

ENTREPRENEURIAL SUCCESS: THE ROLE OF SOCIAL NETWORKS AND
HUMAN CAPITAL

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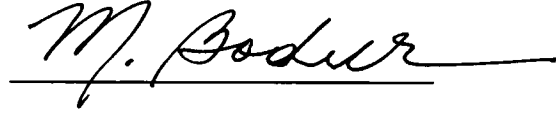
Entrepreneurial Success: The Role of Social Networks and Human Capital

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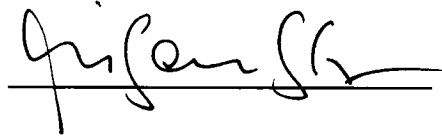
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Dissertation Abstract

Renin Varnalı, “Entrepreneurial Success: The Role of Social Networks and Human Capital”

Social capital theory suggests that a firm’s external networks play a major role in contributing to its performance; hence start-ups, in order to succeed, are advised to pursue strategies that focus on the development of valuable networks, as they hold the set of resources, tangible or virtual, that may accrue to a corporate player through the player’s social relationships across these networks, facilitating the attainment of entrepreneurial goals. Although a number of empirical studies suggest that social networks indeed have an influence on entrepreneurial success, evidence regarding the nature of the relationship is still equivocal. Further, the number of studies focusing on entrepreneurial success through a network perspective in Turkey is quite scarce. Combining the merits of both qualitative and quantitative research, the present dissertation attempts to contribute to the understanding of how social capital and structural elements of an entrepreneur’s network are related with entrepreneurial success. Since there are conflicting and mixed results regarding these relationships in the literature, one additional aim is to introduce human capital in this relationship. First, in-depth interviews are used in the exploratory stage of the research providing in-depth understanding of the phenomenon under investigation within its context. Then, quantitative data, collected via survey administration to entrepreneurs of small and medium sized enterprises (SMEs) from Istanbul, is used to test the hypotheses developed in light of the relevant literature and the qualitative insights. Results provided corroborative empirical evidence for the mediating effect of access to resources on the relationship between entrepreneurial success and its network related antecedents, while illuminating the moderating effect of human capital elements on this mediated relationship. It is shown that human capital (education and industry-specific work experience) indeed changes the nature of the relationships in the predictive model of entrepreneurial success.

Tez Özeti

Renin Varnalı, “Girişimcilikte Başarı:

Sosyal Ağlar ve Beşeri Sermayenin Rolü”

Sosyal sermaye kuramına göre kurumların sosyal ağları performansları üzerinde önemli bir rol oynar. Dolayısıyla, yeni kurulan şirketlere, başarılı olmaları için, değerli sosyal ağlar geliştirecekleri stratejiler sürdürmeleri tavsiye edilir. Çünkü bu sosyal ağlar sayesinde somut ya da sanal kaynaklara erişim sağlayarak başarıya ulaşmaları öngörülmektedir. Sosyal ağların girişimcilerin başarıları üzerinde önemli etkileri olduğunu öneren çok sayıda çalışma olmasına rağmen, ilişkinin doğasına ilişkin kanıt çok yönlüdür. Ayrıca, Türkiye’de sosyal ağ çerçevesinden girişimcilerin başarılarını inceleyen çalışmaların sayısı oldukça azdır. Bu tez, nitel ve nicel araştırma yöntemlerinin marifetlerini birleştirerek girişimcilerin sosyal sermayelerinin ve sosyal ağ yapılarının başarıları ile nasıl bir ilişkide olduğunu anlamayı amaçlamaktadır. İlgili yazında bu ilişki için bulunan çelişkili ve karma sonuçlar olduğundan, bir diğer amaç da beşeri sermayeyi bu ilişkiye tanıtmak olmuştur. Öncelikle, araştırmanın keşif aşamasında, derinlemesine görüşmeler yapılarak konu ile ilgili kendi bağlamında derinlemesine bir anlayış sağlanmıştır. Ardından, İstanbul’daki KOBİ (küçük ve orta büyüklükteki işletmeler) kurucuları olan girişimcilerden anket yöntemiyle sayısal veri toplanarak kalitatif yöntem ve ilgili yazın ışığında geliştirilen hipotezler test edilmiştir. Sonuçlar girişimcilerin başarıları ile bunun sosyal ağlar ile ilgili öncülleri arasındaki ilişkiye kaynaklara erişimin aracı rolü üzerinde destekleyici görgül kanıt sağlarken, aynı zamanda bu aracı ilişkide beşeri sermayenin düzenleyici (moderatör) rolünü de aydınlatmıştır. Beşeri sermayenin (eğitim ve benzer sektör iş deneyimi) girişimcilerin başarısını gösteren modeldeki ilişkilerin doğasını değiştirdiği bulunmuştur.

