vice versa. While a burgeoning body of work indicates reasons why passion could be a valuable factor in investment assessment, it is important to note that much of this conjecture is theoretical, and still needs to be tested. For the empirical work that has emerged, equivocal findings and a lack of experimental validation across studies lead to a general conclusion that more work needs to be done to uncover the way these mechanisms operate.

Most importantly, the entire body of work highlights that there are numerous variables which angel investors may have interest in assessing (passion, persistence, etc.) but we have yet to confirm which ones they truly value and why. For this reason, we decided it would be important to conduct a short, exploratory, qualitative study to inform our theorizing as to *why* angels are interested in passion among the entrepreneurs they evaluate for investment. A qualitative approach allows for deeper elaboration and for inductively-generated reasons to emerge from the population of interest: angel investors. Since we wanted to approach this question in an open-minded manner, we did not offer any reasons to the subjects that passion might be important; we simply asked them to respond to the prompt: “Why is or isn’t passion important when evaluating an entrepreneur?”

Qualitative Study (Examination of Passion)

Our sample included individuals from one of the largest angel investing groups in the U.S., currently located in California. Since its inception in 1997, this group has invested over \$164 million in over 270 new ventures. We asked 101 members of this group one question about passion and we received responses from 66 individuals (66% response rate). 63 (95%) of the respondents were male and their average age was 57. They possessed an average of 13 years of experience as investors and 32 (48%) had started their own companies in the past.

To analyze the responses, we followed generally accepted guidelines for coding qualitative data (e.g. Corbin & Strauss, 2008; Miles & Huberman, 1994). First, two authors read through the responses multiple times. In an effort to add objectivity, neither of these individuals was involved in the collection of the data. Both authors began by organizing the responses into relevant ‘chunks’ or units of analysis (Jennings et al., 2015; Miles & Huberman, 1994) by bracketing phrases that linked passion to reasons of importance (or lack thereof). Studying the responses line by line, we employed the procedures for “open coding” (cf. Corbin & Strauss, 2008) and grouped these chunks according to similarities in themes. Although our categorization of this data followed an emergent, inductive process, our analysis was guided by the outcome of interest specified in our research question. Namely, was passion important, and if so, why? Thus, in coding, we looked specifically for answers to these questions. By reading the responses over and over, and discussing the categories between us, we iteratively fleshed out seven distinct themes in the data (see Table 1 below). At that point, we returned to the literature to provide definitions for constructs alluded to in the data. These definitions are shown in Table 1. We felt this step was important because there are specific, but sometimes subtle, distinctions between these constructs that are outlined in the literature. Next, we followed the procedures recommended by Boyatzis (1998) and coded all the responses for the presence of these seven themes (interrater agreement: 93%, Cohen’s kappa = 0.86). Differences were discussed until agreement was reached. In an effort to substantiate our results, we asked two research assistants who were blind to the intention of this study to code the data according to our seven themes (Miles & Huberman, 1994). Interrater agreement between the authors and the research assistants was high (94%, Cohen’s kappa = 0.89), which provides a degree of confidence in our findings. Our summary of these codes and their frequencies of occurrence are provided in Table 1.

Insert Table 1 About Here

Some responses (5 of 66, 8%) indicated that passion was important, but did not offer a reason why. A few responses (8 of 66, 12%) indicated that passion was not an important criterion, or was not as important as other factors such as management skills or intelligence (see the last quote from Angel #7 in Table 1). Comparisons across variables including age and entrepreneurial experience indicate no significant difference ($p > 0.30$) between respondents who indicated passion was not important, and those who indicated it was. In many cases, investors cited more than one reason that passion was important. As such, the total number of coded phrases sums to more than the number of individuals who responded to our question about passion. From this table, we discern that the primary reasons angel investors cite for the importance of passion are because it signals tenacity (44% of sample states this), motivation (27%), inspirational leadership (17%) and commitment (17%). Opportunity confidence is also mentioned, but to a lesser extent (9%) than the other items. Thus, we focus primarily on the four items cited most frequently in the qualitative data. We do not suggest that these are the only factors related to passion, but instead that these were the factors noted as most important by angels in our qualitative study for why they look for passion in entrepreneurs, if they do so. In the next section, we analyze the constructs mentioned in the qualitative data in greater detail, as well as begin to develop the logic for validating the ties between passion, these factors, and angel investor evaluations in an experimental study.

Tenacity is the most prominent factor associated with passion in our qualitative study. Defined as the sustainment of action and energy despite obstacles (Baum & Locke, 2004)¹, tenacity is noteworthy because it invokes the idea of overcoming adversity that is not explicitly part of the passion construct. Passion is a strong inclination towards an activity that results in persistent effort (Cardon et al. 2009), but passion and tenacity are conceptually separate. Even though Vallerand and his colleagues (2007; 2008) have demonstrated that passion can lead to deliberate practice (Ericsson & Charness, 1994), the experience of passion does not require persistence through obstacles and adversity, nor does persistence through obstacles require feelings of passion. This is important because a signature element we noted in our qualitative study is that each comment we coded for tenacity invoked the idea of overcoming adversity or obstacles, which is a defining element of tenacity. Clearly, the investors in our sample see these two constructs as related to one another, but not identical. It is important to note that individuals can demonstrate tenacity by persisting with a certain activity even though they do not feel an identity connection or great enjoyment for it, indicating that entrepreneurs may possess tenacity without passion (and vice versa). Given that tenacity and passion are distinct constructs it is important to determine how tenacity and entrepreneurial passion work separately and together, to influence opportunity evaluation and investment decision-making.

The second most prominently mentioned factor is motivation. Motivation is defined broadly as energy and direction driving cognition or behavior (Deci & Ryan, 1985; Ryan & Deci, 2000). We do not draw distinctions between intrinsic and extrinsic motivation in the qualitative data because we do not have enough information from the angels to do so, and it is possible they were referring to both types of motivation across their responses. The link between

¹ Although Baum and Locke (2004) define tenacity as a “trait”, we stop short of invoking this personality aspect of the construct.

passion and motivation is not surprising because passion is a motivational construct. Defined as a ‘strong inclination’ (Vallerand et al., 2003), passion is an energizing force that impels behavior directed towards identity-salient activities (Vallerand et al., 2003). As such, passion already includes the notion of motivation. Based on this, we decided we would not pursue further investigation of motivation as a construct separate from passion in angel investor evaluations of entrepreneurs.

The third factor, inspirational leadership, was also cited frequently in our qualitative study, with respect to the ability of passionate individuals to inspire stakeholders to support the venture (e.g. Breugst et al. 2011; Cardon, 2008). Inspirational leadership is a subcategory of transformational leadership, and involves communicating a compelling vision and energizing followers to support the efforts of the leader (Joshi et al., 2009). While leadership is a broad category concerning how leaders influence and motivate followers to achieve certain goals, inspirational leadership is distinct from other theories that describe how leaders employ reinforcement to promote certain types of behavior, or how they encourage performance through reward transactions (Bass & Bass, 2008). In contrast to these approaches, inspirational leadership concentrates on how leaders empower, energize and galvanize followers to participate actively in organizational transformation and growth through inspirational messages and techniques (Bass, 1990). It focuses more tightly on how certain individuals are especially effective at motivating followers to forego self-interests and even engage in self-sacrifice for the sake of collective objectives (Howell & Shamir, 2005: 99). Inspirational leadership is often associated with charismatic leadership as both types help followers transcend individual needs to support the organizational mission. However, inspirational leadership is conceptually distinct from charismatic leadership because the former does not attribute supernatural powers to the leader

and it does not require unquestioning obedience from followers (Bass & Bass, 2008).

