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Franz Lohrke

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Entrepreneurial network development: Trusting in the process[☆]

Delmonize A. Smith^{a,1}, Franz T. Lohrke^{b,*}

^a *E. Philip Saunders College of Business, Rochester Institute of Technology, Rochester, NY 14623-5608, United States*

^b *School of Business, Samford University, 800 Lakeshore Drive, Birmingham, Alabama 35209, United States*

Abstract

An entrepreneur's network can provide a significant source of social capital, which, in turn, may increase a new venture's likelihood of success. Entrepreneurship research has frequently examined how such networks develop, and reviewing extant studies suggests that trust plays a significant role in this process. Despite its recognized importance, limited research exists examining how trust evolves during and interacts with the entrepreneur's venture network development. Accordingly, we propose that an entrepreneur's reliance on exchange relationships based on affective and cognitive trust will vary as the entrepreneur moves through the network development process. We conclude by discussing both the model's implications and future research avenues.

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Keywords: Entrepreneurial networks; Affective trust; Cognitive trust; Social capital

1. Introduction

Entrepreneurs face daunting odds in successfully forming new ventures, in part, because they often do not control all the resources needed to start these ventures. This constraint is compounded by the venture's limited track record and lack of legitimacy, often termed its "liability of newness", which create difficulties in gaining needed support from important resource providers (Stinchcombe, 1965). Consequently, success in both overcoming this liability and, in turn, obtaining necessary resources may depend heavily on the entrepreneur's ability to create sustained exchange relationships with resource providers (Katz and Gartner, 1988).

This focus on the relational nature of entrepreneurship stems from the realization that it is an economic process, embedded within a social context (Aldrich and Zimmer, 1986). Within this context, entrepreneurs must continually develop both exchange

relationship structure and quality in an effort to obtain the resources necessary to launch and sustain a new venture (Greve and Salaff, 2003; Hite, 2005; Ritter and Gemünden, 2003). Substantial research points to trust development as an essential component in this process (e.g., Das and Teng, 1998; Lewicki and Bunker, 1996). Despite its intrinsic importance, little research, to date, has addressed how, and for that matter, why, trust evolves during the entrepreneur's network development process.

Accordingly, by incorporating trust literature into network research, we seek to contribute to entrepreneurship research by shedding light on what has been consistently identified as a salient issue but, as yet, has received little theoretical development. We begin by briefly discussing the importance of an entrepreneur's network in providing social capital and overcoming a venture's liability of newness. Next, we refer to existing research to demonstrate why trust, particular two types, affective and cognitive, plays such a critical role during the entrepreneur's venture network development. Based on this review, we develop a model and corresponding propositions to explain how reliance on affective and cognitive trust evolves as the entrepreneur and resource providers develop exchange relationships. Specifically, the model proposes that as the entrepreneur's network structure changes from simple dyadic ties to complex economic exchanges, so will the relational aspect of

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* Corresponding author. Tel.: +1 205 726 2373; fax: +1 205 726 2464.

E-mail addresses: dsmith@saunders.rit.edu (D.A. Smith), flohrke@samford.edu (F.T. Lohrke).

¹ Tel.: +1 585 475- 7237; fax: +1 585 475- 5989.

affective and cognitive trust, in that the entrepreneur will increasingly rely on relationships based on the latter rather than the former. Lastly, we present important implications of the model, discuss its limitations, and offer suggestions for additional research into trust's role in new venture network development.

2. Networks and social capital

During formation, new ventures require myriad resources, from information and capital to symbolic support such as legitimacy (Singh et al., 1986). Given venture resource constraints, entrepreneurs often form ties with outside entities in an effort to provide many of these critical resources (Dubini and Aldrich, 1991; Hansen, 1995). Such ties form the entrepreneur's "social capital", or the sum of the actual and potential resources embedded within, available through, and derived from a relationship network (Greve and Salaff, 2003; Nahapiet and Ghoshal, 1998). Besides providing access to economic resources, social capital derived from this network is important because it can provide the entrepreneur access to useful, reliable, exclusive, and less redundant information, which, in turn, improves a venture's likelihood of success (Brüderl and Preisendorfer, 1998). In addition, social capital serves as both a product of the entrepreneurial network and an enabler of continued network development, facilitating coordination and co-operation of network ties by bonding the parties involved (Anderson and Jack, 2002).

Social capital has been taken to mean either the structure of network ties, the quality of exchange relationships, or both. These structural and relational views of social capital stem from Granovetter's (1992) discussion of social embeddedness types, which focuses on how the network architecture (e.g., centrality) of exchange relationships influences economic activity (Uzzi, 1997). Accordingly, the structural view of social capital is concerned with the overall pattern or configuration of ties between the entrepreneur and other individuals (Burt, 1992; Granovetter, 1973). In a purely structural view, a tie presumably provides both necessary and sufficient conditions for transferring information and resources that may aid in the venture's likelihood of success. Focusing purely on network structure, however, may inadequately explain how exchange relationships function by assuming that "a tie is a tie" (Uzzi and Gillespie, 2002).

