DEVELOPING RELATIONAL CAPITAL IN TEAM-BASED NEW VENTURES

by

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To My Parents, Julia and Hillel Gauchman

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ABSTRACT

This dissertation develops and tests a theory of how entrepreneurial teams develop relational capital – or relationships characterized by trust, identification, and obligations – and the impact of this relational capital on the teams' performance. I begin by identifying the challenges to relational capital development posed by the lack of social structure in the new venture context. I identify the gap in our understanding of the mechanisms through which entrepreneurial teams develop relational capital. Study 1 is a longitudinal qualitative study of relationships in entrepreneurial teams in new technology ventures. Findings suggest that teams in which members cared about each other and cared about preserving the relationship were characterized by higher-quality relationships than team that did not exhibit such caring. However, the findings also suggested that caring was not enough. Teams that supplemented caring with systematic communication practices that increased explicitness and transparency about goals and actions were better able to preserve the quality of their relationships in light of the challenges they faced as a new venture. Based on the findings of this qualitative study and building on research on interpersonal and inter-organizational relationships, I develop a theoretical framework for relational capital development and the impact of relational capital on performance. Specifically, I argue that the combination of communal relational schemas – caring about team members' needs – and contracting practices – the process of making expectations

explicit and transparent – enable entrepreneurial teams to develop trust, identification, and obligations. These forms of relational capital are hypothesized to increase creativity, resilience, and coordination in entrepreneurial teams. I test my hypotheses with a mail survey of high-technology entrepreneurial teams. The findings suggest that communal relational schemas and contracting practices both are positively associated with trust and obligations on the team and have no relationship with identification with the team. Trust and obligations were also found to be positively associated with creativity, resilience and coordination. Trust and obligations partially mediated the relationships between communal relational schemas and contracting practices on creativity, resilience, and coordination.

The two studies in the dissertation contribute to the entrepreneurship literature by offering the apparently paradoxical combination of communal schemas and contracting practices as a means through which entrepreneurs can overcome the unique challenges associated with the new venture context. Specifically, by structuring their relationships through both communal schemas and contracting practices, entrepreneurs can compensate for their lack of an existing social structure. By highlighting communal schemas, it challenges prevalent portrayals of entrepreneurs as individualistic and self-interested. By incorporating contracting, the present perspective challenges the notion that formalizing commitments hurts entrepreneurs' ability to be agile and adaptive. As such, it has important implications for how entrepreneurial teams go about thinking about their relationships as well as the particular practices they adopt for facilitating their success.

CHAPTER I INTRODUCTION

"Forming a new company is like starting a romantic relationship. The early phase is emotionally volatile. You have to build confidence, establish a sense of fairness and balance. If one person feels he is investing more of his feelings, without reciprocation, the situation can quickly get out of hand, resulting in stormy mood swings ultimately leading to disaster. Continual contact and reassurance are essential" (Kaplan, 1994: 19)."

Most new ventures are started by entrepreneurial teams (Ruef, Aldrich, & Carter, 2003). In high-technology industries, the prevalence of team-based new ventures can be as high as 70% (Francis & Sandberg, 2000). Teams can better handle the complexity inherent in today's increasingly global, competitive, and knowledge-based economy (Birley & Stockley, 2000; Kamm, Shuman, Seeger, & Nurick, 1990). Yet, not all team-based new ventures reap the benefits of the variety in skills, knowledge, resources, and networks of their members. The nature of the relationships between the team members, their relational capital, affects their ability to mobilize these potential sources of advantages to shape a viable future for the new venture. Studies have shown that the quality of entrepreneurial team relationships positively influence both objective performance (e.g., Chowdhury, 2005; Ensley & Pearce, 2001; Ensley, Pearson, & Amason, 2002) and perceived performance (e.g., Watson, Stewart, & BarNir, 2003; Watson, Pontheiu, & Critelli, 1995; West, 2007).

Compared to teams within organizations, entrepreneurial teams face unique challenges that render relational capital more difficult to develop (Stinchcombe, 1965).

For the most part our knowledge about how entrepreneurial teams develop relational capital is limited. Current research on entrepreneurial teams focusing on prior ties and demographic homogeneity has offered insight on possible structural antecedents to relational capital. However, it has only implicitly addressed the cognitive and behavioral underpinnings through which relational capital develops. Moreover, it has produced mixed empirical findings. The goal of this dissertation is to address this gap in our understanding. It presents a mid-range theory of how team-based new ventures develop relational capital in light of their unique challenges and the implications of this relational capital for their performance.

As with all mid-range theories, the proposed framework is applicable under particular assumptions. The first assumption is that the new venture is team-based: a group of two or more individuals with an equity stake in the new venture that is involved in its creation and management (Forbes, Borchert, Zellmer-Bruhn, & Sapienza, 2006). Though I use "team" to be consistent with previous research in entrepreneurship (e.g., Birley & Stockley, 2000; Ensley et al., 2002; Kamm et al., 1990; West, 2007), my use is aligned with Hambrick's (1994) use of the term "group" and does not necessarily connote integration, cohesion, or a strong group identity. The second assumption is that the new venture is a startup, a time period that spans from initiation, when the entrepreneurs decide to form a business venture, to takeoff, the time when the new venture can operate without the external support of its initiators. The new venture draws its resources, competencies, and technology from the entrepreneurial team and external sources (Van de Ven, Angle, & Poole, 1989). In this phase, the primary focus of the entrepreneurial team is on organization creation, resource acquisition, and technology development,

rather than on the activities involved in the growth, maintenance, or change of established organizations (Gartner, 1993; Kazanjian, 1988). The third assumption is that the new venture is knowledge-based, which means that it develops and markets new products or services based upon proprietary technology or skills (Heirman & Clarysse, 2004; Talaulicar, Grundei, & Werder, 2005). Compared to manufacturing, retail, or other low-technology industries, knowledge-based new ventures face greater ambiguity, as knowledge work is relatively non-programmable (Schultze, 2000).

In Chapter II, I present an overview of the importance of relational capital for entrepreneurial teams and the unique challenges to relational capital development posed by the new venture context. I also review existing literature on relational capital development in entrepreneurial teams and identify the gap I seek to fill. In Chapter III, I present Study 1, a longitudinal qualitative study of 27 entrepreneurs exploring the mechanisms through which entrepreneurs create and leverage relational capital in their entrepreneurial teams and the role of previous ties in this process. Chapter IV presents a theory of relational capital development based on combining communal schemas and contracting practices and their effect on team performance. Chapter V presents Study 2, which tests the hypotheses developed in Chapter IV. Chapter VI offers a discussion of contributions and directions for future research.

CHAPTER II REVIEW OF LITERATURE ON RELATIONAL CAPITAL AND ENTREPRENEURIAL TEAMS

Researchers have shown an increasing interest in how teams can impact new venture performance (e.g., Chowdhury, 2005; Ensley & Pearce, 2001; Ensley et al., 2002; Watson et al., 2003; Watson et al., 1995; West, 2007). This research suggests that the nature of the relationships between the team members, or their relational capital, matters. For example, Chowdhury (2005) found that team processes explained 44% of sales growth beyond control variables such as the demographic heterogeneity of the team.

WHAT IS RELATIONAL CAPITAL?

Relational capital (also referred to as relational embeddedness) entails the assets that are created and leveraged through relationships, such as trust and goodwill (Granovetter, 1992; Nahapiet & Ghoshal, 1998). It is a form of social capital in that relationships are a resource for attaining individual and collective goals (Nahapiet & Ghoshal, 1998). Whereas relational capital is about the nature or quality of the relationship, the structural dimension of social capital (or structural embeddedness) deals with the extent to which actions and outcomes are influenced by the overall network of relations. It concerns the value of the position an actor occupies in the network, and therefore focuses on the system as a whole (Granovetter, 1992; Nahapiet & Ghoshal, 1998).

Relational capital can compensate for low levels of structural social capital. For example, those without advantageous network configurations can attain desired outcomes by strengthening the quality of certain relationships (e.g., Westphal & Stern, 2006).

Likewise, the absence of relational capital can be detrimental even if people have high levels of structural social capital. Maurer and Ebers (2006) discuss examples of entrepreneurial biotechnology firms whose performance suffered because founders were unable to adapt their relational capital to their changing task environments. In the less successful firms, founders maintained strong relationships with their scientist peers rather than strengthening their relational capital with other members of their networks, such as venture capitalists. Thus two founders can have similar network configurations, but based on differences in the nature of their relational capital, their performance outcomes differ. Like other social capital constructs, the relational capital of the dyads that compose the team generalize to the team level, such that relational capital becomes a property of the collective (Adler & Kwon, 2002; Coleman, 1988).

REVIEW OF THREE FORMS OF RELATIONAL CAPITAL AND THEIR BENEFITS IN ENTREPRENEURIAL TEAMS

In this dissertation I focus on three forms of relational capital that are particularly beneficial for the quality of entrepreneurial team's processes: trust, identification, and obligations. In their seminal paper, Nahapiet and Ghoshal (1998) identified four types of relational capital – trust, identification, obligations, and norms. I only focuses on the first three types of relational capital. Norms are socially defined guidelines about appropriate and inappropriate actions that represent a degree of consensus in the social system (Nahapiet & Ghoshal, 1998). They are structural characteristics that are independent of any particular member of the group and develop gradually (Hackman, 1992). As

elaborated in a later section, new ventures lack a social structure and are thus unlikely to form such a consensus until they become more established. The norms that influence entrepreneurial team members are more likely to be professional or occupational rather than organizational (Maurer & Ebers, 2006).

Trust involves accepting vulnerability based upon positive expectations of the intentions or behavior of another (Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Trust is seen as a component of both cohesion, or the degree of attraction between entrepreneurial team members (Ensley et al., 2002), and commitment, or loyalty to the entrepreneurial team (Chowdhury, 2005). Trust is an asset in entrepreneurial relationships in that it increases entrepreneurs' propensity to share information, which means that the team can mobilize its resources, such as time, effort, attention, and knowledge more effectively (McEvily, Perrone, & Zaheer, 2003). Trust also increases the likelihood that entrepreneurs respond favorably to each others' actions, reducing detrimental emotional conflict on the team (Dirks & Ferrin, 2001; Ensley et al., 2002). Trust creates a safe environment for team members to express differences of opinions without the conflict becoming emotional or personal (Ensley & Pearce, 2001). Indeed, studies have found that trust can mitigate the negative effects of differences of opinion in entrepreneurial teams (Talaulicar et al., 2005) and is associated with new venture sales growth (Chowdhury, 2005; Ensley et al., 2002).

The second form of relational capital is identification, the extent to which individuals see themselves as one with the team and incorporate it in their self-concept (Pratt, 1998). Identification is an asset on the team as it increases cooperation,

coordination, and helping (Dutton, Dukerich, & Harquail, 1994; Tyler, 1999). It also leads people to consider the needs of the group when making decisions (Simon, 1976).

Finally, felt obligations entail team members' commitment to perform certain activities in the future (Nahapiet & Ghoshal, 1998). Obligations facilitate the performance of entrepreneurial teams by creating a sense among entrepreneurial team members that they can rely on each other (Nahapiet & Ghoshal, 1998). Moreover, felt obligations increase the self-control and proactivity exhibited by team members (Grant & Ashford, 2007). In contrast, a low sense of obligations on the team may distract individuals from task performance, as concerns about lack of accountability prompt team members to check up on each other. Indeed, obligations have been found to facilitate entrepreneurial team performance by mitigating uncertainty about whether team members will perform according to expectations (McGrath, MacMillan, & Venkataraman, 1995). As a result, entrepreneurial teams with obligations benefit from the knowledge and abilities of their members.

