NEW VENTURE SUCCESS: THE ROLE OF PRINCIPAL'S SOCIAL CAPITAL AND

SOCIAL EFFECTIVENESS

Except where reference is made to the work of others, the work described in this dissertation is my own or was done in collaboration with my advisory committee. This dissertation does not include proprietary or classified information.

Neil Tocher

Certificate of Approval:

Christopher L. Shook
Associate Professor
Management

Sharon L. Oswald, Chair
Privett Professor
Management

Garry Adams
Assistant Professor
Management

Joe F. Pittman
Interim Dean
Graduate School

NEW VENTURE SUCCESS: THE ROLE OF PRINCIPAL'S SOCIAL CAPITAL AND SOCIAL EFFECTIVENESS

Neil Tocher

A Dissertation

Submitted to

the Graduate Faculty of

Auburn University

in Partial Fulfillment of the

Requirements for the

Degree of

Doctor of Philosophy

Auburn University
August 4, 2007

NEW VENTURE SUCCESS: THE ROLE OF PRINCIPAL'S SOCIAL CAPITAL AND SOCIAL EFFECTIVENESS

Neil Tocher

Signature of Author

Date of Graduation

DISSERTATION ABSTRACT

NEW VENTURE SUCCESS: THE ROLE OF PRINCIPAL'S SOCIAL CAPITAL AND SOCIAL EFFECTIVENESS

Neil Tocher

Doctorate of Philosophy, August 4, 2007
(M.S., Auburn University, 2005)
(B.S. Gonzaga University, 2002)

117 Typed Pages

Directed by Sharon L. Oswald

Previous empirical research indicates that founder social capital and founder social effectiveness may both be beneficial during the venture creation process. However, few, if any, studies have examined the combined influence of both social capital and social effectiveness on new venture success. Using data gathered from 156 new venture founders throughout the United States, this study examined the influence that both social capital and social effectiveness had on new venture success. Specifically, the current research had three main objectives. First, it sought to examine the notion that new ventures operated by founders with high levels of social capital would experience more new venture success than ventures operated by founders with less social capital. Next, it attempted to examine the notion that new ventures operated by socially effective individuals would experience higher new venture success than ventures operated by less socially effective founders. Finally, it sought to examine the notion that the interaction between a new venture founder’s social capital and social effectiveness would positively influence new venture success. Results indicated that founder social effectiveness positively influenced new venture success.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my committee members Dr. Sharon Oswald, Dr. Chris Shook, and Dr. Garry Adams for guiding me through this challenging and rewarding process. I could not have accomplished this task without their valuable contributions.

Next, I would also like to thank my other former Auburn professors. Individuals such as Achilles Armenakis, Allison Jones Farmer, Junior Feild, Bill Giles, Stan Harris, and many others have provided me with a wide variety of useful knowledge.

Thirdly, I would like to thank all the administrative staff in the Management Department and throughout campus who have been so kind and provided me much needed help. The assistance of individuals such as Barbara Hawkins, Nancy Ray Monroe, Allison Shipp, and many others has been truly helpful and is greatly appreciated.

Fourth, I would like to thank my friends and family for all their love, support, and constant harassment throughout this process. Family and good friends, regardless of their continuous questions about when I would finish my dissertation, truly make life worth living. I am lucky to have such great people in my life.

Finally, I would like to say thank you to my mentor and very good friend Matthew W. Rutherford. Matt, your help and advice has been invaluable throughout the years and I will always be grateful for it. Also, remember War Eagle, Go Zags, and the Yankees stink!

Style manual used: Publication Manual of the American Psychological *Association* (5th ed.). (2001). Washington, DC: American Psychological Association.

Computer Software used: Microsoft Word 2003, SPSS 15.0, AMOS Graphics 5.0.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

I. INTRODUCTION

Social capital includes individual and collective social networks, ties, and structures which assist individuals in gathering resources such as knowledge about market opportunities (Bollingtoft & Ulhoi, 2005). Specifically, it is theorized that entrepreneurs need capital, information, skills, and labor to successfully start businesses. Entrepreneurs possess many of these resources themselves, but also commonly tap into their social networks to complement their own resources (Cooper, Folta, & Woo, 1995). Thus, an entrepreneur’s social capital includes all the entrepreneur’s social network contacts who assist the entrepreneur in starting and running a business (Burt, 1992). Empirical research has indicated that new ventures started by founders with high levels of social capital experience more new venture success than new ventures started by founders with less social capital (Bruderl & Preisendorfer, 1998; Davidsson & Honig, 2003; Florin, Lubatkin, & Schulze, 2003). However, there is still much to learn about the relationship between social capital and new venture success (Hoang & Antoncic, 2003). For example, empirical studies of the relationship tend to use fairly constrained samples such as venture capital backed firms (e.g. Lechner, Dowling, & Whelpe, 2006) or firms that have just gone public (e.g. Florin, et al., 2003).

The broad construct of social effectiveness refers to an individual’s ability to perceive, understand, and control social interactions (Ferris, Perrewe', & Douglas, 2002).

Empirical research on the topic indicates that social effectiveness is positively related to job, managerial, and entrepreneurial performance (Baron & Markman, 2003; Ferris, Witt, & Hochwater, 2001; Kilduff & Day, 1994; Wayne, Liden, Graf, & Ferris, 1997). Further, social effectiveness is proposed to greatly enhance an entrepreneur's ability to perform functions such as gathering critical information, recruiting and hiring competent employees, and raising capital (Baron & Markman, 2000). However, at the present time, few empirical studies have been conducted to examine the founder social effectiveness new venture success relationship (Baron & Markman, 2003)

While social capital and social effectiveness are likely very valuable in many contexts, it is certainly plausible that they are especially valuable, if not essential, for entrepreneurs engaged in new venture creation (Baron & Markman, 2003; Hoang & Antoncic, 2003). New venture founders who are in the early stages of venture creation must forge many social relationships from scratch with a variety of stakeholders such as customers, suppliers, local authorities, prospective employees, and investors. Further, the new venture itself has little legitimacy during these early stages of development (Williamson, 2000). Due to this limited amount of firm legitimacy, when new venture founders are forging important social relationships with stakeholders, they will probably not be able to rely on factors such as the new venture's reputation, good name, and being aligned with industry norms (Aldrich, 1999). Thus, the new venture founder will likely need to rely heavily on her personal social capital and social effectiveness when developing important social relationships with stakeholders. Hence, it is believed that a new venture founder's social capital and social effectiveness are crucial factors in whether a new venture founder will be able to establish fruitful social relationships with stakeholders and thus enhance her chances of establishing a successful firm.

Study Rationale and Outline

Social capital is theorized to be valuable during the venture creation process because it provides founders access to a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Florin, et al., 2003). Specifically, empirical research indicates that new venture founders with more social ties were better able to obtain information necessary to identify and exploit opportunities (Ozgen & Baron, 2007; Smeltzer, Van Hook, & Hutt, 1991). Similarly, social effectiveness is proposed to help new venture founders develop stronger and more productive relationships with other individuals such as stakeholders (Baron & Markman, 2000). Such stronger relationships are expected to help socially effective new venture founders create more successful firms than founders who are not as socially effective. However, at the present time, few empirical studies have been conducted to examine the social effectiveness new venture success relationship (Baron & Markman, 2003). Further, there is still much to learn about the relationship between social capital and new venture success (Hoang & Antoncic, 2003). Finally, little if any research has examined the interaction of a new venture founder's social capital and social effectiveness.

Considering the above discussion, this study examines the influence that both social capital and social effectiveness have on new venture success. Specifically, the current research has three objectives. First, it seeks to examine the notion that new ventures operated by founders with higher levels of social capital will experience more new venture success than ventures operated by founders with less social capital. Next, it attempts to examine the notion that new ventures operated by socially effective individuals will experience higher new venture success than ventures operated by less socially effective founders. Finally, it seeks to examine the notion that the interaction between a new venture founder's social capital and social effectiveness will positively influence new venture success.

As discussed earlier, social capital is theorized to be valuable for a new venture founder because it provides the founder access to a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Florin, et al., 2003). Such increased access to knowledge and other critical resources is theorized to provide founders with high levels of social capital a competitive edge over founders with less social capital. Empirical research provides support for the above notion. For example, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Further, new ventures owned by founders with high levels of social capital tend to experience better firm performance than ventures owned by founders with less social capital (Bruderl & Preisendorfer, 1998; Davidsson & Honig, 2003; Lechner, Dowling, & Whelpe, 2003). Given these findings, it is proposed that new ventures operated by founders with higher levels of social capital will experience more new venture success than ventures operated by founders with less social capital.

As mentioned above, socially effective individuals are better able to perceive, understand, and control social interactions (Ferris, et al., 2002). Socially effective new venture founders are thus theorized to be better able to develop stronger and more productive relationships with others than new venture founders who are not as socially effective (Baron & Markman, 2000). Such an ability to develop stronger and more productive relationships is theorized to help socially effective new venture founders better perform functions such as gathering critical market information not possessed by others, communicating such information to stakeholders, developing more productive relationships with business partners, and establishing more successful new ventures (Baron & Markman, 2003). Further, empirical research indicates that socially effective new venture founders experience more new venture success than venture founders who are not as socially effective (Baron & Markman, 2003; Duchesneau & Gartner, 1990). Thus, social effectiveness is proposed to positively influence new venture success.

Finally, the third objective of the study is to examine the interaction between a new venture founder's social capital and social effectiveness. As discussed in the proceeding paragraphs, research indicates that social capital and social effectiveness both have positive benefits for new venture founders. On one hand, social capital is theorized to be advantageous for new venture founders because it provides founders access to a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Lechner, et al., 2006). On the other hand, socially effective individuals are theorized to be better able to develop stronger and more productive relationships with others than new venture founders who are not as socially effective (Baron & Markman, 2000). Thus, if social capital provides a new venture founder access to a broader network of individuals from whom to gather knowledge and other critical resources (Davidsson & Honig, 2003) and social effectiveness enables a new venture founder to develop and maintain stronger and more productive social relationships (Baron & Markman, 2003), it follows that a new venture founder with a high level of social capital and who is highly socially effective will be able to develop stronger and more productive relationships with a larger body of individuals. Such an ability should enable a founder with high levels of social capital and who is highly socially effective to gather more resources from a larger body of individuals for a longer time period than a founder who is lower on either dimension. Thus, it is expected that new venture founders with high levels of social capital and who are highly socially effective will experience more new venture success than founders who are lower on either dimension.

Measures and Definitions

Social capital is typically operationalized as the size, strength, and mix of an individual's network (Davidsson & Honig, 2003). Hence, social capital was assessed with items addressing network size and mix adapted from Lechner, et al. (2006) and items addressing network strength and mix adapted from Bruderl and Preisendorfer (1998). The network size and mix items ask the founder to indicate the total number of specific categories of individuals (e.g. family members, friends, prominent business people in the community) that the founder maintains relationships with for the purpose of improving her firm. The network strength items ask the founder to indicate on a 5-point scale the amount of support that the founder receives from specific categories of individuals in her network such as family members, friends, and former employers.

A new venture founder’s social effectiveness was measured with a well developed and accepted scale known as the Political Skill Inventory (Ferris, Treadway, Kolodinsky, Hochwater, Kacmar, Douglas, & Frink, 2005). Measures of social effectiveness include a variety of interpersonal skills such as emotional intelligence, political skill, self-monitoring, social competence, and social skill (Ferris, et al., 2002). However, political skill is the only measure of social effectiveness which was developed specifically to help understand behavior in the business environment (Ferris & Judge, 1991). Further, the Political Skill Inventory is a well developed measure which has been empirically demonstrated to have strong reliability and validity (Ferris, et al., 2005). Finally, political skill has been shown not to correlate with general mental ability. This indicates that differences in new venture success attributed to high political skill are likely independent of individual intelligence. For the above reasons, political skill is the measure of social effectiveness that best suits the goals of this study.

The idea of new venture success advanced in this study was measured by both firm financial performance and a concept known as entrepreneurial performance. Entrepreneurial performance is a firm’s ability to innovate and identify and exploit market opportunities (Lumpkin & Dess, 1996). These measures are used because earning financial returns and developing competitive advantages through innovation and opportunity exploitation are both critical to new venture survival.

Contribution to the Literature

The current study made several noteworthy contributions to the literature. First, it expanded scholarly understanding of the social capital new venture success relationship. While several studies have recently been conducted on this topic (e.g. Davidsson & Honig, 2003; Ozgen & Baron, 2007), there is still much to learn about the relationship (Hoang & Antoncic, 2003). For instance, research on this topic has tended to use fairly constrained samples such as venture capital financed firms (e.g. Lechner, et al., 2006), firms that have just gone public (e.g. Florin, et al., 2003), and firms that are located outside of the united states (e.g. Bruderl & Preisendorfer, 1998). Thus, this study contributed to the literature by using a sample of 156 privately owned American new ventures in their early stages of development to empirically examine the social capital new venture success relationship. The use of a different sample was intended to examine whether earlier findings about the relationship can be generalized to a different type of sample.

Next, the present study increased scholarly understanding of the relationship between social effectiveness and new venture success. For example, the sample used in the present study was a bit broader than past samples used to test the social effectiveness new venture success relationship. Earlier studies of the relationship examined fairly constrained samples such as firms in the juice industry (e.g. Duchesneau & Gartner, 1990) and firms in the cosmetics industry (e.g. Baron & Markman, 2003). Additionally, while previous research indicates that socially effective individuals tend to experience more success in a wide variety of business situations than less socially effective individuals (e.g. Ferris, et al. 2001), few empirical studies of the founder social effectiveness new venture success relationship have been conducted (Baron & Markman, 2003). Thus, the current study contributed to the literature by adding another empirical examination of the issue. furthermore, the PSI that was used to assess social effectiveness in the present study is well developed, highly validated, designed specifically to assess social effectiveness in the business environment, and was not available for use when earlier studies of the social effectiveness new venture success relationship were conducted. Therefore, using the PSI helped strengthen this study's conclusions.

Third, to the researcher's knowledge, this study was the first empirical examination of both the social capital entrepreneurial performance relationship and the social effectiveness entrepreneurial performance relationship. Few, if any, studies have examined whether new venture founders with high levels of social capital or who are socially effective tend to operate firms which experience higher levels of entrepreneurial performance – a firm's ability to innovate and identify and exploit market opportunities (Lumpkin & Dess, 1996). As mentioned above, a high level of social capital and being socially effective are both theorized to help a new venture founder obtain more knowledge about market opportunities (e.g. Baron & Markman, 2003; Florin, et al., 2003). It is reasonable to assume that a new venture founder with more knowledge about market opportunities will exploit such opportunities in more innovative ways. However, the present study contributes to the literature by examining the above contention.

Finally, this study contributed to the literature by being one of the first empirical examinations of the combined influence of a new venture founders social capital and social effectiveness on new venture success. While an interaction between these two constructs has been suggested in previous research (Baron & Markman, 2000; 2003), to the author’s knowledge, the current study was the first empirical examination of the relationship. Thus, the attempt to study the interaction with a sample of 156 new venture founders was an addition to current literature.

Research Limitations

Like any study, this one has limitations. The first major limitation of this study is that it gathered data via self report surveys from owners and top managers of new ventures. Clearly it would be ideal to have objective data, such as audited financial statements; however despite its limitations, self report data has been found to be more reliable when the data is gathered from an executive representing the firm (Nayyar, 1992; Nunnelly, 1978; Tan & Litschert, 1994). Additionally, data collection on two of the main variables in this study (e.g. social capital and social effectiveness of new venture founders) is nearly always collected via self report surveys, because there are few other ways to attain such information (e.g. Ferris, et al., 2005; Florin, et al., 2003; Lechner, et al., 2006). Further, data was collected from owners and top managers of 156 American new ventures. Finally, additional empirical research has been called for on both the relationship between social capital and new venture success (Hoang & Antoncic, 2003) and the relationship between social effectiveness and new venture success (Baron & Markman, 2003). The current study provided additional empirical examination of both those issues. Thus, while the self report data collection method has limitations, its use is necessary.

A second study limitation is that there was only one round of data collection on each variable of interest (e.g. firm performance). Multiple observations of key study variables would be ideal. For example, time series data would help the researcher provide stronger evidence of a causal relationship between founder social effectiveness and new venture success. Specifically, the current study, which focused on a sample of new ventures that ranged between one and eight years old and collected data in one time period, found evidence that founder social effectiveness positively influenced new venture success. However, it is reasonable to assert that a study which gathered data in two or more time periods from a sample of new ventures that were all the same age and which also found that founder social effectiveness positively influenced new venture success would provide stronger evidence that founder social effectiveness causes new venture success. Empirical results indicating that the same socially effective founders consistently experienced more new venture success in different time periods would provide a strong argument for a causal relationship between the two. In spite of the above limitations, information gained by the current study advanced scholarly understanding in several areas. The relationships examined in the current study are outlined in Figure 1.