In contrast, the relational view focuses more on information and resources leveraged from personal and direct relationships the entrepreneur has developed with others through a history of interactions (Granovetter, 1992). This view, thus, includes many aspects of the social context, such as social interactions and the degree of trust in the relationships (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998).

New ventures lacking these relationships generally face high mortality risks, a condition that entrepreneurship research has long referred to as the "liability of newness" (Stinchcombe, 1965). This liability arises, in part, from the difficulty in gaining trust and support from key resource providers, who perceive an "adverse selection" risk stemming from the venture's limited track record and lack of legitimacy (Akerlof, 1970; Singh et al., 1986). An entrepreneur who can successfully overcome this liability by convincing resource providers that a new venture is both viable

and legitimate will have a better chance of acquiring resources, and, in turn, increasing the venture's success chances. Thus, venture success may be predicated, in part, on an entrepreneur's ability to proactively accumulate social capital, and, in turn, assemble critical resources via a network of exchange relationships (Venkataraman and Van de Ven, 1998). For example, investors are more likely to invest in new ventures when they have a previously established direct tie to the entrepreneur than when they do not because these ties generate a sense of obligation and trust (Shane and Cable, 2002).

3. Importance of trust

We have invoked the concept of trust above in our discussion of entrepreneur's ability to use their networks to both derive social capital and overcome liability of newness issues. This follows logically considering that previous research has cited trust between partners as a critical element of network exchange that, when developed, enhances resource flows (Larson, 1992; Lorenzoni and Lipparini, 1999). When parties trust each other, they are more willing to engage in cooperative activity through which further trust may be generated (Fukuyama, 1995). Trust is, thus, "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 et al., 1995, p. 712). This definition applies particularly to the context of entrepreneurial network development in that it recognizes a new venture's inherent risk characteristics for both entrepreneurs and resource providers.

Specifically, early in venture's development, entrepreneurs often face high risks resulting from limited protection for their developing ideas. Resource providers also face risks from information asymmetry, and, in turn, adverse selection, arising from the entrepreneur's unwillingness or inability to fully communicate information about the new venture (Venkataraman, 1997). When trust exists, however, individuals are more willing to give useful knowledge, when possible, or forego complete knowledge (Tsai and Ghoshal, 1998). As Aldrich and Fiol (1994) noted, "trust is a critical first-level determinant of the success of founding entrepreneurs because, by definition, there is an absence of information and evidence regarding their new activity" (p. 650).

Although trust can be instrumental in reducing uncertainty, it would be unnecessary if exchange partners could undertake actions with complete rational prediction that totally removed risk (Lewis and Weigert, 1985). Because it is impossible to monitor every detail in most exchanges, however, entrepreneurs must always have a minimum trust level that often evolves as the partners interact (Das and Teng, 1998). Once established, these trust-dependent interactions reduce time spent on monitoring and bargaining over agreements (Dyer and Singh, 1998). Thus, without some level of trust in these circumstances, economic exchanges would fail. Indeed, when asked what protects young firms from exchange partner opportunism in the absence of contracts, entrepreneurs often use the word "trust" (Larson, 1992).

3.1. *Affective and cognitive trust*

In examining a new venture's exchange relationships, Larson (1992) found that trust centered around two dimensions: one consisting of a social relations aspect and the other encompassing an economic aspect. Larson's (1992) findings, thus, correspond with research that has differentiated trust dimensions according to whether they are rooted in human emotions or rationality (e.g., Luhmann, 1979). Scholars refer to the emotional, or social relations, side of trust as "affective" (McAllister, 1995), "benevolence" (Mayer et al., 1995), "identification-based" (Lewicki and Bunker, 1996), or "personal goodwill" trust (Hite, 2005). As the name implies, affective trust develops when individuals emotionally invest in relationships, resulting in genuine concern for a partner's welfare and a belief in the relationship's intrinsic virtue (McAllister, 1995). As such, affective trust resides at an interpersonal level (Lewis and Weigert, 1985).

In contrast, researchers often label the rational, or economic, dimension of trust as "cognitive" (Lewis and Weigert, 1985), "competence" (Mayer et al., 1995), "knowledge-based" (Lewicki and Bunker, 1996), or "social" trust (Hite, 2005). Cognitive trust occurs when a person makes a conscious decision to trust based upon the best knowledge he or she has (McAllister, 1995). When relationships are based on cognitive trust, individuals choose to trust based on evidence of trustworthiness (e.g., everything seems in proper order or the other party appears to possess required capabilities; Luhmann, 1979). Thus, cognitive trust tends to be high when repeated interactions allow parties to come to know, understand, and predict the routines and processes of the interaction (Hite, 2005). Similar to affective trust, cognitive trust can reside at an interpersonal level (e.g., between an entrepreneur and a banker); however, with repeated interactions, it can also develop at the institutional (i.e., organizational) level (e.g., between a new venture and a supplier organization; cf. Lewis and Weigert, 1985).