WHAT HELPS RELATIONAL CAPITAL FORMATION?

Research suggests that social structure and the organizational setting facilitates relational capital development in organizational teams. As argued below, these antecedents of relational capital are largely unavailable to entrepreneurial teams.

Moreover, current research on the antecedents of relational capital in entrepreneurial teams is inconclusive, leaving many unanswered questions about the mechanisms through which relational capital develops in entrepreneurial teams.

Social Structure

Social structure consists of the values and behavioral expectations that prescribe to people what is appropriate behavior in a given social situation (Scott, 1998). Social structure reflects (1) the extent to which people know how to interpret what happens to them in the situation and how to behaviorally respond to these interpretations (i.e., they have schemas or generalized procedures for the situation (Sewell, 1992)) and (2) the extent of consensus among people in the situation about these schemas (Barley & Tolbert, 1997; Sewell, 1992). Thus social structure is high when people are clear about and agree on how to interpret and act on events in a particular social situation.

Social structure serves several functions. It generates regularity of behavior by constraining individuals' behavioral choices, reducing variance in behavioral responses, and diminishing the influence of individual goals, experiences, and dispositions (Scott, 1998). At any moment there are a multitude of alternative possible actions an individual may take. Social structure narrows down these numerous alternatives. The difference between social structure and norms is that social structure regulates behavior through the existence of schemas and agreement on these schemas, whereas norms regulate behavior through the existence of sanctions for violators (see Coleman, 1988; Nahapiet & Ghoshal, 1998). Second, social structure provides meaning, labels, and justifications for organizational experiences and actions (Weick, 1993). Structure stabilizes meaning by fostering shared interpretations among organizational members, thereby reducing the experience of equivocality. Equivocality is the extent to which data are unclear and suggest multiple interpretations (Weick, 1979). Social structure reduces equivocality by providing a shared sense of appropriate interpretations of data and behavioral responses to these interpretations. As such, social structure facilitates organizational action even in

the face of non-routine events. As Ranson, Hinings, and Greenwood (1980: 5) write, shared interpretations enable organizational members "to recognize, interpret, and negotiate even strange and unanticipated situations, and thus continuously to create and reenact the sense and meaning of structural forms during the course of interaction." When social structure exists, individuals inherit explanations for what they are doing, which means that they need not construct them continually (Weick, 1995).

Compared to established organizations, many new ventures lack an established social structure. Often, entrepreneurs must learn and create their roles while on the job and while working with unfamiliar co-workers, board members, investors, customers, and suppliers (Stinchcombe, 1965). They lack important information and thus they may lack confidence. They may not know where to look for answers or even what questions to ask (Amason, Shrader, & Tompson, 2006). Accordingly, they are less likely than members of established organizations to agree in their interpretations of what is happening to them and their behavioral responses to events. Entrepreneurs are still guided by their expectations from occupational communities, past experiences, their dispositional behavioral tendencies, broadly shared institutional templates, and cultural norms for organizing (Aldrich, 1999), all of which lead them to interpret their situations and behave in particular ways. In the absence of social structure, however, there is no consensus among entrepreneurial team members about how to organize. The new venture context itself does not provide clear guidelines. The personality, experience, and set of expectations that each person brings to the endeavor are unique and entrepreneurial team members' behavior is more likely to express their individual uniqueness rather than a shared understanding of how to act (Mischel, 1973). As elaborated below, the less

established the new venture's social structure, the more difficult it can be for the entrepreneurial team to develop relational capital.

Lack of social structure hurts trust development. We know from research on the antecedents of trust that misunderstandings fuel mistrust, as they lead to unmet expectations concerning the other's behavior (Sitkin & Roth, 1993). Studies show that entrepreneurial team members are diverse in their underlying belief structures (West, 2007), tacit knowledge (Beckman, Burton, & O'Reilly, 2007), and goals (Sine, Haverman, & Tolbert, 2005). Without a social structure to align their interpretations and action, misunderstandings, attribution problems, and divergent conceptions are likely to ensue, making trust more difficult to develop (Stinchcombe, 1965). Prior research also documents that behavioral consistency fosters trust, whereas inconsistency undermines it (Whitener, Brodt, Korsgaard, & Werner, 1998). Without an organizational structure to foster behavioral consistency, the climate of trust on the team may be undermined. Lack of structure may be particularly detrimental for establishing trust early in the entrepreneurial team's functioning because team members' information about each other is incomplete (McKnight, Cummings, & Chervany, 1998). As a result, they experience equivocality in evaluating each others' behavior, which increases concerns about each others' motivation and goals (Carson, Madhok, & Wu, 2006).

Lack of social structure also hurts the development of identification with the team. Individuals identify with social groups to reduce uncertainty about their own social standing (Hogg & Terry, 2000). Social structure can increase identification with the team by making salient one's role in the team and why it is important, thereby facilitating role acceptance and identity change (i.e., the role becomes self-referential) (Pratt, 1998). The

better one's understanding of one's role in the collective, the more one is likely to identify with it (Smidts, Pruyn, & van Riel, 2001). Indeed in a recent series of field and laboratory studies, Hogg et al. (2007) demonstrated that when people are uncertain, they prefer to identify with, and identify more strongly with, groups that are more distinctive and more clearly structured. Lack of structure weakens this basis for identification with the team.

Finally, lack of social structure hurts the development of obligations. Stable and enduring roles and authority relations enhance the clarity and visibility of mutual obligations. As Coleman (1990: 313, quoted in Nahapiet & Ghoshal, 1998: 257) writes, "organizations ordinarily take the form of authority structures composed of positions connected by obligations and expectations and occupied by persons." The greater the extent of social structure, the greater people's experience of "prescriptive clarity," whereby they have clear sense of what to do. In this way, social structure increases people's likelihood of acting in accordance to the priorities, perceptions, resources, and obligations specified by the group (March & Olsen, 2006). Without social structure, these bases for obligations are absent, making this type of relational capital elusive for entrepreneurial team members.

Organizational Settings

Research also suggests that trust, identification, and obligations increase with a group's embeddedness within a larger organization—an advantage that startup teams lack. For example, people working in a corporation develop trust toward one another as they accumulate detailed information about their colleagues over time (Gabarro, 1987; Granovetter, 1992). The longer the track record of interaction, the more opportunities

people have to demonstrate their investments and reciprocity in the relationship—all of which foster trust (Blau, 1964/1986). Organizations facilitate this process of trust development by providing interaction routines that allow individuals to demonstrate their trustworthiness and predictability (Nahapiet & Ghoshal, 1998). Closure is another antecedent of trust. In the absence of personal information, membership in the same social group, such as an established organization, can generate positive beliefs about trustworthiness (Meyerson, Weick, & Kramer, 1996). Finally, organizations provide institutional safeguards, such as organizational rules and regulations, that can further build trust by engendering predictability in employees' behavior (McKnight et al., 1998).

Identification is known to increase to the extent that identifying with a social collective reduces people's uncertainty about their place in their social world and/or enhances their self-esteem (Tajfel, 1978). Organizations serve as identification targets for people by establishing clear membership boundaries and highlighting the organization's distinctiveness and internal homogeneity, thereby reducing uncertainty (Hogg & Terry, 2000). Teams within organizations provide members with a clear internal structure, a set of common goals, and a perceived common fate, which also facilitate identification with the team (Hogg et al., 2007). Moreover, organizations can enhance group members' self-esteem—and thus identification—through their reputation in the industry and business arena (Dutton et al., 1994). People take pride in being part of a well-respected company, and a team operating within such an organization may bask in reflected glory.

Finally, several aspects of organizational life can strengthen mutual obligations on a team. These include a history of exchanges (Blau, 1964/1986), people's fear that they will suffer reprisal if they violate norms (Coleman, 1988), and the expectations set by

roles (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). The more longstanding and stable the social relations in a particular organization, the clearer the obligations among members of that organization (Nahapiet & Ghoshal, 1998). Moreover, social norms in established organizations are collectively enforced, as people monitor each other and sanction those who violate the norms (Coleman, 1988). Finally, stable and enduring roles and authority relations enhance mutual obligations.

A team setting out to found a new company lacks many of these organizationally provided sources of relational capital. Members have not yet established routines or procedures that ensure ongoing interaction (Stinchcombe, 1965). Even if team members have worked together before in a different context, that experience may not be relevant to their new endeavor. Team members with a prior relationship may behave differently than expected once the new venture gets rolling, and that can damage the development of trust (Berscheid & Ammazzalorso, 2001). Likewise, identifying with the entrepreneurial team can prove difficult. True, entrepreneurial teams often share a perception of common fate and distinctiveness. Yet by virtue of being new, they lack a clear internal structure that provides members with certainty about their social standing. Moreover, team members cannot bask in any reflected glory from a larger organization's outstanding reputation. With respect to obligations, neither roles nor sanctions can account for obligations in entrepreneurial teams, since these are not well developed. Most nascent ventures have not yet defined agreed-upon "ways of doing things around here," which can leave members with little sense of obligations. Moreover, team members' history of exchanges may either be non-existent or irrelevant for the new venture context, and is thus unlikely to encourage the development of mutual obligations.

Relational Capital Development Outside of Organizations

Given the lack of social structure entrepreneurship teams face, are there any conditions that help them develop trust, identification, and obligations? Some studies of relational capital in entrepreneurial teams have explored prior ties and demographic homogeneity as alternative sources of trust, identification, and obligations. Team members with prior ties (for example, they worked together at a previous company before going into business together) have a relationship history with established patterns of interrelating (Gabarro, 1987). As a result, they are likely to trust each other, identify with the team, and feel a sense of mutual obligation (Eisenhardt & Schoonhoven, 1990). And those who are similar in age, gender, functional background, and other demographic characteristics may interact more frequently and see themselves as members of a distinct group, which can further enhance trust, identification, and obligations (Beckman et al., 2007).

However, most entrepreneurial teams comprise some members who have prior ties and some who do not (Forbes et al., 2006). At the direction of the board of directors or the venture-capital firm funding the startup, a new company's founders may add team members based on the skills they bring to the table, with little regard for whether these individuals know one another (Wijbenga, Postma, & Stratling, 2007). Moreover, many entrepreneurs deliberately strive for demographic diversity in assembling their team. They know that such diversity can increase the range of perspectives and experiences available to the team for creative problem solving. A demographically diverse team also brings a more varied set of external networks, improving members' access to valuable resources (Reagans, Zuckerman, & McEvily, 2004). Investors seem to prefer diverse

entrepreneurial teams as well (MacMillan, Siegel, & Narasimha, 1985). Yet diversity can create problems—in the form of miscommunication and misinterpretation of colleagues' behaviors and communication.

Despite their advantages, prior ties and demographic homogeneity are no guarantors of success for a new venture. One recent study (Beckman et al., 2007) found that functionally homogeneous teams were less able to attain an initial public offering and venture-capital funding than heterogeneous teams (see also Eisenhardt & Schoonhoven, 1990). We do not know why some teams with prior ties or demographic homogeneity still fail or how teams without these structural antecedents can still develop relational capital. The next chapter presents a qualitative study that explores the mechanisms through which entrepreneurial teams develop relational capital and the influence of one such structural antecedent – prior ties – in this process.