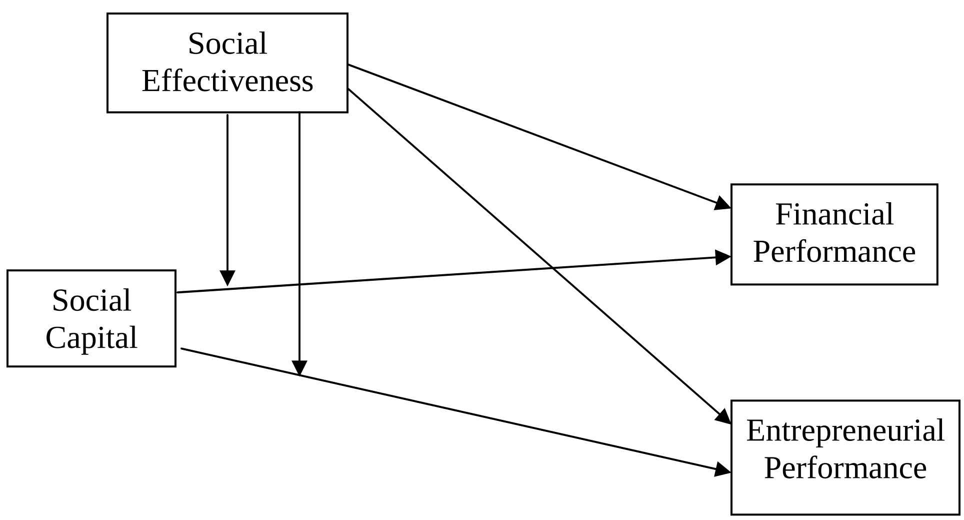

Figure 1. Proposed Relationships

II. LITERATURE REVIEW AND HYPOTHESES

An entrepreneur’s social capital includes all the entrepreneur’s social network contacts who assist the entrepreneur in starting and running a business (Burt, 1992). Possessing a high level of social capital is theorized to be valuable for new venture founders, because such capital provides founders access to a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Florin, et al., 2003; Lechner, et al., 2006). On the other hand, social effectiveness, which is defined as an individual’s ability to perceive, understand, and control social interactions, is theorized to be valuable because individuals who are higher in social effectiveness will be more proficient at interacting with others in social situations (Ferris, et al., 2002). Such an ability is theorized to help new venture founders develop stronger and more productive relationships with others such as potential stakeholders (Baron & Markman, 2000). Thus, it is proposed that social capital and social effectiveness will influence new venture founders’ success. Specifically, social capital and social effectiveness are theorized to be extremely valuable resources for new venture owners, because new venture owners will likely not be able to rely on their firm’s good name or previously earned reputation when developing relationships with stakeholders (Aldrich, 1999; Baron & Markman, 2003).

Social Capital

Social capital includes individual and collective social networks, ties, and structures which help individuals and firms attain resources such as critical knowledge about market opportunities (Bollingtoft & Ulhoi, 2005). Social capital is theorized to be valuable during the venture creation process. It is theorized that since a founder with a high level of social capital will have a larger body of individuals from whom to gather knowledge and other critical resources, that founder will have a competitive edge over founders with less social capital (Florin, et al., 2003; Lechner, et al., 2006). A founder who possesses a higher level of social capital is thus theorized to have a better chance of establishing a successful new venture (Greve & Salaff, 2003). Empirical research provides support for the notion that new venture founders with high levels of social capital are more likely to identify opportunities and establish successful firms than individuals with less social capital.

First, research indicates that new venture founders with more social capital will identify and exploit more new venture opportunities than founders with less social capital. For example, new venture founders tend to possess more social capital than individuals not involved in venture founding (Davidsson & Honig, 2003). Specifically, individuals higher in social capital were more likely to start a venture and still be running that venture 18 months later. Additionally, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Similarly, it was theorized and empirically supported that new venture founder’s who have larger social networks are more likely to identify opportunities

(Singh, Hills, Hybels, & Lumpkin, 1999). Finally, a study of 111 entrepreneurs found that entrepreneurs become aware of business ideas and gather critical information about market opportunities primarily through their social networks (Smeltzer, et al., 1991).

Second, empirical evidence supports the notion that new venture founders with high levels of social capital will be more likely to establish successful new ventures. For example, an examination of 1,710 German firms found that new ventures owned by founders with high levels of social capital were more likely to survive, and experience higher sales and employment growth than new ventures owned by founders with less social capital (Bruderl & Preisendorfer, 1998). Additionally, an examination of venture capital startup firms found that new venture founder network size and mix with a variety of different business people positively influenced new venture performance (Lechner, et al., 2006). Specifically, ventures operated by founders who maintained larger social networks with a mix of different business people (i.e. prominent business people in the community, competitors, and strategic alliance members) broke even more quickly and experienced higher sales than ventures operated by founders with less social capital with such individuals. Furthermore, in an examination of 380 new ventures, it was found that ventures whose founders were members of business networks, such as the chamber of commerce, experienced their first sale more quickly and experienced higher financial firm performance than ventures whose founders were not members of business networks (Davidsson & Honig, 2003). Finally, an examination of new venture founders in a wide variety of industries concluded that founders who gathered advice from a larger and more connected social network experienced higher firm growth in their first year of operations (Hansen, 1995).

The above discussion indicates that social capital is a valuable resource for new venture founders. However, more empirical research is necessary to adequately explain the social capital new venture success relationship (Hoang & Antoncic, 2003). Specifically, previous research on the topic tends to use fairly constrained samples such as firms that have just gone public (e.g. Florin, et al., 2003) or firms that have received financing from venture capitalists (e.g. Lechner, et al., 2006). While such studies are important and informative, it is important to note that an overwhelming number of new ventures will never go public and will never receive financing from venture capitalists (Burger & Udell, 1998). Thus, this study contributes to the literature by using a sample of 156 privately owned new ventures in their early stages of development to empirically examine the social capital new venture success relationship. The use of a broader sample is intended to examine whether earlier findings about the social capital new venture success relationship can be generalized to a different sample of new ventures. Further, the current study contributes to the literature by examining the social capital entrepreneurial performance relationship. Few, if any, studies have examined whether founders with high levels of social capital tend to operate ventures which experience more entrepreneurial performance than ventures operated by founders with less social capital. As mentioned above, a high level of social capital is theorized to help founders obtain more knowledge regarding the recognition and exploitation of market opportunities (Florin, et al., 2003). Therefore, it is reasonable to assume that founders with more knowledge about market opportunities would tend to operate more innovative ventures. However, empirical research is necessary to examine this claim.

Social Effectiveness

Research also provides strong support for a link between social effectiveness and new venture success. First, research indicates that socially effective individuals tend to experience more success in a wide variety of business situations than less socially effective individuals. For example, in a study of over 1400 employees working in a variety of different types of jobs, social skills were found to be the most predictive factor in both job performance ratings and assessments of promotion potential (Wayne, et al., 1997). In addition, employees who show a high degree of social adaptability or the ability to get along with a wide variety of people have been found to be promoted more quickly and more often (Kilduff & Day, 1994). Furthermore, the skill of accurately perceiving other's motives has been shown to help determine whether others are being honest in negotiations and other business transactions (DePaulo, 1994). Second, since socially effective individuals will have more frequent and higher quality communications with others, they are theorized to be better able to establish functional relationships with business partners and, thus, enhance their chances for new venture success (Baron & Markman, 2000).

Third, research indicates that firms operated by socially effective individuals experience higher financial firm performance (Baron & Markman, 2003; Duchesneau & Gartner, 1990). For example, in a study of new ventures in the juice industry, it was found that new venture founders who were better communicators and frequently relied on their communication skills were significantly more likely to establish successful ventures (Duchesneau & Gartner, 1990). Additionally, a study of 230 new venture founders in the cosmetics and hi-technology industries used a questionnaire that assessed several social competencies (e.g. accuracy in perceiving others, skill at impression management, and persuasiveness) and found general support for the notion that socially effective new venture founders will experience higher firm financial performance than less socially effective founders (Baron & Markman, 2003). Specifically, the authors conducted an initial study of 159 independent cosmetic distributors who were all female and all ran their firms out of their homes. Two months later, a follow-up study was conducted of 71 founders of hi-technology firms who were almost all male and were running firms with a median size of 86 employees. Social effectiveness was positively associated with financial success for both of these samples. Baron and Markman's (2003) and Duchesneau and Gartner's (1990) findings are critical because they showed that social effectiveness has been related to financial success in three very different industries. Such findings also indicate that social effectiveness is important in firms of different sizes and is equally beneficial to men and women.

A fourth proposed benefit of social effectiveness for new venture founders involves increased access to information related to the recognition and exploitation of market opportunities. Shane and Venkataraman (2000) assert that one of the reasons certain people are able to identify and exploit opportunities is because there is information asymmetry across individuals with regard to market opportunities. In other words, the entrepreneur has certain information indicating that an opportunity is worth pursuing that others do not possess. Differences in social effectiveness between entrepreneurs is a proposed cause for this market information asymmetry (Baron & Markman, 2003). Specifically, it is proposed that socially effective individuals will be able to rely on their communication skills to gain the trust and confidence of those with whom they interact and, thus, may gain certain valuable market information not possessed by other similarly situated individuals. Further, once this valuable information is gained by a socially effective new venture founder, the socially effective founder will be better able to communicate the sensitive market information to his or her employees. Since socially effective founders may be more proficient at both gathering and capitalizing on valuable market information, their firms may be able to gain competitive advantages in the marketplace (Baron & Markman, 2003).

Finally, socially effective founders will likely be more proficient at recruiting and selecting human resources. It is theorized that socially effective founders will be able to use their social proficiencies to attract and select more competent employees (Baron & Markman, 2000). Empirical evidence provides support for the notion that social effectiveness of company representatives positively influences the attraction and selection of employees. For example, recruitment research indicates that company recruiters and interviewers high in interpersonal skills are preferred by applicants over recruiters with less interpersonal skill (Connerley & Rynes, 1997). Specifically, applicants who deal with a company representative high on interpersonal skills tend to have more favorable impressions of the company and are more likely to accept an eventual job offer from the organization (Powell, 1991; Turban & Dougherty, 1992). Additionally, individuals who are high in social perception tend to hire the most qualified employees (Eder & Ferris, 1989). Further, socially effective individuals are better able to perceive the true motives of others in business negotiations (DePaulo, 1994). Such an ability will help socially effective individuals identify tactics such as impression management during the hiring process. An ability to attract and select desired human capital will be particularly valuable during new venture creation, since, generally speaking, new ventures often have difficulty attracting and selecting competent employees (Williamson, 2000; Williamson, Cable, & Aldrich, 2002).

The preceding discussion suggests that social effectiveness has a wide variety of proposed benefits for entrepreneurs. However, at this point, few studies have been conducted to empirically examine whether socially effective new venture founders are actually able to leverage their social proficiencies to establish more successful new ventures (Baron & Markman, 2003). Therefore, the present study attempts to fill this gap. Specifically, the PSI that was used to assess social effectiveness in the present study is well developed, highly validated, designed specifically to assess social effectiveness in the business environment, and was not available for use when earlier studies were conducted. thus, using the PSI contributes to the literature. Further, this study also contributes to the literature by using a bit broader sample than past studies which examined the social effectiveness new venture success relationship. Earlier studies of the relationship examined fairly constrained samples such as firms in the juice industry (e.g. Duchesneau & Gartner, 1990) and firms in the cosmetics industry (e.g. Baron & Markman, 2003). Finally, as noted earlier, the present study contributes to current literature by being one of the first empirical examinations of the social effectiveness entrepreneurial performance relationship.

Social Capital, Social Effectiveness, and New Venture Success

Social capital is theorized to provide a competitive edge for new venture founders by providing them access to a group of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Florin, et al., 2003). Such increased access to knowledge and other critical resources is proposed to provide new venture founders with high levels of social capital a better chance of identifying profitable opportunities and establishing successful new ventures. Given their increased access to knowledge and other critical resources, venture founders with high levels of social capital are expected to experience more new venture success than founders with less social capital. Specifically, social capital of new venture owners and top managers is expected to positively influence both entrepreneurial and firm financial performance.

Social effectiveness, on the other hand, is theorized to be beneficial to new venture founders by enabling them to develop stronger and more productive relationships with other individuals such as stakeholders (Baron & Markman, 2000). These stronger and more productive relationships are theorized to help socially effective new venture founders better perform functions such as gathering critical market information not possessed by others, communicating such information to stakeholders, and establishing more successful relationships with business partners (Baron & Markman, 2003). Further, Empirical research indicates that socially effective individuals tend to be more proficient managers (Kilduff & Day, 1997), better performers on the job (Ferris, et al., 2001), better able to select the most qualified employees (Eder & Ferris, 1989), and better able to detect dishonest individuals during business transactions (DePaulo, 1994) than less socially effective individuals. Given these benefits of social effectiveness, it is theorized that socially effective new venture founders will experience more success than less socially effective founders. Specifically, social effectiveness of new venture owners and top managers is also expected to positively influence both entrepreneurial and firm financial performance.

Therefore, it is also theorized that a combination of social capital and social effectiveness will provide additional benefits for new venture founders. As discussed in the proceeding paragraphs, research indicates that social capital and social effectiveness both have positive benefits for new venture founders. On one hand, social capital is theorized to be valuable for a new venture founder because the more social capital a founder possesses, the more individuals from whom that founder can gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003). On the other hand, socially effective individuals are better able to develop stronger and more productive relationships with others than less socially effective individuals (Baron & Markman, 2000). Thus, if social capital provides a new venture founder access to a broader network of individuals from whom to gather knowledge and other critical resources (Davidsson & Honig, 2005) and social effectiveness enables a new venture founder to develop and maintain stronger and more productive social relationships (Baron & Markman, 2003), it follows that a new venture founder who possesses high levels of social capital and is highly socially effective will be able to develop stronger and more productive relationships with a larger body of individuals. Such an ability should enable a founder with high levels of social capital and who is highly socially effective to gather more resources from a larger body of individuals for a longer time period than a founder who is lower on either dimension. Thus, it is expected that new venture founders with high levels of social capital and who are highly socially effective will experience more new venture success than founders who are lower on either dimension.

Finally, it is important to note that this study contributes to the literature by being one of the first empirical studies of the combined influence of a new venture founders social capital and social effectiveness on new venture success. While an interaction between these two constructs has been suggested in previous research (Baron & Markman, 2000; 2003), to the author's knowledge, the current study is the first empirical examination of the relationship.

Theoretical Foundation

The knowledge based view of the firm (KBV) is drawn upon here to help explain why the social capital and social effectiveness of new venture founders can lead to new venture success.

Knowledge Based View

The knowledge based view (KBV) of the firm asserts that knowledge is a critical resource that accounts for differential performance between firms (Grant, 1996). Additionally, the KBV also asserts that most knowledge can only be exercised by those who possess it. Thus, the possession of knowledge that others do not possess is likely to lead to a competitive edge (Grant, 1996). This view is based on the notion that core competencies and competitive advantages in the global economy increasingly come from knowing how to do things as opposed to having protected access to resources and markets (Lubit, 2001). Further, gaining a competitive edge through knowledge is likely even more important for new ventures, because emerging ventures do not likely possess the tangible resource base necessary to compete with more established firms (Hornsby & Kuratko, 1990; 2003). Considering the above discussion, it is argued below that social capital and social effectiveness are resources that new venture founders can rely upon to gather market knowledge and other critical resources necessary to identify and exploit opportunities not possessed by others and thus gain a competitive edge.

Social capital is theorized to enable certain new venture founders and not others to gain a competitive edge. Specifically, it is proposed that one of the reasons for differential performance between entrepreneurs is information asymmetry (Shane & Venkataraman, 2000; Venkataraman, 1997). In other words, certain entrepreneurs possess knowledge about the recognition and exploitation of opportunities that others do not possess and this information asymmetry is one of the reasons that some entrepreneurs are more successful than others. Additionally, it is also theorized that new venture founders with high levels of social capital will have a larger body of individuals from whom to gather knowledge about market opportunities than founders with less social capital (Davidsson & Honig, 2003). Thus, new venture founders with high levels of social capital will be more likely to possess more knowledge. Further, the KBV asserts that knowledge is a critical resource that accounts for differential performance between firms and thus the possession of knowledge that others do not possess is likely to lead to a competitive edge (Grant, 1996). Finally, high levels of social capital should also help founders obtain other critical resources necessary in the venture creation process (Florin, et al., 2003; Lechner, et al., 2006). For Example, consider two founders who are both trying to start restaurants in a specific community and are both in need of financing. Founder "X" has a social network contact who works at a community credit union that tends to focus on loans to start-up businesses in the local community. The contact also provides founder “X” advice on the specific information that the credit union tends to look for when deciding to provide a new venture founder with financing. Thus, through her social capital, founder “X” may be more likely to obtain financing sooner than founder “Y” and thus have an advantage. Considering that high levels of social capital are likely to increase a new venture founders access to knowledge and other necessary resources (Davidsson & Honig, 2003; Lechner, et al., 2006) and that knowledge is believed to be the firm’s most critical resource (Grant, 1996), it follows that a new venture founder with a high level of social capital will be more likely to possess more resources such as market knowledge and thus have a competitive edge over a founder with less social capital.