Inspirational leaders empower others through the articulation of collective problems and outlining feasible methods to achieve desirable goals. Such leaders set challenging objectives, point out why followers will succeed and emphasize beating the competition (Bass & Bass, 2008). We focus on inspirational leadership because the ability of entrepreneurs to inspire and energize others beyond self-interest is especially relevant for young ventures that are struggling to accumulate resources and establish a foothold in the marketplace (Bruderl & Schussler, 1990; Stinchcombe, 1965).

The link between passion and inspirational leadership identified by the angel investors in our study is interesting because, similar to tenacity, individuals can be passionate about a venture without being inspirational leaders, and vice versa. Passion requires that the individual internalize the identity at the core of the target activity (Vallerand et al. 2003) whereas being an inspirational leader does not require this level of identification. Instead, inspirational leadership focuses more on how the leader interacts with, and considers, followers and other stakeholders. Individualized consideration is a key component of this style of leadership because it makes others feel as though their concerns are considered uniquely, and that their potential is then elevated (Bass & Avolio, 1990). Thus, inspirational leadership is specifically focused outwards, towards others (typically followers), whereas passion turns the focus inward, towards self-defining activities. Just as entrepreneurs can be tenacious without feeling passion, they can also inspire others without feeling passion for the venture. Anecdotally, we know entrepreneurs can be extremely passionate about their venture, but also fail to exhibit inspirational leadership skills. It is evident that this sample of angel investors see relationships between tenacity, inspirational

leadership and passion, but given the theoretical independence of these constructs, we proceed to examine them as separate factors.

The fourth factor identified in our qualitative study, commitment, is defined as a sense of psychological attachment reflecting dedication to and responsibility for a target (Klein, Molloy & Brinsfield, 2012; O'Reilly & Chatman, 1986). Similar to motivation, there are different types of commitment (affective, organizational, etc.) but we did not have enough information in the qualitative data to identify these specifically so we chose to draw from the more general definition offered by Klein et al. (2012) above. Passion is closely related to the commitment construct by virtue of its origins in central identities. Passion draws its energizing power by being tied to identities that are central, or important, to the focal individual (Murnieks et al., 2014; Vallerand et al. 2003). More specifically, Murnieks et al. (2014) demonstrate that entrepreneurial passion tends to be significantly related to the centrality of the entrepreneurial identity. In turn, entrepreneurs are likely to feel the dedication and responsibility aspects of commitment towards objects associated with important identities, such as their venture. Paralleling our arguments surrounding tenacity, there are undoubtedly cases where an entrepreneur may feel commitment without passion. However, the inverse is harder to imagine, and instead, just as with motivation, it is likely that the existence of passion automatically implies commitment. In addition to overlaps between passion and commitment, there are likely to be overlaps between tenacity and commitment. Individuals who feel dedication towards, and responsibility for, a target (commitment) are more likely to persist through adversity to maintain dedication to that target (tenacity). Based on this reasoning, the construct of commitment is likely to exhibit significant theoretical overlap with both passion and tenacity. Whereas differences in the definitions of these constructs clearly exist, the explanation of variance

attributable to commitment would likely be highly correlated with that from both passion and tenacity. This conceptual overlap makes it difficult to test commitment further in an experimental design. Therefore, we decided to focus on tenacity, inspirational leadership, and passion in our quantitative study as these are more likely to vary independently from one another. We next discuss our theoretical development of the effects of each attribute on angel investor evaluations, and an experiment to test the relative importance of these characteristics to angel investors.

Tenacity, Inspirational Leadership & Passion

Our qualitative study indicates that tenacity and inspirational leadership are two of the significant reasons passion is valued by investors. These findings corroborate extant entrepreneurship literature. Cardon et al.'s (2009) theory of entrepreneurial passion argues that passion matters because it links to persistent behavior towards venture activities. Cardon et al. (2013) confirm that passion for founding and for developing ventures each correlate with greater persistence, and Cardon and Kirk (2015) find strong empirical relationships between three types of entrepreneurial passion and persistence. In addition, Cardon (2008) theorizes that passionate entrepreneurs can inspire and motivate followers and Breugst, et al. (2012) empirically confirm this as well. This research simultaneously reinforces the idea that entrepreneurial passion is separate from tenacity and inspirational leadership, and that passion is important because it signals an entrepreneur's determination and the ability to lead and motivate followers. We focus first on the relationships between tenacity, inspirational leadership and angel investor interest, and then discuss how entrepreneurial passion might interact with these relationships.

Research surrounding tenacity in entrepreneurship is somewhat sparse, but the work that does exist attests to its importance. For example, Baum, Locke and Smith (2001) find that tenacity elevates motivation and development of valuable skill competencies. Similarly, Baum

and Locke (2004) find that tenacity has a positive effect on setting more aggressive goals, raising self-efficacy and communicating one's vision to the entire company. Both studies show that tenacity has a positive effect on venture growth as a whole. In a study surrounding the medical device industry, Markman et al. (2005) find that one key element that separates entrepreneurs from non-entrepreneurs is higher tenacity. Moreover, Haines et al. (2003) assert that angel investors prefer entrepreneurs who exhibit a strong work ethic, which is related to an entrepreneur's level of tenacity. Tenacity is clearly a valuable factor in the entrepreneurial process. Entrepreneurs who possess tenacity and determination are more likely to be steadfast in their effort and focus to succeed (Kuratko, 2014) which elevates the chance for the venture to survive and thrive. As such, we hypothesize:

H1: Entrepreneurs who show greater tenacity will be evaluated more favorably by investors.

Inspirational leadership focuses on communicating a vision and energizing and motivating followers to want to accomplish great things (Avolio & Bass, 1999; Bass & Avolio, 1990; Joshi, Lazarova & Liao, 2009). Inspirational leadership often involves transcending the status quo and inspiring others to set aside self-interests in favor of collective goals because the leader offers a compelling mission and is willing to incur great personal risks and costs in pursuit of this mission (Conger & Kanungo, 1987). This is especially applicable in the entrepreneurial realm because founders often put much of their personal wealth and reputation at risk in order to begin a venture, and ask for the support of their followers. Inspirational leadership can exert powerful effects in organizations. In a study involving 171 employees from a Fortune 500 multinational firm, Joshi et al. (2009) show that inspirational leadership is significantly

associated with elevated team performance, likely because inspirational leadership enhances self-identification between individuals and organizations, building greater trust and commitment.

Inspirational leadership elevates the motivation (Sy, Cote & Saavedra, 2005) and effort (Bass & Avolio, 1990) of followers through emotional contagion mechanisms too (Haver, Akerjordet & Furunes, 2013). When inspirational leaders display positive moods related to their enthusiasm for the venture, employees or team members are likely to adopt these moods (Cardon, 2008; Newcombe & Ashkanasy, 2002; Sy et al., 2005). For example, Bono and Ilies (2006) use a series of experiments to show that leaders rating higher (vs lower) on inspirational motivation indices were more successful at transferring positive moods to followers and that these types of leaders tend to be viewed as more effective. In turn, these positive moods among employees can have significant organizational benefits including elevated creativity (Isen, 2004), increased cooperation, and decreased conflict (Barsade, 2002). Given the evidence that inspirational leaders can improve the performance of a firm through a host of mechanisms, we hypothesize that investors will seek entrepreneurs who possess this characteristic.

H2: Entrepreneurs who show greater inspirational leadership will be evaluated more favorably by investors.

Entrepreneurial passion should also be important to investors for several reasons. First, entrepreneurial passion is theoretically and empirically linked to a number of factors known to be influential in the entrepreneurial process. Entrepreneurial passion drives creative problem-solving and absorption in venture tasks (Cardon et al., 2009; 2013). It also impels greater entrepreneurial effort (Murnieks et al., 2014), development of an entrepreneurial culture (Haar, Taylor & Wilson, 2009) and elevated positive affect among the employees of a new venture (Breugst et al., 2012). Each of these factors contributes to better performance. Second, several

studies that show angel investors value entrepreneurial passion among founders (e.g. Hsu et al., 2014; Mitteness et al. 2012a; Sudek, 2006). In accordance with the findings of these other scholars, we hypothesize that angel investors will value passionate entrepreneurs more highly than non-passionate ones.