The two types of trust are not necessarily independent, because, for example, a certain amount of affective trust can also develop from repeated interactions. Neither are they mutually exclusive, because both are likely present at some level in every instance of trust (Lewis and Weigert, 1985). Research has shown, however, that each may be more or less salient in particular stages of a relationship (Lewicki and Bunker, 1996). We build on these findings below.

4. Trust in the entrepreneur's network development

Considerable research attention has focused on how entrepreneurs develop their new venture networks over time (see Hoang and Antoncic, 2003 for a recent review). This research suggests that network structure and exchange quality change as an entrepreneur searches for sufficient resources to ensure venture success (Dubini and Aldrich, 1991; Hite and Hesterly, 2001; Hite, 2005; Larson and Starr, 1993). This network will often vary from a stable tie of exchange partners, who maintain close social relationships, to exchanges that take place through loose collections of individuals, who maintain impersonal and constantly shifting (e.g., market) exchange ties (Powell, 1990).

Such exchanges can vary from being relationally embedded, strong ties to more arms-length, weak ties (Granovetter, 1973; Uzzi, 1997). Two particular models of entrepreneurial network development have provided insights into this process, and, as such, serve as the basis for our model development.

First, Larson and Starr's (1993) stage network model of organization formation explains how exchange relationship transform from a set of relatively simple dyadic exchanges into a dense set of stable, multidimensional interorganizational relationships. Certain relationship are selected, added, dropped, or allowed to evolve while the entrepreneur culls and grows the range of possible critical resource providers for a new venture (Larson and Starr, 1993). Specifically, the model details three stages of entrepreneurial networking activity used to secure critical economic and non-economic resources: 1) focusing on essential dyadic ties, 2) converting dyadic ties to socioeconomic exchanges, and 3) layering the exchange with multiple exchange processes. Often used as a basis for other network development research (e.g., Schutjens and Stam, 2003), the model has been referred to as "the most complete piece of theorizing about network processes in the entrepreneurial context" (Hoang and Antoncic, 2003, p. 179).

Second, we draw from the insights provided by Hite's (2003, 2005) studies on the evolutionary process of relationally embedded network ties in emerging entrepreneurial firms. Specifically, she posits that entrepreneurial firms evolve through three phases of relational ties: 1) personal, 2) dyadic economic interaction, and 3) social.

4.1. *Personal and essential dyadic exchanges*

As a first step toward building an effective new venture network, aspiring entrepreneurs evaluate and map their current network ties (Low and MacMillan, 1988). During this process, the entrepreneur erects a narrow network of strong ties from previously established relationships (Steier and Greenwood, 1999). Entrepreneurs may first explore the possibility of starting their own business within a small circle of close contacts (Greve and Salaff, 2003), and often turn first to family and friends for necessary resources (Birley, 1985; Larson, 1992). For example, Jack (2005) found that as strong ties, family members were instrumental in helping entrepreneurs recognize potential opportunities and providing continuing support. Even when these informal network participants are less informed about a new venture's potential, they are more likely to be accessible and give advice based on their strong ties with the entrepreneur (Baier, 1986; Steier and Greenwood, 1999). A history of engaging in social activities and interactions means that the parties involved are aware of each other's needs and interests (Hite, 2003). In addition, such ties are more likely to expend effort to ensure that the entrepreneur sufficiently understands and can put into use newly acquired knowledge (Krackhardt, 1992). The social support of these strong ties results mainly from high frequency of contact, strong emotional intensity, high intimacy, and mutual confiding associated with the frequent interactions (Granovetter, 1973).

At this early stage of new venture network development, the entrepreneur has determined who will receive relative degrees

of trust, based on a history of past dealings inside or outside of a business setting. As such, the entrepreneur’s network has been culled to consist primarily of strong ties that the entrepreneur can trust. By their nature, these relationships will be based on high trust levels and provide more emotional support than weaker ties (Tsai and Ghoshal, 1998; Levin and Cross, 2004). The trust that exists in this stage will be primarily based on an affective aspect, which is typically high in primary group relations, such as with family and friends (Lewis and Weigert, 1985). Accordingly, we expect that during this first stage, on average, an entrepreneur will rely more heavily on relationships based on affective rather than cognitive trust to secure resources. This suggests the following proposition (see Fig. 1):

Proposition 1. *Entrepreneur venture networks in the stage of forming personal and essential dyadic exchanges will exhibit greater reliance on relationships based on affective than cognitive trust.*

4.2. Dyadic socioeconomic exchanges

As entrepreneurs continue to cull and grow their respective networks over time, they often shift from depending on ties based primarily on affective or social support, and begin to use their limited exchange relationships as vehicles for new venture growth (Birley, 1985). Incorporating social exchange theory (Homans, 1958), a type of “social contracting” develops whereby the entrepreneur implicitly trades needed resources for social commitments, usually in the form of favors and obligations (Starr and MacMillan, 1990). The relationship, thus, involves increasingly interweaving social and business exchanges as the parties build, test, and refine a complex social and economic contract seeking mutual economic advantage (Larson and Starr, 1993). Once economic interaction is established, the dyadic interactions of the ties will increase over time, facilitating additional interaction, which, in turn, will result in increased interaction ease and quality (Hite, 2005).