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CHAPTER 1

INTRODUCTION

The importance of entrepreneurship for economic development and regeneration is widely accepted (Hart et al., 1993; Wiklund et al., 1997). Entrepreneurship is perceived to bring both social (Aldrich et al., 1983, Hyrsky and Ali, 1996) and economic (Storey, 1997; Wiklund et al., 1997) benefits to the society at large. As Schumpeter (1934) states, new business ventures and the entrepreneurs who established them assume primary roles in modern economic development. They help in fostering technological innovations of industries (Tushman & Anderson, 1986), creating new jobs, and generating new wealth for society (Kao, 1995).

Aldrich and Martinez (2001) highlight the importance of the entrepreneurial success by stating that “understanding how and why some entrepreneurs succeed remains a major challenge for the entrepreneurship research community” (p.41). There are many studies with conflicting results regarding entrepreneurial performance (e.g., Dess, Lumpkin, & Covin, 1997; Lumpkin & Dess, 1996; West & Meyer, 1998). The main purpose of these studies is to explore the factors that bring entrepreneurial success. Extant research suggests that environmental, personal, resource-related, and strategic factors influence entrepreneurial success (e.g., Gartner, 1985; Miller, 1987; Mugler, 2000). Among these factors, the effect of social capital has been widely studied throughout the literature. Abundance of studies specifically

examined the role of social capital (e.g., Aldrich & Reese, 1993; Birley, 1985; Hansen, 1995; Hite, 1999; Larson & Starr, 1993; Stuart, Hoang, & Hybels, 1999) on entrepreneurial success. Although the evidence regarding the nature of the relationship among social capital and entrepreneurial success is still equivocal, its role in entrepreneurial processes towards success is unquestionable.

As scholars started to recognize the relevance and importance of relations for business activity, the use and popularity of the network concept by social science researchers intensified in recent years (Easton & Araujo, 1986; Harland, 1995; Nohria & Eccles, 1992). As social capital theory suggests, a firm's external networks play a major role in contributing to its performance (Leenders & Gabbay, 1999). According to the theory, start-ups, in order to succeed, should pursue strategies that focus on the development of valuable networks with external resource holders (Lee et al., 2001, p. 616). Gabbay and Leenders (1999) define corporate social capital as "the set of resources, tangible or virtual, that accrue to a corporate player through the player's social relationships, facilitating the attainment of goals" (p. 3).

Hoang and Antoncic (2003) suggest that as studies verified the important role that networks play in influencing the entrepreneurial process and outcomes, research on entrepreneurial networks gained legitimacy as a new area of research. Entrepreneurship has been offered as an interesting phenomenon to examine from a network perspective (Araujo & Easton, 1996, p. 97).

When extant studies using personal network perspective in the context of entrepreneurship (e.g., Aldrich, 1989; Aldrich et al., 1987; Aldrich et al., 1989; Birley, 1985; Bogenhold, 1989; Bogenhold & Staber, 1994; Boissevain et al., 1990; Carsrud et al., 1987; Donckels & Lambrecht, 1995; Nohria, 1992; Sanders & Nee,

1996; Zimmer & Aldrich, 1987) are analyzed, it can be seen that majority of the studies deal with the founding process of new ventures, whereas a smaller portion deals with processes after the foundation. Former vein of research is called “network founding hypothesis”, where the main issue is that network resources, networking activities and network support are heavily used to establish new businesses, thus social networks stimulate entrepreneurship (Brüderl & Preisendorfer, 1998). The second phase is called “network success hypothesis”, where the main point is that entrepreneurs who can access to a broad and diverse personal network and receive much support from it are more successful. Hence, in the second vein of research the relationship between network support and organizational performance is frequently assessed (Dubini & Aldrich, 1991).