H3: Entrepreneurs who show greater passion will be evaluated more favorably by investors.

The interactions between entrepreneurial passion, tenacity and inspirational leadership may be of great interest, in addition to the main effects of these constructs. First, individuals who demonstrate high levels of both tenacity and entrepreneurial passion should be extremely attractive to angel investors. These entrepreneurs possess both a general steadfastness of character (tenacity) combined with a deep identity-related emotional connection to the venture itself (entrepreneurial passion) that will push them past the inevitable challenges and obstacles that are expected to occur during business gestation. Given that identities are relatively stable constructs which tend to change only slowly (Serpe, 1987), this means that entrepreneurs with a passion for their venture can be expected to sustain that interest over a long period of time. Activities or elements internalized into an individual's identity become self-defining. Since entrepreneurial passion is tied to the identity of the entrepreneur, this means the passion is integrated with the self-concept and as such, activities related to pursuit of entrepreneurship are intrinsically interesting. This high level of interest (which is sustained because it is tied to the self-concept) is important, because sustained interest in activities over time is viewed as a key component of success in a given profession (Bloom, 1985; Duckworth et al., 2007). A host of deliberate practice literature supports the conclusion that continued interest and engagement in a given field is required for the attainment of expert performance and special achievement

(Ericsson & Charness, 1994). Moreover, the phenomenological experience of entrepreneurial passion is pleasurable (Cardon et al., 2009; Vallerand et al. 2003). Entrepreneurs enjoy the experience of passion and this should help persuade angels that entrepreneurs will be motivated to continue pursuit of activities related to that passion, even in the face of obstacles. In summary, the combination of entrepreneurial passion and tenacity should be particularly powerful because the connection towards the venture that already exists from tenacity will only be magnified under the lens of entrepreneurial passion.

H4: Entrepreneurs' passion and tenacity interact such that entrepreneurs who show both passion and tenacity will be evaluated more favorably.

Second, entrepreneurial passion and inspirational leadership could interact for potent results. We hypothesize that entrepreneurial passion augments the effects of inspirational leadership because investors know that a founder who displays heartfelt passion will resonate particularly strongly with various stakeholders (employees, customers, other investors, etc.) Affective research has examined the positive influence resulting from genuine emotional displays in leadership (Bull Schaefer & Palanski, 2014). Ashforth and Humphrey (1993) categorize genuine emotions as a type of emotional labor whereby the central actor displays emotions that are actually felt, instead of acting or engaging in impression management. Since entrepreneurial passion is tied to the identity of the founder, it is highly likely that its display genuinely showcases how important the venture is to the very self-definition and self-concept of the entrepreneur. These displays will not go unnoticed by others, and will likely be viewed as authentic displays of love and emotion that the entrepreneur feels for the enterprise. Gardner, Fisher and Hunt (2009) argue that genuine emotional displays by leaders create more favorable impressions among followers and increase perceptions of leader authenticity. These outcomes

are beneficial because they result in greater trust of the leader. Ilies, Morgeson and Nahrgang (2005) assert that leaders who are authentic tend to have followers who experience more positive emotional states, reach higher levels of self-realization and who identify more strongly with the organization. Taken together, entrepreneurial passion and inspirational leadership should interact in a positive manner because the former increases the reach and power of the latter, making the venture more attractive to various stakeholders.

H5: Entrepreneurs' passion and inspirational leadership interact such that entrepreneurs who show both passion and inspirational leadership will be evaluated more favorably.

Finally, tenacity and inspirational leadership should also interact to increase the attractiveness of a particular entrepreneur². We have already argued that tenacity is appealing because it signals an entrepreneur's proclivity to drive through adversity and obstacles (Baum & Locke, 2004). In turn, inspirational leadership is compelling because it energizes and motivates stakeholders who are important for venture survival and success (Joshi et al., 2009). Combining tenacity with an entrepreneur who stimulates others is likely to be powerful because the positive effects of inspirational leadership are likely to be sustained over longer periods of time. The tenacious leader who pushes through hardship and demonstrates endurance will be viewed as an example for the rest of the firm. Role models are viewed as robust leadership figures across many different cultures (Kriger & Seng, 2005). The fact that the tenacious entrepreneur refuses to quit means that the effect of their leadership will be extended by example. Just as we argue that passion can increase the reach and power of inspirational leadership, tenacity could do the same. As such, we hypothesize

² We are grateful for an anonymous reviewer who encouraged us to pursue this particular dimension of reasoning.

H6: Entrepreneurs' tenacity and inspirational leadership interact such that entrepreneurs who show both tenacity and inspirational leadership will be evaluated more favorably.

Entrepreneurial Experience of Angels

In addition to theorizing about the relative importance of the entrepreneur's characteristics (passion, tenacity, inspirational leadership) on angel investor evaluations, we also contend that the entrepreneurial experience of the angel investor will moderate these relationships. A substantial body of literature argues that the evaluation of new ventures is not dependent solely upon the traits of the entrepreneurs under consideration; the characteristics of the angel investors who make these evaluations matter as well. For example, Murnieks et al. (2011) show that the effectual logic preference of the investor and the degree to which it matches that of the entrepreneur influences evaluations. Mitteness et al. (2012a) demonstrate empirically that the influence of entrepreneurial passion depends on factors such as angel investor age, cognitive style, motivation to mentor, regulatory focus and personality. One factor that has not received as much attention in this literature is the entrepreneurial experience of the angel investor. Although entrepreneurial experience is often employed as a control variable (see Murnieks et al., 2011; Mitteness et al., 2012a), and has been examined in a small amount of venture capital studies (Franke et al., 2006), empirical work generally does not include it as a moderating consideration. Since a majority of angel investors possess entrepreneurial experience (Freear, Sohl & Wetzel Jr., 1994), this is a relevant variable to consider.

We contend that entrepreneurial experience is likely to moderate all the relationships presented so far in a positive direction. We argue this because investors with this experience will understand the uncertain nature of founding a venture, and should highly value characteristics

that will enable entrepreneurs to navigate these uncharted waters successfully. Support for this comes from a study of the cognitive processes of entrepreneurs versus MBA students, where Dew, Read, Sarasvathy and Wiltbank (2009) find that the former tend to favor effectual reasoning when considering opportunities. Effectual reasoning employs a non-predictive control logic (Sarasvathy, 2001; Wiltbank et al., 2006) which is defined as eschewing predictive information (i.e., market forecasts, sales projections) in favor of developing capabilities to control the outcomes that might emerge from an unpredictable future (Sarasvathy, 2001). Given the findings from Dew et al. (2009) that experienced entrepreneurs tend to prefer effectual reasoning, we contend that angel investors who possess entrepreneurial experience are more likely to do so as well because they will have experienced the value of such reasoning first hand (whether they used it themselves or they viewed entrepreneurial colleagues who used it). If effectual reasoning is preferred, it is logical that entrepreneurs who possess more capabilities to control various outcomes in an unpredictable future will also be preferred. We have already argued that tenacity, inspirational leadership, and passion should be viewed favorably in the entrepreneurial context. Each one of these attributes confers advantages to the entrepreneur that allow him or her to overcome unforeseen challenges or garner the support of key individuals needed for venture survival. We have suggested that all three variables are likely to position the entrepreneur to control unknown occurrences more successfully, and that this capability is likely to be more highly preferred among investors who know the value of such abilities. Thus, we assert that the entrepreneurial experience of the investor will positively moderate the influence of all three factors (tenacity, inspirational leadership, and passion) on opportunity evaluation. Since we have already proposed that the two-way interactions between tenacity, inspirational leadership and passion are likely to influence the evaluation of an entrepreneur positively, herein

we add that the entrepreneurial experience of the angel investor will moderate those previously-offered two-way interactions. In other words, we argue that entrepreneurial experience will represent a three-way interaction across each pair of attributes.