In addition to the changing interaction content and quality among preexisting ties, a network structure that can most

effectively provide critical resources to the new venture may also evolve. As the entrepreneur’s primary group of family and friends gains more knowledge about the new venture, and as the entrepreneur proactively expands his or her network, an increasing number of secondary group ties (e.g., bankers, lawyers, and accountants) may enter the venture network. Thus, network structure will often evolve to include an increasing number of weak ties that are more arms-length or market-like than socially embedded (Larson and Starr, 1993; Hite, 2003, 2005.) These weak ties benefit the entrepreneur because they are more likely than strong ties to provide nonredundant information, such as the most effective means for economic support and market outlets (Brüderl and Preisendorfer, 1998; Burt, 1992; Granovetter, 1973).

Increasing familiarity between network ties in this stage of network development will also increasingly breed trust (Gulati, 1995), assuming exchange partners refrain from activities that abuse trust. At this stage, however, trust is more likely to be primarily cognitive in nature, which develops as partner competency becomes known and exchange relationships crystallize (Hite, 2005). This trust will reduce the uncertainty that repayment will take place in the future, paving the way for exchanges to move from arms-length relations to close collaborative exchanges (Larson, 1992), facilitating the acquisition of critical resources needed for the new venture. Previous research has found that these exchanges built on cognitive trust will also develop some affective component based on continuing positive interactions (McAllister, 1995; Hite, 2005), which when combined with previous affect-based trust relationships from the first stage, suggests the following proposition:

Proposition 2. *Entrepreneur venture networks in the stage of dyadic socioeconomic exchanges will exhibit similar reliance on relationships based on cognitive and affective trust.*

4.3. Organizational exchanges

Additional transformation in exchange relationships takes place as the venture moves from emergence to early growth.

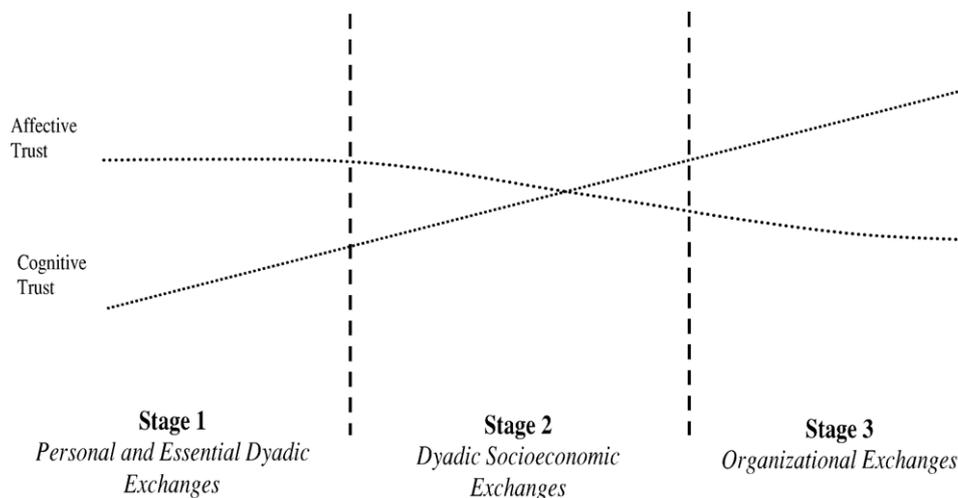


Fig. 1. A stage model of cognitive and affective trust within entrepreneurial venture networks.

Ties between the entrepreneur and the set of essential firm relationships are less likely to be solely interpersonal, and the exchange processes are no longer necessarily attached to particular individuals, but rather based on repeated institutional level exchange cycles between organizations seeking economic gain (Katz and Gartner, 1988). These ties will support the new venture's activity by becoming resource suppliers, business generators, market expanders, and reputation enhancers (Jack, 2005). In addition, the proportion of socially based ties within the network may decrease as the entrepreneur continues to seek social capital needed to increase the new venture's likelihood of success (Hite, 2003, 2005; Hite and Hesterly, 2001; Larson and Star, 1993). Therefore, the network's structure should consist of an even higher number of weak, rather than strong, ties. Empirical support for this transition is provided by research examining the evolution of young firm networks which found that upstream (e.g., suppliers) contacts shifted from a social to economic basis over time (Schutjens and Stam, 2003).

In this stage, the formal organization created from the new venture, rather than the individual entrepreneur, per se, starts to specify and form the boundaries for trust relationships with critical resource providers (Baier, 1986). Cognitive trust further develops as the network structure evolves to include more weak ties, whose history of arms-length transactions increases the knowledge of the parties' competencies and provides evidence of trustworthiness. As a result, the entrepreneur will rely less on relationships based on affective trust as the structure of the exchange dyads shifts in emphasis from personal, strong ties to more organizational, weak ties. It is worth noting, however, that these organizational exchanges still exist within a social context, lending to the notion that an affective element of trust is still a necessary condition (Lewis and Weigert, 1985). This suggests the following proposition:

Proposition 3. *Entrepreneur venture networks in the stage of organizational exchanges will exhibit greater reliance on relationships based on cognitive than affective trust.*

4.4. An illustrative example

As noted, we focus in the present paper on average trust levels across all an entrepreneur's network within a particular stage. The following example highlights this focus by employing two potential resource providers, an entrepreneur's fellow MBA classmate and banker, representing an informal and formal network contact, respectively (Birley, 1985). Although the example is based on hypothetical values that require empirical validation, it illustrates, based on the present model, how different trust dimensions should vary in importance during the entrepreneurial network development process (see Fig. 2).