There are many scholars claiming that social networks have positive influence on entrepreneurial success (Aldrich et al., 1986; Bolcic, 1997, 1998; Hansen, 1995; Michell, 1969; Renzulli et al., 2000; Staber & Aldrich, 1995). It is widely suggested that the entrepreneur’s personal network is his most valuable asset (Johannisson & Peterson, 1984). The entrepreneur, in order to establish a new business needs several resources. In order to obtain the necessary resources, he/she can directly reach a number of persons who are willing to give support. Previous research suggests that personal networks give entrepreneurs the ability to gain information, advice, and social support from network members (Birley, 1985), raise equity and debt capital (Uzzi, 1999; Shane & Cable, 2002), and find alliance partners (Eisenhardt & Schoonhoven, 1996). Extant research indicates a positive association between networking and entrepreneurial performance (e.g., Bakham et al., 1996, Bryson, 1997; Chell, 2000, Foss, 1994; Jenssen, 2001). For instance, Dollinger (1985) found that successful entrepreneurs are particularly active in networking with

business people and regulators. Hansen (1995) suggested that entrepreneurial networks are positively associated with organizational growth. Johannisson (1988) made the point quite clear by stating that “whether the entrepreneur re-acts or pro-acts, whether he is new in business or experienced, he can be approximately described as ‘*networking man*’” (p. 98).

Additionally, as Baron (2000) suggests, successful entrepreneurs’ minds, when compared to other persons, operate in a different manner in several ways. The former are less likely to engage in counterfactual thinking, but more likely to show overconfidence in their judgments. Baron also adds that, successful entrepreneurs seem to be higher in social competence, which is the ability to interact with others effectively. They are better at social perception and adapting to new social situations (p. 15). Entrepreneurs must deal with many persons outside their businesses, including bankers, customers, and employees. Additionally, a new entrepreneurial business may include two or more partners. Considering these social relations that an entrepreneur has to face, Baron (2000) suggests that the ability to interact effectively with these persons might increase the chances of successful outcomes. In line with this reasoning, Baron (2000) predicted and found out that aspects of entrepreneurs’ social competence (which include four factors: (1) social perception: accuracy in perceiving others, (2) impression management: techniques for inducing positive reactions in others, (3) persuasiveness: the ability to change others’ views or behavior in desired directions, and (4) social adaptability: the ability to adapt to, or feel comfortable in, a wide range of social situations) influence financial success (p. 17).

Although many studies suggest that, social networks have an influence on entrepreneurial success, evidence regarding the nature of the relationship is still

equivocal, such that several empirical studies failed to find any positive effect of networking on entrepreneurial performance and success (e.g., Aldrich et al., 1987; Bates, 1994; Yoon, 1991).

Further, entrepreneurial success factors have not previously been analyzed in the context of Turkey. There are very few studies conducted in Turkey related to entrepreneurship, especially on entrepreneurs' social capital. Thus, this study, to our knowledge, being the first one conducted in Turkey, examining the underlying mechanism through which social capital and elements of social network structure of entrepreneurs influence their success, shall contribute to the progress of entrepreneurial research in Turkey. Thus, the main research question of this research is to explore the relationship between social networks and entrepreneurial success in the context of Turkey.

Human capital is considered as another key success factor for entrepreneurial ventures (Brüderl et al., 1992; Cooper et al., 1994; Dimov & Shepherd, 2005; Hart et al., 1995; Santarelli & Tran, 2013). In line with Becker's (1964) human capital theory, Unger et al. (2011) defined human capital as "skills and knowledge that individuals acquire through investments in schooling, on-the-job training, and other types of experience" (p. 343). According to the human capital theory (Becker, 1964), employees' human capital, which consists of primarily education and work experience, contributes to their success; meaning that employees with higher and more quality human capital will be more successful with their jobs than those with less human capital (Becker, 1975; Davidsson & Honig, 2003).

