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ENTREPRENEURS AS AUTHENTIC TRANSFORMATIONAL LEADERS: CRITICAL BEHAVIORS FOR GAINING ANGEL CAPITAL

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ABSTRACT

Few entrepreneurship researchers have focused on entrepreneurs as leaders, particularly in the initial stages of a new venture. We build on theories of authentic and transformational leadership to develop a model of how entrepreneurs exhibiting key leadership behaviors—trustworthiness, coachability, and passion—more successfully gain the support of critical stakeholders. We test the model in the angel investment context and examine how angels' perception of entrepreneurs' authentic transformational leadership behaviors impact angels' evaluations of funding potential. Results indicate that the three authentic leadership behaviors mediate the relationships between personal characteristics of the entrepreneurs and evaluation of the funding potential.

INTRODUCTION

Entrepreneurs in the initial stages of a new venture must enlist the support of others and acquire resources necessary for the new venture's survival. One critical resource for most entrepreneurs, especially those involved in high-growth ventures, involves acquiring financial resources for launching the business. Entrepreneurial leadership behaviors have increasingly been recognized as critical for acquiring resources, establishing and growing new ventures (e.g., Baum, Locke & Kirkpatrick, 1998; Chandler & Hanks, 1994; Daily, McDougall, Covin & Dalton, 2002; Fernald, Solomon & Tarabishy, 2005; Gupta, MacMillan & Surie, 2004; Hmieleski & Ensley, 2007). Research suggests that equity investors consider a founding entrepreneur's competencies including demonstrated leadership when deciding whether to invest in a new venture (Chandler & Hanks, 1994), but few studies have been conducted examining the impact of entrepreneurial leadership behaviors on key outcomes such as acquiring equity capital in the initial stages of the new venture. As Ron Conway, one of the most active angel investors in Silicon Valley with early stage investments in over 500 companies including Google, AskJeeves and Paypal notes, "In my experience of evaluating entrepreneurs, the most important ingredient is the personal chemistry with the entrepreneur and leadership qualities. I look for trustworthiness, flexibility, passion, coachability, and the ability to lead others" (Conway, 2009).

We rely on the extensive leadership literature in building and testing a model of the effect of entrepreneurial leadership behaviors on the acquisition of financial resources, namely gaining angel capital to fund the new venture. We explain how angels' perceptions of authentic transformational leadership behaviors (trustworthiness, coachability, and passion) act as mediators between personal characteristics of the entrepreneur and angels' evaluations of funding potential. Prior research investigating the effect that personal characteristics of entrepreneurs have on new venture outcomes has provided conflicting results (e.g., Brigham et al., 2007; Ciavarella, Buchholtz, & Riordan, 2004; Zhao & Seibert, 2006). However, empirical work indicates that relationships among personality and outcomes are often mediated by situational and task-specific factors (Locke 2001; Rauch & Frese, 2007). Researchers who conclude that personal

characteristics are unimportant in entrepreneurship research may have overlooked indirect effects (Baum et al 2001; Baum and Locke, 2004). Acquiring equity capital likely depends on behaviors exhibited by entrepreneurs in addition to their personal characteristics.

We rely on theories of authentic and transformational leadership to examine how entrepreneurs engaging in authentic transformational leadership behaviors, particularly trustworthiness (exhibiting a sense of internalized moral perspective), coachability (balanced processing of information), and passion for the venture likely impact the entrepreneur's ability to acquire equity capital. Authentic leaders behave in congruence with deep personal and ethical values to: 1) establish trust with followers (Avolio, Gardner, Walumbwa, Luthans & May, 2004) to exhibit trustworthiness; and 2) engage in open communication that assists the leader in self-awareness, self-regulation and self-improvement (Avolio & Gardner, 2005) to appear coachable. Authentic *transformational* leaders engage in these two behaviors and add the affective component of communicating in inspiring and passionate ways (Bass, 1990). Therefore, entrepreneurs who are both authentic and transformational leaders exhibit behaviors that make them appear trustworthy, coachable, and passionate to others.

We begin the paper with a discussion of authentic and transformational leadership theories. This establishes the foundation for the model we develop with three key authentic transformational leadership behaviors acting as mediators between the personal characteristics of the entrepreneur and angels' evaluation of funding potential. After presenting the hypotheses, we describe the sample and methods used to test the model, followed by the results of the analysis. The paper concludes with a discussion of the implications the model—supported by the results—has for theory and practice.