CHAPTER III STUDY 1: A QUALITATIVE STUDY OF RELATIONAL CAPITAL IN ENTREPRENEURIAL TEAMS

This qualitative study identifies the mechanisms that enable entrepreneurial teams in new ventures to develop relational capital. As reviewed in the previous chapter, these mechanisms are not well-understood. Most prior research on relational capital development in teams is based on organizationally-embedded teams working within the context of a social structure. Research on entrepreneurial teams has largely focused on structural antecedents, namely prior ties and demographic homogeneity, without identifying the processes through which relational capital can form, both in the presence of these antecedents and in their absence.

A second goal of this study is to explore the role of prior ties in the relational capital development process. This goal was motivated by the conflicting findings in previous literature on the implications of prior ties in entrepreneurial teams. On one hand, research suggests that when entrepreneurial team members have prior ties, they are likely to have learned how to get along and communicate, which can enable them to perform better (Eisenhardt & Schoonhoven, 1990). For example, teams with common company affiliations share a language and vision that allow them to easily implement and routinize activities (Beckman, 2006). In contrast, teams without previous experience together may face extensive conflict due to misunderstandings, slow decision speed, problems of implementation, and group instability (Birley & Stockley, 2000). Moreover,

entrepreneurs with previous ties may exhibit more trust, cohesion, and unity of direction (Zahra, Yavuz, & Ucbasaran, 2006).

On the other hand, strong ties may not be as beneficial as they are common. For example, strong ties sometimes lead people to choose personal considerations over business ones in making decisions. They can increase errors of judgment, obscure rational decision making, and discourage risk taking, as entrepreneurs become more interested in maintaining their social relationships at the expense of business rationality (Zahra et al., 2006). Another source of performance problems is that entrepreneurial team members with prior ties are likely to have overlapping and redundant competencies and insufficient diversity for high-quality decision making (Francis & Sandberg, 2000; Ruef et al., 2003). Entrepreneurial team may lack differences in perspectives, which may hurt performance (Bunderson & Sutcliffe, 2002). Team members may also lack significant new information (Ruef, 2002). Entrepreneurs with prior ties may think too much alike, ignoring other sources of information and not considering alternatives (Zahra et al., 2006). Thus they may lack the ability to innovate and learn (Birley & Stockley, 2000; Zahra et al., 2006). Indeed, Maurer and Ebers (2006) found that strong norms among people with prior ties sometimes lead to relational and cognitive lock-in and impedes new ventures' ability to adapt to changing task environments. Prior ties may also prevent entrepreneurial team members from communicating enough about their expectations from the work relationship (Watson et al., 1995). In other words, they may assume more common ground than is actually there and refrain from engaging in productive process discussions (Watson et al., 1995). Finally, prior ties may result in inadequate monitoring and control of other team members' progress and performance (Zahra et al., 2006).

Informal, ad hoc, and loose controls may produce faulty or incomplete information about the progress being made, thereby preventing needed help, support, and corrective actions (Zahra et al., 2006). In fact, Ruef (2002) concluded that effective and creative entrepreneurs spent less time interacting with friends than networking with a diverse group that includes acquaintances and strangers.

The divergent literature on this topic suggests that entrepreneurs can most benefit from creating and leveraging the relational capital typically associate with prior ties without suffering from their costs. However, our understanding of how entrepreneurial teams can achieve this benefit (or advantageous situation) remains limited. As demonstrated by the literature review in Chapter II, researchers in the field have focused on structural antecedents such as prior ties but have not examined the particular behaviors and cognitions that help create and leverage relational capital. This study, therefore, addresses these questions: What are the mechanisms through which entrepreneurs create and leverage relational capital in their entrepreneurial teams to facilitate new venture performance? And what is the role of prior ties in this process?

METHODS

Data Collection

I chose an inductive qualitative approach in light of my goal to build theory about the mechanisms through which entrepreneurs working in teams create and leverage relational capital. I selected interviewees following the purposeful sampling guidelines of Lincoln and Guba (1985). That is, I selected individuals because I believed that they would provide insights relevant to my research question (Glaser & Strauss, 1967), yet I also aimed for participant variation. This strategy allowed me to identify the central

themes or patterns that capture core experiences (Patton, 1990). Because my goal was to generalize to theory, not populations, I selected cases for their potential to generate insight, not their representativeness (i.e., theoretical sampling, see Glaser and Strauss, 1967).

I built the sample using multiple sources. I recruited interviewees through acquaintances and used snowball sampling techniques by asking, at the conclusion of each interview, for suggestions of other potential interviewees who had recently started a company with others. Moreover, I took steps to interview entrepreneurs from different geographical areas and in various industries.

My sample consisted of 27 entrepreneurs in 20 knowledge-based startups, including 6 entire founding teams. I conducted follow-up interviews 6-8 months later with 20 of the entrepreneurs and about 18 months after the initial interview with 13 of them. Respondents were not included in the follow-up if they were unavailable for the interview. In some cases, respondents were not interviewed in the third wave because the company had ceased to exist or they had left the company following the first wave and I had already interviewed them in the second wave. The startups ranged in age from one week to five years since founding and represented various industries, including Internet commerce, biotechnology, and software. Entrepreneurial teams ranged in size from 2-5 members. Thirteen respondents were from the San Francisco area and 14 were from large and small cities in the Midwest. Twenty-five were men. Table 1 lists information about each of the 20 companies, including how many team members were interviewed, how the team members met, and information about follow-up interviews.

TABLE 3.1 Study 1 Company Information

•	No. of Infor- mants	Size of team	Entire Team	Age at time of first interview	Industry	Funding	First follow-up	Status	Second follow-up	Status	How met
1	2	2	yes	5 months	communication software	self	6 months	in tact	17 months	One founder left, company continued without him	through family
2	3	3	yes	12 months	software and hardware for tourism	\$420K from family and friends	10 months	dissolved	n/a	n/a	all three worked together at a previous startup
3	3	3	yes	9 months	medical software	\$140K from friend	6 months and 7 months	one founder left, company continued without him	18 months and 9 months	in tact	one team member knew both others, the other two did not know each other
4	1	2	no	6 months	small engines	\$200K from family	8 months	in tact, received \$900K grant	17 months	raised another \$1M, partner continued without respondent	through entrepreneur- ship center
5	1	5	no	8 months	software and internet commerce	outside investors	6 months	in tact	17 months	one founder left, company continued without him	through impersonal search

TABLE 3.1 continued

C o.	No. of Infor- mants	Size of team	Entire Team	Age at time of first interview	Industry	Funding	First follow-up	Status	Second follow-up	Status	How met
6	2	2	yes	6 months	consulting	self	8 months	dissolved	n/a	n/a	casual friendship
7	1	3	no	13 months	biological research	\$2M in grants	8 months	in tact	n/a	Raised \$3.5 in VC funding. Based on website, respondent appears to have left, company continued without him.	two partners were professors who developed the innovation together. The third partner (respondent) was introduced through tech transfer office.
8	1	5	no	23 months	software for automotive industry	\$500K	n/a	had been sold at time of first interview	n/a	n/a	worked together at previous employer
9	1	6	no	5 years	image processing	grants	8 months	in tact, received \$1M in funding	17 months	in tact. Raised additional \$2.7M, got first customer	through university of Michigan

TABLE 3.1 continued

Co .	No. of Infor- mants	Size of team	Entire Team	Age at time of first interview	Industry	Funding	First follow-up	Status	Second follow-up	Status	How met	
10	1	4	no	23 months	Internet platform	\$1.3M in venture capital	7 months	one founder left, company continued without him	16 months	no more funding, company dissolved, but team stayed together and plans on starting another company	three of the four had known each other for many years, the fourth they met through the VC firm	
11	1	3	no	14 months	technology for entertainment	self	7 months	in tact. Raised \$400K and secured first customers.	16 months	One founder left, company continued without him	left, company continued founder without him through Craig's L Third co-founder started as potential customer	first founder found second founder through Craig's List. Third co- founder started as a potential customer and was brought
12	2	2	yes	3.5 years	photography software	self and family	7 months	one founder took on another job and was only minimally involved.	n/a		knew each other from former job, one partner called up and invited the other to join	

TABLE 3.1 continued

	Co .	No. of Infor- mants	Size of team	Entire Team	Age at time of first interview	Industry	Funding	First follow-up	Status	Second follow-up	Status	How met
	13	1	4	no	24 months	real estate software	self and family	7 months	one founder left, company continued without him	16 months	struggling	two founders knew each other from a previous job. The third and fourth were found through a search.
\sim	14	1	4	no	5 months	software for cellular phones	\$2.5M in venture capital	n/a	n/a	16 months	received another \$5M in funding. Hired more people. Rapidly expanding.	two founders knew each other from a previous job. The third and fourth were found through a search.
23	15	2	2	yes	3 years	web hosting services	self	7 months	in tact	16 months	in tact, one founder moved to the opposite coast	through involvement with ideological organizations
	16	1	2	no	1 week	Digital music software	self	8 months	in tact, raised money	16 months	in tact	through mutual friend
	17	1	2	no	15 months	Innovation support	angel and VC	n/a	n/a	n/a	from website appears to be in tact	former co- workers and friends

TABLE 3.1 continued

Co .	No. of Infor- mants	Size of team	Entire Team	Age at time of first interview	Industry	Funding	First follow-up	Status	Second follow-up	Status	How met
18	1	5	no	2 years	geology	grants	7 months	in tact, research progressed	16 months	in tact, hired some more people	former co- workers and friends
19	1	5	no	2 weeks	internet-based software	family	n/a	n/a	n/a	from website appears to be in tact	through a common acquaintance
20	1	3	no	12 months	Online wine application	n/a	n/a	n/a	n/a	from website appears to be in tact	common friends

All of the initial interviews were conducted in person and all of the follow-up interviews were conducted by phone. The interviews lasted from 90 to 120 minutes and were transcribed verbatim. The interview protocol was based on my research questions. Accordingly, questions focused on how they met their team members, how they formed the company, and how their relationships facilitated or inhibited their work. Sample questions include: Can you tell me about a time when the team was functioning really well? Can you tell me a story of a time when one of them helped you work better? Can you tell me a story of a time when one of them made it difficult for you to do your work? Can you give some examples of the kinds of things you do to help them work better? The interview protocol is included in Appendix A.

Analysis

The analysis consisted of several stages in accordance with grounded theory techniques (Glaser and Strauss, 1967). The first stage was open coding of the interviews. I read through the transcripts and attached codes to units of text in a manner that was as open and inclusive as possible. For this stage I applied standard practices for coding qualitative data analysis to build coding categories inductively (Miles & Huberman, 1994). For example, I used labels taken from the respondents' language, or in vivo codes, rather than concepts that had associations for me (Strauss & Corbin, 1998). The analysis and codes focused on identifying qualities of the relationships described (e.g., trusting, conflictual), attitudes toward the other people (e.g., caring), practices adopted in the relationship (e.g., communication practices), and evidence for how the team worked together (e.g., coordinated). The second stage entailed comparing to each other the various instances of each code in an attempt to elaborate the theoretical properties of the

category: its dimensions, the conditions under which it is pronounced or minimized, its major consequences, and its relation to other categories (Glaser and Strauss, 1967). The third stage of analysis entailed examining each company as a case and writing a case study for each company in my sample (Eisenhardt, 1989a). The case descriptions are included in Appendix B. This analysis enabled me to utilize the longitudinal data and to examine how processes unfolded over time. Also, whereas the first two stages were aimed at articulating a theoretical framework, the third stage enabled me to evaluate and refine the framework. I was able to evaluate the validity of my emerging theoretical framework in the context of each company.

