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HOW CRITICAL CUES INFLUENCE ANGELS’ INVESTMENT PREFERENCES

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ABSTRACT

Research suggests that investment decisions are typically based on investors’ intuition (Zacharakis & Shepherd, 2001). We posit that an ego-focused process underlies angels’ intuition formation wherein they consider whether they will be able to have an impact on the venture’s success as they evaluate potential investments. We use social identity and mentor-protégé theories to develop hypotheses which we test using angel investors’ real-time evaluations of entrepreneurs’ pitches. We find that investors’ preferences are higher the more the similar the investors’ experience is to the opportunity space and the more the entrepreneur demonstrates receptivity to investor coaching and mentorship. Our findings highlight how impressions formed by observing an entrepreneur’s pitch in the investment process may lay the ground work for the working relationship between angels and entrepreneurs.

INTRODUCTION

Entrepreneurship research has often suggested that investors use a precise set of criteria when initially evaluating potential investments. Information related to the economics of the venture is commonly used by investors to determine their initial interest in investing – items such as the venture’s financial projections and industry growth rates (e.g. Fried & Hisrich 1994). However, research has also suggested that investors are not necessarily consistent in using their self-identified criteria for their final evaluations (Shepherd, 1999; Shepherd & Zacharakis, 2002; Zacharakis & Meyer, 1996) as investment decisions are typically based strongly on the investors’ intuition (Zacharakis & Shepherd, 2001).

Further, there is little known about intuition formation. For investors, the use of intuition may also be related to overconfidence when investing, a rationale for a desire to invest (Zacharakis & Shepherd, 2001). We speculate that investors may be biased in some systematic ways in developing judgments. Specifically, we use social identity theory to identify possible sources of bias that may also account for previously observed overconfidence. We suggest that the “intuition” in the investors’ evaluation may in fact be an ego-focused element that has not been previously recognized by scholars.

Early-stage investors determine whether to invest or not in a venture over a series of decision-making steps, and the evaluation of decision-making criteria can change over the course of the investment analysis (Fried & Hisrich, 1994; Mainprinze, Hindle, Smith & Mitchell, 2003). One critical event in this process is the initial presentation or the “pitch” by the entrepreneur, an event which typically occurs immediately after an initial positive assessment of the opportunity. Once a venture has been evaluated with positive investment attributes (i.e., positive economic factors),
then the company will be invited to pitch the opportunity directly to investors in order to reveal more about the venture and the management team (Mason & Harrison, 2002; Shane & Cable, 2002). Most early-stage investors will not invest in a venture without having seen the entrepreneur present a formal investment pitch.

Given that investors are not perfectly consistent in their application of decision criteria (Shepherd & Zacharakis, 2001), how pitches influence decisions are not uniformly viewed in the research (e.g. Brooks, Huang, Kearney & Murray, 2014; Chen, Yao & Kotha, 2009; Mitteness, Cardon & Sudek, 2012). We suggest a previously unexplored view as to how and why investors’ preferences may be influenced by entrepreneurs’ pitches. We introduce the idea that investors consider their whether they can help the venture if given a chance, and if they are likely to be given a chance to help substantially. In short, they consider their “relational” potential in addition to focusing solely on the business characteristics of the venture itself. We take this overall premise to argue that investors, in evaluating relational dimensions with the entrepreneur who pitches the venture, look for certain critical characteristics or cues during the pitch that they use to analyze whether or not they can make an impact on the success of the venture after committing to invest.

Our arguments are consistent with research that finds that during the pitch, investors make additional non-economic assessments of the venture opportunity as well as the entrepreneur himself/herself (Clark, 2008; Fried & Hisrich, 1994). Investors have said that they use the pitch to evaluate whether or not they would like to, or could productively, spend more time with the entrepreneur (Morrisette, 2007; Sohl, 2003). This evaluation is nontrivial as investors often rate their time as a more valuable asset than their money (Gifford, 1997; Watson, Pontheiu & Critelli, 1995).

Given the value placed on their time, we argue that angel investors critique the investment opportunity on a personal level and consider qualities that reflect whether they will personally prefer working with some entrepreneurs over others. Importantly, these assessments are based on characteristics of the angel investor him/herself, of the opportunity domain involved, and of the entrepreneur’s apparent receptivity to their involvement. These dimensions are observed during the pitch and become critical cues for individual investors such that they then form different preferences for some ventures versus others when determining whether to consider the venture further (i.e. place the company into a formal due diligence process).