H7: The entrepreneurial experience of angels positively moderates all two-way interactions between passion, tenacity and inspirational leadership on angel evaluations.

METHOD & RESULTS

Conjoint Decision Study

Overview

To investigate our hypotheses, we leveraged the utility of conjoint analysis to decompose the decision policies of individuals engaged in a cognitive task. A conjoint experiment represents a technique that “requires respondents to make a series of judgments or preference choices, based on profiles from which their ‘captured’ decision processes can be decomposed into their underlying structure” (Shepherd & Zacharakis, 1997: 207). A conjoint methodology is particularly well suited for the investigation of the relative influence of different decision factors that are the focus of this study. The key advantage of this approach is that it does not rely on post-hoc recall techniques that involve the participants’ introspection, which have been found to be biased and inaccurate (Drover et al., 2014; Fischhoff, 1982; Priem & Harrison, 1994).

For this study, we developed a decision-making experiment in which a sample of angel investors was asked to evaluate a series of hypothetical investment opportunities and indicate the probability that they would invest in each. Each opportunity profile conveyed information about the attributes of the focal entrepreneur to include characterizations of their passion, tenacity and leadership style, since the qualitative study indicated that tenacity and inspirational leadership

are reasons why passion is important to angel investors. To test our interactions, we also captured, as part of a post-experiment questionnaire, the respondents' levels of entrepreneurial experience. We employed Hierarchical Linear Modeling (HLM) to decompose the aggregate decision policies of our sample because of the nested nature of the data.

Sample

Participants in the conjoint study were sampled from the same investing group used in the qualitative study. Since the data collection for the qualitative study terminated in 2011, and this conjoint data collection did not begin until 2015, we reasoned that the possibility of bias would be relatively small due to the large temporal separation (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). We selected this investing group again because 1) they were interested in the role of passion in investing in general (as indicated by the qualitative study), and 2) they are one of the largest angel investing organizations in the U.S. and as such, offer a good sample against which to test our hypotheses. All angel investors (325) in the organization were contacted via email and invited to participate in this study. We received responses from 57 individuals. After removing cases due to incomplete data, there were 53 complete conjoint experiments (16% response rate). Simple means comparisons across demographic variables including gender and entrepreneurial experience indicate the sample responding to the conjoint was different ($p < 0.05$ for both dimensions) than the sample analyzed in the qualitative study. This sample size is comparable to or exceeds other conjoint studies conducted in the entrepreneurial context (Franke et al., 2006; 2008; Muzyka et al., 1996; Shepherd & Zacharakis, 1999). 85% of respondents (44 of 53) were male and the mean age range was 56-60 years old. Participants had an average of 12.2 years of experience investing in ventures and 66% (35 of 53) reported formal education at the master's-degree level or higher.

Instrument

The construction of the instrument was based on the established tradition of a number of well-regarded conjoint analyses used to investigate decision-making in entrepreneurial contexts (e.g., Drover et al., 2014; Haynie et al., 2009; Murnieks et al., 2011). The instrument itself included instructions to the participants, the conjoint experiment, and a post-experiment questionnaire designed to capture participants' demographic data. Respondents were instructed to consider each investment opportunity as a separate situation, independent of all others. Moreover, respondents were instructed to assume each venture opportunity occurred in an industry with high growth potential and strong profit margins. The ventures were to be considered as scalable and defensible from competition. These conditions were communicated because previous research surrounding investors indicates that both founder and product/market characteristics are considered important during opportunity evaluation (Franke et al., 2008; Murnieks et al., 2011). Thus, we wanted to set the product/market conditions as attractive but constant for all hypothetical opportunities so that the respondents would focus more directly upon the characteristics of the founders.

Regarding the founders, respondents were told to assume that all ventures were formed by a pair of entrepreneurs. The first partner was a quiet but very competent individual who knew the technology domain of the product offering very well. Similar to the product/market characteristics, this variable was held constant in all profiles because relevant industry knowledge is often considered paramount by investors (Franke et al., 2008). The second partner was described as the one in charge of the primary business aspects of the venture (sales, marketing, etc.) and was also the lead founder. This individual was characterized by three primary attributes that were the focus of this study: passion, tenacity and inspirational leadership.

The nature of these attributes (two levels each: high versus low) was varied across the opportunity profiles. Our experimental design included an orthogonal full factorial conjoint design (3 attributes at 2 levels or 2^3 equals 8 profiles). The advantage of using a full factorial orthogonal design is that it ensures there is zero correlation between the three primary attributes (passion, tenacity and inspirational leadership). In order to test for individual consistency (test, retest reliability) we replicated six opportunity profiles (Aguinis & Bradley, 2014), but these six were removed from analysis after the reliability was assessed (Aiman-Smith, Scullen & Barr, 2002). As a result, even though each respondent evaluated 14 profiles, only 8 were kept for analysis. During administration, the order of the attributes as well as the profiles was varied to mitigate demand and response biases. We describe the particular characteristics of the profiles below. The entire conjoint instrument was validated through interviews with angel investors and academics who were familiar with the angel investing context prior to executing the study (in fact, two of the academics consulted were angel investors themselves). We also assessed the face validity by conducting qualitative interviews with a sample of 7 different angel investors prior to the study and by running a pilot test using a sample of 61 undergraduate students. All groups attested to the realism of our hypothetical profiles. A sample of one investment scenario shown to participants in the study is depicted in Appendix A. Examples of all variables used are shown in Appendix B and Appendix C displays the general investment conditions held constant across all scenarios.

Dependent Variable

The angel investor's desire to invest in the venture led by the focal entrepreneur served as the dependent variable. Drawing from other conjoint studies (e.g. Muzyka et al., 1996; Shepherd

et al., 2000), we asked subjects to indicate their probability of investing on a seven point Likert scale (1-low probability to 7-high probability).

Independent variables

Each opportunity profile was described in terms of three independent variables, all related to the attributes of the founder: 1) entrepreneurial passion of the founder, 2) tenacity of the founder, and 3) inspirational leadership ability of the founder. We developed our attributes and level descriptions by reviewing extant literature.

Entrepreneurial passion of the founder. We depicted the entrepreneur leading the venture investment opportunity as possessing either high or low entrepreneurial passion. We chose to operationalize entrepreneurial passion in a manner consistent with Vallerand et al.'s (2003) dualistic theory of passion. This theory contends that passion can be characterized as either harmonious or obsessive, depending on the internalization process. Harmonious passions are internalized autonomously and engaged willingly, without contingency. Obsessive passions are internalized in a controlled fashion which often creates a compulsion to engage them. We anchored entrepreneurial passion in this theory because we wanted to assess the effects of passion for entrepreneurial activities broadly, instead of focusing on passion directed at specific roles in the venture creation process such as inventing, founding and developing which is the target in Cardon et al.'s (2009) theory of entrepreneurial passion.

To assess the relative value of obsessive versus harmonious entrepreneurial passion in the eyes of angel investors, we conducted a special pilot study. We developed a conjoint instrument similar in design to our main conjoint study, but with harmonious versus obsessive passion as the only founder attribute (i.e., this instrument did not include tenacity and inspirational leadership as variables). We used personal contacts to reach out to 43 different angel investors in a sample

separate from our main conjoint study, and asked them to evaluate these profiles using only harmonious or obsessive passion. Hierarchical linear modelling of the results indicated that these angels strongly preferred obsessive to harmonious passion ($\beta = 0.80$, S.E. = 0.14, $p < 0.01$), while controlling for respondents' age, gender, investing experience, entrepreneurial experience, and level of education. Thus, we used Vallerand et al.'s (2003) theory surrounding obsessive passion to operationalize entrepreneurial passion for the conjoint experiment. Entrepreneurial passion was conveyed by describing the extent to which entrepreneurship was part of the founder's identity and the excitement felt by engaging this passion (Vallerand et al., 2003; Vallerand & Verner-Filion, 2013).