FINDINGS

The findings are presented to address the two research goals of this study. I begin with my findings on the mechanisms for creating and maintaining relational capital. I then discuss my findings on the role of prior ties in these processes.

Mechanisms for Creating and Maintaining Relational Capital in Entrepreneurial Teams

What differentiates teams that appear to possess relational capital from those who do not? Two themes emerged from the data. The first theme reveals that some teams are connected by a bond created by caring for each other's needs and mutual concern for preserving the relationship for its own sake. The second theme highlights implementation of contracting practices that enhance explicitness and transparency regarding team members' goals and activities. I begin by presenting the results about caring.

First Theme: Caring about Needs and the Relationship

Some entrepreneurial teams exhibited more caring about each other's needs, whereas others did not. The caring observed involved concern and respect for others'

unique circumstances. The following example is from a team composed of an experienced entrepreneur and four undergraduate students,

"There's one guy [on the team] who is going to take a leave of absence from school. He's from Guatemala. He wants to go back to Guatemala so I've been very flexible. We're going to pay for trips back and forth. I'm going to give him his first two weeks of salary before he's actually worked for two weeks. Lending him money to buy the equity, you know. I'm doing what I can to make life easier for him." (S25)

As the quote suggests, the informant is willing to expend valuable resources to accommodate the unique needs of this team member.

Another example of accommodation to a partner's needs even at the expense of business rationality comes from a two-person startup team. One of the team members lives in Germany, while the second team member quote below, lives in Silicon Valley,

"One of [my partner's] biggest concerns was being forced to fly, which he just hated. He couldn't sleep for one day before the flight and one day after the flight. He was scared all the way in the aircraft. It was a big thing for him. On the other side, from a business perspective [Silicon Valley is] just the right place to be... I said [to investors] 'You have to take into account that Kenny will at most come three times a year to the U.S. It could be two.' I made that a pretty prominent point and just respected that. He liked to see that I was fighting for his objectives." (\$23)

Another manifestation of caring was respect for team members' non-work lives. For example,

"There are times when your family will need you and it doesn't matter what work means; you have to be there. And that should trump. And we don't want to work in an environment where folks are constantly seeking approval to go be with their sick kid. Go be with your sick kid." (S2)

Caring teams exhibited social and instrumental support. This support directly and indirectly enabled team members to succeed in their organizational tasks, while also sending a message that team members are willing to take care of each other. For example,

the following entrepreneur reflected, "Everything else stops if one of my team members needs something from me... because I am here to support them in their success." (S27) Finally, caring entailed the taking on of vulnerability. As one experienced entrepreneur commented.

"How the hell are you going to develop a great love relationship unless you can open yourself up so much so that yes, if the guy is a jerk you are going to be badly hurt and if you can't open yourself up to that then Oh well. And I think that's true in business relationships if they're going to be really, really close entrepreneurial types of things" (S14).

By opening up and exposing himself to the possibility of being hurt, he sends a message to his partners that theirs will be an intimate rather than an arm's length relationship.

As these quotes suggest, some entrepreneurs were aware of the importance of caring on the team. Many respondents explicitly compared their relationships with their team members to romantic relationships with the associated commitment and caring:

"I joke about this now and then: I have my girlfriend partner and my business partner, I have two partners. And it's funny, there are all these parallels in the relationships. Sort of similar landmarks of levels of trust and commitment." (S21)

"I think it's very similar to my challenges in my own personal relationships. [In my marriage] we choose to move forward because we trust each other, we love each other, we know what skill sets we bring into our marriage. It's the same in a company. And I think very much in a start up. If you have it, you have a greater chance of success. We very much trust. I think we do love each other as friends and partners." (S8)

Caring benefitted the teams in my sample. In the following example of a university spin-off, the attitude of caring facilitated a more open relationship between the entrepreneurial team members:

"Toward the end of one of our meetings with the professors [who invented the product and were on the entrepreneurial team], I was saying, 'Here's the way we want to approach this type of project with you. The only way we're going to find out if this is going to be a truly great, the whole is greater than the sum of the parts, really fun, rewarding relationship is if we go into it openly, we play open

hand poker, you always know what all our cards are, and we will meet you 70% of the way and see if you meet us back.' And you see these little glances and then they came into the next meeting, and they were just all – the body language was so palpably different, it was so cool, they were smiling, they were shaking hands with two hands, embracing our hands. It was just, 'We are so glad to be working with you guys – you're just so cool.' And they just completely opened up. You know, stuff they were holding back on before." (S14)

In contrast, other teams adopt a more instrumental approach to their relationships, viewing them as a means to an end rather than an end in themselves. For example, the following entrepreneur explains his approach toward his partners,

"With all my partners, it's not an equal partnership in the sense that it's always my idea. .. I always have more percentage. And it's always somebody that I brought that I thought can run the business but at the same time, the idea and the vision was mine. So the truth is that a lot of times I do tell them what to do. I mean, even with my partners, a lot of time they are more like my employees." (S1)

This partnership ended before the conclusion of the study.

The following example also highlights the potential negative effects of such an approach among team members. The attitude of the partner speaking in the quote below reflects opportunism. As a result, the partnership (and the venture) almost came to an end:

"I kind of look at all of these things - academics or industry - as a series of four-year projects. The specifics of how you basically fund that in some ways is secondary. So I kind view this company as really just a vehicle to see if this idea will work... I was developing this other project and ironically the same week that we turned in the Phase II grant application [for the startup], I found out this other project was getting funding. By that point I felt like I was committed [to the other project]. So when we find out a couple of weeks later that we had gotten Phase II, at that point it looked like I was going to be leaving the company. This would have created a huge problem because I was a co-PI [principle investigator] on the grant and if I was leaving the company it would put the grant in jeopardy. There was a matter of replacing me. I mean whether or not you find somebody who would make the same sacrifice that I had made was questionable and Mitch probably could not do the project alone. As it turned out the funding for the other project fell through so I ended up deciding to stay. That also created a problem

because I think Mitch saw that I was willing to leave... So I think he was a little angry at that if the funding hadn't fallen through, I would have done that." (S24) In this case, the speaker was willing to leave his partner, thereby jeopardizing the new venture, to follow an attractive alternative opportunity. His description of the events reveals an opportunistic approach and a lack of caring for his business partner. Even the speaker is aware that even though he stayed on, the viability of the new venture was jeopardized by the affect on his willingness to leave on his partner's feelings.

These examples suggest that caring may be an important mechanism through which entrepreneurial team members strengthen the quality of their relationships on the team, thereby increasing their capacity to succeed in the difficult task of creating a new venture. The bond and communal sentiment, as well as the goodwill generated by responsiveness to needs, increase team members' commitment to stay together through inevitable challenges and facilitated mutual trust. In a situation characterized by uncertainty about the future, an emotional "leap of faith" may actually reduce the partnership's riskiness by increasing their collective capacity to deal with the challenges ahead of them.

Second Theme: Contracting Practices

The data suggest a second theme, a set of behaviors that also help build and maintain relational capital on the teams. The data from both the in-tact and dissolved teams suggest that contracting practices, or practices that make commitments explicit and transparent, are an important complement to caring in new venture teams.

Contracting serves several relationship-building and relationship-maintaining functions. First, contracting practices at the beginning of the entrepreneurial process, even before formal incorporation, serves to identify and clarify team members' goals and

values, thereby facilitating alignment on these important factors. It facilitates a "soul searching" process (S26), allowing partners to open up about their values and expectations. Often the discussions also include spouses and significant others, whose support is instrumental to the team's success. One entrepreneur reflected on some of the issues he discussed with his partner in the course of this process, which took about three months and involved both partners' spouses,

"Is this going to be something that we spend time for 18 months or 3 years or 5 years and is this company eventually going to get bought out by someone? Is this an acquisition target?... There was also the compatibility thing. We wanted to make sure that Bob and I could stand each other as people because we're going to be spending a lot of time together so we had to make sure we weren't going to drive each other crazy." (S26)

As the end of the quote suggests, the contracting process served as a means for partners to get to know each other and assess the likelihood of working well together. The contracting process entailed not only exchanging information but also served as a trial period that indicated whether they could embark together on the intense and intimate journey of new venture formation. In the following quote, a respondent tells about the *a priori* contracting process between him and his partner, who was initially a stranger,

"We started discussing what my role would be, what the equity allocation would be for everybody, what his role would be, our vision for the strategy of the company, our vision for the financing strategy, and so forth. We really just hit it off. The guy [the inventor] is amazing. He's going to be a superstar." (S25)

Sometimes this process results in a mutual understanding that the partnership is not a good one. For example, a respondent told of a potential partnership that did not work out. In their initial discussions, it was revealed that her potential partner's values about entrepreneurship were significantly different from hers:

"I'm grateful that the partnership dissolved then... I wanted to create an organization that first and foremost added a value-added service to customers that

was sustaining and satisfying to our team members and created a great return on investment for my investors. That is what I care about. Those are the values that I came to the table with... And I think she really saw it as a much smaller opportunity financially because we were looking at a narrow space. Financially I think she thought it was too small of an opportunity for herself... for me it's not at all about the money." (S27)

Value-congruence is an important component of trust and goodwill (Mayer et al., 1995) that is revealed by contracting practices, as partners learn about each other's values and goals.

In the following example, a partnership in which team members exhibited caring eventually dissolved because of divergent views of the goals of the company. The partners had not engaged sufficiently in *a priori* contracting about this topic. As one of the partners tells,

"I realized we had a diversion of goals and it took me a while to realize and then articulate to myself and to Mark what my concern was, which is that he has made it very clear all along that he is interested in building something great... and in the next breath he said 'If this doesn't work out, time is wasting. I am in the prime of my career and I will be building something great somewhere and I'm hoping this will end up being the platform for that but it may not.'... [for me] for financial reasons and just for stress reasons, this is not sustainable. The business model doesn't seem to be sustainable from my perspective." (S14)

Whereas the respondent's partner's goals were long-term and focused on building something great, the respondent's goals were more short-term and financial. This goal incongruence drove them apart despite having spent significant time and resources on the venture and despite the fact that it was meeting its goals at the time of dissolution.

A priori contracting is also important for bringing up and resolving questions about equity. Several teams exhibited unresolved tensions around how ownership was distributed among team members. Those who lacked a mechanism for talking explicitly about this issue suffered lower relationship quality. For example, one respondent felt that

his share of the company's equity did not fairly reflect his efforts and contribution. Yet he and his partners failed to discuss it. He said,

"We just don't talk about it. I don't know how healthy it is. But when you have to work with somebody ten hours a day every day, I mean we often work weekends too so it's like we see so much of each other. Unless you really sort of deal with it and come to a resolution, I think we both feel like there is no sense in having a nasty work relationship." (S24)

This partner's assessment of the situation reveals a relationship where his dissatisfaction with the equity distribution could not be addressed because the relationship was not open enough to allow a discussion of this issue. The respondent acknowledged that equity distribution should have been dealt with up front. "People don't want to deal with everything right in the beginning. They say, 'Oh, we don't know. We got to put that off because we don't know yet. But to the extent possible [it's better to] try to define everything from the beginning."