AUTHENTIC TRANSFORMATIONAL LEADERSHIP

Authentic leadership theory builds on literature from ethics, leadership and positive organizational scholarship (Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008). Authentic leadership represents a psychological construct that reflects a leader's general tendencies to view himself within his social environment and to behave consistently with his deeply held values (Illies, Morgeson & Nahrgang, 2005: 376). "Authentic leaders act in accordance with deep personal values and convictions, to build credibility and win the respect and trust of followers by encouraging diverse viewpoints and building networks of collaborative relationships" (Avolio et al., 2004: 806). These leaders demonstrate openness, passion, trustworthiness, and encourage diverse viewpoints while candidly discussing issues and concerns with others (Avolio & Gardner, 2005; Avolio et al., 2004). Authentic leaders both shape and become shaped through social exchanges with others (Avolio & Gardner, 2005).

We adopt a behaviorally-oriented definition of authentic leadership that describes it as, "a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate (Walumbwa et al., 2008: 94). In addition, we focus on how perceptions of the leader's behaviors impact key stakeholders. People interacting with the entrepreneur will observe the entrepreneur's behaviors and will likely attempt to judge the authenticity of the leadership behaviors. We argue that circumstances exist when it may be more relevant to examine individuals' perceptions of leadership behaviors than the self-reported or actual leadership of the entrepreneur. For example, when examining trust, researchers often focus on the dyad consisting of the trustor or the person doing the trusting and the trustee or the individual being trusted and his trustworthiness (Becerra & Gupta, 2003); the emphasis in this study involves the trustworthiness of the trustee or entrepreneur as assessed by the trustor or the

angels. The angel will decide whether the entrepreneur appears trustworthy regardless of whether the entrepreneur is truly being honest and trustworthy. This perception will ultimately impact angels' evaluations of funding potential.

One of the few studies examining authentic leadership among entrepreneurs shows that founders of ventures with "growth-oriented goals" engage in higher levels of authentic leadership behaviors than founders of low growth businesses (Jensen and Luthans, 2006). This result suggests we need to better understand the antecedents and consequences of authentic and transformational leadership behavior in the context of angel investing since entrepreneurs often need angel funding when starting up high growth ventures. Entrepreneurs who behave as authentic leaders will shape and be shaped by others during social interactions and exchanges (Avolio & Gardner, 2005), for instance, as they interact with, respond to questions from, and try to influence angels or other potential equity investors to provide financial resources. Entrepreneurs engaging in authentic leadership behaviors exhibit a sense of internalized moral perspective (i.e., trustworthiness), and they appear coachable when they solicit and use multiple perspectives to examine issues (Avolio & Gardner, 2005). These authentic leadership behaviors likely mediate the relationships between personal characteristics of the entrepreneur and evaluations of funding potential.

Trustworthiness

An important aspect of authentic leadership involves trustworthiness. Trust has been defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis & Schoorman, 1995: 712). In other words, a trustor or person deciding to trust becomes vulnerable by assuming a risk in the relationship with the trustee, and the amount of risk depends on the amount of trust the trustor has in the trustee (Mayer et al., 1995).

Authentic leaders act with an orientation toward "what is right and fair" (Luthans & Avolio, 2003) because they possess a strong obligation to act ethically and in the best interests of others (May et al., 2003). Relational transparency represents an important part of authentic leadership (Walumbwa et al., 2008: 94). Entrepreneurs who engage in authentic leadership behave ethically and consistently with their values, thereby establishing their trustworthiness (Avolio et al., 2004; Bass, 1990; Kouzes & Posner, 1995). When angels perceive a particular entrepreneur as trustworthy, the angels believe they can expect that entrepreneur's "word, promise, verbal or written statement" can be relied upon (Rotter, 1967: 651); this increases the likelihood that the angels will agree to provide funding to the entrepreneur.