There are a variety of reasons an angel investor may be more interested in some entrepreneurs than others. We argue that because angel investors highly value their time, they will carefully consider and plan their time may be used once they have invested. This assumption is central to our theoretical development: we argue that angel investors focus on critical cues that provide insight into how much impact they will be able to have on the venture after they invest. This perspective also assumes that investors place great confidence in the value of their own abilities and their advice: thus, we depend on the premise that they highly value the allocation of their personal involvement (Gifford, 1997) and that they believe their personal involvement will make a difference on the venture's eventual outcome after investing. Research has found that investors do believe their involvement and advice (e.g. as a board member or a mentor) will help the company grow and ultimately lead to greater ROI (Wiltbank & Boecker, 2007). Indeed, many early stage investors spend great amounts of time and have high levels of involvement with a company once they have invested; in some cases, investors have even been found to act as a temporary CEO or as a co-founder (Morrisette, 2007).
Given this personal ego-focus that we take, the critical cues that guide the investors’ preference for certain ventures over others following a pitch would result from personal aspects that become evident when observing a pitch. These are: 1) the level of similarity between the investor and the entrepreneur, 2) an introduction to the entrepreneur’s pitch by another investor, and 3) the demonstrated level of openness to coaching and mentoring by the entrepreneur. These critical cues that are observed during a pitch, we argue, will influence how investors critique and subsequently determine which ventures should be seriously considered for investment.

Our cues are derived from social identity theory where perceived similarities have subconscious preference effects due to cognitive grouping and sense of shared identities (Turner, Hogg, Oakes, Reicher & Wetherell, 1987) and mentor-protégé theories where mentors seek those that are most open to guidance and coaching (Kram, 1985). We first consider the similarity between investor and entrepreneur observed during the pitch. Social identity theory suggests that when individuals identify with others, it reduces uncertainty in the other and enhances the individual's own self-esteem (Hogg & Terry, 2000). When investors observe similarities between themselves and the focal entrepreneur during the pitch, such observations may produce preferences for the investor towards that entrepreneur and then the venture overall.

**Effects of Similar Expertise on Investment Preference**

Using this notion from social identity theory, we suggest that observing similarities to the entrepreneur during the pitch is a critical cue that is driven by the investor’s ego. Qualities of similarity to the entrepreneur offer one ego-focused element of the angel investor’s evaluation during the pitch: when investors observe similarity between themselves and the entrepreneur, they may envision themselves having greater impact on the entrepreneur, which ultimately would lead in their mind, to the success of the venture.

Research has found that management teams are similar to the investors who invested in them based on similarity of expertise/experience (Franke, Gruber, Harhoff & Henkel, 2006). Investors rarely invest outside of their selected focus/expertise (Gupta & Sapienza, 1992; Sapienza, 1992; Steier & Greenwood, 1995). When considering investment opportunities, investors may subconsciously focus on entrepreneurs with similar backgrounds and according to social identity theory, similar backgrounds offer another form of “in-group” membership.

Franke, et al (2006) findings that investors have similar expertise/experience to management teams in which they have invested may in fact, be driven by our premise. We focus on the rationale as to why investors would be initially interested in such ventures, when investors initially screen ventures and management teams for their investment potential. Social identity theory suggests observing and awareness of similarity leads to subconscious in-grouping and affiliation which creates a sense of preference (Brewer, 1981; Tajfel & Turner, 1989). In addition, drawing on the ego focus we propose, investors may feel an initial preference for similar expertise due to feeling a sense of control and ability to contribute their knowledge toward a venture’s success.

Thus, we hypothesize that at this earlier stage, a critical cue for an investor’s preference for one venture over another are observed similarities between the investor and the entrepreneur during the pitch. These observed similarities will immediately affect investors’ perceptions and preferences, resulting in better evaluations for the venture by investors following the pitch.
H1: The more similar an entrepreneur seems to the investor during the pitch (in expertise), the more the investor will prefer that venture following the pitch.