Empirical evidence provides support for the notion that new venture founders with high levels of social capital will be better able to gather critical knowledge about market opportunities and acquire the resources necessary to exploit such opportunities (e.g. Aldrich, 1999; Davidsson & Honig, 2003; Ozgen & Baron, 2007). For example, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Further, empirical research indicates that founders with more social capital were better able to obtain critical resources needed to exploit opportunities (Aldrich, 1999; Aldrich & Zimmer, 1986). Similarly, an empirical study of biotechnology firms found that new ventures with larger and more efficient social alliances with other firms tend to gather more resources and experience higher levels of firm performance than ventures with fewer and less efficient social alliances (Powell, Koput & Smith-Doerr, 1996). Finally, new ventures owned by founders with high levels of social capital tend to experience better firm performance than ventures owned by founders with less social capital (Bruderl & Preisendorfer, 1998; Davidsson & Honig, 2003; Hansen, 1995). Considering the above discussion, it is theorized that new venture founders with high levels of social capital will experience more new venture success than founders with less social capital.

Social effectiveness is also theorized to help certain new venture founders and not others gain competitive advantages. As mentioned above, socially effective new venture founders are theorized to be able to create stronger and more productive relationships with others. Such an ability is theorized to help socially effective founders better perform functions such as gathering critical market information not possessed by others, effectively communicating such information to stakeholders, recruiting and selecting more competent employees, and establishing more successful relationships with business partners (Baron & Markman, 2003). It is proposed that the abilities of socially effective founders to gather and communicate critical market knowledge will create information asymmetries between new venture firms and thus provide ventures operated by socially effective founders a competitive edge over ventures operated by founders who are not as socially effective (Shane & Venkataraman, 2000; Venkataraman, 1997). Specifically, since core competencies and competitive advantages in the global economy increasingly come from knowing how to do things as opposed to having protected access to resources and markets, knowledge is likely the most critical resource that a firm can possess (Lubit, 2001). Further, considering that knowledge is such an important resource for firms to possess, the most important job of management may be to gather knowledge and distribute it to firm employees (Grant, 1996). Thus, if socially effective new venture founders are better able to gain knowledge and communicate that knowledge to their employees, socially effective founders should have a competitive edge over less socially effective founders. Finally, abilities such as recruiting and selecting more competent employees, and forging stronger relationships with business partners should also help socially effective founders establish more successful new ventures.

Empirical research supports the notion that social effectiveness will help new venture founders gain competitive advantages. First, research indicates that socially effective individuals tend to experience more success in a wide variety of business situations than less socially effective individuals. For example, socially effective individuals are able to determine whether others are being honest in negotiations and other business transactions (DePaulo, 1994). Additionally, individuals who are high in social perception tend to hire the most qualified employees (Eder & Ferris, 1989). Furthermore, research indicates that socially effective individuals experience more managerial success (Kilduff & Day, 1997), are perceived as more competent employees (Wayne, et al., 1997), and are better performers on the job (Ferris, et al., 2001). Second, empirical research indicates that socially effective new venture founders experience more new venture success than less socially effective founders. Specifically, in a study of new ventures in the juice industry, it was found that new venture founders who were better communicators and relied frequently on their communication skills were significantly more likely to establish successful ventures (Duchesneau & Gartner, 1990).

The above results indicate three things. First, socially effective individuals appear to be able to gather the necessary knowledge to succeed in a wide variety of business situations. Second, new venture founders who are better communicators appear to be more likely to experience new venture success. Third, it seems that socially effective individuals will be better able to manage new ventures. For example, as stated above, empirical research indicates that socially effective individuals tend to be more proficient managers (Kilduff & Day, 1997), better performers on the job (Ferris, et al., 2001), better able to select the most qualified employees (Eder & Ferris, 1989), and better able to detect dishonest individuals during business transactions (DePaulo, 1994) than less socially effective individuals. Such skills would seem to be very helpful when managing a new venture. Considering the above discussion, it is theorized that socially effective new venture founders will experience more new venture success than founders who are less socially effective.

Finally, it is theorized that the combination of possessing high levels of social capital and being highly socially effective will help new venture founders gather even more knowledge and other critical resources, leading to even higher levels of new venture success. On one hand, social capital is theorized to be advantageous for new venture founders because it provides founders access to a body of individuals from whom to gather knowledge about market opportunities and other critical resources necessary to exploit such opportunities (Florin, et al., 2003; Lechner, et al., 2006). Empirical research supports this notion. For example, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Additionally, empirical research indicates that founders with more social capital were better able to obtain critical resources needed to exploit opportunities

(Aldrich, 1999; Aldrich & Zimmer, 1986). Further, an examination of 1,710 German firms found that new ventures owned by founders with high levels of social capital were more likely to survive, and experience higher sales and employment growth than new ventures owned by founders with less social capital (Brüderl & Preisendorfer, 1998). On the other hand, social effectiveness is theorized to help new venture founders develop stronger and more productive relationships with network members (Baron & Markman, 2000). These stronger and more productive relationships are expected to positively influence new venture success for socially effective new venture founders. Empirical research provides support for this notion as socially effective new venture founders tend to experience higher financial firm performance than less socially effective founders (Baron & Markman, 2003).

Therefore, if social capital provides a new venture founder access to a broader network of individuals from whom to gather knowledge and other critical resources (Florin, et al., 2003) and social effectiveness enables a new venture founder to develop and maintain stronger and more productive social relationships (Baron & Markman, 2000), it follows that a new venture founder with a high level of social capital and who is highly socially effective will be able to develop stronger and more productive relationships with a larger body of individuals. Such an ability should enable a founder with high levels of social capital and who is highly socially effective to gather more resources from a larger body of individuals for a longer time period than a founder who is lower on either dimension. Hence, it is expected that new venture founders with high levels of social capital and who are highly socially effective will experience more new venture success than founders who are lower on either dimension.

Social Capital and Firm Performance

As explained in detail above, it is theorized that a new venture owner with a high level of social capital will have a competitive edge over a founder with less social capital (Davidsson & Honig, 2003). Specifically, a high level of social capital will provide a new venture owner more access to market knowledge and other necessary resources to identify and exploit opportunities. Considering that knowledge is one of the key variables that explain differential performance, a new venture founder with more knowledge than other founders will be likely to have a competitive edge (Grant, 1996). Further, since newly founded firms often perform poorly or fail due to a lack of critical resources such as capital and competent human resources (Williamson, 2000), founders with more access to other necessary resources should also have a competitive edge. Given the positive benefits of social capital, new venture founders with high levels of social capital are expected to experience better entrepreneurial and firm financial performance than founders with less social capital.

Empirical research supports the above notions. First, research indicates that new venture founders with higher levels of social capital will identify and exploit more new venture opportunities than founders with less social capital. For example, new venture founders tend to have more social capital than individuals not involved in venture founding (Davidsson & Honig, 2003). Specifically, individuals with higher levels of social capital were more likely to start a venture and be running the venture 18 months later. Additionally, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Finally, a study of 111 entrepreneurs found that entrepreneurs become aware of business ideas and gather critical information about market opportunities primarily through their social networks (Smeltzer, et al., 1991).

Second, empirical evidence indicates that new ventures operated by founders with more social capital tend to experience higher firm performance than ventures operated by founders with less social capital (Davidsson & Honig, 2003; Lechner, et al., 2006). For example, an examination of 1,710 German firms found that new ventures owned by founders with high levels of social capital experienced higher sales and employment growth than new ventures owned by founders with less social capital (Brüderl & Preisendorfer, 1998). Additionally, an examination of venture capital startup firms found that new venture founder network size with a mix of businesspeople positively influenced firm sales (Lechner, et al., 2006). Finally, in an examination of 380 new ventures, it was found that ventures whose founders were members of business networks, such as the Chamber of Commerce, experienced higher financial firm performance than ventures whose founders were not members of business networks (Davidsson & Honig, 2003).

The above findings indicate that new venture founders with high levels of social capital tend to identify and exploit more market opportunities (e.g. Ozgen & Baron, 2007) and are generally better able to establish more successful ventures (e.g. Brüderl & Preisendorfer, 1998; Davidsson & Honig, 2003) than venture founders with less social capital. Such findings support the notion that a high level of social capital will help a new venture founder access the appropriate market knowledge and other critical resources necessary to exploit more profitable market opportunities in more innovative ways. Hence, the following are proposed.

Hypothesis 1: New venture owners' social capital will positively influence financial firm performance such that new venture owners with higher levels of social capital will experience higher financial firm performance.

Hypothesis 2: New venture owners' social capital will positively influence entrepreneurial performance such that new venture owners with higher levels of social capital will experience higher entrepreneurial performance.

Social Effectiveness and Financial Firm Performance

New ventures have little previous history and thus commonly do not have much legitimacy (Williamson, 2000). Firms are seen as legitimate when potential and actual stakeholders have a good understanding of the firms operations and product or service (Aldrich & Fiol, 1994). Empirical research supports this notion by finding that a wide variety of potential stakeholders such as customers, employees, and financiers were more likely to enter into long term relationships with firms whose operations and products they understood well (Choi & Shepherd, 2005). Thus, it appears that an important skill for new venture founders to have is the ability to communicate with potential stakeholders about the operating procedures and product or service of their new venture. Importantly, socially effective individuals are able to use their social proficiencies to communicate more effectively with others (Baron & Markman, 2003). Hence, it is theorized that new ventures operated by socially effective founders will be viewed as more legitimate. This increased legitimacy will convince more stakeholders to become involved with the new venture and enhance the new ventures ability to make a profit.

Empirical research supports the notion that ventures operated by socially effective founders will experience higher financial firm performance than ventures operated by less socially effective founders. For example, in a study of new ventures in the juice industry, it was found that new venture founders who were better communicators and relied frequently on their communication skills were significantly more likely to establish successful ventures (Duchesneau & Gartner, 1990). Additionally, a study of venture founders in the cosmetics and hi-technology industries found that socially effective new venture founders experienced higher financial firm performance than less socially effective founders (Baron & Markman, 2003). The above findings are important because they indicate that social effectiveness is valuable in very different industries and leads one to believe that it should have positive outcomes for new venture founders in general.

Considering the above discussion, the following is proposed.

Hypothesis 3: New venture owners' social effectiveness will positively influence financial firm performance such that new venture owners with higher levels of social effectiveness will experience higher financial firm performance.

Social Effectiveness and Entrepreneurial Performance

It is theorized that social effectiveness will help venture founders facilitate entrepreneurial performance — a firm's ability to innovate and identify and exploit opportunities (Lumpkin & Dess, 1996). First, as mentioned above, it is proposed that socially effective entrepreneurs will be able to use their social proficiencies to attract and select more competent employees (Baron & Markman, 2000). Empirical research provides support for the notion that social effectiveness positively influences an individual's ability to attract and select employees. For instance, research indicates that company recruiters and interviewers high in interpersonal skills are preferred by applicants over recruiters with less interpersonal skill (Connerley & Rynes, 1997).

Specifically, applicants who deal with a company representative high on interpersonal skills tend to have more favorable impressions of the company and are more likely to accept an eventual job offer from the organization than those dealing with a representative low on interpersonal skills (Powell, 1991; Turban & Dougherty, 1992). Further, socially effective individuals have been shown to be better able to select the most qualified applicants (Eder & Ferris, 1989) and are better able to notice tactics such as impression management (DePaulo, 1994). Finally, it is reasonable to assert that competent employees will be critical to entrepreneurial performance. However, emerging ventures commonly are not able to recruit and select the competent employees they desire (Williamson, 2000; Williamson, et al., 2002). Thus, the ability to recruit and select competent employees on a consistent basis will likely help new ventures establish and sustain entrepreneurial performance.

Next, socially effective new venture founders are also theorized to be more proficient at using their social skill to attain critical knowledge with regard to market opportunities. Shane and Venkataraman (2000) assert that one of the reasons for differential performance among entrepreneurs is knowledge asymmetry between individuals with regard to market opportunities. The entrepreneur taking advantage of an opportunity has knowledge that other individuals do not possess. Differences in the social skills of individuals have been advanced as one of the possible explanations for this knowledge asymmetry (Baron & Markman, 2003). Specifically, it is theorized that socially effective individuals will be able to gain the trust and confidence of those with whom they interact and, thus, may gain certain valuable market knowledge not possessed by others. These socially effective individuals will also be more proficient at communicating this valuable knowledge to their employees (Baron & Markman, 2003). Thus, socially effective founders will be more likely to possess critical market knowledge and be better able to pass that knowledge on to their employees, who are likely to be more competent than those of competitors.

Considering the above discussion, it is believed that socially effective new venture founders are likely to experience higher entrepreneurial performance. Hence, the following is proposed.

Hypothesis 4: New venture owners' social effectiveness will positively influence entrepreneurial performance such that new venture owners with higher levels of social effectiveness will experience higher entrepreneurial performance.

Social Capital, Social Effectiveness and Firm Performance

It is also theorized that a combination of social capital and social effectiveness will provide additional benefits for new venture founders. As discussed in the proceeding paragraphs, research indicates that social capital and social effectiveness both have positive benefits for new venture founders. On one hand, social capital is theorized to be advantageous for new venture founders because it provides founders access to a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003; Lechner, et al., 2006). Given these benefits, founders with high levels of social capital are theorized to have a better chance to establish successful new ventures than founders with less social capital. Empirical research supports this notion. For example, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). Additionally, empirical research indicates that founders with more social capital were better able to obtain critical resources needed to exploit opportunities (Aldrich, 1999; Aldrich & Zimmer, 1986). Finally, an examination of German firms found that new ventures owned by founders with high levels of social capital were more likely to survive, and experience higher sales and employment growth than new ventures owned by founders with less social capital (Brüderl & Preisendorfer, 1998). On the other hand, socially effective new venture founders are theorized to be able to use their social proficiencies to develop stronger and more productive relationships with others (Baron & Markman, 2000). Such an ability is theorized to be valuable during new venture creation because it will enable socially effective new venture founders to better perform functions such as gaining access to critical information, and selecting competent employees. Empirical research provides support for this notion as socially effective new venture owners tend to experience higher financial firm performance than less socially effective founders (Baron & Markman, 2003).

Thus, if social capital provides a new venture founder access to a broader network of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2005) and social effectiveness enables a new venture founder to develop and maintain stronger and more productive relationships (Baron & Markman, 2003), it follows that a new venture founder who possesses high levels of social capital and is highly socially effective will be able to develop stronger and more productive relationships with a larger body of individuals. Such an ability is theorized to positively influence new venture performance. Specifically, it is reasonable to assert that a new venture founder who is able to gather more market knowledge and other critical resources necessary to identify and exploit opportunities will be able to establish more successful new ventures than founders who are not able to gather as many resources. It is also reasonable to assert that a founder who is able to establish stronger and more productive relationships with others will be able to continue gathering knowledge and other critical resources from her social capital for a longer period of time than founders who are not as proficient at developing such relationships; therefore, a founder who has high levels of social capital and who is highly socially effective will be able to gather more resources from a larger body of individuals for a longer time period than a founder who is lower on either dimension. Hence, the following are proposed.

Hypothesis 5: The positive relationship between new venture owners' social capital and financial firm performance will be moderated by social effectiveness such that the relationship will be stronger for new venture owners with higher levels of social effectiveness.

Hypothesis 6: The positive relationship between new venture owners' social capital and entrepreneurial performance will be moderated by social effectiveness such that the relationship will be stronger for new venture owners with higher levels of social effectiveness.