Entrepreneurs vary greatly in their personal characteristics. Personal characteristics often examined in entrepreneurship research include the amount of expertise and prior entrepreneurial experience, as well as gender, age, and personality (e.g., Ciavarella, et al., 2004; Davidsson & Honig, 2003; Ones, Dilchert, Viswesvaran & Judge, 2007). Personal characteristics of the entrepreneur will affect the perceived trustworthiness of the entrepreneur during interactions with stakeholders (Becerra & Gupta, 2003). Numerous studies have suggested that an individual's ability, expertise or experience in a particular domain likely affect the individual's trustworthiness (Gabarro, 1978; Giffin, 1967; Mayer et al., 1995). An entrepreneur's personality likely impacts whether others view him as trustworthy since prior research shows that an individual's openness influences trustworthiness (e.g., Farris, Senner & Butterfield, 1973). Personal characteristics of the entrepreneur also likely impact the level of trustworthiness perceived by angels and ultimately

their evaluations of funding potential. Thus trustworthiness acts as a mediator in the relationships between personal characteristics of an entrepreneur and angels' evaluations of funding potential as stated in the following hypothesis:

H1: Perceived trustworthiness mediates the relationships between personal characteristics of the entrepreneur (entrepreneur strength, age, gender, total years as an entrepreneur, and personality) and angels' evaluations of funding potential.

Coachability

Another important aspect of authentic leadership involves coachability, defined as the degree to which entrepreneurs listen to key stakeholders, carefully consider feedback prior to responding, recognize their weaknesses, and willingly make changes to address those weaknesses (Institute 4 Priority Thinking, 2009). Authentic leaders encourage diverse viewpoints (Avolio et al, 2004), openly discuss their weaknesses or vulnerabilities (Luthans & Avolio, 2003) and communicate honestly and freely as part of self-regulation and self-improvement (Avolio and Gardner, 2005). "Authentic leaders realize that they have to be willing to listen to feedback—especially the kind they don't want to hear" (George et al., 2007: 134). Angels will be drawn to entrepreneurs they perceive as coachable because angels enjoy helping entrepreneurs build their new ventures: angels often invest in firms because they want to make a difference and utilize their experience and expertise, not just their financial capital, to help the entrepreneur grow the new venture (Benjamin & Margulis, 2000; Van Osnabrugge & Robinson, 2000).

Although authentic leaders solicit and use multiple perspectives to examine issues (Avolio & Gardner, 2005), they will be perceived as inauthentic leaders if they display a high level of plasticity (Seeman, 1960) or overcompliance with requests and demands by others (Avolio & Gardner, 2005). This makes them appear too eager to win others' approval and respect (George, 2003), even by compromising their core values. This type of behavior will appear fake or not genuine and therefore will not be perceived by angels as an entrepreneur who appears coachable. Entrepreneurs will seem to lack coachability if they often dismiss ideas, suggestions or criticisms offered by angels and other stakeholders, sending the message that they do not want or need the feedback. In contrast, entrepreneurs who engage in authentic transformational leadership appear coachable by seeking out and listening to feedback on their weaknesses and vulnerabilities (Luthans & Avolio, 2003); this openness to feedback results in greater effectiveness when the leader tries to influence others (Quinn, Spreitzer & Brown, 2000).

Personal characteristics of the entrepreneur will affect the perceived coachability of the entrepreneur during interactions with angels although little research has been done examining these relationships. Coachability likely mediates the relationship between the personal characteristics of the entrepreneur and angels' evaluations of funding potential. Thus we hypothesize that:

H2: Perceived coachability mediates the relationships between personal characteristics of the entrepreneur (entrepreneur strength, age, gender, total years as an entrepreneur, and personality) and angels' evaluations of funding potential.

Passion

Passion may also be an important aspect of authentic leadership because leadership is intrinsically an emotional process (Dasborough & Ashkanasy, 2002). Authentic leadership

represents a root construct of leadership or one believed to underlie all other theories of leadership (Avolio et al., 2004); thus a leader exhibits authentic leadership in combination with any style of leadership such as transformational leadership (Bass 1990). Entrepreneurship research has found that transformational leadership is most effective in increasing new venture performance when operating in environments high in dynamism (Ensley, Pearce, and Hmieleski, 2006). Angels tend to invest in high growth ventures in the very early stages of the funding process (Freear & Wetzel, 1990), situations that involve dynamic environments characterized by unpredictable and rapid change (Dess & Beard, 1984). Therefore focusing on transformational leadership in combination with authentic leadership in the angel investing context seems especially appropriate.