As shown in the figure, we posit that during a venture's initial formation, an entrepreneur will rely more heavily on the preexisting strong ties, and the resulting high affective trust, with a classmate to gain resources than from weaker ties, such as with a banker. The former would be more likely to provide critical inputs (e.g., start-up capital) on favorable terms at this stage whereas a banker would be less or even unwilling to do so based on the venture's limited track record. Next, the entrepreneur's social capital increases through the second stage as the venture demonstrates reliable behavior over time and initial contacts between the banker and the entrepreneur become repeated interactions allowing weak ties to come to know, understand, and predict interaction routines and processes. As a result, the banker should begin to develop cognitive trust in the entrepreneur, and, in turn, be more likely to provide critical resources to supplement those derived from an entrepreneur's affective-based relationship with a classmate. By the third stage,

	Stage I <i>Personal and Essential Dyadic Exchanges</i>	Stage II <i>Dyadic Socioeconomic Exchanges</i>	Stage III <i>Organizational Exchanges</i>
Fellow MBA Classmate	<i>Affective Trust Reliance = 9</i> Listens and gives advice, strong emotional tie and social support	<i>Affective Trust Reliance = 4</i> Same emotional tie except less reliance on social support	<i>Affective Trust Reliance = 3</i> Organizational context make exchanges less common
	<i>Cognitive Trust Reliance = 2</i> Provides very little economic utility	<i>Cognitive Trust Reliance = 2</i> Potential for economic utility has not changed	<i>Cognitive Trust Reliance = 2</i> Potential for economic utility has not changed
Banker	<i>Affective Trust Reliance = 1</i> Not socially embedded, weak tie	<i>Affective Trust Reliance = 4</i> Repeated positive interactions creates an affective element	<i>Affective Trust Reliance = 4</i> Organizational level exchanges mitigate affective component
	<i>Cognitive Trust Reliance = 2</i> Position leads to rational reasons to trust; economic utility somewhat limited	<i>Cognitive Trust Reliance = 6</i> Greater economic utility, repeated interactions create additional reason to trust	<i>Cognitive Trust Reliance = 9</i> Market-like exchanges, development of implied contracts
Total	<i>Affective Trust Reliance = 10</i> <i>Cognitive Trust Reliance = 4</i>	<i>Affective Trust Reliance = 8</i> <i>Cognitive Trust Reliance = 8</i>	<i>Affective Trust Reliance = 7</i> <i>Cognitive Trust Reliance = 11</i>

Fig. 2. The entrepreneur's reliance on different resource providers across network development stages.

repeated, arms-length transactions become the norm and the liability of newness declines as the banker develops increasing cognitive trust in the venture.

5. Model implications

Entrepreneurship research, in general, investigates the intersection of the individual entrepreneur and an entrepreneurial opportunity (Shane and Venkataraman, 2000). In examining how trust facilitates this process, we employ a contemporary view of trust, which assumes that individual actors can take an active role in developing trust, rather than a more traditional view, which implicitly assumes that trust develops as a more passive outcome resulting from on-going interactions between partners (Williams, 2007). This deliberate action view also coincides with the dominant view in entrepreneurship research characterizing the entrepreneur as exercising strategic choice in many aspects of new venture formation (Lumpkin and Dess, 1996).

As noted, like social capital, trust can both enable and facilitate exchange relationships. In this sense, it is the “grease” that starts the wheels rolling and keeps them moving. Viewed thusly, our model has several important implications, especially if one subscribes to the notion that “good” entrepreneurs proactively develop their exchange relationships so as to acquire social capital and overcome liability of newness issues. Practical implications also exist for resource providers forming exchange relationships with entrepreneurs.

First, given the nature of entrepreneurial endeavors, our model posits that entrepreneurs will initially depend on higher affective trust levels with exchange partners than might be necessary in an established organization. However, as they develop their venture network over time to a point characteristic of organizational exchange, they should rely less on relationships rooted in affective trust and begin relying more on ones based on cognitive trust. Indeed, those who hang on to relationships based primarily on the former might actually stifle both their network development and creation of much needed social capital. Thus, the entrepreneurs who can best develop and proactively build cognitive trust with critical resource providers should have a higher success rate and more quickly overcome any liability of newness issues.