Tenacity of the founder. Tenacity was operationalized through a short paragraph describing the tendency of the founder to work through obstacles. Following the theorizing of scholars who focus on the persistence aspect of tenacity (Baum & Locke, 2004; Markman et al., 2005), especially during instances of adversity (Duckworth et al., 2007), we described the extent to which the founder had shown a tendency to persevere through challenges in the past or to be frustrated by them. This variable was represented at two levels (low and high).

Inspirational leadership of the founder. Inspirational leadership was operationalized through a short paragraph describing the leadership style of the founder. This paragraph contrasted strong inspirational leaders with weak levels of inspirational leadership, which was depicted through a transactional style (e.g. Bass & Avolio, 1990). Strong inspirational leaders were characterized by their contagious energy and enthusiasm, as well as their ability to motivate followers through inspiration (Howell & Shamir, 2005; Joshi et al., 2009). Weak inspirational leaders were described as taking a transactional and passive management style until problems warranted

action, preferring to empower employees to figure out how to manage issues until breakdowns occurred (Hinkin & Schriesheim, 2008; Judge & Piccolo, 2004).

Entrepreneurial experience. In order to test our three-way, cross-level interactions (H7), we operationalized entrepreneurial experience using a dummy code (0 indicates the angel investor had never started his or her own company, and 1 indicates s/he had started a venture).

Control variables. Four relevant control variables were also captured: the respondents' age, gender, level of education and investing experience. We included these variables due to their demonstrated importance in this context. Franke et al. (2006), Mitteness et al. (2012a), and Hsu et al. (2014), all argue that age, education and gender have the potential to influence investment decisions among angel investors. Likewise, Shepherd, Zacharakis & Baron (2003) demonstrate that investing experience can exert a significant influence as well. Including these variables in our empirical model helps us control for possible sources of variation as well as allowing us to compare our findings to other extant studies.

Empirical Model

Our conjoint data is multilevel in nature, and HLM has proven to be a robust method for analyzing these types of models (e.g., Drover et al., 2014; Mitchell & Shepherd, 2010). In HLM, parameter estimates are generated, and the t-values associated with those parameters indicate the significance of the attribute or the interaction between attributes. The parameter estimates indicate the amount of change in the dependent variable as a function of a one-unit change in the independent variable (for example, moving from a low to a high condition). For example, this change can be interpreted as the difference between evaluating an entrepreneur who possesses low versus high tenacity. Since the research design (full factorial conjoint) ensures there are zero correlations between the independent variables, testing and subsequently reporting two models

(control and main-effects) is neither necessary nor appropriate (Priem, 1994; Priem & Rosenstein, 2000). Thus, we report only the full model with all control and main effects shown together. This is consistent with other studies using orthogonal designs for metric conjoint analyses (cf. Priem, 1994; Priem & Rosenstein, 2000) as well as with conjoint studies conducted in the entrepreneurial context (Drover et al., 2014; Murnieks et al., 2011).

Results

The main study provided 424 total observations (8 observations per participant for 53 participants). In all, 77% of the individual decision models for the angels were significant ($p < 0.05$) with a mean adjusted- R^2 of 0.73. This indicates that the independent variables used in the main study were the primary drivers of the investment decisions captured in the dependent variable. Further, the mean test-retest correlation for the dependent variable was 0.74 (standard deviation = 0.25), which indicates consistency in decision-making. The intraclass correlation was 0.207. This indicates that roughly 21% of the variance in investment evaluations was due to differences between participants which is relevant for evaluation of cross-level hypotheses (H7) that predict differences in evaluation across investors. Table 2 below summarizes our analyses.

Insert Table 2 About Here

As can be seen in the table, two main effects were significant. Higher levels of tenacity ($\beta = 0.830$, $SE = 0.160$, $p < 0.01$) and entrepreneurial passion ($\beta = 0.887$, $SE = 0.194$, $p < 0.01$) led to increased probabilities of investment. Inspirational leadership did not exhibit a significant effect ($\beta = 0.208$, $SE = 0.156$, $p = 0.19$). These results provide support for H1 and H3, but not H2. The interaction of passion and tenacity is significant ($\beta = 0.509$, $SE = 0.144$, $p < 0.01$) as

well as the interaction of inspirational leadership and tenacity ($\beta = 0.283$, $SE = 0.116$, $p < 0.05$). This indicates that the relationship of tenacity with founder evaluation is even stronger when the founder exhibits high entrepreneurial passion or strong inspirational leadership. This provides support for H4 and H6. The effect size of these interactions is 8.5% (tenacity x passion) and 4.7% (tenacity x inspirational leadership) respectively. Table 3 sheds more light on these relationships. Table 3 displays the marginal means for the dependent variable across conditions. Therein, we see that the evaluation of the founder is highest ($M = 5.736$) when both entrepreneurial passion and tenacity are high. This condition is significantly higher ($p < 0.01$) than the marginal means of low entrepreneurial passion/low tenacity, and both the mixed (high-low) conditions involving entrepreneurial passion and tenacity. The condition for high passion/high tenacity was also significantly higher than the condition for high tenacity/high inspirational leadership ($p < 0.01$). This indicates that overall, the condition viewed most favorable by investors was the one where high entrepreneurial passion was paired with high tenacity. It is interesting that inspirational leadership did not play a bigger factor.

There is no significant difference ($p > 0.10$) between the marginal means of high entrepreneurial passion and high tenacity individually, and between the joint conditions of high passion/low tenacity, and high tenacity/low passion. Moreover, even though there was no difference between the high conditions for entrepreneurial passion and tenacity, both conditions were rated more favorably than those involving high inspirational leadership ($p < 0.05$).

Insert Table 3 About Here

H5 was not supported. The interaction of entrepreneurial passion with inspirational leadership was not significant ($\beta = -0.038$, $SE = 0.145$, $p > 0.05$). Since the interaction between entrepreneurial passion and inspirational leadership was not significant, we did not evaluate the marginal means of this condition in Table 3.

The three-way interaction between entrepreneurial passion, tenacity and entrepreneurial experience is significant ($\beta = 0.852$, $SE = 0.345$, $p < 0.05$), and its effect size is 14.2%, but the other interactions involving entrepreneurial experience are not significant. Thus, H7 received only partial support. The interactions for H4, H6 and H7 are shown in Figures 1, 2 and 3 below. The pseudo R^2 for the full model is 0.77.

Insert Figures 1, 2, & 3 About Here

DISCUSSION & IMPLICATIONS

Through the two studies in this paper, we seek to extend the knowledge surrounding entrepreneurial passion in new venture investing. We find that angel investors look for tenacious and passionate entrepreneurs. Moreover, investors prefer those who show both tenacity and passion, as well as tenacity and inspirational leadership. It is interesting that the marginal means for entrepreneurial passion and tenacity individually are not significantly different (see Table 3), and that the marginal mean of the high entrepreneurial passion-low tenacity condition does not differ from the low entrepreneurial passion-high tenacity condition. This points to the tentative conclusion that neither passion nor tenacity is more important than the other in the eyes of angel investors. Rather, it is the union of both of these that is particularly powerful. Both the marginal means and the graph shown in Figure 1 attest to the fact that angel investors strongly preferred

entrepreneurs who exhibit entrepreneurial passion and tenacity together. Figure 2 indicates that they also preferred entrepreneurs who exhibit inspirational leadership and tenacity. This speaks to the importance of tenacity to angel investors, particularly in combination with passion or inspirational leadership. Frankly, we are puzzled as to why inspirational leadership was not significant as a lone attribute, given that it was mentioned frequently in the qualitative study. The analysis of the marginal means in Table 3 indicates that inspirational leadership is not perceived as important when compared to passion or tenacity, which corroborates the regression results. Perhaps tenacity is viewed as an important foundation for inspirational leadership to build upon (which explains the significant interaction with tenacity), but that inspirational leadership is seen as less effective by itself.