Leaders with a transformational style exhibit characteristics of charisma, inspiration, and intellectual stimulation or problem solving (Bass, 1990; Bass & Avolio, 1993). Transformational leadership behavior inspires a shared vision or “an ideal and unique image of the future” (Kouzes & Posner, 1995: 95). When leaders clearly and passionately articulate their vision for a venture, their stakeholders have higher commitment and motivation to the vision (Kouzes & Posner, 1995) and the venture will more likely create shareholder value (George, 2003). Entrepreneurs exhibiting transformational leadership behaviors enhance emotional contagion and increase the passion in key stakeholders (Cardon, 2008).

Passion has been described in a variety of ways as illustrated in a recent review of the literature on entrepreneurial passion (Cardon, Wincent, Singh & Drnovsek, 2009). Passion in the entrepreneurial setting ranges from a love of and attachment to work (Baum & Locke, 2004), a drive or emotional energy exhibited by an entrepreneur (Bird, 1989), a highly intense and positive enduring feeling (Cardon, 2008), an intense desire to create something truly great (Ma & Tan, 2006) or a strong positive emotion that drives an entrepreneur’s activities (Winnen, 2005). We agree with the definition of passion as, “consciously accessible, intense positive feelings experienced by engagement in entrepreneurial activities associated with roles that are meaningful and salient to the self-identity of the entrepreneur” (Cardon et al., 2009: 517).

Authentic transformational leaders exhibit emotional contagion or positive emotional states (Ilies et al., 2005). Entrepreneurs exhibiting authentic transformational leadership behaviors likely display passion and they transfer this passion to key stakeholders through emotional contagion (Cardon, 2008). Entrepreneurs exhibit passion as they describe their vision for the new venture and try to enlist others to work with them toward that vision (Cardon, 2008). Angels will respond positively to entrepreneurs they perceive as passionate because passion is believed to stimulate entrepreneurs to overcome obstacles and remain engaged with the new venture through tough times (Bierly et al., 2000; Bird, 1989; Cardon et al., 2009).

Personal characteristics of the entrepreneur likely affect the level of passion perceived by angels although there has been very little research examining the antecedents of levels of passion displayed. Not only can passion indicate a willingness to persevere under tough times, passion can also enhance an entrepreneur’s ability to present or pitch the venture idea to potential investors (Elsbach & Kramer, 2003), increasing the entrepreneur’s chances of acquiring equity capital. Entrepreneurs who do not display passion may appear to lack the effort and faith needed to keep the venture going (Cardon et al., 2005). Passion perceived by angels likely mediates the relationship between personal characteristics of the entrepreneur and angels’ evaluations of funding potential. Entrepreneurs engaging in authentic transformational leadership likely display passion and create contagion among stakeholders such as angels, increasing the likelihood that stakeholders provide financial and other resources or support to the entrepreneur. This leads to the following hypothesis:

H3: Perceived passion mediates the relationships between personal characteristics of the entrepreneur (entrepreneur strength, age, gender, total years as an entrepreneur, and personality) and angels' evaluations of funding potential.

METHODS

Data Source

The setting for this study was a chapter of one of the largest angel organizations in the United States that has invested over \$100 million in more than 150 companies. The angel organization does not invest as a whole and instead, each individual angel decides whether to independently invest in an entrepreneur and new venture. Data were obtained from 78 different angels who evaluated 205 entrepreneurs presenting their venture ideas between August 2006 and November 2009. Angels completed questionnaires over this period at the screening stage - when angels determine whether the entrepreneur should proceed to the due diligence stage. Collecting data on real time investment decisions helps eliminate the problems associated with hypothetical responses, ensures angels provide more accurate recollections, and minimizes self-reporting bias because success of the investment is unknown at the time of data collection (Fried & Hisrich, 1994). The number of angels evaluating each entrepreneur ranged from 7 to 22 with a mean of 15.64. Company level variables were calculated by averaging the angels' responses for each company/entrepreneur. Entrepreneurs provided information regarding themselves and the new venture in their application to the angel organization.