Second, although affective and cognitive trust are somewhat interconnected, different ways exist to build each type of trust. For example, affective trust stems from an entrepreneur forming emotional bonds that require genuine care and concern for exchange partners’ welfare and a belief in a relationship’s intrinsic virtues. Thus, understandably, based on these prerequisites, one can suggest that a concerted effort to build affective trust would be difficult, to say the least. In contrast, cognitive trust requires that the entrepreneur make a conscious decision to trust based upon the best knowledge he or she has. In this case, the entrepreneur can choose to trust based on evidence of trustworthiness, such as whether he or she can rely on the other party’s capabilities. Therefore, the entrepreneur who can best develop and build cognitive trust with critical resource providers is one who makes a conscience effort to trust, acquires knowledge about the exchange partner, and actively engages in exchange relationships.

Third, resource providers vying even for arms-length exchange relationships with entrepreneurs early in the new venture networking process will benefit from ensuring their economic transactions are considered fair and equitable, especially considering that cognitive based trust may be susceptible to break downs or repeated abuses when expectations of avaricious actions result in distrust (Uzzi, 1999). By doing so, resource providers can lay the foundation for the cognitive trust that will enable and facilitate continued economic exchange. These same resource providers should be aware, however, that affective trust is a necessary criterion for economic exchange, especially in the early stages of the entrepreneur’s network development (Larson, 1992). Although building affective trust will be a difficult task, resource providers may benefit from recognizing and utilizing individuals that already maintain close ties with the entrepreneur, such as family and friends. For instance, the banker in the illustrative example might find it beneficial to communicate his or her value to the MBA classmate, who already has a relationship based on affective trust with the entrepreneur. This line of thinking coincides with previous research suggesting that the majority of ties enter the entrepreneur’s network based on personal relationships (Hite, 2005; Hite and Hesterly, 2001). Taken together, our model reaffirms the notion that the entrepreneur and those that engage in exchanges with the entrepreneur must recognize trust as a social asset (Starr and MacMillan, 1990).

6. Limitations

Although our model incorporates trust issues into network research, two possible limitations should be noted. First, the evolution of affective and cognitive trust during the entrepreneur’s network development is likely to be recursive, rather than linear as our model suggests. That is, the structural changes in ties as the process progresses will create varying reliance on relationships based on affective and cognitive trust relationships. As noted in previous trust research, however, it is often useful to employ a linear approximation of the process when initially deriving research propositions (Boersma et al., 2003). Discovering the exact recursive or interactive nature of trust and new venture network development will require empirical studies employing longitudinal research designs given that extant research suggests that this process may evolve over months or even years (Steier and Greenwood, 1999).

Second, in our particular context of new venture network development, the strength and type of network ties reflect a structural and relational variable of interest, respectively. By only paying attention to these variables, however, we implicitly downplay other network characteristics (e.g., centrality) that could interact with trust, and, thus, affect the entrepreneur’s ability to generate social capital and overcome liability of newness issues. We view incorporating these latter characteristics as a significant opportunity for future research attempting to understand the interactive role that trust plays in the entrepreneur’s new venture network. We discuss other potential future research avenues next.

7. Future research avenues

By incorporating the trust literature into network research, we have attempted to contribute to entrepreneurship research by shedding light on what has been consistently identified as a salient issue but, as yet, has received little theoretical development. The model and propositions we developed, thus, can serve to guide future empirical investigations into the critical role trust plays in an entrepreneur's network development process.

Beyond its general insights for entrepreneurship research, the model also suggests at least three future research avenues. First, one overriding theme in developing our model involved how entrepreneurs overcome a lack of trust, and, in turn, a new venture's liability of newness (Stinchcombe, 1965). One extension to our general discussion could be to investigate how this liability, and, thus, the need for both cognitive and affective trust, may vary across different contexts. For example, Gounaris (2005) studied how firms targeting businesses rather than consumers as their primary customers (B2B versus B2C firms) built trusting relationships through mechanisms such as service quality. In addition, Morse et al. (2007) posited that new ventures employing e-commerce may be able to build potential resource providers' trust by virtually embedding themselves in critical on-line networks. Thus, these and other contexts may provide fruitful avenues for investigating the current model's propositions.

Second, we model trust building as a complete process with the importance of cognitive and affective trust varying over time. One intriguing research question would be what happens to external resource provider's trust levels in an entrepreneur if a negative outcome (e.g., venture bankruptcy) interrupts the process, particularly if it is the entrepreneur's first attempt at new venture formation. Extant trust research suggests that the circumstances surrounding the interruption could critically impact current and future trust in the entrepreneur. For example, if the negative outcome resulted from factors largely outside (e.g., economic recession or adverse legislation) rather than those within (e.g., an entrepreneur's deliberate action or incompetence) an entrepreneur's control, we posit that external resource providers would be more forgiving, which, in turn, should reduce the deleterious impact the event has on their trust in the entrepreneur (cf. Williams, 2007).