Although the qualitative study led us to believe that angel investors might view passion as a key marker for tenacity and inspirational leadership, the conjoint experiment indicates that there may be more to passion than simply serving as a signal that these other characteristics are present. When we control for tenacity and inspirational leadership in the conjoint experiment, entrepreneurial passion continues to exert a significant influence on opportunity evaluation. In other words, it is not simply a proxy for other attributes. It appears that angel investors still value the fact that the founder identifies closely with and has positive feelings for the venture. This is interesting because the theoretical development of passion actually indicates tenacity and passion may not be symbiotic, especially as they relate to persistence. Cardon et al. (2009) argue that passion is likely to increase entrepreneurs' persistence on tasks "...that validate and reaffirm the identity activated by passion" (p. 521). This raises a natural question about what happens to the relationship between passion and persistence when the focal identity is not reaffirmed by the task at hand. If individuals encounter adversity or obstacles that pose an identity threat, by causing

them to question whether or not they are good entrepreneurs, what happens to passion? If identity validation is threatened, does passion push the entrepreneur through the tough times or is the relationship between passion and persistence weakened? Theoretically, tenacity should push an entrepreneur through obstacles towards continued development of the opportunity. This may also force the entrepreneur to continually operate in environments where their identities are threatened, and their passion weakened as a result. Whereas anecdotal notions of passion may tie it to sustained effort and engagement, the extant theory on passion is not clear because it relates persistence to identity validation. More research is needed to disentangle passion and tenacity in the entrepreneurial context, especially in the face of substantial adversity.

We know that there are key outcomes that emerge from entrepreneurial passion (creative problem solving, venture growth, etc.) and perhaps these are reasons that angel investors value passion even when controlling for tenacity and inspirational leadership. Future research could explore this in greater detail, using in-depth qualitative interviews with angel investors to explore when and why angels value passion versus tenacity versus inspirational leadership and other attributes. Prior research has suggested that different aspects of entrepreneurs and opportunities may be more important at different stages of the investment evaluation process (Maxwell et al., 2011; Mitteness, Baucus, & Sudek, 2012b), and a similar phenomenon may be occurring concerning passion, tenacity, and inspirational leadership. In addition, given that we already tested two primary espoused reasons that passion is important (tenacity and inspirational leadership), it would be fascinating to learn if there are other elements, perhaps operating below the conscious deliberation of investors, that mark passion as desirable. We know passion is tied intricately to identities (Cardon et al., 2009) so perhaps there are identity mechanisms like affective commitment or social support that investors hope to leverage in high passion

conditions. Gathering data like this is difficult because investors are generally reluctant to allow their meetings to be recorded. However, presentation of these initial findings to certain angel groups could spark their interest in wanting to know more about how these decision-making mechanisms actually operate. Perhaps then, techniques like think-aloud protocols could be used in conjunction with conjoint or policy-capturing designs. These methodologies would provide more insight into both the conscious and subconscious decision-making processes behind opportunity evaluation.

Another opportunity for future research concerns the target of entrepreneurial passion. There are a multitude of objects an entrepreneur could be passionate about such as inventing, founding and developing the venture, being an entrepreneur, advancing a social cause, etc. (Cardon et al., 2005; 2009; Fauchart & Gruber, 2011), but exploration of these specific targets was outside the scope of the present study. Future research could take a more fine-grained approach to the notion of passion by examining the extent to which angel investors can discern and/or are concerned about the particular object of an entrepreneur's passion versus their experience of passion for some aspect of entrepreneurship³.

It also appears that the relative weight placed on passion and tenacity depends on the amount of entrepreneurial experience possessed by the angel investor. Specifically, angel investors who had greater entrepreneurial experience placed even more value on the presence of passion and tenacity among founders. It is interesting that angels who should have a greater ability to empathize with the influence of passion and tenacity in the founding process tend to reiterate their importance. Perhaps, as we hypothesize, they know that there are many uncertainties in the path to founding a viable venture, and that individuals who refuse to quit in

³ We are grateful to an anonymous reviewer for pointing out this possible stream of research.

the presence of adversity as well as possess a strong, identity-based connection to entrepreneurship are most likely to be able to overcome these uncertainties. Future research could examine this area in greater depth to determine how these relationships might shift due to different types of experience among angels (by industry for example) or by their specific backgrounds (numbers of successful exits vs. failures, etc.).

Limitations

As with all studies, there are certain limitations in our work. First, our experimental design sterilizes the opportunity evaluation and investment decision process to a certain extent by using hypothetical ventures instead of actual ones. Shepherd et al. (2000) claim that even though this limitation can be a concern with conjoint studies, it is more likely to influence novice decision-makers rather than the more experienced angels we sample in these studies. Second, the possibility exists that participants in our experiments could place value on variables such as passion or tenacity simply because we highlight them in the conjoint instrument. To address this, we made sure to include descriptions of other known factors (like the economic characteristics of the opportunity) so as to hold those conditions constant across all scenarios. In addition, we subjected our instrument to extensive pre-testing with both angels and academics that are experts in the areas of angel investing and entrepreneurial passion to verify validity. Upon conclusion of our experiments, we also conducted follow-up interviews with participants to allow them to interpret their decisions for us. These interviews confirmed the face and content validity of the prompts and provided assurance that the hypothetical opportunities resembled real investment scenarios seen by angel investors every day. Although some of the limitations of our study stem from the use of conjoint analysis as a technique, this methodology has been established and used widely across many disciplines (such as marketing, cognitive psychology, organizational

behavior, etc.) as well as by entrepreneurship scholars (Drover et al., 2014, Murnieks et al., 2011, Shepherd & Zacharakis, 1999). Thus, we contend these limitations do not overcome the theoretical and empirical contributions of this study.

CONCLUSION

The study of passion is gaining momentum both in the entrepreneurship realm as well as in psychology and management. The past decade has seen an explosion in the number of studies conducted that analyze the operation and influence of passion on individuals like entrepreneurs. To extend this literature, it was our aim to clarify the notion of passion vis-à-vis other related constructs, including tenacity and inspirational leadership. We also expand the lens through which we view passion beyond the focal individual, to achieve greater clarity in how passion versus other entrepreneurial characteristics might influence decision-making of other individuals (i.e., Breugst et al., 2012; Mitteness et al., 2012a). Our results suggest that passion exerts a strong influence on angel investors even when controlling for other personal characteristics, and that these effects are contingent upon the experience of the investor who must assess an entrepreneur's passion. These findings have important implications for understanding both entrepreneurial passion and angel investor decision-making, and we encourage further inquiry in this area.

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APPENDIX A

SAMPLE INVESTMENT SCENARIO SHOWN TO PARTICIPANTS

Opportunity: VZR

This investment opportunity is characterized as follows:

❖ Passion of the Entrepreneur: **DRIVEN**

This founder is obsessed with being an entrepreneur. In fact, being an entrepreneur is a big part of his identity. He finds being an entrepreneur to be so exciting, he sometimes loses control over his ability to work on anything else. He feels guilty when he is not building his business, and has difficulty imagining what his life would be like if he was not an entrepreneur.

❖ Commitment Level of the Entrepreneur: **DEVOTED**

This founder finishes whatever he begins. He is diligent and has overcome many setbacks just to get this business off the ground and generating revenue. Setbacks do not discourage this individual. Compared to him, many other entrepreneurs you know would have quit when faced with the obstacles this entrepreneur has overcome. He continues to work hard even when faced with opposition.