Measures

Angels evaluate the funding potential of a new venture at the end of the entrepreneur's presentation by indicating whether the entrepreneur should proceed to due diligence using a five-point Likert scale (1=disagree, 5=agree). Entrepreneur strength consisted of responses provided when the angels assessed the strength of the entrepreneur in terms of their experience by domain and track record using a five-point Likert scale (1=disagree, 5=agree). The items that were averaged were "The domain expertise of the CEO/presenter is strong" and "The CEO/presenter has a proven track record". Age, gender, and total years as an entrepreneur provided additional measures of the entrepreneur's personal characteristics. Each entrepreneur provided his or her age and gender when filling out the application to the angel organization. We used the entrepreneur's age in years in the analysis. Gender was coded as a dichotomous variable with 1 indicating a male and 0 indicating a female. Entrepreneurs also indicated how many years they have been an entrepreneur (shown as "total years entrepreneur" in the tables). Personality of the entrepreneur was included as part of the entrepreneur's personal characteristics. Entrepreneurship researchers have relied on the five-factor personality instrument in prior research (Ciavarella, Buchholtz, Riordan, Gatewood & Stokes, 2004; Nicholson, 1998; Sudek, 2007). Entrepreneurs completed a Big Five Personality Instrument (Saucier, 1994) when applying to the angel organization, providing measures of the entrepreneur's extraversion, agreeableness, conscientiousness, neuroticism and openness. We used each personality measure as an independent variable in our analysis.

Authentic transformational leadership behaviors included perceived trustworthiness, coachability, and passion. The angels observed the entrepreneur during the entrepreneur's presentation of the venture idea and the question and answer period that followed. Perceived trustworthiness was measured by averaging angel responses indicating the extent to which, "the CEO/presenter appears trustworthy" and "the CEO/presenter appears honest." Perceived

coachability was measured by a single item where angels indicated the extent to which, “the CEO/presenter appears coachable.” Each angel also rated the extent to which “the CEO/presenter is passionate about the company” and “The CEO/presenter is very enthusiastic.” These items were averaged to indicate perceived passion. All of these items used a five-point Likert scale (1=disagree, 5=agree).

Evaluations of funding potential may depend on the stage of development of the new venture and the strength of the opportunity so we controlled for these factors in our analysis. The entrepreneurs provided data on the stage of development in their applications. The choices offered to the entrepreneur were coded as follows: good idea (1), product development (2), initial marketing (3), revenue (4), profitable (5), turnaround/restart (6). Opportunity strength was determined by averaging the responses of angels attending the screening. Angels used a 5 point agree-disagree Likert scale to rate the strength of the opportunity using six items, such as “the business model is strong,” “the market has a large growth potential,” “the product/service development risk is low,” “the company’s revenue potential is large,” “the company has a reasonable exit plan,” and “there are reasonable barriers to entry.”

Analysis

Hierarchical regression analysis was used to test all hypotheses. Baron and Kenny (1986) provide a framework using a series of regression models to test for mediation. Variable M is considered a mediator if it meets the following criteria: 1) X significantly predicts Y; 2) X significantly predicts M; and 3) M significantly predicts Y when controlling for X (Baron & Kenney, 1986; Preacher & Hayes, 2004). Mediation is evident if the effects of X on Y are reduced or eliminated when M is added into the model. A robust test of mediation (Sobel test) was used to determine the degree each of the three authentic transformational leadership behaviors (perceived passion, perceived trustworthiness, and perceived coachability) mediate relationships between the entrepreneur’s individual characteristics and evaluations of funding potential.

RESULTS

The model developed in this paper proposes that angels’ perceptions of an entrepreneur’s authentic transformational leadership behaviors mediate the relationships between the personal characteristics of the entrepreneur and evaluations of funding potential. Table 1 provides means, standard deviations and correlations for variables used in the study. Fairly low correlations among the independent variables and mediating variables indicate multicollinearity is not an issue. In addition, our diagnostic tests indicate that the data do not violate assumptions of linearity, normality, homoskedasticity, and independence.