The second kind of contracting occurred in the day-to-day interaction among team members. It entailed revisiting the terms discussed in the initial phase of contracting. One respondent told of how they revisit the strategy and goals they set at the outset,

"You want to engrain that strategy into all your daily decision making. So whenever we discuss like shall we put our time on this customer or this customer, we go back and say, "What's our strategy, which customer is the good customer?" (\$23)

Day-to-day contracting also served to align partners for the ongoing operations of the startup. For example,

"[We have] an Excel spreadsheet that talks about finance and operations, marketing, sales and maybe some miscellaneous things. And it has what needs to get done and who's responsible for it and then there's a date and a detail... and if you can't get it done in that week and it's in red, then you send me or Jake, "I need to push this date back," right? So it's not so much that you have to hit the deadline as it is let everybody know when the deadline's going to be hit." (S5)

In the absence of social structure and formal roles, the transparency created by such working tools helps the team progress toward its goals. Moreover, by reducing surprises and increasing accountability toward goals, such day-to-day contracting can help prevent disappointments, which can be damaging to relationships.

The following is an example of how *the absence* of day-to-day contracting can engenders negative feelings about the team's coordination and performance,

"There are times that I get the feeling that I'm spending a lot of time and energy on things that aren't the right things to spend time and energy on that aren't going to actually advance us. I was going to say we don't have any formal process for assessing this... Day-to-day is basically just gut feeling. There are some things that feel like distractions and are. I'm usually aware when I'm working on those and I usually get really frustrated and annoyed by them eventually." (S21)

Because of the unstructured nature of the startup experience, day-to-day contracting can prevent partners from losing direction, wasting resources, and experiencing frustrations and performance failures. The following example is illustrative,

"I developed guidelines for expense reporting and things like that. Here are the things you can expense; here is how you do it. Here is what you have to keep track of for IRS. That helped a lot because then when you get into those situations you don't have to get angry because you expected something and somebody expected something else. That still happens but the more you define up front about the way things need to work if there is an issue [the better]. And the other thing that is important is not to assume that there won't be any issues. It is better to assume that there will be conflict, a lot of it, and to try to define how you want to work through it. Because you will have conflicts." (S12)

As is apparent from the quote, this contracting practice was motivated by an awareness of the possibility of divergent expectations and conflict.

Contracting practices are facilitators of communication and alignment. They also offer entrepreneurs a safe mechanism to deal with the emotional aspects of the entrepreneurial experience. As the following example suggests, contracting can help cope with the emotions associated with uncertainty,

"I always keep a list of the top ten things that will kill this company and anybody can go up and nominate another one and we decide where it's going to be but it's all of the things we worry about the most. It's a way to get those worries out in a group setting when you don't want to sound stupid... it also makes it very easy to say 'We've got to address these top three. What are we doing to address these? Does anybody have any new ideas about these top three?"" (S19)

Contracting practices furthermore counteract the potentially negative aspects of caring, such as less accountability or insufficient monitoring. The following quote from a team that had dissolved is illustrative:

"I probably did not step back soon enough to take a look at what are we really missing. I treated my partners as business owners and wanted them to take leadership in their own areas of expertise... Because of the partnership, I was reluctant to treat Harry as an employee and I should have treated my partners more as employees [when asked to elaborate, he continued] Employee discussions would be 'Let's talk about the product specifically' and' I'm going to hold you accountable for your area of responsibility. We are going to set milestones and you need to deliver against them.' Well that is an area that I'm typically very good at, because I think I did not make a strong enough separation between partner and employee, I didn't push hard enough... I think because of the friendship or the level of respect that was between us that may have been a blind spot for me."(S8)

Interestingly, the interview with "Harry" indicated that he was not aware of the informants' concerns, which reinforces the finding in the literature that cohesive teams are less likely to bring up difficult issues (Zahra et al., 2006).

In sum, these findings suggest that a combination of caring and contracting practices helped the entrepreneurial teams in my sample create and leverage the benefits of relational capital without suffering potential costs, such as inhibited conflict, lack of accountability, and insufficient monitoring. I explored the relationship between caring and contracting and firm outcomes by evaluating the evidence of caring and contracting for each of the companies as high, medium, or low. A team was characterized as low caring if the respondent/s did not at all express concern about team members' needs but

rather focused on the partners' role and benefit for the firm. Medium-caring teams were ones in which respondents exhibited concern for others' needs, but the caring was not a major overarching theme in the interview. High-caring teams were ones in which respondents repeatedly expressed concern for the others and explicitly spoke of the relationships as ends in themselves. The level of contracting was evaluated based on how respondents described the extent of explicitness and transparency of their expectations and activities. Low contracting teams specifically described themselves as ad hoc in their communication about expectations and activities. Medium contracting teams had some practices in place, and/or had done some *a priori* contracting, but there was still many substantial points of vagueness with respect to each others' goals, priorities, activities, and timelines. Finally high contracting teams were ones who implemented systematic practices that maintained open and continuous communication about goals and activities.

Of the eight companies in which at least one team member left over the course of the study, seven had exhibited low caring, 6 had exhibited low contracting, and 5 had exhibited both low caring and low contracting. All eight had exhibited either low caring or low contracting. Of the three companies that had dissolved, one had exhibited low caring. Of the nine companies that had remained intact and continued, only two exhibited low caring and only one exhibited low contracting. These findings suggest that caring and contracting played a role in the fate of the team and its ability to remain intact.

The Impact of Prior Ties

The teams in my sample came together in diverse ways. In some teams, prior ties existed among all team members, in some there were no prior ties at all, and in a third set, some members had prior ties and others did not. Teams where all team members had

prior ties formed either because a group wanted to start a business together, not necessarily caring what the business was, or because an individual had an idea for a business and looked for partners only among people he or she knew well, such as friends, former co-workers, or family. In the case of no prior ties, individuals searched for potential partners with complementary skills and common interests and found them either through acquaintances or through impersonal searches, such as through Craig's List. Groups with a mix of ties usually started out as a team with prior ties who added members to complement their skills.

In my sample, 8 companies formed through prior ties, 7 companies formed through no prior ties, and 5 companies formed through a mix of prior ties and no ties. In all three categories, some companies dissolved by the time of the second or third data collection whereas others were continuing on a path to success. Table 2 outlines the fate of the companies based on how the team had formed. As the table indicates, prior ties among all team members or among a subset of teams members did not necessarily provide an advantage over teams lacking prior ties in the team's likelihood to stay intact 16-18 months after the beginning of the study.

TABLE 3.2
Prior Ties and Fate of Startup

	Prior Ties	No Prior Ties	Mix of Prior and
			No Prior Ties
Team In Tact,	4 (companies 12,	2 (companies 16,	3 (companies 9, 14,
Startup Continues	15, 17, 18)	20)	19)
Team Member/s	2 (companies 1, 8)	3 (companies 4, 5,	3 (companies 3, 7,
left, Startup		11)	13)
Continues			
Startup Dissolves	2 (companies 2, 6)		1 (company 10)

The data also indicate that prior ties do not necessarily imply that team members exhibited caring, though sometimes they did. Some teams with no prior ties exhibited caring (such as companies 16 and 20) and some companies with prior ties were low on caring (such as companies 6, 8, and 18).

Several respondents reflected on the advantages and disadvantages of prior ties and sometimes addressed explicitly how contracting can buffer them against the liabilities of prior ties. For example, one respondent reflected on what she had learned about going into business with friends:

So it would be to have the conversation really initially of, "Here's my style. Here's our culture. Here are my expectations in partnering with you. What are your expectations in partnering with me? And how are we going to make this work? What values are we going to preserve in our friendship and not let them trickle over?" (S27)

As this quote suggests, contracting can be a means of preserving the caring in a prior-tie relationship. This insight also applies to the case of S24, whose team had not contracted adequately about equity distribution. The data revealed that this failure in contracting contributed to the erosion of a fifteen-year relationship. The following is an example of a team with prior ties whose extensive contracting around equity helped preserve the caring in the relationship:

So for instance there's always issues about how to dispute disagreements between partners. That's a key question. Again, it's at least a catalyst to bring up issues like how you value each other, how you consider each other, how you also plan to work together because it's also about control. It's not only about how do we distribute the benefits at the last day but it's also about what control do you have over the other so can I be fired by him or can I fire him. You set the tone. So we did have quite some discussions. It was a long time to get to the point where we ended up splitting equally which is quite surprising since he worked 5 years on it already and I didn't... That was certainly one point that we wanted to talk about. The other is like finding the right market segment and making the right decision... [based on these discussions] I know what's important to him." (S23)

Prior ties offer benefits in terms of interpersonal knowledge (knowing how the other thinks and works) and trust in the other's competence and goodwill. Nonetheless, the data suggest that in the absence of contracting, these benefits are not enough to sustain positive relationships on the team.

DISCUSSION

This qualitative study of how entrepreneurial teams build and leverage relational capital suggests that (1) prior ties may not lead to relational capital if they are not accompanied by caring and contracting (2) entrepreneurs with no prior ties can develop relational capital by adopting an attitude of caring toward their team members, and (3) entrepreneurial teams are more likely to survive in the early stages of new venture formation when caring is supplemented by contracting practices.

The data further the existing debate in the literature about the costs and benefits of prior ties for entrepreneurial teams. The findings of this study do not go against findings that prior ties translate to better working relationships based on prior interpersonal knowledge and common language or that teams without prior ties may suffer from misunderstandings (Beckman, 2006; Birley & Stockley, 2000; Eisenhardt & Schoonhoven, 1990). They do indicate, however, that these benefits may not be realized if teams fail to implement mechanisms to facilitate open discussions about difficult or tacit issues, such as each others' goals and the status of tasks and activities. These contracting practices help offset the liabilities of prior ties, such as avoiding conflict in the interest of relationship maintenance (Zahra et al., 2006), lack of communication about expectations (Watson et al., 1995), inadequate monitoring and control of team members'

progress and performance (Zahra et al., 2006), and strong norms that prevent adaptation to changing circumstances (Maurer & Ebers, 2006).

The finding that prior ties and caring are decoupled is surprising in light of the literature that assumes that prior ties are associated with greater trust, cohesion, and other forms of relational capital (e.g., Zahra et al., 2006; Birley & Stockley, 2000). Further investigation is warranted into when and why embedded actors with prior ties may behave opportunistically toward one another. The findings of this study may help explain why sometimes entrepreneurs with prior ties are unable to leverage the benefits associated with these to succeed, whereas other entrepreneurs may successfully build an organization they started with relative strangers. This appears to be an important area for future research.

This study's findings about caring are complemented by social psychological research on situations of relational interdependence and uncertainty. Entrepreneurial teams represent a relational reality characterized by high mutual joint interdependence, covariation of interests, extended temporal duration, and high uncertainty in the situation. Moreover, entrepreneurial situations usually benefit from making significant investments in the relationship. Such relational situations generate high concern for relationship maintenance because of reliance on the partners (Kelley et al., 2003). Entrepreneurs may be motivated to apply an attitude of caring toward their team members because of the high uncertainty of their situation and because founding partnerships are difficult to dissolve (Klein, 2005).

This study suggests that caring about each other's needs and concern for maintaining the relationship beyond the needs of the venture benefits the process of

building relational capital among entrepreneurial teams. It also suggests that leveraging relational capital entails some use of impersonal organizing mechanisms. Impersonal organizing mechanisms arise from structural sources such as laws, norms, and roles and are relatively immune to changes in the identity of the individual. As Zucker writes (1977: 729), "Any act performed by the occupant of an office is seen as highly objectified and exterior. When an actor occupies an office, acts are seen as nonpersonal and as continuing over time, across different actors." In his classic analysis of organizational influence, Simon (1976: 187-188) also addresses the notion of impersonal organizing mechanisms, writing that "when a person is behaving impersonally, then, an organizational value scale is substituted for his personal value scale as the criterion of "correctness" in his decisions."