Effects of Certification on Investment Preference

In addition to similarity of qualities between the investor and the entrepreneur, social desirability theory suggests that individuals could feel cognitive grouping and shared identities due to relationships the entrepreneur indicates he/she may have. During the pitch, investors have the opportunity to observe a direct relationship with a “champion” of the entrepreneur and/or the venture- in this context, a relationship the entrepreneur has with another investor in the group. In the angel investor context, this can be observed by the presence of a formal introduction of the venture to the group by another angel investor prior to the pitch to the investment group (Sudek, 2006).

By observing another angel, in essence, “vouch” for the entrepreneur pitching the group for investment, and assuming that the investor who makes the introduction is an individual whose judgment the other investors respect, observing the introduction prior to the pitch provides an informal certification mechanism based on a personal, more trustworthy source (Brown & Reingen, 1987; Buttle, 1998). Typically in the angel investor context, this relationship could indicate a working advisory role or an existing investment status.

When investors observe such a relationship, entrepreneurs may also gain the benefit of legitimation effects due to subconscious enhancements of the entrepreneur’s reputation (Wong & Boh, 2009; Granovetter, 1973; McPherson, Smith-Loven & Cook, 2001). In addition, research has shown that direct network ties have direct relationships with investment outcomes: when entrepreneurs have direct ties to the investment community, they are more likely to receive investment (Amit, Glosten & Mueller, 1990; Gulati & Higgins, 2003).

Social identity theory suggests that in the case of angel investing context, having a “champion” or another angel in the group vouch for entrepreneur leads to a perception of “in-group” status for the entrepreneur (Hogg & Vaughn, 2002). In terms of the egocentric focus we utilize in this study, having an existing relationship with an angel investor may imply to the investor who observes this relationship that the entrepreneur already knows how to work with investors/board advisors and the like. Therefore, by observing a direct relationship with another angel investor in the group, investors may subconsciously feel that their influence will be easily accepted if they invest by the entrepreneur (Kram, 1985). Thus:

H2: Investors who observe an entrepreneur being certified (introduced) by another angel investor during the pitch are more likely to prefer that venture following the entrepreneur’s pitch.

Effects of Entrepreneurs’ Receptivity on Investment Preference

Angel investors and other early-stage investors believe that their investments in companies are more than money: they consider their time a more valuable resource (Gifford, 1997; Watson, Pontheiu & Critelli, 1995). When investors decide to invest in a company, this indicates their interest in spending time in a board advisor/informal advisor role in addition to the actual capital invested.
Due to the nature of the angel investors’ involvement in a company once they have invested, the ego-focus we utilize in this study, we argue that angel investors want to feel their time is well spent, and in that regard, that the advice they offer the entrepreneur is taken into action. Therefore, angel investors want to invest in an entrepreneur who is open to their mentorship and to taking on a role as a protégé’s in a mentor-protégé relationship with the investor.

Mentors are defined as individuals with advanced experience and knowledge who are committed to providing support and upward mobility to their protege’s careers (Hunt & Michael, 1983; Kram, 1985) and mentor-protégé relationships have been found to be a critical resource for protégé career mobility (Scandura, 1992), promotions (Dreher & Ash, 1990), compensation (Whitely, Dougherty & Dreher, 1991) and career and job satisfaction (Fagenson, 1989; Köberg, Boss, Chappell & Ringer, 1994). Such benefits may also be accessible to entrepreneurs through a similar relationship with “mentor” angel investors.

Using social identity theory, the nature of mentor-protégé relationships suggests that when there is interpersonal comfort, individuals are more likely to feel similarity and in-group acceptance and therefore more likely to spend time mentoring (Allen, Day & Lentz, 2005). The pitch provides a direct opportunity for investors to evaluate if they would like to spend more time with an entrepreneur in a mentoring/coaching role (i.e. Gifford, 1997) so during the pitch, they are also assessing the entrepreneur levels of openness to coaching and mentoring.

\[ H3: \text{The more receptive to coaching and mentorship an entrepreneur is during the pitch, the more likely investors are to prefer that venture following the entrepreneur's pitch} \]

**Moderating Effects of Entrepreneur’s Receptivity**

Because of the constraints on how early-stage investors allocate their time in potential investments, we also consider how the receptivity to coaching and mentorship demonstrated by entrepreneurs during the pitch may moderate investor preferences following the pitch. Social identity and the egocentric focus we utilize in this study suggest that how entrepreneurs relate to investors may be critical for investors who are evaluating a potential mentor-protégé relationship with the entrepreneur. This analysis may be happening due to the functions of mentoring that are relevant in the investor-entrepreneur context.