Table 2 shows results of the hierarchical regression analysis. Although we made no hypotheses regarding the direct effects of personal characteristics of the entrepreneur on evaluations of funding potential, Baron and Kenny’s (1986) framework requires establishing the direct effect of the independent variables on the dependent variable and mediating variables. Model 8 in Table 2 shows the direct effects of the personal characteristics of the entrepreneur on evaluations of funding potential when controlling for opportunity strength and stage of development. Entrepreneur strength, age, gender, total years as an entrepreneur, and conscientiousness all exhibited significant direct effects on evaluations of funding potential ($b = .232, p < .001$; $b = -.101, b = .087, b = -.096, \text{ and } b = -.081$ respectively, $p < .05$). Models 2, 4, and 6 in Table 2 indicate the effects of personal characteristics of the entrepreneur on the three authentic leadership behaviors: perceived trustworthiness, perceived coachability, and perceived

passion. Entrepreneur strength exhibited a significant direct effect on perceived trustworthiness ($b = .422, p < .001$), perceived coachability ($b = .246, p < .001$), and perceived passion ($b = .380, p < .001$). The only other personal characteristic with a significant direct effect on perceived trustworthiness is total years as an entrepreneur ($b = -.224, p < .01$), whereas extraversion was the only other personal characteristic with significant direct effect on perceived passion ($b = .196, p < .01$). Three additional personal characteristics had significant direct effects on perceived coachability: age ($b = -.195, p < .01$), gender ($b = -.164, p < .05$), and total years as an entrepreneur ($b = -.141, p < .05$).

Hypothesis one suggested that perceived trustworthiness mediates the relationships between the entrepreneur's characteristics and the evaluations of the venture's fundability. To support this hypothesis, perceived trustworthiness must predict evaluations of funding potential when controlling for the personal characteristic of the entrepreneur and the effect of each of the personal characteristics that exhibited significant direct effects with evaluations of funding potential must be reduced or eliminated. As shown in Model 9 of Table 2, perceived trustworthiness exhibits a significant effect ($b = .183, p < .001$) on the dependent variable when controlling for the personal characteristics of the entrepreneur. The effect of both entrepreneur strength and total years as an entrepreneur was reduced ($b = .155, p < .01$ and $b = -.055, p > .05$ respectively) when perceived trustworthiness was added to the model. The results of the Sobel test for mediation supports the findings that the relationship between both entrepreneur strength and total years as an entrepreneur with evaluations of funding potential is mediated by perceived passion. Thus, hypothesis one receives partial support.

The second hypothesis posited that the coachability of the entrepreneur would mediate relationships between the entrepreneur's personal characteristics and evaluations of funding potential. Following the procedure above, perceived coachability mediates the relationship between the personal characteristics of entrepreneur strength ($b = .199, p < .01$), age ($b = -.075, p > .05$), gender ($b = .109, p < .01$), and total years as an entrepreneur ($b = -.077, p < .05$) on evaluation of funding potential. As indicated in Model 10 of Table 2, the Sobel test confirms the conclusion that perceived trustworthiness mediates the relationship between these four personal characteristics of the entrepreneur and evaluations of funding potential. This confirms hypothesis two relative to all personal characteristics except personality.

Hypothesis three stated that perceived passion would mediate relationships between the personal characteristics of the entrepreneur and evaluations of funding potential. Results provided in Model 11 of Table 2 indicate that perceived passion mediates the relationship between entrepreneur strength ($b = .170, p < .001$) and evaluations of funding potential. Results of the Sobel test of mediation provides additional information that perceived passion mediates this relationship but also indicates perceived passion mediates the relationship between extraversion ($b = -.077, p < .05$) and evaluations of funding potential. In situations with suppression, a significant effect may not show up for the relationship between the independent variable and the dependent variable. Although the direct relationship between extraversion and evaluations of funding potential is not significant ($b = -.045, p > .05$), evidence of an indirect effect exists because extraversion has a positive and significant effect on perceived passion and perceived passion has a positive and significant effect on evaluations of funding potential. Mediation exists because the relationship between extraversion and evaluations of funding potential becomes significant ($b = -.077, p < .01$) when perceived passion is "held constant". These results provide partial support of hypothesis three.

Conscientiousness, a measure of personality, exhibited a direct effect on evaluations of funding potential. However, none of the three authentic transformational leadership behaviors mediated this relationship according to the Sobel test for mediation.