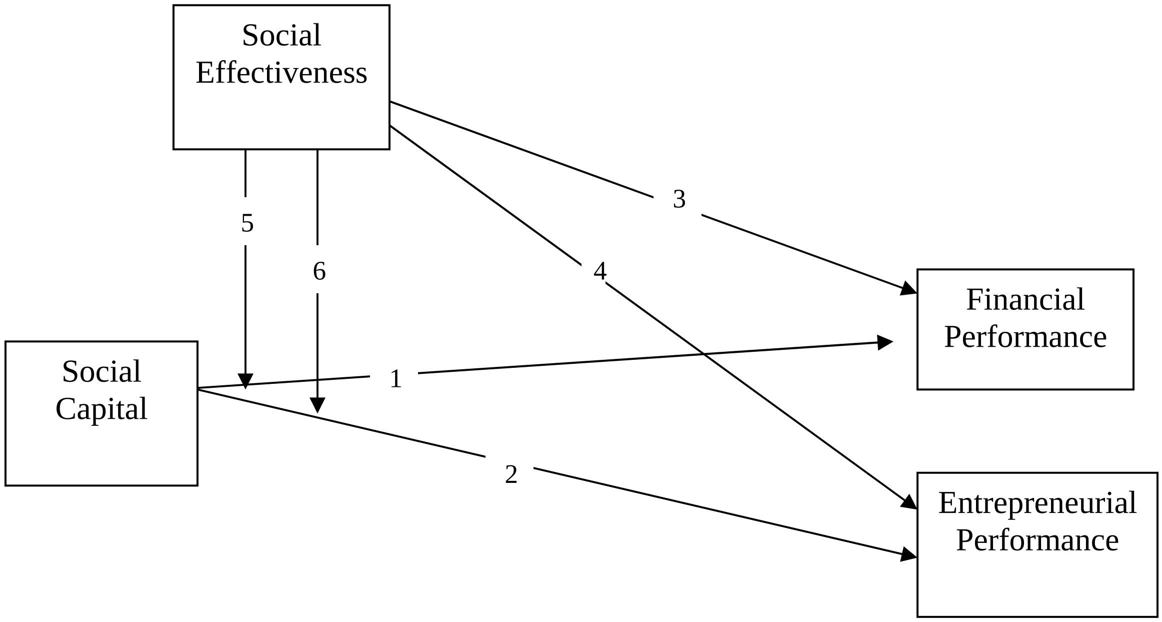

Figure 2. Hypothesized Relationships

III. METHOD

Sample

The target population for the current study was for profit new venture firms. While there is some debate on what constitutes a new venture, to be consistent with previous literature, this study classified any firm in its first eight years of operations as a new venture (e.g. Ensley, Pearce, & Hmieleski, 2006; McDougall, Covin, Robinson, & Herron, 1994; McDougall & Robinson, 1990). Early research found that it took new ventures an average of eight years to reach profitability and approximately 12 years to resemble established firms (Biggadike, 1979; Miller & Camp, 1985). Thus, the eight year point was established as a cutoff for categorizing firms as new ventures.

Participants for this study were recruited from mailing lists obtained from business incubators and Small Business Development Centers (SBDCs) throughout the United States. Specifically, 1,611 firms were contacted about participation in the study. Of the 1611 firms contacted, 156 returned completed and usable surveys for a response rate of 9.5%. While this response rate is somewhat low, it is in line with similar studies of new venture firms (e.g. Amason, et al. 2006; Chandler, Honig, & Wiklund, 2005; Lechner, et al. 2006). Firms in the sample had an average size of 6.5 employees (Range = 1– 87) and an average age of 3.3 years (Range = 1-8).

As a note, business incubators are organizations which provide start-up firms with basic services such as clerical help, marketing advice, assistance raising capital, legal advice, and access to new markets for a limited amount of time. Specifically, the goal of business incubators is to take on start-up firms at inception, provide them certain business services to help them grow to a point where they can operate on their own, and graduate the firms from the incubator to independent status (Aernoudt, 2004). Additionally, while incubators can operate in any industry, they tend to focus in new and growing industries such as the technology industry (McAdam & McAdam, 2006). Further, SBDCs also provide startup firms with a wide variety of services such as help writing business plans, obtaining financing, and understanding local laws and regulations. Hence, the sample was drawn from firms who currently are or once were receiving services from either a business incubator or an SBDC.

Procedures

Officials from the small business assistance organizations were asked to endorse the project and encourage membership participation. Email addresses and other contact information were obtained. Once this information was obtained, a web survey was used to collect the study data. A copy of the web survey is included in Appendix A. The survey was administered using the procedures below.

An email was sent to the owner or top manager of each firm asking for their participation in a study being conducted by a researcher at Auburn University. The email explained the purposes of the study and assured possible participants that any information they provide was strictly anonymous and would only be used for research purposes. The email also explained that participation in the study required only that participants fill out a short survey, which would take between 12 and 15 minutes, as well as consider having a fellow employee, who was not a direct family member, complete a shorter supplemental survey. Finally, the email directed those who desired to participate to click the survey link and begin.

Once a participant clicked the link, he or she was asked to enter an eight character username of the participant's choice. Once the participant entered this username and clicked continue, the participant was routed to the web survey and could begin entering information. After filling out the survey and pressing submit, participants were routed to a third page which thanked them for their helpful participation and reminded them that the information provided was strictly anonymous and would only be used for research purposes. The third page contained an option that allowed participants to email one of their fellow employees a link to the supplemental survey along with the participant's username. The supplemental survey was used to cross validate some of the study measures and is discussed in detail below.

Contacting Non-Responders

Those who did not respond to the first request for participation were contacted again with a second similar email. This second communication was sent approximately two weeks after the original communication and was the last time that non-responders were contacted. Finally, once a sufficient number of responses were received, the survey was taken off the web and the data was analyzed.

Non-Response Bias

Considering that late responders have been shown to be similar to non-responders, the data were checked for response bias by comparing the responses of the first and last responders (Armstrong & Overton, 1977). More specifically, the first and last quartile of respondents were compared and no statistically significant differences in the variables of interest in this study were observed. Thus, there does not appear to be any evidence of response bias.

Measures

In addition to demographic data, information was collected on the new venture founder’s social capital, the new venture founder’s social effectiveness, and both firm financial and entrepreneurial performance. Table 1 contains each study variable and its definition. The means, standard deviations, intercorrelations, and coefficient alphas, when applicable, of all study variables are presented in Table 2.

Table 1

Study Variables and Definitions

	Study Variable	Definition
1	Firm Size	Open ended variable that asked the founder to indicate the number of full time employees that the founder’s firm has
2	Firm Age	Open ended variable that asked the founder to indicate the number of years in which the founder’s firm had been in operation
3	Hi-technology	Dummy variable coded as 1 if the founder’s firm primarily operated in the high technology industry and 0 if the founder’s firm did not primarily operate in the high technology industry
4	Services	Dummy variable coded as 1 if the founder’s firm primarily operated in a service industry and 0 if the founder’s firm did not
5	Owner Age	Open ended variable that asked the founder to indicate his/her age
6	College Degree	Dummy variable that is coded as 1 if the founder’s highest education achieved was an undergraduate degree and 0 if the founder’s highest education achieved was not an undergraduate degree
7	Graduate Degree	Dummy variable that is coded as 1 if the founder’s highest education achieved was a graduate degree and 0 if the founder’s highest education achieved was not a graduate degree
8	Own. Man. Exp.	Open ended variable that asked the founder to indicate the number of years that the founder had owned a firm
9	Owner Industry Experience	Open ended variable that asked the founder to indicate the number of years in which the founder had worked in the industry that the founder’s firm was operating in
10	Owner Gender	Dummy variable that is coded as 1 if the founder is a male and 0 if the founder is a female
11	Owner Race	Dummy code that is coded as 1 if the founder is a Caucasian and 0 if the founder is a minority

(table continues)

Table 1 (continued)

	Study Variable	Definition
12	Social Capital Size	Open ended item which asked founders to indicate the total number of relationships that they maintained with other individuals that they regarded as important for their business, independent of simple economic exchange
13	Social Capital Strength	Average of the founder's answers to the 10 network strength items
14	Social Capital Mix 1	Open ended item which asked founders to indicate the total number of relationships that they maintained with friends and family members that they regarded as important for their business, independent of simple economic exchange
15	Social Capital Mix 2	Open ended item which asked founders to indicate the total number of relationships that they maintained with prominent individuals in the business community that they regarded as important for their business, independent of simple economic exchange
16	Social Capital Mix 3	Open ended item which asked founders to indicate the total number of relationships that they maintained with individuals who work for competing firms that they regarded as important for their business, independent of simple economic exchange
17	Social Effective	Average of the founder's answers to the 18 item Political Skill Inventory
18	Ent. Performance	Average of the founder's answers to the seven item entrepreneurial performance scale
19	Sales Growth Rate	Item which asked founders to rate their firm's sales growth rate, in comparison to other similar firms in the industry, on a 5 point scale ranging from low performer to high performer
20	Accounting Return	Average of the founder's rating of their firm's after tax return on sales and after tax return on assets, in comparison to other similar firms in the industry, on a five point scale ranging from low performer to high performer.
21	Overall Firm Performance	Item which asked founders to rate their firm's overall firm performance, in comparison to other similar firms in the industry, on a 5 point scale ranging from low performer to high performer

Table 2

Means, Standard Deviations, Intercorrelations and Coefficient Alphas for Study Variables

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1	Firm Size	6.50	9.83	NA										
2	Firm Age	3.30	2.10	.27**	NA									
3	Hi-technology	.41	.49	-.05	-.08	NA								
4	Services	.34	.48	*.03	.04	-.60	NA							
5	Owner Age	45.21	9.58	.08	.28**	.00	.04	NA						
6	College Degree	.32	.47	-.03	-.07	-.10	.09	-.28**	NA					
7	Graduate Degree	.53	.50	-.03	-.04	.22**	-.08	.23**	-.72	NA				
8	Owner Managerial Exp.	6.99	7.17	.10	.32**	-.02	.00	.41**	-.07	-.06	NA			
9	Owner Industry Exp.	13.91	9.99	.21	.11	-.01	.07	.48**	-.11	.09	.11	NA		
10	Owner Gender	.77	.42	-.11	-.02	.24**	-.31**	-.10	.02	.12	-.09	-.11	NA	
11	Owner Race	.85	.36	.06	.08	.07	-.03	.24**	.03	.02	.06	.02	-.02	NA
12	Social Capital Size	26.95	49.74	.06	-.10	.17*	.08	-.03	-.10	.11	-.08	.06	.02	-.01
13	Social Capital Strength	2.75	.70	-.11	-.13	.15	-.09	-.13	-.04	.06	-.01	-.04	.06	-.07
14	Social Capital Mix 1	8.51	18.96	.00	.11	-.09	.09	.09	-.09	.11	.00	.24**	-.15	.02
15	Social Capital Mix 2	8.35	9.96	.04	-.08	.09	.01	.06	-.10	.13	.00	.16	-.05	-.05
16	Social Capital Mix 3	3.56	6.14	.18*	-.03	-.02	.10	.06	-.13	.06	.16*	.16	-.08	-.01
17	Social Effectiveness	3.92	.47	.02	-.05	.05	.03	-.03	-.1	-.05	.11	-.14	-.12	.04
18	Entrepreneurial Perform.	3.56	.61	-.09	-.14	.17*	.17*	-.15	-.03	.03	.07	-.41**	.05	.03
19	Sales Growth Rate	3.10	1.13	.28**	-.10	-.18*	.07	-.05	.01	-.12	.13	.00	.05	-.02
20	Accounting Return	2.82	1.10	.25**	.09	-.12	.09	-.05	.07	-.09	.14	.02	.00	.03
21	Overall Firm Perform.	3.02	1.06	.27**	.08	-.14	.12	-.08	.08	-.13	.12	.06	-.15	.03

Note: * $p < .05$, ** $p < .01$, N=156. Coefficient alphas are reported on the diagonal.

Table 2 (continued)

		Mean	SD	12	13	14	15	16	17	18	19	20	21
12	Social Capital Size	26.95	49.74	NA									
13	Social Capital Strength	2.75	.70	.07	.73								
14	Social Capital Mix 1	8.51	18.96	.28**	.09	NA							
15	Social Capital Mix 2	8.35	9.96	.38**	.12	.55**	NA						
16	Social Capital Mix 3	3.56	6.14	.21**	.23**	.22**	.26**	NA					
17	Social Effectiveness	3.92	.47	.15	.21**	.21**	.30**	.11	.89				
18	Entrepreneurial Perform.	3.56	.61	.10	.19*	-.05	.08	.07	.32**	.77			
19	Sales Growth Rate	3.10	1.13	.04	-.03	.01	-.03	.16*	.06	.09	NA		
20	Accounting return	2.82	1.10	.09	.03	-.09	-.01	.17*	.16*	.10	.57**	NA	
21	Overall Firm Perform.	3.02	1.06	.11	.00	.08	.08	.21**	.24**	.17*	.75**	.74**	NA

Note: * p <.05, ** p < .01, **N = 156**. Coefficient alphas are reported on the diagonal.

Demographics

This section of the survey gathered information on both firm (e.g., size, age, industry affiliation) and owner/manager (e.g., age, education, experience) characteristics. The demographics gathered were used to describe the study sample and to act as control variables in statistical analysis. Specifically, the variables of firm size, firm age, firm industry affiliation, owner age, owner education, owner managerial experience, owner industry experience, owner gender, and owner race were controlled for in the statistical analysis.

Control Variables

Several firm level and individual level characteristics which could be reasonably expected to have an effect on the dependent variables in this study (i.e. entrepreneurial and financial performance) were controlled for in the statistical analyses. First, firm age and firm size were controlled. Older firms have had more time to develop items that are critical to profitable operations and innovation, such as sales, cash, equity, and other assets (Dyke, Fischer, & Reuber, 1992). Further, larger firms should also have increased access to the above listed items. Size was measured by the number of full time equivalent employees (FTE's) of a firm and age was measured by the number of years that the firm has been in operation.

Next, industry affiliation was controlled for because it is a significant determinant of all aspects of firm performance and eventual survival (Gimeno, Folta, Cooper, & Woo, 1997; Galbraith, 1983). For instance, it has been found that firms in the same industry tend to follow similar decision making patterns, specifically with regard to financial decisions, than firms in different industries (Harris & Raviv, 1991). Three dummy variables were created for the technology industry, the service industry, and another category was used as the null. It is important to note that the participants were asked to indicate the primary industry in which their firm operated. Respondents were given a list of eight industries as well as another category. The seven industry categories were agricultural, construction, hi-technology, manufacturing, wholesale, retail, telecommunications, and services. However, over 75% of the respondents indicated that their firm's primarily operated in either the service or technology industries. Thus, industry was coded into three dummy variables instead of eight.

Finally, the individual level variables of owner age, owner education, owner experience, owner gender, and owner race were all controlled for. Since older owners have had more time to develop assets critical to success such as social networks (Hite, 2005), owner age is expected to account for some variance in new venture performance. Additionally, research has consistently indicated a positive relationship between both owner education and owner management experience and new venture success (Gimeno, et al., 1997; Lussier, 1995; Miller & Toulouse, 1986). Further, it is reasonable to assert that owner experience within the industry would have a similar positive impact on firm performance. Finally, research indicates that gender and race of firm owners are associated with differences in new venture performance (Robb, 2002).

Age, gender, and race were measured by asking the respondent to indicate his/her age, gender, and race. Two dummy variables were created to measure gender with 1 indicating male. Two dummy variables were also created to measure race with 1 indicating Caucasian and 0 a minority founder. Three dummy variables were created for the owner education levels of four year college degree, postgraduate degree, and no college degree was the null variable. Management experience was measured by the total number of years the owner has managed or owned a business. Industry experience was measured by the total number of years the owner has worked in the industry in which the firm operates.

Social Capital Measures

Consistent with earlier research, social capital was operationalized as the size, strength, and mix of a new venture founders network (Davidsson & Honig, 2003). Hence, social capital was assessed with items addressing network size and mix adapted from Lechner, et al. (2006) and items addressing network strength and mix adapted from Bruderl and Preisendorfer (1998). To measure overall network size, the founder was asked to answer the open ended statement "Please indicate the total number of relationships that you maintain with other individuals that you regard as important for your business, independent of simple economic exchange." The answer to this statement was used to measure network size (Lechner, et al., 2006).

To examine network strength, new venture founders were asked to indicate on a 5-point Likert type scale the answer that best described the amount of support running their business (such as marketing advice) they received from specific groups of individuals such as family members, friends, and former employers (Bruderl & Preisendorfer, 1998). The 5-point scale ranged from no support to strong support. The answers to the network strength items were averaged to create a network strength score for each new venture founder.

The eight categories of individuals in the scale were parents, spouse/life partner, relatives, friends, business partners, former employers, former coworkers, and acquaintances (Bruderl & Preisendorfer, 1998). The researcher also added the two categories of prominent business people in the community and individuals who worked for competitors. These groups were added because previous research has indicated that new venture founders who maintain relationships with similar categories of individuals experience higher firm performance (Lechner, et al., 2006). As indicated in Table 1, coefficient alpha for the social capital strength scale was .73, which is slightly above the recommended threshold for acceptability of .70 (Cohen, Cohen, West, & Aiken, 2003).