These impersonal practices appear to be important complements to caring, as they provide a structural source of accountability. We know about the benefits of contracting, or formalization, for organizational performance since Weber's (1947) treatise on bureaucracy and the influential work of the Carnegie School (e.g., March & Simon, 1958). Making explicit roles and routines helps overcome individuals' cognitive limitations. Because of new ventures' "liability of newness" (Stinchcombe, 1965), some degree of formalization helps them perform better. A recent study of new firms in the highly turbulent Internet sector provides preliminary support for the benefits of practices such as formalization in new ventures. Sine, Mitsuhashi, and Kirsch (2006) found that in new ventures, where a dynamic task and external environment would suggest that flexibility is most beneficial, embracing basic structural features such as role

formalization, functional specialization, and administrative intensity, was in fact associated with greater performance in terms of revenue.

The next chapter builds on the insights generated by this study to develop a theoretical framework of relational capital development in entrepreneurial teams. It draws on the social psychological and anthropological literature on personal relationship to develop arguments on how communal relational schemas, which capture the present findings about caring, help the performance of entrepreneurial teams. It also draws on the literature on inter-firm relationships to develop arguments for how contracting practices complement communal schemas to facilitate entrepreneurial team performance.

CHAPTER IV A MODEL OF RELATIONAL CAPITAL DEVELOPMENT

In this chapter I build on the findings of Study 1 to present a mid-range theory of relational capital development in team-based new ventures. This theory delineates how a certain kind of cognition – communal relational schema – coupled with a certain kind of behavior – contracting practices – can build relational capital in entrepreneurial teams and thereby facilitate the team's performance. By structuring their cognitions and behaviors, communal schemas and contracting practices enable entrepreneurial teams to overcome the specific challenges they face. Communal schemas structure entrepreneurs as a community bound together by bonds of caring, whereas contracting structures entrepreneurs as an organization tied by bonds of commitment. The former structures how entrepreneurs *think* about each other, the latter structures how they *act* toward each other. Moreover, together, communal schemas and contracting practices compensate for each one's liabilities. As such, they represent a process through which teams can create relational capital when they are engaged in the act of creating an organization.

COMMUNAL RELATIONAL SCHEMAS

Research on interpersonal relationship suggests that people apply specific relational schemas toward relationship partners and that these schemas influence the nature and development of relationships (Reis, Collins, & Berscheid, 2000). They represent the type of relationship the person desires from another and are used to interpret experiences and guide action in the relationship (Baldwin, 1992). Relational schemas

include a self-schema for how the self is experienced in the relationship, a parallel schema for the partner, and an interpersonal script or expected pattern of interaction (Baldwin, 1992). Relational schemas are cognitive structures that organize how people think about their relationships. Although they are cognitive, each kind of relational schema is associated with certain behavioral manifestations and expectations (McGraw & Tetlock, 2005). Thus relational schemas structure people's expectations, interpretations, and behaviors toward others (Baldwin, 1992; Fiske, 1992). By "structure" I mean that they constrain and align interpretations and regulate behavior, reducing the possible options individuals are likely to exercise (Barley & Tolbert, 1997). Relational schemas are important in understanding personal relationships because they shape expectations, thereby shaping each person's own behavior as well as partners' behavior and the nature of interactions. Because of the self-fulfilling nature of expectations in personal relationships, relational schemas are often mutual (Reis et al., 2000).

Relational schemas differ based on their implications for how benefits and resources are allocated in the relationship (Clark & Mills, 1979; Fiske, 1992). Relational schemas provide a decision rule for resource allocation. In a seminal paper, Fiske (1992) identified four basic relational schemas that are prevalent across cultures. In the equality matching schema, benefit allocation is governed by egalitarianism, in-kind reciprocity and balance; in the authority ranking schema benefits are allocated according to precedence, hierarchy, and status; in the market pricing schema proportionality determines allocation according to a common scale of ratio values (such as money); and in the communal schema giving is based on perceived need and for the purpose of expressing commitment to the relationship (Clark & Mills, 1979; Fiske, 1992). For

example, in an entrepreneurial team deciding how to allocate vacation time among team members, an equality matching schema will lead the team to rotate taking a week off. An authority ranking schema will give precedent and first choice of dates and length of vacation to the team member who has the greatest ownership stake or the highest ranking position (e.g., the CEO). A market pricing schema may reward team members with vacation time for important accomplishments, such as securing a certain amount of funding or meeting an R&D milestone. Finally, a communal schema will result in allocating vacation time to the team member who needs it most – the one who is most burnt out or whose child is ill.

Which relational schema will be appropriate in a given relational context depends on certain properties of the situation. Specifically, interdependence theory (Kelley et al., 2003; Rusbult, Kumashiro, Coolsen, & Kirchner, 2004) holds that the nature of interdependence in a relationship determines which kind of relational schema is most adaptive. According to these authors, several properties of the relationship determine which schema is most functional, including the degree of dependence of partners on one another, the mutuality of the dependence, whether the outcome depends on joint or unilateral action, covariation of interests, the temporal duration of the relationship, and the extent of uncertainty. Although Kelley and other interdependence theorists did not develop their theory in the entrepreneurial context, an analysis of the entrepreneurial team context based on interdependence theory criteria leads to several conclusions. Entrepreneurial teams represent a relational reality characterized by high mutual joint interdependence, covariation of interests, extended temporal duration, and high uncertainty in the situation. Moreover, entrepreneurial situations usually entail making

significant investments in the relationship. Such relational situations generate high concern for relationship maintenance because of reliance on the partners (Kelley et al., 2003). Also, because dependence often entails vulnerability, these situations may inspire motivated forms of cognition such as positive illusions and downward social comparison (Rusbult et al., 2004). Specifically, interdependence theory predicts that in these situations people are likely to apply a communal relational schema. As Kelley et al. (2003: 380) write, "People should be driven to develop communal sharing rules in domain of their environment in which they are subject to the whims of fate." Research on other highly uncertain interdependent situation supports the notion that successful adaptation entails communal relations. For example, Shils and Janowitz (1948) argue that the isolation and danger faced by German soldiers in World War II, coupled with intensity of interpersonal contact, facilitated their intimacy and closeness, thereby reducing desertion and improving their combat performance. Likewise, Shirom (1976) concluded that the most important determinant of combat performance in the Israeli army is the need-based social support soldiers receive from each other.

The findings from Study 1, reported in Chapter III, present evidence that some entrepreneurial teams adopt communal relational schemas (henceforth, communal schemas) toward each other. The data suggest that they thought and talked about their partners in ways that expressed concern for their needs and wellbeing. Communal schemas rather than other kinds of schemas appeared to underlie their supportive behavior. Published accounts of entrepreneurial teams also support the existence of communal schemas in entrepreneurial teams. An example comes from Vermeer Technologies (Levenson & Nanda, 1997). The partners lacked prior ties and met only in

the interest of forming the venture, but quickly came to care about each other. As cofounder Randy Forgaard said about his co-founder Charles Ferguson, "Charles is
extremely protective of the Vermeer family and what we have built. He is always on
guard against unscrupulous partners [and] overly greedy VCs" (Levenson & Nanda,
1997: 4). Another example of communal schemas in an entrepreneurial team comes from
Federal Express, which was founded on principles of caring and compassion for people.

One of the early hires tells of the concern co-founder Fred Smith expressed for her as a
single mother, "No one at American [her former employer] cared about my situation. I
was just overwhelmed by Fred's compassion and by the atmosphere of the company"
(Frock, 2006: 66).

In communal relationships, benefits are given to fulfill the other person's needs or to express a general concern for the other person. As Blau (1964/1986: 6) writes, individuals in communal relationships, where both partners adopt communal schemas toward each other, "often do favors for one another not in the expectation of receiving explicit repayments but to express their commitment to the interpersonal relation and sustain it by encouraging an increasing commitment on the part of the other." Communal schemas entail a sense of belonging, mattering, and commitment to being together (McMillan & Chavis, 1986). Under these conditions, individuals become part of a community of fate (Stinchcombe, 1965), regardless of whether they have an established relationship. Thus, communal schemas can temporally precede relational capital, as people can be communal even toward relative strangers. Communal schemas are a matter of degree, whereby the more communal, the greater the sense of responsibility a person

feels for the other's welfare and the greater the concern with maintaining relationship health (Mills, Clark, Ford, & Johnson, 2004).

COMMUNAL SCHEMAS AND RELATIONAL CAPITAL

Below I present arguments about the impact of communal schemas on relational capital. Specifically, I argue that communal schemas facilitate the development of trust and identification but can inhibit the development of obligations.

Trust

Communal schemas influence interpretations and behaviors in predictable ways that increase trust on the team. Because thinking communally about another means caring about his or her needs, communal individuals are likely to be other-interested, rather than strictly self-interested (McGinn & Keros, 2002). They are more likely to pay attention to the other's needs (Clark, Mills, & Corcoran, 1989), give others benefits in response to these needs (Clark, Ouellette, Powell, & Milberg, 1987) and feel good when helping the other (Williamson & Clark, 1989). These forms of social support increase perceived trustworthiness (Whitener et al., 1998). In the new venture context, this can mean noticing that a team member is discouraged and giving him a "pep talk," helping a team member with her presentation skills, or accommodating and forgiving mistakes.

Communal schemas also increase trust by facilitating interpersonal coping with the intense and sometimes negative emotions generated by the entrepreneurial experience. People who are communal are more likely to express emotions and are more accepting of emotional expressions by others (Clark, Fitness, & Brissette, 2001). Emotional expression communicates that partners' trust each other with information about their vulnerabilities and that they trust others to support them rather than take

advantage of their weaknesses (Clark et al., 2001). Moreover, because expressions of negative emotions are more likely to engender expression of support when people are communal, communal teams may reap the benefits of task conflict without suffering detrimental relationship conflict that can hurt trust (Ensley et al., 2002). Although communal teams may still experience tensions, blaming, and finger pointing, these are less likely to tear them apart because of the intimacy, openness, and mutual concern on the team (Ensley et al., 2002).

Communal schemas and the behaviors they engender thus substitute for social structure in developing trust. When communal, individuals convey valuable information about themselves through emotional expression and self-disclosure. These communicative acts increase team members' knowledge of each other's motivations, goals, and interpretations and decrease the agency misattributions and misunderstandings that can undermine trust. In addition to increasing trust by others, communal schemas lead people to be more trusting of others. They lead to motivated cognitions, whereby relationship partners cast others' intentions, abilities, and behaviors in a more positive light (Kelley et al., 2003). Thus communal schemas reduce concerns about goal incongruence, the other's competence, or free riding, and increase the belief that relationship partners are acting in the interest of the relationship.

These arguments suggest the following hypothesis:

Hypothesis 1: Communal schemas among entrepreneurial team members are positively associated with trust on the team.

Identification

Adopting communal schemas toward teammates can also lead to greater identification with the team. The self disclosure and emotional expression associated with communal schemas mean that team members are more likely to treat each other as individuals, based on unique personal characteristics, rather than stereotypically as representative of social groups (e.g., "engineers"), which increases identification between them (Sluss & Ashforth, 2007). The closeness that communal schemas bring about leads relationship partners to include each other in their selves in the sense that the other's perspectives, resources, and identities are to some extent their own (Aron, Aron, & Norman, 2001).