DISCUSSION

Authentic transformational leadership theory forms the basis for the relationships proposed in our model. This approach provides “a comprehensive theory-driven framework for studying the leadership process of business founders” (Jensen & Luthans, 2006: 257), and applies a new theoretical perspective to the field of entrepreneurship. Entrepreneurs engaging in authentic transformational leadership behaviors establish trust with followers (Avolio et al., 2004) to exhibit trustworthiness; engage in open communication that assists the leader in self-awareness, self-regulation and self-improvement (Avolio & Gardner, 2005) to appear coachable; and display passion and create contagion among stakeholders (Bass, 1990; Cardon, 2008). Our results point to the need for entrepreneurship scholars to pay greater attention to leadership behaviors—especially authentic transformational leadership behaviors—exhibited by entrepreneurs. The trustworthiness, coachability, and passion of entrepreneurs affect how angels perceive the entrepreneur and the new venture: angels more likely support an entrepreneur moving on to the due diligence stage when the entrepreneur demonstrates authentic transformational leadership behaviors. The results also show the importance of including measures of leadership as mediators when investigating relationships among entrepreneurial characteristics and key outcomes such as acquiring funding at the initial stages of a new venture.

Authentic transformational leadership provides a useful theoretical base for examining the role of affect in entrepreneurial settings. Entrepreneurs who engage in authentic transformational leadership likely appear genuine when displaying affect and may have an easier time convincing stakeholders to contribute essential resources or support to the new venture. Scholars have discussed the importance of entrepreneurs not displaying too much passion--by appearing obsessive (Branzei & Zietsma, 2003) or allowing excess passion to limit creative problem solving (Cardon et al., 2009)--or appearing too coachable (e.g., too willing to acquiesce to all demands from stakeholders) but the real issue may involve whether or not the entrepreneurs appear to be authentic transformational leaders or not. Authentic transformational leaders have a strong sense of self and a calm and confident presence that they maintain regardless of the situation, allowing them to achieve superior results over a long period of time (George et al., 2007). Stakeholders can likely tell the difference between an entrepreneur who's authentic and one who lacks authentic transformational leadership. This and many other questions about the role of authentic transformational leadership in entrepreneurial settings need to be empirically investigated by entrepreneurship scholars.

Our study provides one of the early empirical examinations of the importance of entrepreneurs engaging in authentic transformational leadership behaviors but it has limitations. We focused on only three key authentic transformational leadership behaviors exhibited by entrepreneurs, trustworthiness, coachability, and passion. Leadership scholars (e.g., Avolio & Gardner, 2005; Avolio et al., 2004; Jensen & Luthans, 2006) have posited additional factors such as hope or optimism believed to constitute authentic transformational leadership and entrepreneurship scholars may want to incorporate more of these constructs in future research. Our interest involved the demonstration of trustworthiness, coachability, and passion because these have been strongly supported in the entrepreneurship and leadership literature as critical for predicting key outcomes. The results show that perceived trustworthiness, coachability, and passion mediate relationships between the personal characteristics of the entrepreneur and angels' evaluations of the venture's

funding potential. Our measure of coachability used a single item and may have reduced the amount of variance explained by this variable. We were limited in the number of items that the angels could complete in their real-time evaluations of the entrepreneurs. Since these results indicate that the entrepreneur's coachability matters, researchers may want to develop additional measures or a scale for assessing coachability.

The sample used here provides one of the first studies of authentic transformational leadership that does not rely on self-evaluations of leadership by individuals; it also represents one of a very few studies that explores leadership by entrepreneurs. Future research could also ask entrepreneurs to rate their own authentic transformational leadership and compare it to other stakeholders' evaluations of the entrepreneurs. Authentic transformational leaders also strengthen their bond with stakeholders by being genuine and behaving as the same person in a variety of settings and environments (George et al., 2007). Future research could examine how consistency of authentic transformational leaders behaviors as the entrepreneur progresses through the entrepreneurial process impacts stakeholders' evaluations and willingness to become involved with the new venture.

Entrepreneurs may benefit from our results by recognizing that authentic transformational leadership can affect their success in gaining financial resources, support of key stakeholders and for achieving other outcomes necessary for new venture survival. They may want to focus on how to develop into authentic transformational leaders, and appreciate the value of heightened self-awareness, strong values and fostering open, honest communication with others. Our results suggest that angels and likely other key stakeholders can quickly assess whether an entrepreneur demonstrates trustworthiness, coachability, and passion and angels more highly evaluate the funding potential of new ventures started by authentic transformational leaders. Ron Conway, a highly experienced and successful angel investor highlights the importance of trustworthiness, coachability and passion when articulating how he evaluates whether or not to invest in an entrepreneur and new venture: "the most important attributes are trustworthiness and flexibility to morph the ideas around the company till there are metrics to prove success. Next, passion and coachability are crucial. Passion provides the energy to get through hard times, and coachability enables a willingness to be open to make the necessary and often numerous course corrections and morphing that startups require. Lastly, the entrepreneur needs the capacity to lead others through communicating a compelling vision to the team and persuading external stakeholders that this vision will be successful" (Conway, 2009).