To examine network mix (range of individuals in the network) in more detail, founders were also asked to indicate in an open ended format the total number of relationships they maintained with specific categories of individuals that they considered important for their business, independent of economic exchange (Lechner, et al., 2006). Specifically, new venture founders were asked to indicate the number of relationships they maintained with friends and family, individuals who work for competing firms, and prominent individuals in the business community.

Finally, it is important to note that the wording of the Lechner, et al., (2006) survey questions were slightly changed to reflect individual rather than firm level measures. Specifically, several of the items were designed to measure firm level social capital and thus the word “firms” was changed to “individuals”.

Social Effectiveness Measure

Social effectiveness was assessed in this study by using the Political Skill Inventory (PSI). The PSI is a well developed and validated measure of social effectiveness for use in the business environment (Ferris, et al., 2005). The PSI was chosen over other measures of social effectiveness such as emotional intelligence for reasons described as follows. First, the PSI is the only measure of social effectiveness which was developed specifically to help understand behavior in the business environment (Ferris & Judge, 1991; Ferris, et al., 2005). Next, the PSI has been shown to have convergent validity with other social effectiveness concepts such as self monitoring, political savvy, and emotional intelligence, but the PSI's positive correlations with such constructs were not so high as to indicate redundancy. Further, the PSI was shown not to correlate with general mental ability (Ferris, et al., 2005).

The 18 item PSI asks respondents to rate on a 7-point Likert type scale the response that best describes how much they agree with each statement about themselves in their respective work environments. To be consistent with the other scales used in this study, the 7-point scale was changed to a 5-point scale. Example items included "It is easy for me to develop good rapport with most people" and "I understand people very well." The answers to the 18 items were averaged to create a social effectiveness score for each respondent. As shown in Table 1, the coefficient alpha for PSI in this study was .89, which is close to the previously reported level of .90 (Ferris, et al., 2005).

The PSI was designed to be completed by individuals working in large firms and thus six of the scale items contained the phrase "at work". In an effort to make the scale more relevant to new venture founders, these six items were slightly modified. Specifically, the "at work" phrase was either replaced with "in business situations" or it was removed entirely.

Finally, it is important to note that politically skilled individuals are theorized to be proficient in the four dimensions of social astuteness, interpersonal influence, apparent sincerity, and networking ability (Ferris, et al., 2005). Thus, the PSI can be broken out into four different subscales to measure each of these four dimensions. Social astuteness is the ability to observe and comprehend other people in various social settings. Interpersonal influence measures an individual's ability to use an appropriate level of influence behavior to persuade others. Apparent sincerity refers to an individual's ability to come across as genuine, sincere, and honest to influence others. Networking ability refers to an individual's proficiency to use social networks to gain access to assets, protected knowledge, and develop and sustain relationships with important individuals (Ferris, et al., 2005). Hence, each of these four dimensions of political skill can be analyzed separately to examine the social effectiveness-new venture success relationship in more detail.

Entrepreneurial Performance Scale

Entrepreneurial performance was measured using a seven item scale developed by Miller (1983). This scale is a commonly used measure of entrepreneurial performance and there is strong evidence of both its reliability and validity (Hayton, 2003). The scale asks respondents to rate on a 5-point Likert type scale the degree to which they agree with each item. Answers to item two were reverse scored. Thus, after reverse scoring item two, the answers to the seven items were averaged to create an entrepreneurial performance score for each respondent's firm. An example scale item was "This company shows a great deal of tolerance for high risk projects." As indicated in Table 1, the coefficient alpha for the entrepreneurial performance scale was .77, which is also above the recommended threshold for acceptability of .70 (Cohen, et al., 2003).

Financial Performance Scale

In order to assess firm financial performance, a four item scale developed by Garg, Walters, and Priem (2003) was used. Since privately owned firms generally do not prefer to release detailed accounting data on financial performance (e.g. Garg, Walters, & Priem, 2003; Gilley & Rasheed, 2000; Lumpkin & Dess, 2001), the scale instead asked firm managers to think about their firm's performance relative to similar firms within their industry and assess, to the best of their knowledge, the four items on a 5-point Likert type scale. The scale ranged from 1 being a low performer to 5 being a high performer. The four items in the scale were sales growth rate, after tax return on total sales, after tax return on total assets, and overall firm performance/success. An overall accounting return on performance was calculated by averaging the return on assets and return on sales items (Garg, Walters, & Priem, 2003). Thus, the three financial performance items of sales growth rate, accounting return on performance, and overall firm performance were each analyzed independently as measures of financial firm performance.

It has been accepted by researchers that performance is a multiple level construct and should be measured via several different indicators (Morash, Droge, & Vickery 1996; Shane & Kolvereid, 1995). Thus, it is important to assess both profitability and sales growth because they represent contrasting firm aspirations (Kirchhoff, 1979). Furthermore, while objective financial performance data are ideal, it is important to note that subjective measures of firm performance have been shown to be highly correlated with actual objective data measures of firm performance (Chandler & Hanks, 1993; Dess & Robinson, 1984). Finally, the request to compare performance to similar firms within the same industry provided a form of control against performance differences due to industry and strategic group effects (Dess, Ireland, & Hitt, 1993; Garg, et al., 2003). Hence, this scale provided an acceptable measure of firm financial performance.

Design and Analysis

Hypotheses were tested with hierarchical moderated multiple regression analysis following a method outlined by Aiken and West (1991). Specifically, the nine control variables of firm size, firm age, firm industry affiliation, owner age, owner education, owner managerial experience, owner industry experience, owner race, and owner gender were entered in Step 1. Next, the main effects for social network size, social network strength, and social effectiveness were entered in Step 2. Finally, in Step 3 the relevant interactions were entered (i.e. social network size * social effectiveness and social network strength * social effectiveness). Hypotheses 1-4 were tested by looking at the main effects and Hypotheses 5 and 6 were tested by looking at the two way interactions. The dependent variables in this study are entrepreneurial and financial firm performance. Results of this analysis are contained in Table 3.

Table 3

Hierarchical Moderated Regression Results for Social Capital, Social Effectiveness, Entrepreneurial Performance, and Firm Financial Performance

Independent Variables	Dependent Variables											
	Entrepreneurial Perform.			Sales Growth Rate			Accounting Return			Overall Firm Perform.		
Equation	1	2	3	1	2	3	1	2	3	1	2	3
Firm Size	-.01	-.02	-.02	.28**	.27**	.26**	.25**	.24**	.23*	.24**	.22**	.22**
Firm Age	-.13	-.09	-.08	-.01	.00	-.01	-.01	.01	.00	.00	.03	.02
Hi-technology	.10	.05	.06	-.16	-.18	-.18	-.07	-.11	-.12	-.06	-.11	-.11
Services	-.09	-.11	-.09	.00	-.01	-.02	.09	.07	.06	.06	.04	.03
Owner Age	-.07	-.05	-.06	-.11	-.11	-.10	-.15	-.13	-.13	-.21*	-.21*	-.21
College Degree	-.04	.00	-.04	-.11	-.11	-.09	.02	.05	.08	.01	.03	.05
Graduate Degree	.02	.05	.03	-.13	-.13	-.11	-.02	.00	.01	-.04	-.02	-.01
Owner Manage Exp.	.17	.01	.10	.14	.13	.14	.18	.16	.18	.16	.13	-.14
Owner Ind. Exp.	-.29**	-.25**	-.25**	-.01	.00	.00	.03	.04	.05	.09	.12	.12
Owner Gender	-.03	.00	.00	.04	.05	.04	.08	.09	.09	-.08	-.05	-.06
Owner Race	.05	.04	.05	-.01	-.01	-.02	.04	.04	.03	.05	.05	.04
Social Capital Size		.05	.02		.05	.06		.09	.11		.10	.11
Social Capital Strength		.09	.09		.00	.01		.03	.02		-.02	-.02
Social Effectiveness		.24**	.24**		.04	.05		.14	.15		.21**	.22*
SC Size * SE			-.07			.00			.03			.02
SC Strength * SE			.12			.10			.15			.07
DF	144	141	139	144	141	139	144	141	139	144	141	139
F	2.29	3.17	3.05	2.14	1.71	1.58	1.71	1.73	1.75	2.13	2.46	2.19
R^2	.17	.24	.26	.14	.15	.15	.12	.15	.17	.14	.20	.20
Change in R^2	.17**	.07**	.02	.14*	.01	.00	.12	.03	.02	.14*	.06*	.00
Adjusted R^2	.10	.16	.18	.08	.06	.06	.05	.06	.07	.08	.12	.11
Power	>.75	>.95	>.95	>.60	>.30	>.30	>.30	>.30	>.30	>.60	>.80	>.75

Note: * p <.05, ** p < .01, **N=156**, power is calculated at the .05 level of significance

Finally, to test study hypotheses in an alternative way, a second hierarchical moderated multiple regression model was run. In this second model, the network size variable was entered as a control variable and the network mix variables were entered in Step two. Thus, in Step one the original 9 control variables and network size were entered. In Step two the social effectiveness score, the network strength score, and the three network mix items were entered (i.e. friends and family, prominent individuals in the business community, and individuals who work for competing firms). Finally, in Step three, four interaction terms were entered (i.e. each of the three network mix items * social effectiveness and social network strength * social effectiveness). Recent research indicates that network mix may be a better predictor of new venture success than network size (e.g. Lechner, et al., 2006). Thus, this second model allowed the researcher to test study hypotheses in an alternative manner as well as to compare the predictive value of network size and mix. Results of this analysis are contained in Table 4.

Table 4

Hierarchical Moderated Regression Results for Social Capital Mix, Social Effectiveness, Entrepreneurial Performance, and Firm Financial Performance

Independent Variables	Dependent Variables											
	Entrepreneurial Perform.			Sales Growth Rate			Accounting Return			Overall Firm Perform.		
Equation	1	2	3	1	2	3	1	2	3	1	2	3
Firm Size	-.02	-.04	-.05	.27**	.25**	.24**	.24**	.19*	.21*	.23**	.19*	.19*
Firm Age	-.12	-.07	-.06	-.01	.00	-.01	.00	.06	.04	.01	.05	.04
Hi-technology	.09	.04	.04	-.17	-.15	-.15	-.09	-.12	-.13	-.08	-.08	.05
Services	-.09	-.11	-.11	-.01	.01	.00	.08	.09	.08	.06	.07	.06
Owner Age	-.07	-.06	-.05	-.11	-.10	-.09	-.14	-.14	-.16	-.21	-.20	-.21
College Degree	-.03	.00	-.03	-.11	-.10	-.06	.03	.07	.12	.02	.05	.09
Graduate Degree	.02	.06	.03	-.13	-.12	-.10	-.02	.04	.09	-.04	-.01	.02
Owner Managerial Exp.	.17	.12	.15	.14	-.12	.13	.18*	.13	.14	.16	.10	.11
Owner Industry Exp.	-.29**	-.24*	-.24*	-.02	-.02	-.01	.02	.09	.09	.08	.11	.11
Owner Gender	.03	-.01	.00	.04	.05	.06	.08	.08	.08	-.08	-.05	-.05
Owner Race	.05	.05	.06	-.01	-.01	-.03	.04	.04	.00	.05	.04	.02
Social Capital Size	.09	.05	.02	.06	.05	.06	.11	.13	.17	.13	.09	.10
Social Capital Strength		.08	.05		-.02	-.07		.01	.05		-.05	-.07
Social Capital Mix 1		-.08	.26		.01	.25		-.19	-.51*		-.03	.03
Social Capital Mix 2		.05	.04		-.07	-.07		-.04	.11		-.04	-.01
Social Capital Mix 3		.04	-.05		.11	.08		.13	.18		.15	.14
Social Effectiveness		24**	.22**		.05	.05		.19*	.20*		.23**	.22*
SC Strength * SE			-.11			.13			.08			.08
SC Mix 1 * SE			-.43*			-.18			.46*			.03
SC Mix 2 * SE			.06			-.09			.21			-.16
SC Mix 3 * SE			.11			.04			-.01			.02

(table continues)

Table 4 (continued)

Independent Variables	Dependent Variables											
	Entrepreneurial Perform.			Sales Growth Rate			Accounting Return			Overall Firm Perform.		
DF	143	138	134	143	138	134	143	138	134	143	138	134
F	2.49	2.63	2.58	2.00	1.49	1.4	1.74	1.87	1.97	2.21	2.21	1.94
R^2	.17	.25	.29	.14	.16	.18	.13	.19	.24	.16	.21	.23
Change in R^2	.17**	.08*	.04	.14*	.02	.02	.13	.06	.05	.16*	.05	.02
Adjusted R^2	.10	.15	.18	.07	.05	.05	.05	.09	.12	.09	.12	.11
Power	>.75	>.85	>.95	>.50	>.20	>.20	>.30	>.60	>.70	>.60	>.75	>.70

Note: * $p < .05$, ** $p < .01$, **N = 156**, power is calculated at the .05 level of significance

IV. RESULTS

Since the variables of interest in this study were collected in a cross sectional manner, the potential for common method variance existed. Thus, the researcher conducted Harman's single factor test before running the regression analysis. The Harman single factor test is a commonly used procedure by scholars to check for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The assumption behind the single factor test is that if common method variance is primarily responsible for the covariation among study variables, a confirmatory factor analysis would likely indicate that one factor fits the data (Korsgaard & Roberson, 1995; Mossholder, Bennett, Kemery, & Wesolowski, 1998; Podsakoff, et al., 2003). Thus, a confirmatory factor analysis model was run in which all study variables (e.g. social capital, social effectiveness, entrepreneurial performance, and firm financial performance) were loaded on one factor. Two common indices used to evaluate the fit of confirmatory factor models are the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). Specifically, a confirmatory model is said to have adequate fit if the CFI is greater than .95 and the RMSEA is less than .08 (Kline, 2003). Importantly, results indicated that the one factor model had a poor fit (CFI = .38, RMSEA = .22). While these results do not allow the researcher to eliminate the possibility of common method variance, they do indicate that it is not likely an explanation for the findings reported in the current study (Andersson & Bateman, 2000). Thus, the regression analysis was run and study Hypotheses were tested.

Hypothesis 1 proposed that new venture founders' social capital would positively influence financial firm performance such that new venture founders with higher levels of social capital would experience higher financial firm performance. Similarly, Hypothesis 2 predicted that new venture founders' social capital would positively influence entrepreneurial performance such that new venture founders with higher levels of social capital would experience higher entrepreneurial performance. Table 3 shows the results of the hierarchical moderated multiple regression analysis. In Step 2 of this analysis, the main effects of social capital size, social capital strength, and social effectiveness were entered. The effects of both social capital size and social capital strength on all three measures of firm financial performance (i.e. sales growth rate, accounting return on performance, and overall firm performance) were statistically insignificant. Thus, no statistically significant support was indicated for Hypothesis 1. The results in Step 2 of Table 3 also indicate that the effects of both social capital size and social capital strength on entrepreneurial performance were statistically insignificant. Thus, Hypothesis 2 was not supported. The data analyzed indicate no statistically significant relationship between a new venture founder's social capital and the entrepreneurial performance and financial firm performance of the founder's venture.

Hypothesis 3 posited that new venture founders' social effectiveness would positively influence financial firm performance such that new venture founders with higher levels of social effectiveness would experience higher financial firm performance. As reported in Step 2 of the analysis in Table 3, social effectiveness had a positive and statistically significant relationship on the financial performance measure of overall firm performance (β = .21, p < .01). However, the influence of social effectiveness on both sales growth rate and accounting return on performance were statistically insignificant. Thus, Hypothesis 3 was partially supported. The data analyzed provided some support for the notion that socially effective new venture founders would experience higher firm financial performance than less socially effective founders.

Hypothesis 4 predicted that new venture founders' social effectiveness would positively influence entrepreneurial performance such that new venture founders with higher levels of social effectiveness would experience higher entrepreneurial performance. Again referring to Step 2 in Table 3, it can be seen that new venture founder social effectiveness had a positive and statistically significant influence on entrepreneurial performance (β = .24, p < .01). Thus, Hypothesis 4 was supported. The data analyzed support the notion that new ventures owned or managed by socially effective founders would experience more entrepreneurial performance than firms owned or managed by founders who are not as socially effective.

Hypothesis 5 predicted that the positive relationship between new venture founders' social capital and financial firm performance would be moderated by social effectiveness such that the relationship would be stronger for new venture founders with higher levels of social effectiveness. Similarly, Hypothesis 6 proposed that the positive relationship between new venture founders' social capital and entrepreneurial performance would be moderated by social effectiveness such that the relationship would be stronger for new venture founders with higher levels of social effectiveness. In Step 3 of the analysis in Table 3, the interactions for social capital size and social effectiveness as well as social capital strength and social effectiveness were entered. The increase in R^2 between Step 2 and Step 3 was not statistically significant for any of the three measures of firm financial performance (i.e. sales growth rate, accounting return on performance, and overall firm performance) or the measure of entrepreneurial performance. Thus, the data analyzed do not indicate any statistically significant support for Hypotheses 5 and 6.