According to mentor-protégé theory, mentors can provide two functions for protégés – career development functions or psychosocial functions (Kram, 1985). The “psychosocial” functions include helping protégés develop a sense of professional self, providing problem-solving, offering support and friendship, and offering role modeling (Kram, 1985). For an angel investor seeking a mentor-protégé relationship with an entrepreneur, his or her mentoring impact is grounded in the psychosocial domain. Investors, once they have joined the company, can offer entrepreneurs advice on improving their business operations, problem-solving advice, general support and role modeling.

Research has suggested that individuals will more strongly identify and feel more comfortable being mentored by individuals who are perceived as similar due to a sense of shared beliefs and attitudes (Ragins, 1997). When entrepreneurs demonstrate their acceptance and interest in investors’ beliefs and attitudes during the question and answer session of the pitch, entrepreneurs
may demonstrate their comfort and interest in being mentored by the investors present. Investors who already find similarity from expertise may perceive more similarity due to this acceptance and interest by the entrepreneur; thus, they may have greater preference for entrepreneurs who demonstrate receptivity to coaching and mentoring.

The mentorship literature also suggests that mentors seek out individuals with whom they feel they can have the most impact as that leads to their own personal satisfaction (Erickson, 1963). When selecting a mentor-protégé relationship, therefore, investors may more strongly seek out individuals whom they observe to be most interested in receiving their mentorship, in the case of angel investors, entrepreneurs who are already familiar with mentoring by investors. By observing another angel investor introduce the entrepreneur, the positive effects on investor preferences towards the venture will be enhanced by entrepreneurs who demonstrate receptivity to coaching and mentoring during the pitch to the new potential investors.

Therefore, when both cues discussed above in hypothesis one and two (similarity in expertise and certification) are observed by investors, the positive effects hypothesized on investor preference resulting from observing these cues will be more positively increased when investors also observe greater entrepreneur receptivity to coaching and mentorship. Thus:

\textit{Hypothesis 4a: An entrepreneurs’ receptivity to coaching and mentorship during the pitch moderates the positive relationship between similarity (in expertise) and investor interest following the pitch, such that this relationship strengthens as receptivity increases.}

\textit{Hypothesis 4b: An entrepreneurs’ receptivity to coaching and mentorship during the pitch moderates the positive relationship between certification (introduction) by another angel investor and investor interest following the pitch, such that this relationship strengthens as receptivity increases.}

\textbf{METHOD}

\textbf{Data Source}

Because the purpose of our study was to examine angel investors’ preferences for investing in ventures based on cues observed during the entrepreneur’s pitch, we sought to collect data from an angel investment group with a structured investment decision-making process where the pitch to the investors is a critical step in the eventual funding decision. We worked with the Tech Coast Angels (TCA), a well-established angel investor network in Southern California.

The TCA was founded in 1997 and is the largest “angel” organization in the United States consisting of approximately 300 investors or angels as of October 2008. Over the nine years in operation, TCA members have funded 155 companies with over $100 million in venture capital. TCA typically provides funding in the range of $250K to $1.0mm per venture. The organization does not invest as a whole; each angel member decides independently whether or not to commit personal funds to the company and the dollar amount he or she would like to invest.
TCA Investment Process

The TCA uses a six-step process for their investment analysis that starts with an online application, and (for less than 5% of the companies that do present) culminates with funding. There is no charge to the entrepreneur at any point in the process. Each chapter conducts its own complete process for each potential investment.