Third, extant trust research informs us that individuals may vary in their initial disposition to trust in new relationships (McKnight et al., 1998); thus, the starting point of an entrepreneur's trust towards resource providers may vary. Having a high general disposition to trust, however, could actually produce some negative effects. For example, Yli-Renko et al. (2001) found that relationship quality, as characterized by levels of trust, was negatively related to knowledge acquisition. In such cases, the relationship between the entrepreneur and resource providers may suffer from "overembeddedness" when concentrated exchanges with only a few network partners result in redundant information and decreased social capital (Uzzi, 1997). This issue of "overtrust" suggests that some distrust may be functional in complex economic exchanges in that it dictates a course of action based on suspicion, monitoring, and activation of

safeguards (Barber, 1983). Specifically, excessively high levels of trust may act to stifle effective economic action if the social aspect of exchange supersedes the economic action (Zahra et al., 2006). Future research, thus, should investigate at what levels too much trust hinders the development of new venture networks and the creation of social capital, and if these levels differ depending on affective versus cognitive based trust (cf. Goel and Karri, 2006).

8. Conclusion

The study of entrepreneurial networks has emerged as an important area of inquiry within the conceptual domain of entrepreneurship. A majority of network-based research has noted the importance of both social and economic contexts of the new venture creation process, and within these contexts, trust has been consistently identified as an essential component to this process. Despite its intrinsic importance, little research, to date, has directly examined the role of trust in the entrepreneurial network development process. To provide insights into this process, we presented a model illustrating how the reliance of both affective and cognitive trust varies as the entrepreneur moves through the network development process. We have also suggested various future research avenues that we hope will lead to a better understanding of the role trust plays in an entrepreneur's network development process.

References

- Akerlof G. The market for 'lemons': quality uncertainty and the market mechanism. *Q J Econ* 1970;84:488–500.
- Aldrich H, Fiol C. Fools rush in? The institutional context of industry creation. *Acad Manage Rev* 1994;19:645–70.
- Aldrich H, Zimmer C. Entrepreneurship through social networks. In: Sexton D, editor. *The art and science of entrepreneurship*. Cambridge, MA: Ballinger; 1986. p. 3–32.
- Anderson A, Jack S. The articulation of social capital in entrepreneurial networks: A glue or a lubricant? *Entrep Reg Dev* 2002;14:193–210.
- Baier A. Trust and antitrust. *Ethics* 1986;96:231–60.
- Barber B. *The logics and limits to trust*. New Brunswick: Rutgers University Press; 1983.
- Birley S. The role of networks in the entrepreneurial process. *J Bus Venturing* 1985;1:107–17.
- Boersma M, Buckley P, Ghauri P. Trust in international joint venture relationships. *J Bus Res* 2003;56:1031–42.
- Brüderl J, Preisendorfer P. Network support and the success of newly founded businesses. *Small Bus Econ* 1998;10:213–25.
- Burt R. *Structural holes*. Cambridge, MA: Harvard University Press; 1992.
- Das T, Teng B. Between trust and control: developing confidence in partner cooperation in alliances. *Acad Manage Rev* 1998;23:491–512.
- Dubini P, Aldrich H. Personal and extended networks are central to the entrepreneurial process. *J Bus Venturing* 1991;6:305–13.
- Dyer J, Singh H. The relational view: cooperative strategy and sources of inter-organizational competitive advantage. *Acad Manage Rev* 1998;23:660–79.
- Fukuyama F. *Trust: social virtues and the creation of prosperity*. New York: Free Press; 1995.
- Goel S, Karri R. Entrepreneurs, effectual logic, and over-trust. *Entrep Theory Pract* 2006;30:477–93.
- Gounaris S. Trust and commitment influences on customer retention: insights from business-to-business services. *J Bus Res* 2005;58:126–40.
- Granovetter M. Strength of weak ties. *Am J Sociol* 1973;78(6):1360–80.
- Granovetter M. Problems of explanation in economic sociology. In: Nohria N, Eccles R, editors. *Networks and organizations: structure, form, and action*. Boston: Harvard Business School Press; 1992. p. 25–56.