Communal schemas also can generate social comparisons that strengthen identification. As a result, communal teams are more likely to derogate alternative relationship partners, selectively attend to information consistent with a positive view of each other, and construct narratives that discount negative aspects of the relationship and augment positive ones (Karney, McNulty, & Bradbury, 2001). These motivated cognitions increase team members' perception that their relationships are positive and facilitate an esprit de corps that solidifies their identification with the relationship (Roberts, 2006). They can foster identification through an "us versus them" mentality (Hill & Levenhagen, 1995). Finally, communal schemas and the social support they engender may facilitate a positive rather than negative emotional response to the stresses of entrepreneurship by granting entrepreneurs with a sense that they have the resources they need to cope effectively with the challenges they face (Rindova & Petkova, 2007). The experience of positive emotions is a known antecedent of identification as it

increases the value and significance of group membership (Pratt, 2000). These arguments suggest the following hypothesis:

Hypothesis 2: Communal schemas among entrepreneurial team members are positively associated with identification with the team.

Obligations

Despite their positive effects, communal schemas by themselves are not enough for the development of relational capital, as they can reduce obligations to the team. Communal schemas can lead team members to overestimate the extent to which they think alike (Watson et al., 1995). They perceive less uncertainty about the motives and mental models of the other team members and assume that their affinity in the social realm translates to similarity in opinions in the task realm (Hogg & Terry, 2000). As a result, they may refrain from holding explicit conversations about their behavioral expectations from each other. Explicitness is one of the conditions that increases behavioral commitment (Salancik, 1977) and without it, the level of obligations on the team will be lower. For example, the team may decide to work on their business plan and assign different sections to various team members but, given their assumption that everyone is on the same page, may not be explicit about what each part of the business plan should include, by when it should be completed, or even what they mean by the term "business plan." As a result, there will be less commitment to produce the document in a way that meets others' expectations. Unlike clans (Ouchi, 1977) or strong cultures (O'Reilly & Chatman, 1996), entrepreneurial teams do not attain agreement by socializing their members, because there is no social structure to socialize them into.

Thus clarity can only be attained by holding explicit conversations with direct sharing of diverse views, which is less likely to happen when a team is highly communal.

Communal schemas can reduce obligations even as it increases trust and identification. Entrepreneurial team members may be highly motivated, but in the absence of clarity and accountability, their relationship will be characterized by low levels of obligations. Thus,

Hypothesis 3: Communal schemas among entrepreneurial team members are negatively associated with felt obligations on the team.

The above arguments suggest that entrepreneurial teams that characterized only by communal schemas may not develop the three types of relational capital that they need to succeed. As I argue below, contracting practices can supplement communal schemas for relational capital development in entrepreneurial teams.

CONTRACTING PRACTICES

Insights on the benefits of contracting practices in relationships come from research on inter-organizational alliances (e.g., Carson et al., 2006; Vlaar, Van den Bosch, & Volberda, 2006). Like entrepreneurial teams, they represent relationships that are neither hierarchy (i.e., the two firms are distinct entities rather than a single organization) nor market (i.e., the interaction between them is embedded rather than arm's length). In the words of Powell (1990: 301), "this patterned exchange looks more like a marriage than a one-night stand, but there is no marriage license, no common household, no pooling of assets." Moreover, they share with entrepreneurial teams high mutual and joint interdependence, as well as uncertainty. As suggested by the results of Study 1, in such relationships, contracting practices can facilitate relational capital.

Contracting is a behavioral practice that entails codifying and enforcing inputs, outputs, and behaviors, thereby producing a testament of the process. The testament can be either written or verbal; what matters is that there is explicitness and transparency about expectations from the other party (see also Vlaar et al., 2006). Like communal schemas, contracting practices reduce the bounds on interpretative and behavioral options. Contracting practices provide direction for people about what they need to do, thereby replacing an organizationally-given structure (Sine et al., 2006). The power of contracting practices is not necessarily their legal enforceability, because most are actually too incomplete to constitute legal safeguards. Thus contracts are not inherently obliging. Rather, contracting practices are a dynamic mechanism for clarifying and elaborating objectives and responsibilities (Carson et al., 2006). They stimulate conversations that create shared meaning where there is none by focusing partner's attention on the same issues, forcing articulation of opinions, and instigating and maintaining interaction about how the company should be run (Vlaar et al., 2006). Contracting also creates rules or guidelines for action. Although these rules are dynamic and continuously modified, at any given moment they serve as templates for planning and accomplishing tasks (Desanctis & Poole, 1994). Like communal schemas, contracting practices are a matter of degree. The more complex the contracting practice, the more elaborate the process of joint problem solving and the greater the specification of promises and processes for settling differences of opinion (Carson et al., 2006; Poppo & Zenger, 2002).

Entrepreneurs may be motivated to engage in contracting practices as their situation is novel. In uncertain and unfamiliar situations, people are more likely to engage

in systematic cognitive processing and counterfactual thinking (Baumeister, Vohs, DeWall, & Zhang, 2007). The emotions associated with the uncertainty of new venture formation, whether positive, such as hope, or negative, such as fear or worry, likewise motivate systematic cognitive processing to improve understanding what is happening in the current situation and perceived ability to predict what will happen next (Tiedens & Linton, 2001). Contracting can be a way for entrepreneurial team members to address this need for greater certainty.

Most entrepreneurial teams engage in some form of contracting, as when defining the ownership of the firm. But contracting practices can also be used more extensively in the team's day-to-day operations. For example, at the end of their weekly meetings, a team can put into writing what each person had agreed to do, along with a target date to do it by, thereby making explicit their goals and commitments and plans for achieving them, rather than agreeing in more general terms (or not conducting weekly meetings at all). These examples correspond to the task description aspect of contracting (Argyres, Bercovitz, & Mayer, 2007). Detailed contracting around how the entrepreneurial teams' relationships will end and how they will handle possible conflicts of interest later on, for example in a detailed "Operating Agreement," is another means of generating explicit conversations about these issues. Operating Agreements include details guidelines about how the new venture will be managed, how major decisions will be made, and how dissolution will be handled. This second practice of contracting, contingency planning, outlines how partners will deal with problematic contingencies that might arise, such as changes in technology, competitor's actions, and unexpected delays (Argyres et al., 2007).

Examples of entrepreneurs engaging in these practices abound, including those presented in Chapter III. Likewise, from the very beginning, the founders at Vermeer adopted the practice of turning their ideas into written commitments. As Forgaard said, "What I tried to do was bring the ideas down to the ten-thousand-foot level by producing a document that enumerated the features we would like" (Mahmood & Nanda, 1997: 3). In its early years, Federal Express was loosely structured and "titles were virtually meaningless." Yet the founding team held weekly meetings to coordinate their activities in which they would set goals and follow up on them, spend time on schedules, uncover reasons for delays, and discussing alternative approaches to meeting objectives.

According to founding team member Roger Frock, these practices injected some discipline into the young organization (Frock, 2006).

CONTRACTING PRACTICES AND RELATIONAL CAPITAL

Contracting practices have important implications for relational capital development in entrepreneurial teams by structuring team members' interpretations and actions regarding managing the new venture, as elaborated below.

Obligations

Contracting practices force relationship partners to articulate, deliberate, and reflect on their goals and needs for the new venture (Beck & Kieser, 2003; Vlaar et al., 2006). The greater the extent of interaction generated by contracting, the greater the feeling of interacting parties that they should comply with the terms agreed upon. This greater sense of obligations arises not because of the legally binding aspect of the contracts, as they are too incomplete to constitute legal safeguards. Rather, the greater sense of obligation comes from the process of verbally articulating behavioral

commitments. The explicitness, publicness, and irrevocability of stated intentions articulated in the contracting process increase people's behavioral commitment to follow through (Salancik, 1977).

Contracting practices facilitate collective sensemaking of the new venture's ambiguous task and help team members make sense of each other. Specifying a basic division of responsibility and accountability increases the likelihood that entrepreneurial team members know how others on the team will handle certain contingencies (Fama & Jensen, 1983; March & Simon, 1958). Thus contracting practices increase both clarity about how to manage the new venture and agreement about it between entrepreneurial team members. They serve as substitutes for precedent, providing clarity where there is none and protecting the team from detrimental mistakes and misalignments.

Indeed, studies have demonstrated that when groups are uncertain about how to organize, time spent communicating about goals and ideas improves group functioning (Ericksen & Dyer, 2004). Even when partners have previous experience with the situation, they may contract because their past experience taught them the benefits of contracting practices. Argyres, Bercovitz, and Mayer (2007) found that in the inter-firm context, as two partners contracted over time, they tended to include more, not less, provisions specifying plans for various contingencies. These arguments suggest the following hypothesis:

Hypothesis 4: Contracting practices among entrepreneurial team members are positively associated with felt obligations on the team.

Identification

Contracting practices can facilitate the formation of a shared identity. Contracts codify a group boundary through the creation of explicit legal, financial, and social boundaries and thereby facilitate greater levels of identification within the team (Kogut & Zander, 1996). As Aldrich (1999: 161) writes, "Organizational emergence is marked by organizational boundaries coming into focus. With definite boundaries, an organization is no longer merely an aggregation of individuals. In their organizationally-defined roles, people now constitute an entity that differs radically from the accumulation of individual self-interests." Contracts are an articulation of that emerging boundary and thus are conducive to the development of identification (Nahapiet & Ghoshal, 1998).

Contracting practices can alleviate the negative effects of lack of structure on identification by facilitating convergence on shared meaning about the company. In a recent study, Hogg et al. (2007) found that when people are uncertain about themselves in a social situation, they prefer to identify with, and identify more strongly with, groups that are more distinctive, more clearly structured, and associated with clearer prototypes. Such groups have "high entitativity" and are thereby more effective at reducing uncertainty. Contracting increases the entitativity of the startup, thereby increasing its attractiveness as a target of identification. Specifically, the interactions about and definition of the nature of the organization creates a more crystallized identity and a sense of how it is distinct from others (Albert & Whetten, 1985). For example, The Prediction Company was founded in 1991 and uses chaos theory to develop automated trading systems. As told in *The Predictors*, the discussions among the founders of company about how they should define themselves as a legal entity brought forth their ideas about

what kind of company they were going to be – an investment firm, a software company, or a division of a large bank. At the end of the discussion they had converged on a common vision for their identity and affirmed their commitment to it (Bass, 1999). Likewise, Vermeer Technologies held weekly meetings where everyone made explicit their commitments to perform certain tasks and reported progress on those tasks. As one the team member said, "This is a device to get the momentum and positive feeling going and ensure that the right hand knows what the left hand is doing. Besides, the meetings are the only mechanisms that make us all feel that we are part of one company. They build a sense of community among the engineers (Levenson & Nanda, 1997: 2)." Thus contracting provides an alternative path to identification where market-based novelty strips new ventures of opportunities to attract identification through their external image. Thus,

Hypothesis 5: Contracting practices among entrepreneurial team members are positively associated with identification with the team.

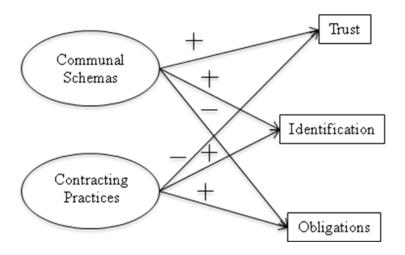
Trust

Like communal schemas, however, contracting practices are insufficient, by themselves, for building relational capital in entrepreneurial teams. Within teams, contracting can undermine trust. Contracting in the absence of communal schemas can undermine trust in others' motives and goodwill, for example, by leading people to attribute others' cooperation to the constraints imposed by the contract rather than to internal motivations (Kollock, 1994). Although contracting can increase cognitive trust, or calculus-based trust, which is grounded in the belief that others will do as expected (McAllister, 1995; Rousseau et al., 1998), it tends to reduce trust in the others'

benevolent intentions and value-congruence. Contracts can increase the perception of social distance between team members and increase the salience of impersonal aspect of their relationship relative to interpersonal aspects (Sitkin & Roth, 1993). Thus, *Hypothesis 6: Contracting practices among entrepreneurial team members are negatively associated with trust on the team.*

Figure 4.1 is a representation of the hypothesized effects of communal schemas and contracting practices on trust, identification, and obligations.