Although there are many studies that examined the role of human capital on entrepreneurial success (e.g., Bozeman, 2004; Brüderl et al., 1992; Cooper et al.,

1994; Hart et al., 1995), there are also several studies that have failed to find a positive relationship between human capital and entrepreneurial success. In a review conducted by Reuber and Fisher (1994), while eleven significantly positive effects are found, eleven non-significant effects, and two significantly negative effects are also observed. The authors describe the relationship between human capital and success as “spotty and difficult to interpret” (Reuber & Fisher 1994, p. 370). Other scholars also pointed out the inconclusive and mixed results of the relationship between human capital and entrepreneurial success (Honig 2001, p. 579, Florin et al. 2003, p. 375). Thus, “the field of entrepreneurship research so far has failed to adequately explain the differential effects of human capital attributes and to provide a framework to illuminate why and what kind of human capital should be related to success” (Santarelli, 2013, p.437).

In this dissertation, one of the aims is to contribute to the understanding of the role of human capital in entrepreneurial success. Since there are conflicting views regarding the positive relationship between social networks and entrepreneurial success, the role of human capital in this relationship may shed light into the inconclusive results regarding its effect. In this respect, human capital may be the catalyst that entrepreneurs need while they benefit from their social networks to achieve success. Thus, one of the aims of the present research is to explore how human capital interacts with the effects of social capital in determining entrepreneurial success.

In this dissertation, main focus is on the effect of social networks of entrepreneurs; specifically, examining the mechanism through which network characteristics interact with human capital of entrepreneurs in predicting entrepreneurial success constitutes the main research agenda.

This study is a part of a larger project, which is conducted in collaboration with Koç University. The aim of the larger project is to find key success factors of women entrepreneurs. In so doing, we aim to analyze women entrepreneurs and compare them with their men counterparts. The funding of the project is obtained from an institute, named KOÇKAM (Koç Üniversitesi – Toplumsal Cinsiyet ve Kadın Çalışmaları Araştırma ve Uygulama Merkezi). The focus of the larger project is on women entrepreneurs; in other words, the gender aspect of entrepreneurship is of consideration. In that study, a model consisting of person, environment, resource, and process-related factors will be examined in relation to entrepreneurial success. The moderating role of gender is to be analyzed and emphasized.

This dissertation attempts to make several contributions to the field. First, it is expected to contribute to the debate regarding the role of networks on entrepreneurial success. In addition, human capital elements of the entrepreneurs will be analyzed through a perspective that has not yet been adopted in the relevant literature by construing human capital as a catalyst that entrepreneurs need when they benefit from their social networks to achieve success. Second, the present research combines the merits of both qualitative and quantitative research. The in-depth interviews used in the exploratory stage of the research provided in-depth understanding of the phenomenon under investigation within its context. Then, quantitative data, collected via a survey administered to entrepreneurs of small and medium sized enterprises (SMEs) from Istanbul, is used to test the hypotheses developed in light of the relevant literature and the qualitative insights. Finally, the results of the study will be highly important due to the context within which the study is conducted. Although there are few studies conducted in Turkey that are related with entrepreneurship, the number of studies specifically related to social networks and human capital is quite

scarce. Thus, this study will give direction to scholars who are interested in studying the factors of entrepreneurial success in emerging countries, like Turkey.

This dissertation includes six chapters. In Chapter 2, the literature on entrepreneurship will be presented, as it constitutes the domain of inquiry. Additionally, the relevant literature on social networks and human capital will be presented in this chapter. In Chapter 3, theoretical framework and hypotheses development will be discussed alongside the research models. In Chapter 4, the methodology, including data collection procedures, sample characteristics, and the measures of the scales employed in two quantitative studies will be presented. In Chapter 5, data analyses and hypotheses testing will be stated for both studies. Chapter 6 will present the discussion of the findings, underlining the main contributions of the study, limitations, future research avenues, and concluding remarks.

CHAPTER 2

LITERATURE REVIEW

Entrepreneurship

Entrepreneurship in General

The term “entrepreneur” has been used in French language since the twelfth century. It comes from the term “enterprise” that has a German meaning of “to undertake” (Luchsinger & Bagby, 1987, p. 10). Entrepreneurship literature has a long history as an academic field (Landstrom, 1999, 2005). Its legitimacy as an academic field is proved by the increased number of studies in mainstream journals and the existence of high quality journals related to entrepreneurship; such as Entrepreneurship: Theory and Practice and Journal of Business Venturing (Stevenson & Jarillo, 1990).