Step one is an online application to the TCA website where the entrepreneur completes a four-page overview of their startup venture. Step two, each chapter has a member or staff person screen the application to insure it is within the target area for a TCA venture. In step three a member or small group of members (3-7) perform an informal screening of the company where each entrepreneur presents a brief overview of the company that is followed by roughly twenty minutes of informal questions and discussion with the pre-screening committee where this committee ultimately decides if the prospective company should be invited to pitch. Step four, is the pitch or “screening” stage where typically once a month three to four companies pitch to the angels. The number of angels present at every meeting varies, though there is typically an average of approximately 20-30 angels in attendance. Each entrepreneur is asked to pitch (present) for 15 minutes with 5 minutes of Q&A following the formal pitch. After the Q&A, the entrepreneurs are asked to leave the room so that the investors can discuss the company in private (approximately 5-10 minutes). The entrepreneurs are then invited back into the room, and a designated TCA member provides quick feedback. If there is enough interest in moving the company to due diligence from the angels in attendance, then the company enters step five, formal due diligence. TCA members who are interested sign up after the screening to be on the due diligence team where the team reviews the business plan in detail and verifying representations by the startup such as customers, agreements, references, backgrounds, etc. The results of the due diligence process are posted, and if the results are positive, a term sheet is negotiated and finalized. This term sheet specifies the price per share the investors will pay. The term sheet also will include other parameters of the deal such as reporting of quarterly financial information to the investors, and board seat for a TCA member. If enough interest has been generated, step six, funding may occur. TCA members invest in deals individually, thus only a small percentage of TCA members need to participate for the startup to secure funding.

There are 6 locations, or “chapters,” of the TCA located in across Southern California (Orange County, Los Angeles, San Francisco, North County, and San Diego) with the headquarters located at the Orange County chapter. Screening and funding occurs across all the chapters. Once selected for screening, a company can go on to present to all 5 chapters. Thus, each screening is a new opportunity for a company for investment – an opportunity to move forward to due diligence for interested angel investors. The decisions made by the angel investors in each chapter is an individual decision to personally invest rather than a decision made by the chapter for all of the angels in the group or the TCA overall. We utilized data from the Orange County chapter for this study.

Variables and Measures

Dependent Variable: The level of individual investor's preference in the venture was measured using a survey that was administered during the entrepreneur's pitch. TCA members filled out surveys so each observation recorded is the investor-venture pair. Investors rated the extent to
which they agreed with the statement “I feel the company should go to due diligence” on a 1-5 likert scale, ranging from 1=highly disagree to 5=highly agree. We used this rating of interest in moving the venture to due diligence to indicate the level of investor preference for the venture such that higher scores indicate higher preference in the venture.

Independent Variables: To test the effect of similar expertise, we measured whether the investor had experience in industries related to the venture being pitched. We asked TCA members to evaluate the degree to which they have expertise in the same industry on a 5-point scale after observing the pitch. We verified the investors’ perceived expertise with another measure of industry similarity from the investors’ prior experiences.

We then categorized industry similarity where 0 = “No similarity” and 1 = an exact match. Partial matches were categorized as 0.25, 0.50, and 0.75 (“Low similarity,” “Moderate similarity,” and “High Similarity,” respectively), and were based on the NAICS industry codes matches at the 1-, 2-, or 3-digit level. A score of 0 was given if the relationship could not be characterized at the 1-digit level. This rating scheme was then used to generate a similarity score for each type of experience based on the investor’s responses. The four measures (three calculated similarity scores and the survey responses) were moderately correlated and reliable as a construct with an alpha of 0.808. Therefore, we constructed a variable of “perceived similarity of expertise” by summing the calculated similarity scores and the investor’s rating of perceived expertise from the survey.

Our second variable for certification was whether the entrepreneur was introduced by another angel investor. We coded a “1” if the pitch had an introduction by a TCA angel, and a “0” otherwise. This measure is coded at the level of the pitch for uniformity.

A final independent variable was the level of the entrepreneur’s receptivity to coaching and mentoring and was measured in two ways. The first method used the survey tool to ask each angel investor to rate the perceived coachability of the entrepreneur on a 5-point scale during the pitch evaluation. We also used videos of the pitches and had independent, trained coders watch the videos and evaluate specific cues of receptivity demonstrated by the entrepreneur. Specifically, coders were asked to rate on a 5-point scale the extent to which entrepreneurs exhibited behaviors indicating they were “accepting ideas/suggestions” during the Q&A session with the investors. Thus, perceived receptivity of the entrepreneur was also measured at the level of each angel-pitch observation. These measures were moderately correlated but demonstrated low reliability (alpha = 0.299) in robustness testing. We tested both measures as separate variables in our analysis and found that both were positive and significant independently (coachability $\beta = 0.187$, p<0.05; accepting ideas $\beta = 0.141$, p<0.01). As a result, we felt comfortable combining these variables to reflect an overall level of receptivity. We used this same variable for our moderation tests as well.