As mentioned above, recent research indicates that network mix may be a better predictor of new venture success than network size (e.g. Lechner, et al., 2006). Thus, a second hierarchical moderated linear regression equation was run to test study Hypotheses in an alternative manner and to compare the predictive value of network size and mix. Table 4 contains the results of this analysis. In Step 2 of this analysis, the social effectiveness measure, the social capital strength measure, and the three social capital mix items (i.e. friends and family, prominent individuals in the business community, and individuals who work for competing firms) were entered. As can be seen in Step 2 of Table 3, the effects of each of the three social capital mix items on the three financial firm performance measures and the entrepreneurial performance measure were all statistically insignificant. These results again provide no statistically significant evidence to support Hypotheses 1 and 2, which predicted that new venture founders' social capital would positively influence financial firm performance and entrepreneurial performance respectively.

In Step 3 of the analysis in Table 4, the interactions of social capital strength * social effectiveness and the three social capital mix items * social effectiveness (i.e. friends and family *social effectiveness, prominent individuals in the business community * social effectiveness, and individuals who work for competing firms * social effectiveness) were entered. As can be seen in Table 4, the increase in R^2 between Step 2 and Step 3 was not statistically significant for any of the three measures of firm financial performance (i.e. sales growth rate, accounting return on performance, and overall firm performance) or the measure of entrepreneurial performance. Thus, the data analyzed do not indicate any statistically significant support for Hypotheses 5 and 6.

In summary, study results indicated that socially effective new venture founders tend to experience more new venture success than less socially effective founders. Specifically, ventures operated by socially effective founders experienced higher levels of both entrepreneurial performance and overall firm performance than ventures operated by less socially effective founders. Further, no statistically significant support was found to indicate that either founder social capital or the interaction between founder social capital and founder social effectiveness positively influenced new venture success.

Cross Validation of Social Capital and Social Effectiveness

To obtain evidence about the accuracy of entrepreneur's ratings of their own social capital and social effectiveness, the researcher employed a method similar to the one outlined by Baron and Markman (2003). Specifically, in the initial contact letter, the researcher asked new venture founders to please consider allowing a fellow employee, who is not a direct family member, to fill out a shorter supplemental survey.

Founders who wished to allow a fellow employee to fill out the supplemental survey were able to email a request for participation to a fellow employee. The request for participation explained the study, included the founder's user name for the fellow employee to enter, and contained a link to the supplemental survey. If the employee chose to participate, the employee simply clicked the link, entered the user name, and took the survey. Thus, the researcher was able to match up surveys from the founder and the fellow employee by username. These methods were intended to ensure that a matched pair of responses was obtained by the researcher, while still keeping the study anonymous.

The second survey was used as another assessment of the owner's social capital and social effectiveness. A copy of the supplemental survey is included in Appendix B.

As stated above, 156 usable responses to the main survey were returned. Of these 156 respondents, 15 also had fellow employees who returned completed and usable responses to the supplemental survey. Thus, 9.61% of the new venture founders who participated in this study had employees who returned usable cross validation surveys. This response was lower than the expected return rate of between 20 and 30 % (e.g. Baron & Markmen, 2003). However, it is important to note that in the current study founders were instructed to ask a fellow employee, who was not a direct family member, to complete the supplemental survey. Baron and Markman (2003) instructed founders to have someone who knew them well such as a spouse, other family member, or close business associate fill out the supplemental survey. It is quite possible that asking founders to have a fellow employee who is not a direct family member fill out the survey may have hurt the response rate for the supplemental survey. However, it was believed that fellow employees who were not direct family members of the founder may provide a more objective evaluation of the founder's social capital and social effectiveness.

The ratings of the two individuals (new venture founder and fellow employee) on the variables of social capital and social effectiveness were correlated. Further, mean ratings of the two individuals (i.e. new venture founder and fellow employee) on both variables were compared to identify if any statistically significant differences existed. Results indicated that the two sets of ratings were significantly correlated. Specifically, founder and fellow employee ratings for social capital strength ($r= .69$, $p < .01$) and social effectiveness ($r = .67$, $p < .01$) were significantly correlated. Further, a comparison of mean ratings indicated that the self reported ratings of social capital strength and social effectiveness by founders did not significantly differ from the ratings provided by the founders' fellow employees. Thus, no evidence was found to indicate that the self report measures were not valid proxies of entrepreneurs' social capital and social effectiveness.

V. DISCUSSION

General Discussion of Study Objectives and Implications

The present study had three main objectives. First, it sought to examine the notion that new ventures operated by founders with high levels of social capital would experience more new venture success than ventures operated by founders with less social capital. Next, it attempted to examine the notion that new ventures operated by socially effective individuals would experience higher new venture success than ventures operated by less socially effective founders. Finally, it sought to examine the notion that the interaction between a new venture founder's social capital and social effectiveness would positively influence new venture success.

Consistent with expectations, study results supported the notion that new ventures operated by socially effective individuals would experience higher new venture success than ventures operated by less socially effective founders. Specifically, ventures operated by socially effective founders experienced higher levels of entrepreneurial performance and overall firm performance than ventures operated by less socially effective founders. Importantly, these findings are consistent with previous empirical research on the founder social effectiveness new venture success relationship (e.g. Baron & Markman, 2003; Duchesneau & Gartner, 1990). Further, previous research indicates that socially effective individuals tend to experience more success in a variety of business situations than individuals who are not as socially effective. For example, research indicates that socially effective individuals experience more managerial success (Kilduff & Day, 1994), are perceived as more competent employees (Wayne, et al., 1997), and are better performers on the job (Ferris, et al., 2001) than less socially effective individuals.

In summary, the positive relationship between social effectiveness and new venture success discovered in the current study, the similarity of study results to Baron and Markman's (2003) findings, and the finding that socially effective individuals tend to experience more success in a variety of business situations provide strong evidence that social effectiveness is a valuable asset for new venture founders to possess. Thus, founders may want to consider polishing their social skills at the same time they are polishing their business plans. It is important to note that previous research indicates that social skills are able to be significantly improved through training (Ferris, et al., 2005). Hence, founders may want to consider enrolling in a class or training session to improve social skills. Given the above results, the time and cost of such a training session may prove to be beneficial in the venture creation process.

On the other hand, contrary to expectations, no statistically significant support was found to indicate that either founder social capital or the interaction between founder social capital and founder social effectiveness positively influenced new venture success. Since the present study's findings about the founder social capital new venture success relationship were statistically insignificant, possible theoretical and methodological reasons for such findings are discussed below.

Theoretical Rationale

Founders with high levels of social capital were theorized to have a wider variety of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities. Therefore, founders with higher levels of social capital were expected to possess more knowledge and other critical resources than founders with less social capital. Due to their increased levels of knowledge and other critical resources, , founders with high levels of social capital were expected to exploit opportunities in more innovative and profitable ways than founders with less social capital (Davidsson & Honig, 2003; Florin, et al., 2003). Hence, ventures operated by founders with high levels of social capital were expected to experience more new venture success than ventures operated by founders with less social capital.

One possible theoretical reason for the statistically insignificant findings between founder social capital and new venture success is that other factors besides founder knowledge base may be more influential on a new ventures ability to identify and exploit opportunities. Research indicates that many other factors besides a founder’s knowledge base influence the manner in which new venture founders identify and exploit opportunities. For example, previous research on opportunity recognition indicates that factors such as an entrepreneur’s cognitive processes (e.g. Baron, 2004), heuristics (e.g. Busenitz & Barney, 1997), and family background (e.g. Aldrich & Cliff, 2003) tend to influence how entrepreneurs recognize market opportunities. Thus, while founder knowledge base may influence a new ventures ability to identify and exploit opportunities, other factors may be more influential.

Similarly, a new venture's collective knowledge base may be more influential on new venture success than the founder's personal knowledge base. While new ventures operated by founders with high levels of social capital are theorized to possess more knowledge than ventures operated by founders with less social capital (Florin, et al., 2003), a new venture's employees also likely possess critical knowledge that plays an important role in the new venture's ability to remain competitive. Empirical research supports the notion that employee knowledge base tends to positively influence firm performance in emerging ventures. For example, research indicates that small firms which relied on the knowledge base of their employees through programs such as empowerment, participative management, and team based problem solving experienced higher firm performance than small firms which relied less on such practices (Arthur, 1994; Hayton, 2003). Thus, while new ventures operated by founders with high levels of social capital may have more knowledge than ventures operated by founders with less social capital, the new venture's collective knowledge base may be more influential on new venture success.

Third, founders who possess more knowledge about market opportunities may not always be able to pass that knowledge on to their employees. As stated above, founders with higher levels of social capital were theorized to be better able to gather knowledge about market opportunities than founders with less social capital (Florin, et al., 2003). However, founders with increased access to knowledge may struggle to pass that knowledge on to their employees and, thus, the founder's knowledge base may not always be reflected in the new venture's success. Several previous empirical studies indicate that founder social capital positively influences new venture success (e.g.

Davidsson & Honig, 2003; Lechner, et al., 2006). However, it would be interesting to know if the founders with high levels of social capital in those studies were also socially effective. In the current study, socially effective founders were theorized to be better able to both gather and communicate critical market knowledge (Baron & Markman, 2000, 2003). Hence, ventures operated by socially effective founders were expected to experience more new venture success. It is interesting to note that the current study found that ventures operated by socially effective founders tended to experience higher levels of firm performance than ventures operated by less socially effective founders, but found no evidence that ventures operated by founders with high levels of social capital experience better performance than ventures operated by founders with less social capital. Thus, founder knowledge base may not influence new venture success unless the founder can effectively communicate that knowledge to firm employees.

Fourth, founder social capital may not enhance firm performance unless the resources gathered through such capital help create a bundle of firm resources that are valuable, rare, non-substitutable, and inimitable. As stated above, social capital is theorized to be beneficial for new venture founders by allowing them a body of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (e.g. Davidsson & Honig, 2003). However, the resource based view of the firm (RBV) asserts that a firm will gain a competitive advantage when it develops and controls a bundle of resources that are valuable, rare, non-substitutable, and inimitable (Barney, 1991, 1995). Therefore, while the obtaining of resources such as knowledge and financing through social capital is likely beneficial for new ventures, according to the RBV, a new venture will not experience extended periods of enhanced firm performance unless the overall bundle of resources that the firm controls is valuable, rare, and difficult to imitate. Thus, even though social capital may help new venture founders gather knowledge and other necessary resources, such resources may not enhance new venture success.

Next, social capital may be more influential on venture creation than venture financial performance. The benefits of social capital include a broader group of individuals from whom to gather knowledge and obtain resources (Davidsson & Honig, 2003). Knowledge and other critical resources are certainly essential components in venture creation. However, once the venture is in operation, other factors such as founder social effectiveness may be more influential on the new venture's performance than founder social capital. As noted above, previous research indicates that founder social capital positively influences new venture success (e.g. Davidsson & Honig, 2003; Lechner, et al., 2006). However, such research did not examine whether the founders with high levels of social capital were also socially effective. The current study found that ventures operated by socially effective founders tended to experience higher levels of firm performance than ventures operated by less socially effective founders, but found no evidence that ventures operated by founders with high levels of social capital experience better performance than ventures operated by founders with less social capital. A possible explanation for this finding is that social capital, which helps founders gather knowledge about market opportunities and assemble needed resources, is more influential on venture creation; while founder social effectiveness may be more influential on a new venture's performance. Empirical research indicates that socially effective individuals tend to be more proficient managers (Kilduff & Day, 1997), better performers on the job (Ferris, et al., 2001), better able to select the most qualified employees (Eder & Ferris, 1989), and better able to detect dishonest individuals during business transactions (DePaulo, 1994) than less socially effective individuals. Such abilities may be more influential on a new venture's performance than the knowledge and resources gained through social capital. Thus, it is certainly possible that founder social capital is more influential on a founder's likelihood of starting a new venture than it is on the venture's performance.

Finally, founder social capital may not have a direct effect on new venture success. Instead, a mediating or moderating variable may be necessary to better explain the relationship. The current study examined the moderating influence of founder social effectiveness and did not find any evidence to indicate that social effectiveness helps explain the relationship. In spite of these results, other moderators and mediators such as founder self efficacy and schema strength may help explain the relationship. For example, a recent study of new venture founders in the information technology industry indicated that founders who gathered more information from their social capital were more likely to recognize market opportunities (Ozgen & Baron, 2007). However, the study also indicated that founder self efficacy and schema strength mediated the social capital opportunity recognition relationship. Specifically, founders with schemas that were more aware of market opportunities and founders who had higher self efficacy were more likely to rely on information gathered from their social capital in the opportunity recognition process (Ozgen & Baron, 2007). As a note, schemas are mental frameworks that help individuals organize information retained in memory (Wyer & Srull, 1994) while self efficacy refers to an individual's confidence that he/she can accomplish tasks that he/she undertakes (Bandura, 1997). By extension, it is possible that the founder social capital new venture success relationship may be mediated by founder schema strength and founder self-efficacy. It seems reasonable that if the relationship between founder social capital and opportunity recognition is mediated by schema strength and self efficacy, the relationship between founder social capital and new venture success may also be mediated by such characteristics. After all, if a mental framework that helps organize knowledge about market opportunities and a high level of self efficacy help a founder make better use of their social capital during the opportunity recognition process, it seems reasonable that they may also help founders make better use of their social capital to improve their venture's performance.

Methodological Rationale

The method in which the study was conducted may also have influenced the outcomes. For example, the main variables of interest in the current study were collected in a cross sectional manner. Thus, there was no time lag between information collection on social capital and new venture success. It is likely that the social capital of firm top managers tends to evolve over time (Collins & Clark, 2003). Further, the benefits of a high level of founder social capital, such as knowledge about market opportunities, may take time before they influence new venture success (Florin, et al., 2003). Thus, either creating a time lag between when the data was collected about founder social capital and new venture success or collecting the information in multiple time periods may have provided a clearer picture of the relationship.

Similarly, the current study focused entirely on the new venture founder's individual social capital. However, social capital has been theorized to be a multiple level construct, existing at both the individual and the firm level (Nahapiet & Ghoshal, 1998). Consistent with this theory, previous research indicates that firm level social capital may be just as adequate or an even better predictor of firm performance than individual level social capital. For instance, Lechner, et al. (2006) found that while founder social capital size positively influenced new venture success, the mix of relationships that a new firm maintains with other firms was actually a stronger predictor of new venture success (Lechner, et al., 2006). Further, an examination of firms that had recently launched IPO's found that both founder and firm level social capital were predictive of firm performance (Florin, et al. 2003). Thus, study results may have been more informative if information had been collected about both individual and firm level social capital.

Third, it is a possibility that the measures this study relied upon to assess founder social capital did not measure the construct adequately. Research that examines the social capital general business success relationship typically assesses social capital by asking individuals to indicate each and every relationship that the individual maintains with others in the firm or department under study (e.g. Mehra, Dixon, Brass, & Robertson, 2006; Umphress, Labianca, Brass, Kass, & Scholten, 2003). Specifically, respondents are provided a roster of all individuals in the firm or department under study and asked to indicate with whom they maintain relationships and the strength of each relationship. These measures create a complete picture of an individual's social capital. On the other hand, creating a roster of all the individuals who may influence a new venture founder's success would be difficult. Therefore, researchers typically assess founders' social capital by asking them to indicate the relationships they maintain with various categories of individuals who are hypothesized to influence new venture success such as family, friends, former employers, and competitors (e.g. Davidsson & Honig, 2003; Florin, et al., 2003; Ozgen & Baron, 2007). However, it is certainly possible that scholars are not asking about the most influential groups of individuals. Hence, detailed interviews with a focus group of new venture founders may help identify categories of individuals within founder's social networks that scholars are not currently asking about. Further, scholars may also not be assessing all the influential dimensions of social capital. For example, a qualitative study of new venture founders was able to examine aspects of founder social capital such as degree (a measure of interconnectivity of network members) and frequency (how often network members interacted) that are not typically assessed by empirical studies of the relationship (Hansen, 1995). Interestingly, the study indicated that the degree and frequency of a founder's network positively influenced new venture growth. Considering the above findings, future investigations of the founder social capital new venture success relationship may benefit from the use of a qualitative format to help identify additional categories of individuals who influence new venture success as well as assess other influential aspects of social capital such as the interconnectivity of network members (e.g. Hansen, 1995).