- Greve A, Salaff J. Social networks and entrepreneurship. *Entrep Theory Pract* 2003;28(1):1–22.
- Gulati R. Does familiarity breed trust? The implications of repeated ties for contractual choices in alliances. *Acad Manage J* 1995;38:85–112.
- Hansen E. Entrepreneurial networks and new organization growth. *Entrep Theory Pract* 1995;19(4):7–19.
- Hite J. Patterns of multidimensionality among embedded network ties: a typology of relational embeddedness in emerging entrepreneurial firms. *Strat Org* 2003;1:9–49.
- Hite J. Evolutionary processes and paths of relationally embedded network ties in emerging entrepreneurial firms. *Entrep Theory Pract* 2005;29:113–44.
- Hite J, Hesterly W. The evolution of firm networks: from emergence to early growth of the firm. *Strateg Manage J* 2001;22(3):275–86.
- Hoang H, Antoncic B. Network-based research in entrepreneurship: a critical review. *J Bus Venturing* 2003;18(2):165–87.
- Homans G. Social behavior as exchange. *Am J Sociol* 1958;62:597–606.
- Jack S. The role, use and activation of strong and weak network ties: a qualitative analysis. *J Manag Stud* 2005;42:1233–59.
- Katz J, Gartner W. Properties of emerging organizations. *Acad Manage Rev* 1988;13:429–41.
- Krackhardt D. The strength of strong ties: the importance of philos in organization. In: Nohria N, Eccles R, editors. *Networks and organizations: structure, firm, and action*. Boston: Harvard Business School Press; 1992. p. 216–39.
- Larson A. Network dyads in entrepreneurial settings: a study of the governance of exchange relationships. *Adm Sci Q* 1992;37(1):76–104.
- Larson A, Starr J. A network model of organization formation. *Entrep Theory Pract* 1993;17(2):5–15.
- Levin D, Cross R. The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer. *Manage Sci* 2004;50:1477–90.
- Lewicki R, Bunker B. Developing and maintaining trust in work relationships. In: Kramer R, Tyler T, editors. *Trust in organizations: frontiers of theory and research*. Newbury Park, CA: Sage; 1996. p. 114–39.
- Lewis J, Weigert A. Trust as a social reality. *Soc Forces* 1985;63:967–85.
- Lorenzoni G, Lipparini A. The leveraging of interfirm relationships as a distinctive organizational capability: a longitudinal study. *Strateg Manag J* 1999;20:317–38.
- Low M, MacMillan I. Entrepreneurship: past research and future challenges. *J Manage* 1988;14:139–61.
- Luhmann N. *Trust and power*. New York: Wiley; 1979.
- Lumpkin G, Dess G. Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad Manage Rev* 1996;21:135–72.
- Mayer R, Davis J, Schoorman F. An integrative model of organizational trust. *Acad Manage Rev* 1995;20:709–34.
- McAllister D. Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Acad Manage J* 1995;38:24–59.
- McKnight D, Cummings L, Chervany N. Initial trust formation in new organizational relationships. *Acad Manage Rev* 1998;23:473–90.
- Morse E, Fowler S, Lawrence T. The impact of virtual embeddedness on new venture survival: Overcoming the liability of newness. *Entrep Theory Pract* 2007;31:139–59.
- Nahapiet J, Ghoshal S. Social capital, intellectual capital, and the organizational advantage. *Acad Manage Rev* 1998;23:242–66.
- Powell W. Neither market nor hierarchy: network forms of organization. In: Staw B, Cummings L, editors. *Res in organ beh*. Greenwich, CT: JAI; 1990. p. 295–336.
- Ritter T, Gemünden H. Interorganizational relationships and networks: an overview. *J Bus Res* 2003;56:691–7.
- Schutjens V, Stam E. The evolution and nature of young firm networks: a longitudinal perspective. *Small Bus Econ* 2003;21(2):115–34.
- Shane S, Cable D. Network ties, reputation, and the financing of new ventures. *Manage Sci* 2002;48:364–81.
- Shane S, Venkataraman S. The promise of entrepreneurship as a field of research. *Acad Manage Rev* 2000;25:217–42.
- Singh J, Tucker D, House R. Organizational legitimacy and the liability of newness. *Adm Sci Q* 1986;31:171–93.
- Starr J, MacMillan I. Resource cooptation via social contracting: resource acquisition strategies for new ventures. *Strateg Manag J* 1990;11:79–92.
- Steier L, Greenwood R. Newly created firms and informal angel investors: a four-stage model of network development. *Venture Cap.* 1999;1(2):147–67.
- Stinchcombe A. Social structures of organizations. In: March J, editor. *Handbook of organizations*. Chicago, IL: Rand McNally; 1965. p. 153–93.
- Tsai W, Ghoshal S. Social capital and value creation: the role of intrafirm networks. *Acad Manage J* 1998;41:464–76.
- Uzzi B. Social structure and competition in interfirm networks: the paradox of embeddedness. *Adm Sci Q* 1997;42:35–67.
- Uzzi B. Embeddedness in the making of financial capital: how social relations and networks benefit firms seeking financing. *Am Sociol Rev* 1999;64:481–505.
- Uzzi B, Gillespie J. Knowledge spillover in corporate financing networks: embeddedness and the firm's debt performance. *Strateg Manag J* 2002;23:595–618.
- Venkataraman S. The distinctive domain of entrepreneurship research: an editor's perspective. In: Katz J, Brockhaus R, editors. *Advances in entrepreneurship, firm emergence, and growth*, vol. 3. Greenwich, CT: JAI Press; 1997. p. 119–38.
- Venkataraman S, Van de Ven A. Hostile environmental jolts, transaction set, and new business. *J Bus Venturing* 1998;13(3):231–55.
- Williams M. Building genuine trust through interpersonal emotion management: a threat regulation model of trust and collaboration across boundaries. *Acad Manage Rev* 2007;32:595–621.
- Yli-Renko H, Autio E, Sapienza H. Social capital, knowledge acquisitions, and knowledge exploitation in young technology-based firms. *Strateg Manag J* 2001;2:587–613.
- Zahra S, Yavuz I, Ucbasaran D. How much do you trust me? The dark side of relational trust in new business creation in established companies. *Entrep Theory Pract* 2006;30:541–59.