Control Variables: We controlled for four characteristics of entrepreneurs and the ventures pitching that may have influenced the investors’ preferences. Because economic factors are a key criteria for investment interest as investors ultimately seek financial returns (Fried & Hisrich, 1994; Sahlman, 1990; Shane & Cable, 2002), we created a variable to assess this by combining questions on the economic aspects of the venture that the angels evaluated following the pitch. Investors were asked to indicate on a scale from 1=highly disagree to 5=highly agree, the extent to which they agreed with the following economic aspects: 1) the market has large growth potential, 2) the
company revenue potential is large, and 3) the business model is strong. Higher scores indicate stronger evaluation of the economic factors of the business. This measure has high inter-item correlations and a Cronbach’s alpha of internal consistency of 0.85.

We created a variable on the overall competence of the entrepreneur. These questions related to the entrepreneur’s general ability and strength of his social network (Chandler & Jansen, 1992; Pavett & Lau, 1983). Angel investors were asked to indicate on a scale from 1=highly disagree to 5=highly agree, the extent to which they agreed with the following competency aspects: 1) the management team appears strong, 2) the domain expertise of the CEO is strong, 3) the CEO has a proven track record, 4) the company has strong board of advisors/directors. Ratings were averaged across investors. Higher scores indicate higher perception of competency. This measure has high inter-item co-variances and an alpha coefficient of .808.

Given that the sample of angels and entrepreneurs represented a wide range of age groups, we controlled for the difference in age between the investor and entrepreneur for each observation. Ages were based on self-reported values recorded at the time that the angel or entrepreneur profiles were entered into the TCA database. Finally, the number of angels present during the screening sessions varied and the order of each pitch varied in a screening session (average of three pitches per screening session). To control for ordering effects and variation in number of angel investor evaluations, we added a final control for the number of pitches in the sample that each angel evaluated to control for more active angels.

**Analyses And Results**

Table 1 reports the results of the moderated hierarchical ordinary least squares regression analysis that was conducted to test the hypotheses. For the regressions, we first entered all our control variables (Model 1), then the independent variables (Model 2), followed by the moderator variable (entrepreneur’s receptivity to coaching and mentorship) with the two-way interaction terms to create a full regression model in Model 3 (Cohen & Cohen, 1983). In order to facilitate the interpretation of our moderation results, we plotted the significant interaction effects in Figure 1 (Aiken & West, 1991; Cohen, Cohen, West & Aiken, 2003).

Regarding main effects, all three main effects were found to be significant though one was not as we had hypothesized. Similar expertise ($\beta = .04, p<.01$) and the entrepreneur’s receptivity to coaching and mentorship ($\beta = .30, p<.001$), were shown to be positively related to the investors’ interest in due diligence. However, certification or an introduction by another angel or not was significant but negatively related to the investors’ interest in due diligence. Therefore, hypotheses one and three were supported, but hypothesis two was not.

Now turning to the moderation results, one interaction effect was found to predict investors’ interest in due diligence. The addition of interaction effects slightly, but significantly, improved the fit of the regression model. However, only one interaction was significant. The significant interaction effects presented in Table 1 were plotted in Figure 1 to facilitate their interpretation.

Results demonstrated that as investors perceived greater entrepreneur receptivity to coaching and mentoring during a pitch when certified (introduced) by another angel, the angels’ interest in due diligence also increased ($\beta = .26, p<.001$). This is contradictory to the main effect result
considering the impact of an introduction by another investor on the angels’ interest in investing. This was, however, in line with our expectation unlike the earlier finding of the main effect. Thus, hypothesis 4a was not supported but hypothesis 4b was. Our results are discussed more fully below.