Finally, the items used in the current study to assess social capital may have focused too heavily on strong ties at the expense of weak tie relationships. Weak ties are loose acquaintance type relationships; while strong ties are close interpersonal relationships similar to those that would be found in a nuclear family (Granovetter, 1973, 1985). It is argued that weak ties are valuable because they provide founders access to critical information which would otherwise be hard to access. On the other hand, it is argued that strong ties are valuable because they provide ready access to other resources necessary in venture creation such as labor and financing (Davidsson & Honig, 2003; Granovetter, 1973). As mentioned above, the current study asked founders to indicate the strength of their relationships with several categories of individuals who were theorized to be influential on new venture success such as friends, family members, prominent business people in the community, acquaintances, former employers, and former co-workers. However, it is certainly possible that the categories asked about were too focused on strong tie relationships and not enough on weak tie relationships. Focusing too heavily on strong tie relationships would have certainly limited the information discovered about the influence of founder social capital on new venture success.

Future Research Agenda

The above discussion highlights several interesting areas for future research. First, regarding the founder social effectiveness new venture success relationship, future work should consider examining the relationship over several time periods. The current study examined the founder social effectiveness new venture success relationship with a sample of 156 new venture founders and, consistent with Baron and Markman's (2003) findings, supported a positive link between the two. However, the current study focused on a sample of new ventures that ranged between one and eight years old and only collected data in one time period. Future studies which gathered data in two or more time periods using a sample of new ventures that were all the same age would answer additional questions about the founder social effectiveness new venture success relationship. For example, is the role of founder social effectiveness more critical in the first couple of years of the venture's existence or is it more critical a few years later when the venture may be beginning to grow rapidly? Further, do new venture founders tend to exhibit a consistent level of social effectiveness over time or do new venture founders tend to become more socially effective from years of experience running a new business? Answering these and other questions in future studies will help scholars learn more about the founder social effectiveness new venture success relationship.

Next, time series studies of both the social capital new venture success relationship and the social effectiveness new venture success relationship would also help minimize the success bias that is present in the current study. Specifically, it can be argued that the firms examined in the present study are all successful because they are still in operations (e.g. Davidsson & Honig, 2003). Given a success bias, it is possible that variables which a research study finds positively influence a dependent variable, such as firm performance, may not be that influential. For instance, it is possible that many socially effective founders launched ventures that later failed. However, a study of only firms in operation would not discover such a condition and thus may make conclusions that are not applicable to the entire population of new venture founders (e.g. Davidsson & Honig, 2003). Thus, future studies which gathered data in two or more time periods using a sample of new ventures that were all the same age would help to eliminate this bias. In such a study, firms would certainly fail over time and the researcher could then examine the influence that social capital and social effectiveness have on firm survival.

Third, future studies should consider examining if social capital is more influential on venture creation than venture performance. The benefits of social capital include a broader group of individuals from whom to gather market knowledge and other critical resources necessary to identify and exploit opportunities (Davidsson & Honig, 2003). While resources are certainly essential to creating ventures, other factors such as founder social effectiveness may be more influential on the new venture's eventual performance than founder social capital. Empirical research indicates that socially effective individuals tend to be more proficient managers (Kilduff & Day, 1997), better performers on the job (Ferris, et al., 2001), better able to select the most qualified employees (Eder & Ferris, 1989), and better able to detect dishonest individuals during business transactions (DePaulo, 1994) than less socially effective individuals. Such abilities may be more influential on a new venture's performance than the knowledge and resources gained through social capital. Thus, it is certainly possible that founder social capital is more influential on a founder's likelihood of starting a new venture than it is on the venture's performance. However, future research is necessary to examine this issue.

Further, researchers should attempt to identify variables that may be moderating or mediating the social capital new venture success relationship. Identifying such variables will help scholars provide better advice to practitioners regarding how social capital may influence new venture success. For example, a recent study of new venture founders in the information technology industry indicated that founder schema strength and founder self efficacy mediated the social capital opportunity recognition relationship (Ozgen & Baron, 2007). Specifically, founders with schemas that were more aware of market opportunities and founders who had higher self efficacy were more likely to rely on information gathered from their social capital in the opportunity recognition process (Ozgen & Baron, 2007). By extension, it is possible that the founder social capital new venture success relationship may be mediated by founder schema strength and founder self-efficacy. It seems reasonable that if the relationship between founder social capital and opportunity recognition is mediated by schema strength and self efficacy, the relationship between founder social capital and new venture success may also be mediated by such characteristics. After all, if a mental framework that helps organize knowledge about market opportunities and a high level of self efficacy help a founder make better use of their social capital during the opportunity recognition process, it seems reasonable that they may also help founders make better use of their social capital to improve their venture's performance. However, future empirical studies are needed to examine these and other possible variables which may intervene in the social capital new venture success relationship.

Next, future studies should consider examining whether there are aspects of founder social capital which influence new venture success which scholars are not currently measuring. As discussed above, founder social capital is typically measured by asking founders to indicate the number and strength of relationships they maintain with certain individuals whom scholars hypothesize influence new venture success (e.g. Davidsson & Honig, 2003; Lechner, et al., 2006). However, it is certainly possible that scholars are not asking about the most influential groups of individuals. Further, scholars may also not be assessing all the influential dimensions of social capital. For example, a qualitative study of new venture founders was able to examine aspects of founder social capital such as degree (a measure of interconnectivity of network members) and frequency (how often network members interacted) that are not typically assessed by empirical studies of the relationship (Hansen, 1995). Interestingly, the study indicated that the degree and frequency of a founder's network positively influenced new venture growth. Thus, future research in this area is necessary and may benefit from the use of a qualitative format to help identify additional categories of individuals who influence new venture success as well as assess other influential aspects of social capital such as the interconnectivity of network members (e.g. Hansen, 1995).

Finally, future research on the social capital new venture success relationship would be well served to focus on whether founders who tend to gather knowledge primarily from strong or weak ties experience different levels of success. Research tends to argue that founders gather some of their most critical information from weak ties for the reason that founders are able to learn more from such individuals because of their differing knowledge bases (e.g. Davidsson & Honig, 2003). Specifically, founders do not tend to gain much knowledge from strong tie relationships because strong ties tend to all have similar knowledge bases. However, weak ties operate in different knowledge circles and will thus have useful information for founders (Davidsson & Honig, 2003; Granovetter, 1985). Classic network research by Granovetter (1973) provides support for this notion by indicating that individuals searching for jobs tended to gain critical information about employment opportunities from weak ties. It would be interesting to know if successful new venture founders tend to gather critical information about such things as financing from weak ties. For example, consider a group of new venture founders who have all received financing from business angels. Are such founders typically put in contact with their business angels through strong or weak tie relationships? An interesting study would be to have a group of such founders indicate the individual(s) who put them in contact with their business angel. Further, the study would also need to ask founders to indicate the strength of their relationship with the individuals(s) around the time when the individual(s) put the founders in contact with their business angels. The researcher could then examine if founders who receive business angel financing are typically put in contact with their business angels by strong tie or weak tie relationships. Such a study would help indicate if more successful founders tend to gather critical knowledge from strong or weak tie relationships.

Research Limitations

Like any study, this one has limitations. The first major limitation of this study is that it gathered data via self report surveys from owners and top managers of new ventures. Clearly, it would be ideal to have objective data, such as audited financial statements; however, despite its detractors, self report data has been found to be reliable when the data is gathered from an executive representing the firm (Nayyar, 1992; Nunnelley, 1978; Tan & Litschert, 1994). Additionally, data collection on two of the main variables in this study (e.g. social capital and social effectiveness of new venture founders) is nearly always collected via self report surveys, because there are few other ways to attain such information (e.g. Ferris, et al., 2005; Florin, et al., 2003; Lechner, et al., 2006). Further, data was collected from owners and top managers of 156 American new ventures. Finally, additional empirical research has been called for on both the relationship between social capital and new venture success (Hoang & Antoncic, 2003) and the relationship between social effectiveness and new venture success (Baron & Markman, 2003). The current study provided additional empirical examination of both those issues. Thus, while the self report data collection method has limitations, its use was necessary.

A second study limitation is that there was only one round of data collection on each variable of interest (e.g. firm performance). Multiple observations of key study variables would be ideal. For example, time series data would help the researcher provide stronger evidence of a causal relationship between founder social effectiveness and new venture success. Specifically, the current study, which focused on a sample of new ventures that ranged between one and eight years old and collected data in one time period, found evidence that founder social effectiveness positively influenced new venture success. However, it is reasonable to assert that a study which gathered data in two or more time periods from a sample of new ventures that were all the same age and which also found that founder social effectiveness positively influenced new venture success would provide stronger evidence that founder social effectiveness causes new venture success. Empirical results indicating that the same socially effective founders consistently experienced more new venture success in different time periods would provide a strong argument for a causal relationship between the two. In spite of the above limitations, information gained by the current study advanced scholarly understanding in several areas.

Contribution to the Literature

The current study made several noteworthy contributions to the literature. First, it expanded scholarly understanding of the social capital new venture success relationship. While several studies have recently been conducted on this topic (e.g. Davidsson & Honig, 2003; Ozgen & Baron, 2007), there is still much to learn about the relationship (Hoang & Antoncic, 2003). For instance, research on this topic has tended to use fairly constrained samples such as venture capital financed firms (e.g. Lechner, et al., 2006), firms that have just gone public (e.g. Florin, et al., 2003), and firms that are located outside of the united states (e.g. Bruderl & Preisendorfer, 1998). Thus, this study contributed to the literature by using a sample of 156 privately owned American new ventures in their early stages of development to empirically examine the social capital new venture success relationship. The use of a different sample was intended to examine whether earlier findings about the relationship can be generalized to a different type of sample. As mentioned above, study results did not indicate a statistically significant relationship between new venture founder social capital and new venture success. Hence, previous findings were not generalizable to the current sample. However, the previous statement should be interpreted with great caution. While it is noteworthy that this study did not find a statistically significant relationship between new venture founder social capital and new venture success, it by no means indicates that there is not a relationship between the two. This being said, the inconsistent findings between founder social capital and new venture success in the current study indicate that scholarly research on the topic should continue.

Next, the present study increased scholarly understanding of the relationship between social effectiveness and new venture success. For example, the sample used in the present study was a bit broader than past samples used to test the social effectiveness new venture success relationship. Earlier studies of the relationship examined fairly constrained samples such as firms in the juice industry (e.g. Duchesneau & Gartner, 1990) and firms in the cosmetics industry (e.g. Baron & Markman, 2003). Additionally, while previous research indicates that socially effective individuals tend to experience more success in a wide variety of business situations than less socially effective individuals (e.g. Ferris, et al. 2001), few empirical studies of the founder social effectiveness new venture success relationship have been conducted (Baron & Markman, 2003). Thus, the current study contributed to the literature by adding another empirical examination of the issue. Furthermore, the PSI that was used to assess social effectiveness in the present study is well developed, highly validated, designed specifically to assess social effectiveness in the business environment, and was not available for use when earlier studies of the social effectiveness new venture success relationship were conducted. Therefore, using the PSI helped strengthen this study's conclusions. Finally, the current study's findings are consistent with previous research on the relationship (e.g. Baron & Markman, 2003). Hence, while additional empirical research is always desirable, study results indicate that the findings of previous research are generalizable to the current sample and provide additional evidence that social effectiveness is a beneficial asset for new venture founders to possess.

Third, to the researcher's knowledge, this study was the first empirical examination of both the social capital entrepreneurial performance relationship and the social effectiveness entrepreneurial performance relationship. Few, if any, studies have examined whether new venture founders with high levels of social capital or who are socially effective tend to operate firms which experience higher levels of entrepreneurial performance — a firm's ability to innovate and identify and exploit market opportunities (Lumpkin & Dess, 1996). A high level of social capital and being socially effective were both theorized to help a new venture founder obtain more knowledge about market opportunities (e.g. Baron & Markman, 2003; Florin, et al., 2003). It is reasonable to assume that a venture operated by a founder with more knowledge about market opportunities will exploit such opportunities in more innovative ways. However, the present study contributed to the literature by being one of the first empirical examinations of the above notions. As discussed earlier, results indicated that ventures operated by socially effective founders tended to experience higher levels of entrepreneurial performance than ventures operated by less socially effective founders. Interestingly though, ventures operated by founders with high levels of social capital did not experience different levels of entrepreneurial performance than ventures operated by founders with less social capital. Therefore, it is possible that social effectiveness may be more influential than social capital on new venture performance. Such a contention is an interesting area for future research.

Finally, this study contributed to the literature by being one of the first empirical examinations of the combined influence of a new venture founders social capital and social effectiveness on new venture success. While an interaction between these two constructs has been suggested in previous research (Baron & Markman, 2000, 2003), to the author’s knowledge, the current study was the first empirical examination of the relationship. Thus, the attempt to study the interaction with a sample of 156 new venture founders was an addition to current literature. Additionally, in spite of the results that were discovered in the current manuscript, the researcher still strongly believes that a high level of social capital along with being socially effective is beneficial in the venture creation process. However, future research will need to be undertaken to further examine this issue.

Conclusion

Social capital and social effectiveness have recently received attention as possible explanations for why certain individuals are more successful than others in the venture creation process (e.g. Baron & Markman, 2003; Lechner, et al., 2006). However, since few, if any, studies had examined the influence of both founder social capital and founder social effectiveness on new venture success, this study was undertaken. Consistent with expectations, study results supported the notion that new ventures operated by socially effective individuals would experience higher new venture success than ventures operated by less socially effective founders. However, contrary to expectations, no substantial empirical support was found to indicate that either founder social capital or the interaction between founder social capital and founder social effectiveness positively influenced new venture success.

In conclusion, the current study provides additional empirical support for the notion that social effectiveness is a valuable asset for new venture founders to possess. Study results indicated that ventures operated by more socially effective new venture founders experienced more new venture success than ventures operated by less socially effective founders, which is consistent with Baron and Markman's (2003) earlier findings. Thus, founders should strongly consider polishing their social skills at the same time they are polishing their business plans.

REFERENCES

Aernoudt, A. (2004). Incubators: Tool for entrepreneurship? *Small Business Economics, 23*(2), 127-138.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing, 18*(5), 573-591.

Aldrich, H. E., & Fiol, C. M. (1994). Fools rush in? The institutional context of industry creation. *Academy of Management Review*, *18*(4), 445-470.

Aldrich, H., & Zimmer, C. (1986). *Entrepreneurship through social networks*. In D. Sexton and R. Smilor (Eds.), *The art and science of entrepreneurship* (pp. 3–23). New York: Balliner.

Aldrich, H. E. (1999). *Organizations evolving*. London: Sage.

Amason, A. C., Shrader, R. C., & Tompson, G. H. (2006). Newness and novelty: Relating top management team composition to new venture performance. *Journal of Business Venturing*, *21*(2), 125-148.

Andersson, L. M., & Bateman, T. S. (1997). Cynicism in the workplace: Some causes and effects. *Journal of Organizational Behavior*, *18*(5), 449-469.

Armstrong, J. S., & Overton, T. A. (1977). Estimating non-response bias in mail surveys. *Journal of Marketing Research*, *14*, 396-402.

Arthur, J. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, *37*, 670-687.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.J.H. Freeman.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*, 99-120.

Barney, J. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, *9*(4), 49-61.

Baron, R. A. (2004). The cognitive perspective: A valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing, 19*(2), 221-237.

Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneur's social competence in their financial success. *Journal of Business Venturing*, *18*, 41-60.

Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *The Academy of Management Executive*, *14*(1), 106-116.

Biggadike, R. (1979). The risky business of diversification. *Harvard Business Review*, *57*(3), 103-117.

Bollingtoft, A., & Ulhoi, J. P. (2005). The networked business incubator — leveraging entrepreneurial agency? *Journal of Business Venturing*, *20*(2) 265-283.

Bruderl, J., & Preisendorfer, P. (1998). Network support and the success of newly founded businesses. *Small Business Economics*, *10*, 213-225.

Burt, R. S. (1992). *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.

Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, *12*(1), 9-30.

Chandler, G. N., & Hanks, S. H. (1993). Measuring the performance of emerging businesses: A validation study. *Journal of Business Venturing*, *8*, 391-408.

Chandler, G. N., Honig, H., & Wiklund, J. (2005). Antecedents, moderators, and performance consequences of membership change in new venture teams. *Journal of Business Venturing*, *20*(5), 705-725.

Choi, Y. R., & Shepherd, D. A. (2005). Stakeholder perceptions of age and other dimensions of newness. *Journal of Management, 31*(4) 573-595.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Erlbaum.

Connerley, M. L., & Rynes, S. L. (1997). The influence of recruiter characteristics and organizational recruitment support on perceived recruiter effectiveness: Views from applicants and recruiters. *Human Relations*, *50*(12), 1563-1586.