❖ Leadership Style of the Entrepreneur: **INSPIRATIONAL**

This entrepreneur displays confidence in his employees and it is obvious he has the respect of the people who work in the venture. He constantly talks about the values of the organization and emphasizes the collective mission. He is enthusiastic and his energy is contagious. The employees are inspired by him and are motivated to work hard as a result.

The following table summarizes the description above:

Passion:	DRIVEN
Commitment:	DEVOTED
Style:	INSPIRATIONAL

ASSESSMENT: (Please circle the number that best represents your response)

What is the probability that you would invest in this deal?

Low Probability 1 2 3 4 5 6 7 High Probability

If you were to invest in this deal, what is the likely amount you would invest?

Lowest Possible Amount 1 2 3 4 5 6 7 Highest Possible Amount

Whether you invest or not, how successful do you think this opportunity will be?

Low Success 1 2 3 4 5 6 7 High Success

APPENDIX B

ATTRIBUTES AND LEVELS (AS PRESENTED TO PARTICIPANTS) IN CONJOINT MAIN STUDY

(Attribute 1: Passion)¹

- ❖ Passion of the Entrepreneur: DRIVEN (High Entrepreneurial Passion)¹

This founder is obsessed with being an entrepreneur. In fact, being an entrepreneur is a big part of his identity. He finds being an entrepreneur to be so exciting, he sometimes loses control over his ability to work on anything else. He feels guilty when he is not building his business, and has difficulty imagining what his life would be like if he was not an entrepreneur.

- ❖ Passion of the Entrepreneur: BALANCED (Low Entrepreneurial Passion)¹

This founder enjoys being an entrepreneur, but it is not a big part of his identity. Although he finds it to be a fulfilling career, he is not obsessed with it. He enjoys building a company but does not feel the need to spend all his time working on the business. He wants to maintain balance in his life and enjoy other activities in addition to entrepreneurship.

(Attribute 2: Tenacity)¹

- ❖ Commitment Level of the Entrepreneur: DEVOTED (High Tenacity)¹

This founder finishes whatever he begins. He is diligent and has overcome many setbacks just to get this business off the ground and generating revenue. Setbacks do not discourage this individual. Compared to him, many other entrepreneurs you know would have quit when faced with the obstacles this entrepreneur has overcome. He continues to work hard even when faced with opposition.

- ❖ Commitment Level of the Entrepreneur: SOLID (Low Tenacity)¹

This founder is a hard worker and is willing to put forth significant effort to make this business successful. The business is generating revenue. You know this entrepreneur started this business after his last venture encountered significant obstacles and he decided to close it down. This entrepreneur occasionally gets discouraged by setbacks and is frustrated when others oppose him.

(Attribute 3: Leadership Style)¹

- ❖ Leadership Style of the Entrepreneur: INSPIRATIONAL (High Inspirational Leadership)¹

This entrepreneur displays confidence in his employees and it is obvious he has the respect of the people who work in the venture. He constantly talks about the values of the organization and emphasizes the collective mission. He is enthusiastic and his energy is contagious. The employees are inspired by him and are motivated to work hard as a result.

- ❖ Leadership Style of the Entrepreneur: EMPOWERING (Low Inspirational Leadership)¹

This entrepreneur reacts to problems effectively, and takes action quickly whenever an issue becomes serious. He generally delays immediate responses, preferring to let employees work problems out by themselves. As long as things are working, he does not implement change. He puts out fires whenever necessary, and feels that people need to be self-motivated to succeed.

1. Items shown in parentheses depict the attribute and level associated with the characteristic. Items in parentheses have been added to make the conjoint manipulations clear for the reader, but these items were not shown to respondents in the actual conjoint study.

APPENDIX C

BASELINE INVESTMENT CONDITIONS HELD CONSTANT ACROSS ALL SCENARIOS IN CONJOINT MAIN STUDY

Instructions

This study will present you various descriptions of hypothetical entrepreneurs. Imagine you are an investor who is evaluating each of these entrepreneurs for possible investment. Each one was referred to you by a trusted associate. Following each scenario, you will be asked to provide an evaluation. There are NO right or wrong answers to any question; we are only interested in your opinion. Your responses to all scenarios are very important. While some scenarios may seem redundant, all the scenarios and questions are necessary for an accurate analysis of the data.

Market Characteristics for All Opportunities Presented:

For all of the investment opportunities we are about to present you, please assume your diligence efforts have led you to the conclusion that each opportunity is in an industry with high growth potential (high relative to other investments currently in your portfolio), has a scalable business model, a defensible competitive position and appears to have strong profit margins. For a profitable exit, this firm will still need to grow considerably.

Founders:

This study is designed to analyze how you view different entrepreneurial characteristics when evaluating a prospective deal. While most ventures are formed by teams of entrepreneurs, for the purposes of this study, assume that each founding team is composed of 2 people. The first person is a quiet but very competent technology founder who knows the technology behind the product very well. The second person is the entrepreneur (the marketing and sales person who had the original idea for this business and is the lead founder). These two founders are friends, have known each other for a long time, and jointly own 100% of the equity in the business. The two founding members have each invested significant amounts of their own money into this venture, but will require more funding to grow the business. **The second founder (the lead founder) is the one who is depicted with different characteristics in the hypothetical scenarios that follow.**

TABLE 1: CODING RESULTS OF QUALITATIVE DATA

Theme	Definition	Times Cited	Examples
Tenacity	Sustainment of goal-directed action and energy even when faced with obstacles. (Baum & Locke, 2004)	29	Passion is needed to overcome obstacles that always arrive. (Angel #21)
			Without passion, people quit or become discouraged when things get tough – as they always do at some point. (Angel #32)
			Without passion, when trouble arises, people will give up. (Angel #11)
Motivation	Energy and direction driving cognition or behavior. (Deci & Ryan, 1985; Ryan & Deci, 2000)	18	Passion is a measure of their available energy for any task. (Angel #6)
			Passion signals sustainable motivation. (Angel #51)
			Passion results in energy and determination to get a project done. (Angel #80)
Inspirational Leadership	Subfactor of transformational leadership, which involves communicating a vision and energizing a team. (Joshi, Lazarova & Liao, 2009)	11	It is essential to success that the entrepreneur be passionate. S/he is the leader and must spread the passion to the team and make true believers of everyone else. It is an essential element of leadership. (Angel #9)
			If s/he isn't passionate about the business, no one else will be. (Angel #8)
			Passion is contagious and can positively affect employees, partners and investors. (Angel #75)
Commitment	Psychological attachment reflecting dedication to and responsibility for a target. (Klein, Molloy & Brinsfield, 2012; O'Reilly & Chatman, 1986)	11	Passion is necessary for commitment. (Angel #50)
			You need passion for long-term commitment. (Angel #41)
			Passion indicates commitment. (Angel #33)
Opportunity Confidence	Degree of favorability and feasibility of opportunity. (Dimov, 2010; Davidsson, 2015)	6	An entrepreneur should believe in their business and not simply be going through the motions. (Angel #75)
			Confidence, success and passion go hand-in-hand. (Angel #83)
			Passion indicates that they really care about the business or technology. (Angel #35)
Passion is important	Passion cited as important, but no further reasoning provided.	5	Passion is extremely important. (Angel #15)
			One of the biggest factors, they must be passionate. (Angel #27)
			It is important. (Angel #78)
Passion is not important	Passion was cited as unimportant, or not as important as other factors.	8	Some of the best entrepreneurs are not the types that exude passion. (Angel #43)
			Lots of people with bad ideas are passionate. (Angel #19)
			Passion is a factor, but only one of many in evaluating an entrepreneur. I feel that leadership, intelligence and management skills would be more important. (Angel #7)