**Discussion**

According to social identity theory, we proposed that there are certain cues that lead to angel investor in some ventures over others following the entrepreneur’s pitch. We utilized an ego-focus for our theorizing, such that, while social identity informed our hypotheses, we took this approach to focus on the impact of certain cues related to the investor’s ego. Unlike the majority of research that has focused on investment outcomes (e.g., Franke, et al, 2006; Shane & Cable, 2002, Sorenson & Stuart, 2001) we focused on angel investors decisions immediately following the pitch – what qualities or cues do investors see in the pitch that influences their preferences such that they would like to seriously consider the venture for potential investment. To do this, we used investors’ ratings immediately following their viewing pitches of potential investments.

We found that there were cues during the pitch that led to increased angel preference for the venture even when controlling for basic investment considerations like economic factors and general competency of the entrepreneur/management team. These cues were related to similarity between the investor and entrepreneur and evaluating a future mentor-protégé relationship. Increase in similar expertise between angel investors and entrepreneurs and entrepreneur receptivity to coaching and mentorship increased angel interest in the venture. This finding is in line with post-hoc analysis of investors and entrepreneur teams and the role investors seek to play in early-stage investments (e.g. Franke, et al, 2006; Morisette, 2007). Our findings also related to the ego-focus we used for our theoretical approach: early-stage investors’ desire to contribute to the venture so when they have similar expertise, they may feel that they can add more value to the future success of the venture and therefore be directly responsible for the venture’s success.

Unlike our hypothesis, we did not find a positive direct main effect when an entrepreneur was certified or introduced by another angel investor during the pitch; instead our analysis showed a negative effect. While we theorized that an introduction by a similar other would trigger in-group status based on certification from reputation and referral effects, we did not find support for this. Perhaps an introduction by a similar does not “certify” the entrepreneur but instead leads investors to be more critical and/or biased negatively towards the venture. Observing an introduction by a “champion” or an investor who has already committed to the venture may raise the expectations for the venture such that the pitch then does not deliver on these raised expectations. Finally, the certification effects we anticipated may in fact be negative if the introduction by another angel indicates to the observer that a newer investor may have limited access to influence the venture due to the established presence of an investor-entrepreneur relationship. Therefore, while there may be some positive attributions for those investors for whom the referral is notable and meaningful, there also may be investors for whom this is not true on a greater scale. As this study delineates investor preference *by investor*, the positive effects may be washed out due to the disparity between positive and negative associations the observers have to the investor who is introducing the entrepreneur. Future studies should investigate this finding by parsing out attributions towards the venture and the “champion” angel investor by the other investors.
Turning to our findings regarding the moderation effects of the entrepreneur’s receptivity to coaching and mentorship on both – similar expertise between the investor and entrepreneur and introduction by another angel investor – our study provides support that the entrepreneur’s receptivity to coaching and mentorship moderates the impact of an introduction by another angel investor. As predicted, we found that entrepreneur receptivity to coaching and mentorship increases interest in due diligence when introduced by another angel. This finding suggests that any negative attributions angel investors may have had from observing the introduction may be reversed when entrepreneurs demonstrate greater receptivity to coaching and mentoring by the angels watching the pitch. Increased receptivity to coaching and mentoring did not moderate the effects of perceived similarity between entrepreneur and investor; however, from our main effects analysis, perceived similarity directly increased angel investor interest. In considering the unsupported hypothesis for moderation effects with perceived similarity, we draw additional support for the egocentric focus we have taken in developing our theory. Angel investors may feel that by having strong similarity to the entrepreneur they can have a strong impact on the venture’s success regardless of how receptive the entrepreneur is to mentoring/coaching. They may presume their ability to drive a successful outcome because of their knowledge and insight in the area. However, when observing an introduction by another angel investor, any negative associations may be reversed once investors feel that the entrepreneur is receptive to their mentorship. And, if involved, their valuable insight will be accepted by the entrepreneur, then they may feel the venture will be successful and a worthwhile consideration for investment.

Limitations

A few limitations of our study should be noted. First, because this study utilizes one location of a large angel investor group, we draw conclusions based on how this group of angels considers the future relationship with potential investments. The analyses conducted here may not support similar hypotheses with another, very differently structured angel investor group. To minimize this concern, we considered research on other angel investor groups’ decision-making processes and objectives. Our research site represents one of the oldest and most well established angel investor groups in the country. Thus, the investment process used by this group is well documented and replicated by many other angel groups across the country (Sohl, 1999; Wiltbank, 2005, etc.). And, research has supported similar goals and step-wise investment processes for other early-stage investors, like venture capital investors (e.g. Fried & Hisrich, 1994; etc.).