FIGURE 4.1 Summary of Hypotheses 1-6



COMBINING COMMUNAL SCHEMAS AND CONTRACTING PRACTICES

There are several reasons to believe that combining communal schemas and contracting practices is beneficial for building relational capital in entrepreneurial teams. First, either one by itself can be insufficient and even dysfunctional. For example, entrepreneurs pursuing only contracting without communal schemas in the "built to flip" model typical of pre-bubble Silicon Valley sought each other as means to get rich fast

and move on. They engaged in elaborate contracting around their exit strategy (Collins, 2000). Many of these teams imploded before they could realize the gains of their ideas and market opportunities, perhaps because the absence of caring inhibited the development of strong and resilient relationships. At the other extreme, entrepreneurial teams who re-create family-like patterns of relating with non-family members and in which agreements are informal rather than contractually recorded have been shown to suffer from the perils of free riding, unfulfilled promises, and other manifestations of lack of obligations (Kerra, Tracey, & Phillips, 2006).

Contracting practices without communal schemas means that team members have structured their behavioral commitment but have not solidified as a team characterized by strong emotional connections. Team members may be more likely to walk away from such teams. Communal schemas without contracting practices mean that despite caring, the team is unprepared for difficult junctures ahead. They may have solidified their interpersonal bonds, but are not bound by commitments.

Contracting practices also can serve as a platform upon which entrepreneurs can leverage the benefits of communal schemas, and vice versa. Apparent opposites can be mutually reinforcing (Clegg, Vieira, & Cunha, 2002). Thus when enacted with communal schemas, contracting practices do not necessarily undermine trust. They mean, rather, that entrepreneurs acknowledge the complexity of their situations. Their attribution for contracting is the situation, not suspicion about the motives of their team members. As a result, entrepreneurial team members need not worry as much about actually enforcing the contract (Dyer & Chu, 2003). At the other end, when communal schemas are enacted with contracting practices, this means that team members' caring is not "blind".

Contracting is a practice that enables communal partners to hold "difficult" or "uncomfortable" discussions (Vlaar et al., 2006). As a result, their relationship is of a higher quality, as it is more robust to various contingencies, can support discussions of a broader range of issues, and is resilient in the face of setbacks (Dutton & Heaphy, 2003). These ideas are summarized in the following hypotheses:

Hypothesis 7a: The interaction of communal schemas and contracting practices among entrepreneurial team members is positively associated with trust.

Hypothesis 7b: The interaction of communal schemas and contracting practices among entrepreneurial team members is positively associated with identification.

Hypothesis 7c: The interaction of communal schemas and contracting practices among entrepreneurial team members is positively associated with obligations.

The perspective presented here differs from much of the literature on control within organizations, which do not treat communal schemas and contracting practices as coexisting (e.g., Eisenhardt, 1985; Ouchi, 1979). The unique features of team-based new ventures, where high personal stakes co-occur with high task and environmental ambiguity, make both communal schemas and contracting practices necessary. Moreover, at the startup phase, there is no past, no precedent, and no existing social structure. The entrepreneurial team *is* the organization. As a result, team members need to cultivate both the team and its ability to function as an organization. Communal schemas enable entrepreneurs to be a team rather than a collection of individuals in the sense of being integrated and connected to each other (Hambrick, 1994). Contracting practices enable entrepreneurs to be an organization in the sense of producing collective coordinated

action (Thompson, 1967). Both are ways of structuring their relationships, thereby compensating for entrepreneurial teams' lack of an exogenous social structure.

RELATIONAL CAPITAL AND ENTREPRENEURIAL TEAM PERFORMANCE

Below I develop hypotheses regarding particular aspects of entrepreneurial team performance impacted by the relational capital build through communal schemas and contracting practices. Previous research on entrepreneurial team performance has conflated team performance with venture performance (e.g., Amason et al., 2006; Birley & Stockley, 2000; Ensley et al., 2002; Rueber & Fischer, 2002; Watson et al., 2003). Here I aim to examine more proximal outcomes of relational capital on the team, namely team process quality, to gain a more fine grained understanding of how entrepreneurial performance is affected by relational capital.

Three types of team processes are particularly beneficial in entrepreneurial teams: creativity, resilience, and coordination. Creativity is the production of novel, useful ideas or problems solutions (Amabile, Barsade, Mueller, & Staw, 2005). Because new ventures are in the business of creating something new, the ability of the entrepreneurial team to be creative is particularly important for their success. Indeed studies find that creativity engenders positive evaluations it receives from stakeholders. For example, Rindova, Petkova, & Kotha (2007) found that new firms that introduced novel product and service features generated positive evaluations from the media.

Relational capital on the entrepreneurial team is hypothesized to facilitate creativity. Walter and Bruch (2008) recently reviewed the evidence on emotions in groups to argue that high-quality interpersonal relationships within work groups promote mechanisms of affective sharing, thereby increasing the level and homogeneity of group

members' positive affect. This positive affect in the group, in turn, increases the group's creativity by broadening cognition and increasing the group's repertoire of ideas and possibilities (Amabile et al., 2005; Fredrickson, 2001; Walter & Bruch, 2008). Trust and the openness it promotes also facilitate the generation of ideas for creativity (Isaksen & Lauer, 2002; Madjar, Oldham, & Pratt, 2002). Identification promotes creativity by increasing mutual support and collective problem-solving, as team members focus on their collective goal (Orr, 1990). Finally, obligations provide a minimal structure by ensuring that team members know what is going one with each other's activities. The minimal structure serves as a platform for creativity to take place (Kamoche & Cunha, 2001). Together, the three forms of relational capital increase the entrepreneurial team's generativity, or its ability to create, transform, or otherwise expand its resource options for coping with the problems it faces (Dutton & Glynn, 2007).

Resilience is the capacity to rebound from adversity strengthened and more resourceful (Sutcliffe & Vogus, 2003). Resilience is an important quality for entrepreneurial teams, as they are likely to face numerous road blocks, failures, and disappointments. Promises of funding fall through, technological launches fail, competitors reach the market first, or progress takes more time and money than anticipated. Entrepreneurs have no slack resources and experience these near-disasters as stressful, as they reduce their perceived ability to cope with their situation (Rindova & Petkova, 2007). For example, when Federal Express was first founded, the hub-and-spokes idea was novel and initially ridiculed as impractical. "Existing regulations prohibited this form of nationwide delivery service, experts considered it a financial impossibility, and airline executives forecast its demise (Frock, 2006: 9)." As a result,

Federal Express experienced many difficulties, repeatedly coming within an inch of failure because of dwindling financial resources and unforeseen events (Frock, 2006). Yet the founding team was able to be resilient in the face of these obstacles, kept on trying, and persevered to bring the company to success.

The support, encouragement, commitment, and cohesion associated with relational capital on the team facilitate the ability of the team to rebound from adversity. These qualities of relationships increase the team's perceived efficacy or ability to cope with their stressful circumstances, thereby facilitating a positive emotional response to challenges (such as hope) rather than a negative one (such as frustration) (Rindova & Petkova, 2007). Trust, identification, and obligations provide a basis for taking risks in coping with adversity, thereby facilitating resilience. For example, at one point in Federal Expresses' early history, when it had just about run out of money, Fred Smith, Federal Express's founder, took the last of the young company's money to Las Vegas and gambled all night. He made enough to last them until their next round of funding (Frock, 2006). This resilient response was facilitated by his team members' trust in him to do what is right for the company. Identification fosters resilience by tying the success of the venture to individual's own perceived success, thereby increasing their motivation to keep going rather than give up. Obligations facilitate resilience because they lead people to commit to do whatever it takes for the firm to succeed. For example, when the terrorist attacks of September 11, 2001 destroyed the workplace of a large investment bank, traders who had previously earned eight-figure salaries became clerks or manual operators as part "doing what it takes" to be resilient in light of the disaster (Beunza &

Stark, 2005). Their sense of obligation toward each other underlay their willingness to do work for which they are overqualified.

Coordination is the extent of consistency and coherence in organizational members' work activities (Cheng, 1983). High-quality coordination is necessary for entrepreneurial teams to perform well in light of the complexity and ambiguity of their situation (Alvarez & Barney, 2005; Eisenhardt, 1989b). Entrepreneurial teams need to respond quickly and flexibly to dynamic and turbulent environments and the limited resources available to new ventures mean that entrepreneurial teams cannot afford misalignment in their actions (Alvarez & Barney, 2005; Quinn & Cameron, 1983). Yet attaining a high level of coordination is a non-trivial endeavor given the lack of social structure in entrepreneurial ventures to align people's behaviors. People may differ substantially in their interpretation of their situation and their perception of what is the appropriate response. As a result, their behaviors and actions are unlikely to converge.

Trust, identification, and obligations facilitate coordination by increasing team members' knowledge about each other's activities and thus their ability to align with these activities. Trust means that individuals have a sense of the other's motivations and behavioral tendencies (Mayer et al., 1995), which enables better anticipation and response to their actions. Identification means that team members share certain premises for decision making, and thus are likely to respond to a given contingency in the same way (Simon, 1991). This predictability facilitates coordinated responses, even in the face of novel circumstances. Obligations also increase predictability, as people know that others will follow through with their promises. They also increase people's willingness to adjust to each other's actions post-hoc. Because team members feel obliged, they are

more likely to respond to each other's actions with a "yes-and" response, building on rather than blocking each other's ideas and actions (Weick, 1998). The enhanced interpersonal knowledge associated with these forms of relational capital facilitate mutual adjustment for coordination (Gittell, 2006). It also enables team members to take each other's perspective and thereby anticipate the behavior and reactions of others (Galinsky, Ku, & Wang, 2005). In support of this logic, it is known that *lack* of perspective-taking is particularly harmful to coordination, as people are unable to abandon their own perspective in interactions with others from different disciplines (Heath & Staudenmayer, 2000).

In sum, I propose the following hypotheses regarding the relationship between relational capital and new venture performance:

Hypotheses 8a-c: Trust between entrepreneurial team members is positively associated with (a) creativity, (b) resilience, and (c) coordination.

Hypotheses 9a-c: Identification with the entrepreneurial team is positively associated with (a) creativity, (b) resilience, and (c) coordination.

Hypotheses 10a-c: Obligations between entrepreneurial team members are positively associated with (a) creativity, (b) resilience, and (c) coordination.

Combining the hypotheses presented thus far yields the theoretical framework presented in Figure 4.2 below. As is apparent from the figure, communal schemas and contracting practices are hypothesized to improve team process quality through their impact on relational capital. Thus,

Hypotheses 11a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between communal schemas and creativity.

Hypotheses 12a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between communal schemas and resilience.

Hypotheses 13a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between communal schemas and coordination.

Hypotheses 14a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between contracting practices and creativity.

Hypotheses 15a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between contracting practices and resilience.

Hypotheses 16a-c: (a) Trust, (b) identification and (c) obligations mediate the relationship between contracting practices and coordination.

FIGURE 4.2
Hypothesized Relationships between Communal Schemas, Contracting Practices,
Relational Capital, and Team Process Quality