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Table 1: Descriptive Statistics and Correlations

	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Funding Potential	3.27	.60														
2. Opportunity Strength	3.19	.37	.802**													
3. Stage of Development	3.41	.96	.096	-.094												
4. Entrepreneur Strength	3.73	.44	.549**	.489**	-.043											
5. Age	43.83	9.95	-.108	-.014	-.015	.143*										
6. Gender	.79	.41	.156*	.084	.070	-.004	.026									
7. Total Yrs Entrepreneur	8.00	8.03	-.033	.084	.047	.089	.299**	-.030								
8. Extraversion	4.03	.60	-.040	-.011	.020	.097	.014	-.115	.036							
9. Agreeableness	4.08	.55	-.037	-.107	.120	.001	.061	-.184**	.042	.125						
10. Conscientiousness	4.21	.53	-.074	-.002	-.053	.007	.029	-.026	-.044	.110	.178*					
11. Neuroticism	3.74	.71	.066	.047	-.084	.105	.049	-.045	.193**	.091	.408*	.259**				
12. Openness	4.23	.46	-.102	-.115	-.095	-.127	-.076	.001	-.001	.158*	.136	.064	-.008			
13. Perceived Passion	4.10	.39	.539**	.436**	.010	.508**	-.061	.031	-.012	.217**	-.001	-.030	.059	-.067		
14. Perceived Trustworthiness	4.00	.34	.506**	.352**	-.047	.474**	-.057	-.026	-.181**	.019	.052	-.003	.028	-.002	.446**	
15. Perceived Coachability	3.44	.47	.295**	.162**	-.090	.238**	-.207**	-.183**	-.157*	.070	.119	.009	.055	.086	.343*	.747**

* p < .05; ** p < .01

n = 205

Table 2: Multiple Regression Results

	Trustworthiness		Coachability		Passion		Evaluations of Funding Potential				
	1	2	3	4	5	6	7	8	9	10	11
Opportunity Strength	.353***	.183*	.157*	.082	.441***	.254***	.819***	.707***	.674***	.696***	.666***
Stage of Development	.017	.014	-.055	-.045	.058	.040	.181***	.167***	.165***	.173***	.161***
Entrepreneur Strength		.422***		.246**		.380***		.232***	.155*** ⁺⁺	.199*** ⁺⁺	.170*** ⁺⁺
Age		-.044		-.195**		-.101		-.101*	-.093*	-.075 ⁺⁺	-.084*
Gender		-.037		-.164*		.035		.087*	.094*	.109** ⁺	.081*
Total Yrs Entrepreneur		-.224**		-.141*		-.049		-.096*	-.055 ⁺	-.077* ⁺	-.088*
Extraversion		-.033		.010		.196**		-.045	-.039	-.046	-.077* ⁺⁺
Agreeableness		.075		.105		.019		.042	.028	.028	.039
Conscientiousness		-.028		-.030		-.055		-.081*	-.076*	-.077*	-.072
Neuroticism		.000		.015		.016		.060	.060	.058	.058
Openness		.068		.093		-.022		.029	.017	.017	.033
Trustworthiness									.183***		
Coachability										.135**	
Passion											.164***
r-squared	.124***	.311***	.029	.189***	.193***	.359***	.676***	.748***	.771***	.762***	.765***
adj r-squared	.115	.272	.020	.143	.185	.322	.673	.733	.756	.748	.750
change in r-squared	.124***	.187***	.029	.160***	.193***	.166***	.676***	.072***	.023***	.015**	.017***

Standardized regression coefficients are displayed in the table.

*p < .05

**p < .01

***p < .001

+ Sobel test indicates mediation at .05 significance level

++ Sobel test indicates mediation at .01 significance level