N = 66 Angel Investors

TABLE 2
HLM MODEL OF ANGEL INVESTOR EVALUATIONS

Variables	Full Model	Standard Error
Intercept	4.434**	0.125
<i>Control Variables</i>		
Age	0.001	0.052
Gender	0.405	0.245
Education	0.110	0.117
Entrepreneurial Experience	-0.289	0.268
Investing Experience	-0.002	0.017
<i>Main Effects</i>		
Tenacity (H1)	0.830**	0.160
Inspirational Leadership (H2)	0.208	0.156
Entrepreneurial Passion (H3)	0.887**	0.194
<i>Interactions (Level 1)</i>		
Tenacity x Entrepreneurial Passion (H4)	0.509**	0.144
Entrepreneurial Passion x Inspirational Leadership (H5)	-0.038	0.145
Tenacity x Inspirational Leadership (H6)	0.283*	0.116
<i>Interactions (Level 2)</i>		
Entrep. Passion x Tenacity x Entrepreneurial Experience (H7)	0.852*	0.345
Entrep. Passion x Inspirational Ldr x Entrep. Experience (H7)	0.095	0.362
Tenacity x Inspirational Ldr x Entrep. Experience (H7)	-0.283	0.302

Notes: † p < 0.10; * p<0.05; ** p<0.01

N=424 decisions nested within 53 Angel investors

TABLE 3**ESTIMATED MARGINAL MEANS BY ATTRIBUTE AND LEVEL**

Attribute	Level	Marginal Mean	Standard Deviation
Entrepreneurial Passion	Low	3.873	1.691
	High	4.995	1.429
Tenacity	Low	3.821	1.599
	High	5.047	1.491
Inspirational Leadership	Low	4.269	1.643
	High	4.599	1.668
Entrep. Passion x Tenacity	Low-Low	3.387	1.665
	Low-High	4.359	1.581
	High-Low	4.255	1.408
	High-High	5.736	1.008
Tenacity x Inspirational Ldr.	Low-Low	3.726	1.665
	Low-High	3.915	1.531
	High-Low	4.811	1.435
	High-High	5.283	1.517

FIGURE 1

INTERACTION BETWEEN ENTREPRENEURIAL PASSION & TENACITY (H4)

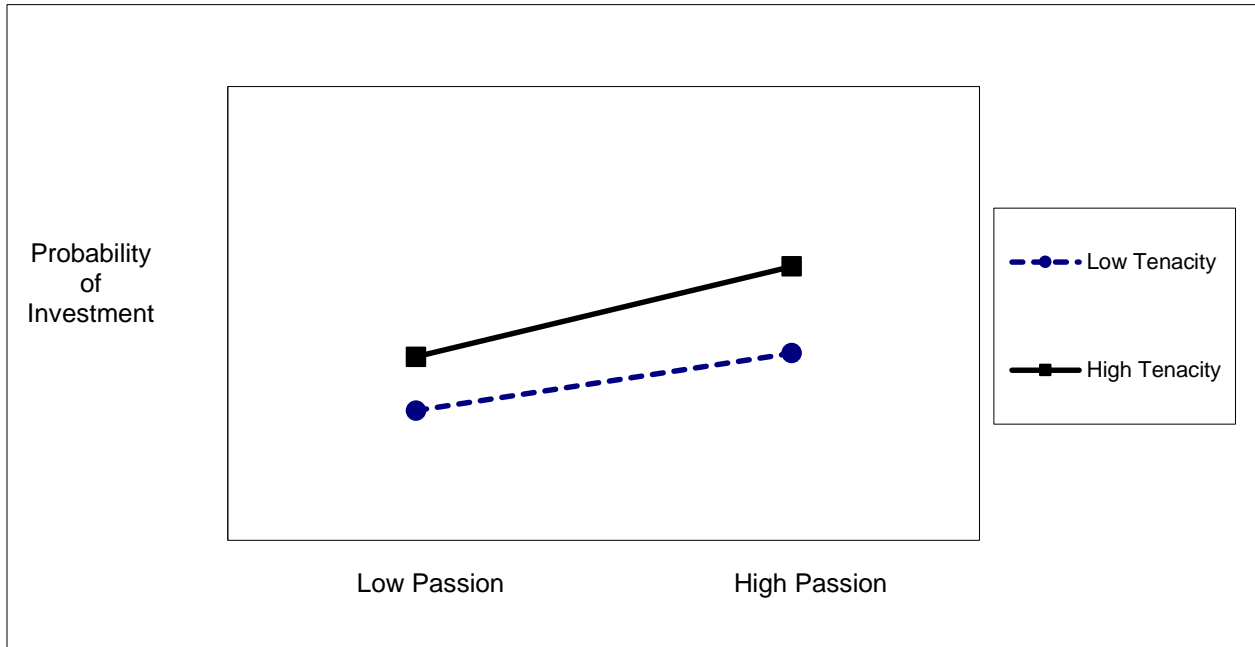


FIGURE 2

INTERACTION BETWEEN TENACITY & INSPIRATIONAL LEADERSHIP (H6)

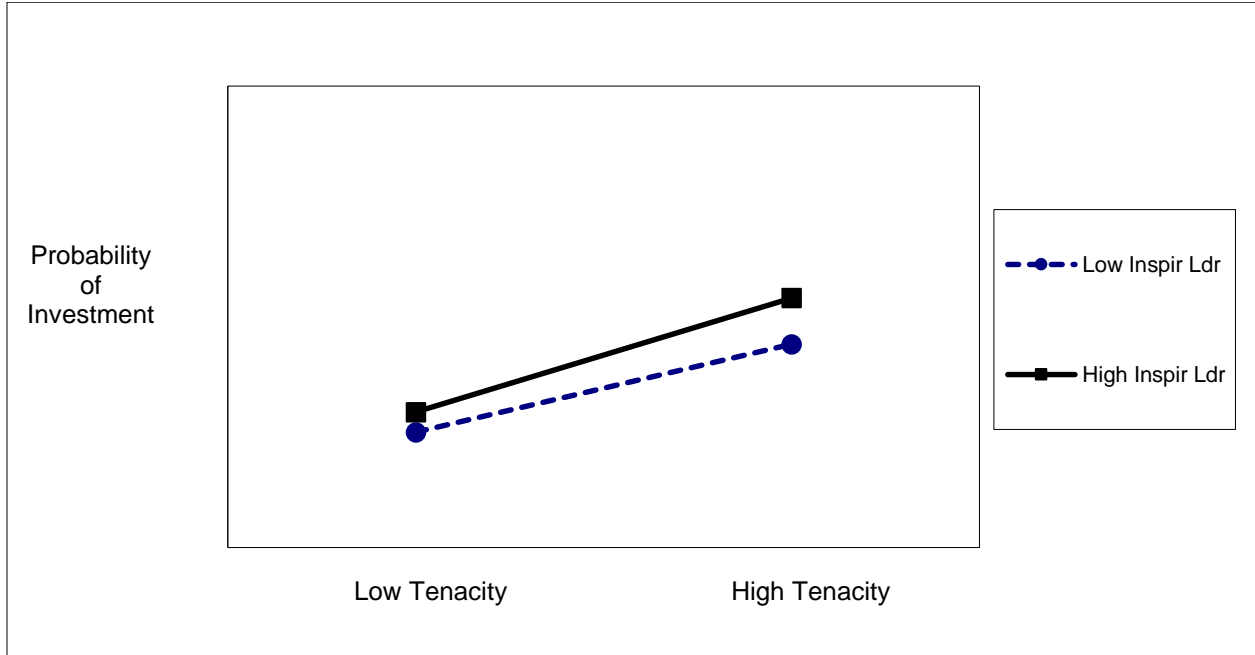


FIGURE 3

INTERACTION BETWEEN ENTREPRENEURIAL PASSION, TENACITY, & ENTREPRENEURIAL EXPERIENCE (H7)