Cooper, A. C., Folta, T. B., & Woo, C. (1995). Entrepreneurial information search. *Journal of Business Venturing*, *10*(2), 107-120.

Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, *18,* 301-331.

Dess, G. G., Ireland, R. D., & Hitt, M. A. (1990). Industry effects and strategic management research. *Journal of Management*, *16*, 5-25.

Dess, G. G., & Robinson, R. B. (1984). Measuring organization performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, *5*(3), 265-273.

DePaulo, B. M. (1994). Spotting lies: Can humans learn to do better? *Current Directions in Psychological Science, 3*, 83–86.

Duchesneau, D. A., & Gartner, W. B. (1990) A profile of new venture success and failure in an emerging industry. *Journal of Business Venturing*, *5*, 297–312.

Dyke, L. S., Fischer, E. M., & Reuber, A. R. (1992). An inter-industry examination of the impact of owner experience on firm performance. *Journal of Small Business Management*, *30*, 72-87.

Eder, R. W., & Ferris, G. R. (1989). *The employment interview*. Newbury Park, CA: Sage.

Ensley, M. D., Pearce, C., & Hmieleski, K. (2006). The moderating effect of environmental dynamism on the relationship between entrepreneur leadership behavior and new venture performance. *Journal of Business Venturing, 21*(2), 243-263.

Ferris, G. R., & Judge, T. A. (1991). Personnel/human resources management: A political influence perspective. *Journal of Management*, *17*, 447-488.

Ferris, G. R., Perrewe', P. L., & Douglas, C. (2002). Social effectiveness in organizations: Construct validity and research directions. *Journal of Leadership and Organizational Studies*, *9*, 49-63.

Ferris, G. R., Treadway, D. C., Kolodinsky, R. W., Hochwater, W. A., Kacmar, C. J., Douglas, C., & Frink, D. D. (2005). Development and validation of the political skill inventory. *Journal of Management*, *31*,126-152.

Ferris, G. R., Witt, L. A., & Hochwater, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology*, *86*, 1075-1082.

Florin, J., Lubatkin, M., & Schulze, W. (2003). A social capital model of high-growth ventures. *Academy of Management Journal*, *46*, 374-384.

Galbraith, J. (1983). Strategy and organizational planning. *Human Resource Management*, *22*, 63-78.

Garg, V. K. Walters, B. A., & Priem, R. L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*, *24*(8), 725-743.

Gilley, K. M., & Rasheed, A. (2000). Making more by doing less: An analysis of outsourcing and its effects on firm performance. *Journal of Management*, *26*(4) 763-791.

Gimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of under-performing firms. *Administrative Science Quarterly, 42*(4), 750-783.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, *78*(6), 1360-1380.

Granovetter, M. (1985). Economic action and social structure: A theory of embeddedness. *American Journal of Sociology*, *91*(3), 481-510.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, *17*, 109-122.

Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, *28*(1) 1-15.

Hansen, E. L. (1995). Entrepreneurial network and new organization growth. *Entrepreneurship Theory and Practice*, *19*(4) 7-19.

Harris, M., & Raviv, A. (1991). The theory of capital structure, *Journal of Finance*, *46*(1), 297-355.

Hayton, J. (2003). Strategic human capital management in SMEs: An empirical study of entrepreneurial performance. *Human Resource Management*, *42*(4), 375-393.

Hite, J. M. (2005). Evolutionary processes and paths of relationally embedded network ties in emerging entrepreneurial firms. *Entrepreneurship Theory and Practice, 29*(1), 113-128.

Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing*, *18*(2) 165-182.

Hornsby, J. S., & Kuratko, D. F. (2002). Human resource management in U.S. small business: A replication and extension. *Journal of Developmental Entrepreneurship*, *8*(1), 73-89.

Hornsby, J. S., & Kuratko, D. F. (1990). Human resource management in small business: Critical issues for the 1990s. *Journal of Small Business Management*, *28*(3), 9-18.

Kilduff, M., & Day, D. V. (1994). Do chameleons get ahead? The effects of self-monitoring on managerial careers. *Academy of Management Journal*, *37*, 1047-1060.

Kirchhoff, B. A. (1979). Commentary. In D. Schendel and C. W. Hofer (Eds.), *Strategic management: A new view of business policy and planning.* Boston: Little Brown.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, London: The Guilford Press.

Korsgaard, M. A., & Roberson, L. (1995). Procedural justice in performance evaluation: The role of instrumental and non-instrumental voice in performance appraisal discussions. *Journal of Management*, *21*(4), 657-669.

Lechner, C., Dowling, M., & Whelpe, I. (2006). Firm networks and firm development: The role of the relational mix. *Journal of Business Venturing*, *21*(4), 514-533.

Lubit, R. (2001). Tacit knowledge and knowledge management: The keys to sustainable competitive advantage. *Organizational Dynamics*, *29*(4), 164-178.

Lumpkin, G. T., & Dess, G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, *16*(4), 429-451.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, *21*, 135-173.

Lussier, R. N. (1995). A non-financial business success versus failure prediction. *Journal of Small Business Management*, *33*(1), 8-26.

McAdam, M., & McAdam, R. (2006). The networked incubator: The role and operation of entrepreneurial networking with the university science park incubator (USI). *International Journal of Entrepreneurship and Innovation*, 7(2), 87-98.

McDougall, P., Covin, J., Robinson, R., & Herron, L. (1994). The effects of industry growth and strategic breadth on new venture performance and strategy content. *Strategic Management Journal, 15*(7), 537-554.

McDougall, P., & Robinson, R. B. Jr. (1990). New venture strategies: An empirical identification of eight 'archetypes' of competitive strategies for entry. *Strategic Management Journal*, *11*(6), 447-467.

Mehra, A., Dixon, A. L., Brass, D. J., & Robertson, B. (2006). The social network ties of group leaders: Implications for group performance and leader reputation. *Organization Science, 17*(1), 64-81.

Miller, A. & Camp, B. (1985). Exploring determinants of success in corporate ventures. *Journal of Business Venturing*, *1*(1), 87-101.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, *29*, 770-792.

Miller, D., & Toulouse, J. (1986). Strategy, structure, CEO personality and performance in small firms. *Entrepreneurship Theory and Practice*, *14*, 47-63.

Morash, E. A., Droge, C. L., & Vickery S. K. (1996). Strategic logistics capabilities for competitive advantage and firm success. *Journal of Business Logistics*, *17*(1), 1-22.

Mossholder, K. W., Bennett, N., Kemery, E. R., & Wesolowski, M. A. (1998). Relationships between bases of power and work reactions: The mediational role of procedural justice. *Journal of Management*, *24*(4), 533-552.

Nayyar, P. R. (1992). On the measurement of service diversification strategy: Evidence from large U.S. service firms. *Strategic Management Journal, 13*, 219-235.

Nunnelly, J. C. (1978). *Psychometric theory.* New York: McGraw-Hill.

Ozgen, E, & Baron, R. A. (forthcoming). Social sources of information in opportunity recognition: Effects of mentors, industry networks, and professional forums. Forthcoming in *Journal of Business Venturing*.

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. B. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879-894.

Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, *41*, 116–145.

Powell, G. N. (1991). Applicant reactions to the initial employment interview: Exploring theoretical and methodological issues. *Personnel Psychology*, *44*, 647-683.

Robb, A., M. (2002). Entrepreneurial performance by women and minorities: The case of new firms. *Journal of Developmental Entrepreneurship*, 7, 4, 383-397.

Shane, S., & Kolvereid, L. (1995). National environment, strategy, and new venture performance: A three country study. *Journal of Small Business Management*, *33*, 37-50.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*, 217–226.

Singh, R., Hills, G., Hybels, R., & Lumpkin, G. T. (1999). Opportunity recognition through social network characteristics of entrepreneurs. *Frontiers of Entrepreneurship Research*, 228–241. Babson Park, MA: Babson College Press.

Smeltzer, L. R., Van Hook, B. L., & Hutt, R. W. (1991). Analysis and use of advisors as information sources in venture startups. *Journal of Small Business Management*, *29*(3), 10–20.

Tan, J. J., & Litschert, R. J. (1994). Environment-strategy relationship and its performance implications: An empirical study of the Chinese electronics industry. *Strategic Management Journal*, *15*(1), 1-20.

Turban, D. B., & Dougherty, T. W. (1992). Influences of campus recruiting on applicant attraction to firms. *Academy of Management Journal*, *35*, 739-765.

Umphress, E. E., Labianca, G. J., Brass, D. J., Kass, E., & Scholten, L. (2003). The role of instrumental and expressive social ties in employees' perceptions of organizational justice. *Organization Science*, *14*(6), 738-759.

Venkataraman, S. (1997). The distinctive domain of entrepreneurship research: An editor's perspective. In J. Katz & R. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (Vol. 3, pp. 119–138). Greenwich, CT: JAI Press.

Wayne, S. J., Liden, R. C., Graf, I. K., & Ferris, G. R. 1997. The role of upward influence tactics in human resource decisions. *Personnel Psychology*, *50*, 979-1006.

Williamson, I. O. (2000). Employer legitimacy and recruitment success in small businesses. *Entrepreneurship Theory and Practice*, *25*(1), 27-43.

Williamson, I. O., Cable, D. M., & Aldrich, H. E. (2002). Smaller but not necessarily weaker: How small businesses can overcome barriers to recruitment. In J. A. Katz & T. M. Welbourne (Eds.), *Managing people in entrepreneurial organizations: Learning from the merger of entrepreneurship and human resource management* (pp. 83-106). Greenwich, CT: JAI Press.

Wyer, R. S., & Srull, T. K. (1994). *Handbook of social cognition* (2nd ed.). Hillsdale, NJ: Erlbaum.

APPENDICES

APPENDIX A

SURVEY FOR FIRM OWNER/TOP MANAGER

Survey for Firm Owner/Top Manager

Part A

1. What is the total number of employees employed by your firm (full time equivalents)? _____

2. How many full years has your business been in operation? _____

3. Please indicate the state in which your business primarily operates (check only one).

   _____Choice of all fifty and the District of Columbia in a drop down box

4. As the survey respondent, please indicate your current position in the business (check one).

   _____Owner
   _____CEO/Top manager, but not owner
   _____Middle- level manager
   _____Lower-level manager
   _____Other (please specify) ______________________

5. Please indicate within which industry your business primarily operates (check one).

   ______ Agricultural
   ______ Construction
   ______ Hi-technology
   ______ Manufacturing
   ______ Retail
   ______ Services
   ______ Telecommunications
   ______ Transportation
   ______ Wholesale
   ______ Other

6. What is your age? _______

7. What is the highest level of education that you have earned (pick one)?

_____Less than a high school diploma
_____High school diploma
_____Some College
_____Undergraduate degree
_____Graduate degree

8. How many years have you owned or managed a firm? _____

9. How many years of experience do you have working in the industry that your firm is currently operating in? _____

10. What is your Gender? _____ Male _____ Female

11. What is your race?

_____ Caucasian
_____ African American
_____ Asian
_____ Hispanic
_____ Native American
_____ Arab
_____ Other (*please specify*) ______________________________

Part B

Please use the scale below to indicate the amount of support running your business that you receive from each group of individuals, excluding financing.

	1 No Support	2	3 Moderate Level of Support	4	5 High Level of Support
Parents	1	2	3	4	5
Spouse/life Partner	1	2	3	4	5
Relatives	1	2	3	4	5
Friends	1	2	3	4	5
Business partners	1	2	3	4	5
Former employers	1	2	3	4	5
Former coworkers	1	2	3	4	5
Acquaintances	1	2	3	4	5
Prominent business people in the area	1	2	3	4	5
Individuals who work for competitors	1	2	3	4	5

1. Please indicate the total number of relationships that you maintain with other individuals that you regard as important for your business, independent of simple economic exchange. _________

2. Please indicate the total number of relationships that you maintain with family and friends that you regard as important for your business, independent of simple economic exchange. _________

3. Please indicate the total number of relationships that you maintain with individuals who are highly respected in the business community that you regard as important for your business, independent of simple economic exchange. _________

4. Please indicate the total number of relationships that you maintain with individuals who work for competing firms that you regard as important for your business, independent of simple economic exchange. _________

Part C

Instructions: Using the following scale, please place a number in the blank next to each item that best describes **how much you agree with each statement about yourself in your work environment.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. _____ I spend a lot of time and effort in business situations networking with others.
2. _____ I am able to make most people feel comfortable and at ease around me.
3. _____ I am able to communicate easily and effectively with others.
4. _____ It is easy for me to develop good rapport with most people.
5. _____ I understand people very well.
6. _____ I am good at building relationships with influential people in business situations.
7. _____ I am particularly good at sensing the motivations and hidden agendas of others.
8. _____ When communicating with others, I try to be genuine in what I say and do.
9. _____ I have developed a large network of colleagues and associates who I can call on for support when I really need to get things done.
10. _____ I know a lot of important people and am well connected.
11. _____ In business situations, I spend a lot of time and effort developing connections with others.
12. _____ I am good at getting people to like me.
13. _____ It is important that people believe I am sincere in what I say and do.
14. _____ I try to show a genuine interest in other people.
15. _____ I am good at using my connections and network to make things happen.
16. _____ I have good intuition or "savvy" about how to present myself to others.
17. _____ I always seem to instinctively know the right things to say or do to influence others.
18. _____ I pay close attention to peoples' facial expressions.

Part D

Please use the scale below to indicate the degree to which each of the following statements describe your firm.

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. This company shows a great deal of tolerance for high risk projects.
2. This company uses only "tried and true" procedures, systems, and methods.
3. This company challenges, rather than responds to, its major competitors.
4. This company takes bold, wide-ranging strategic actions, rather than minor changes in tactics.
5. This company emphasizes the pursuit of long-term goals and strategies.
6. This company is the first in the industry to introduce new products to the market.
7. This company rewards taking calculated risks.

Part E

Please assess, to the best of your ability, your firm’s performance *RELATIVE TO similar firms within your industry* in the following areas by marking the appropriate response on the scale below.

	Low Performer		Moderate Performer		High Performer
Sales Growth Rate	1	2	3	4	5
After Tax Return on Total Sales	1	2	3	4	5
After Tax Return on Total Assets	1	2	3	4	5
Overall Firm Performance/Success	1	2	3	4	5

APPENDIX B

SURVEY FOR OTHER FIRM EMPLOYEE

Survey for Other Firm Employee

Part A

1. As the survey respondent, please indicate your current position in the business (check one).

_____Owner
_____CEO/Top manager, but not owner
_____Middle-level manager
_____Lower-level manager
_____Other (please specify) ______________________________

Part B

Please use the scale below to indicate the amount of support you believe your firm's top manager receives running the business from each group of individuals.

The owner/top manager's …	**1** No Support	**2**	**3** Moderate Level of Support	**4**	**5** High Level of Support
Parents	1	2	3	4	5
Spouse/life Partner	1	2	3	4	5
Relatives	1	2	3	4	5
Friends	1	2	3	4	5
Business partners	1	2	3	4	5
Former employers	1	2	3	4	5
Former coworkers	1	2	3	4	5
Acquaintances	1	2	3	4	5
Prominent business people in the area	1	2	3	4	5
Individuals who work for competitors	1	2	3	4	5

Part C

Instructions: Using the following scale, please place a number in the blank next to each item that best describes **how much you agree with each statement about your firm's owner/top manager.**

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. _____ The owner/top manager spends a lot of time and effort in business situations networking with others.
2. _____ The owner/top manager is able to make most people feel comfortable and at ease around him/her.
3. _____ The owner/top manager is able to communicate easily and effectively with others.
4. _____ It is easy for the owner/top manager to develop good rapport with most people.
5. _____ The owner/top manager understands people very well.
6. _____ The owner/top manager is good at building relationships with influential people in business situations.
7. _____ The owner/top manager is particularly good at sensing the motivations and hidden agendas of others.
8. _____ When communicating with others, the owner/top manager tries to be genuine in what he/she says and does.
9. _____ The owner/top manager has developed a large network of colleagues and associates who he/she can call on for support when he/she really needs to get things done.
10. _____ The owner/top manager knows a lot of important people and is well connected.
11. _____ In business Situations, the owner/top manager spends a lot of time and effort developing connections with others.
12. _____ The owner/top manager is good at getting people to like him/her.
13. _____ It is important to the owner/top manager that people believe he/she is sincere in what he/she says and does.
14. _____ The owner/top manager tries to show a genuine interest in other people.
15. _____ The owner/top manager is good at using his/her connections and network to make things happen.
16. _____ The owner/top manager has good intuition or "savvy" about how to present himself/herself to others.
17. _____ The owner/top manager always seems to instinctively know the right things to say or do to influence others.
18. _____ The owner/top manager pays close attention to peoples' facial expressions.