Another limitation is the investor demographic represented in this study. Our study consists of angel investors from one sector (technology) and primarily one gender (male). We were not able to diversify these qualities due to the nature of our group and the access we were able to obtain to gather these data. However, in considering other sectors and male versus female investors, and more importantly, mentor-protégé relationships, our findings are in line with prior findings (e.g. Klyver & Grant, 2010; Ragins & Cotton, 1999).

In conclusion, our study calls attention to the need for entrepreneurs to be cognizant of the cues investors rely on when watching a pitch. If not, they run the risk of discounting the interpersonal and ego-focus considerations investors have when evaluating the entrepreneur’s pitch. Our study suggests that instead of assigning individual disparities in investor preferences for certain ventures over others to investor intuition, entrepreneurs may be able to more finely present their ventures and themselves by understanding the personal factors that underlie investor preferences.
Conclusions and Implications

Taken together, these results have important implications for entrepreneurship research and theory. Our study adds to the entrepreneurship literature by demonstrating that angel investors are influenced towards certain ventures because of cues observed during the investment pitch. We also showed that investors rely on their own strengths when making investment preferences. As such, our research demonstrates the individualized context of early-stage investor decision-making and suggests that although there may seem to be reliance on objective “rules” or economic factors for decision-making, investors also strongly evaluate their relational aspects with the entrepreneur when determining whether or not to consider the venture for investment. And importantly, these evaluations occur based on critical cues investors observe during the entrepreneur’s pitch.

We contribute to theory in two specific ways. First, by applying social identity theory to the investor-entrepreneur evaluation, we demonstrate that cues of in-group associations during the entrepreneur’s pitch can inform investors’ intuition formation on potential investments. Specifically, we showed that observing perceived similarity to the entrepreneur directly impacts the investor’s preference for a potential investment. Second, our study shows the applicability of mentor-protégé theory to investor-entrepreneur relationships by suggesting that investors strongly consider the future relationship with the entrepreneur when considering whether or not they are interested in the venture as a potential investment. We offer an underlying theoretical rationale for our findings that suggests investors draw from an egocentric focus when considering potential investments. Angel investors want to have additional impact on the venture’s success over and above capital contributions. We reveal that investor intuition is also driven by observing during the pitch how well an investor can and will work with the entrepreneur presenting the venture.

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References


Table 1: Multiple regression analysis of critical cues and angel investor interest

<table>
<thead>
<tr>
<th>Variables</th>
<th>Interest in Due Diligence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Similar Expertise</td>
<td>0.038**</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
</tr>
<tr>
<td>Certification (Introduction)</td>
<td>-0.166**</td>
</tr>
<tr>
<td></td>
<td>(0.057)</td>
</tr>
<tr>
<td>Entrepreneur’s Receptivity</td>
<td>0.336***</td>
</tr>
<tr>
<td></td>
<td>(0.045)</td>
</tr>
<tr>
<td>Similar Expertise x Entrepreneur’s Receptivity</td>
<td>0.020</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
</tr>
<tr>
<td>Certification x Entrepreneur’s Receptivity</td>
<td>0.260**</td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
</tr>
<tr>
<td>Economic Factors</td>
<td>0.677***</td>
</tr>
<tr>
<td></td>
<td>(0.041)</td>
</tr>
<tr>
<td>Competence</td>
<td>0.422***</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
</tr>
<tr>
<td>Difference in Age (Ang-Ent)</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>Number of Angels at Pitch</td>
<td>-0.057***</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
</tr>
<tr>
<td>Order of Presentation at Screening</td>
<td>0.071*</td>
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<tr>
<td></td>
<td>(0.029)</td>
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<tr>
<td># of Pitches Attended by Angel</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
</tr>
<tr>
<td>(Intercept)</td>
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<tr>
<td></td>
<td>(0.238)</td>
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<td>R²</td>
<td>0.333</td>
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<tr>
<td>RMSE</td>
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</table>
Figure 1: Moderating effect of entrepreneur receptivity to coaching and mentorship on relationship between introduction by another angel investor and investor interest