In entrepreneurship literature, there exist three levels of analysis, as individuals, groups, and the organization (Lumpkin & Dess, 1996). At the individual level, an entrepreneur establishes, organizes and manages the new organization and assumes the whole risk (Luchsinger & Bagby, 1987) and, as Schumpeter (1934) suggests these activities include novelty and innovation. Thus, entrepreneurship

means innovation generally in the form of a new venture with novel products, services or processes. As Brazeal and Herbert (1999) state “the classical conception of entrepreneurship is that the individual, independent entrepreneur who assumes financial and other risks in order to exploit a new idea or product possibility; he or she may be supported by another, perhaps a venture capitalist or a family member, but the risks of failure uniquely devolve upon the entrepreneur” (p. 40). Although risk-taking, innovativeness, and proactiveness are seen as important aspects of entrepreneurship, recent studies emphasize opportunity recognition and exploitation as a firm behavior (Brown, Davidsson, & Wiklund, 2001). Stevenson and Jarillo (1990) defined entrepreneurship as “the process by which individuals – either by their own or inside organizations – pursue opportunities without regard to the resources they currently control” (p. 23). According to this definition, the focus of entrepreneurship is on the pursuit of an opportunity, irrespective of the organizational context (Brown et al., 2001).

Venkataraman (1997) emphasizes the exploitation of opportunities and states that the field of entrepreneurship aims to understand how future goods and services are discovered and exploited. In the framework developed by Shane and Venkataraman (2000) for the study of entrepreneurship, there are three basic research areas; namely, the existence of entrepreneurial opportunities, the discovery and exploitation of opportunities, and the modes of exploitation.

Another term, intrapreneurship, has also attracted researchers’ attention. Entrepreneurship and intrapreneurship are two different concepts; as such, the former aims at personal, while the latter at organizational gain (Hisrich, 1990). Another criterion that differentiates the two terms is the context within which the entrepreneurial activity takes place (Shetty, 2004).

Stevenson and Jarillo (1990) identified three main research streams in the field of entrepreneurship: (1) what happens when entrepreneurs act, (2) why they act, and (3) how they act. The first one concentrates on the outcomes and results of the actions of the entrepreneur. Economists dominate this area of research. The second line of research adopts a psychological/sociological approach and treats the entrepreneur as an individual (Collins & Moore, 1964; McClelland, 1961). In this area, researchers are primarily interested in the causes of individual entrepreneurial actions. In the third stream of research, researchers analyze the characteristics of entrepreneurial management and how entrepreneurs achieve their aims. This line focuses on the entrepreneurial management process. Predictors of entrepreneurial success (Cooper & Bruno, 1975; Dollinger, 1984) are also investigated in line with this research stream. Although earlier studies have focused primarily on the first two lines of research areas; namely, the economic function of entrepreneurship and the nature of the individual who is the entrepreneur, in recent years there has been a shift towards the investigation of the “how” of entrepreneurship. The specific topics that are focused by this stream of research include the recognition of the opportunity, the process of committing to an opportunity, gaining control over the resources, managing the network of resources, and the way in which participants are rewarded (Stevenson, 1985; Stevenson & Jarillo, 1990). It is suggested that, since investigating the “how” question focuses on understanding the managerial practice, this stream is the most appropriate one to be followed by business schools.

Gartner (2001) suggests that for entrepreneurship to flourish as a legitimate and fruitful field of research, communities of scholars identified with specific research questions and issues in the field of entrepreneurship must emerge. In his milestone article, Gartner (2001), used the six key specification decisions for

entrepreneurship research (purpose, theoretical perspective, focus, level of analysis, time frame, and methodology) outlined by Low and MacMillan (1988) to explore unstated assumptions in entrepreneurship theory development. A table synthesizing the works of both Low and Macmillan (1988) and Shane and Venkataraman (2000) is given below:

Table 1. Synthesis of Six Key Specification Decisions for Entrepreneurship Research

Specification of Purpose		
Low & Macmillan (1988)	Shane & Venkataraman (2000)	Gartner (2001)
Purpose of entrepreneurship research is to explain and facilitate the role of new enterprise in furthering economic progress (p. 141).	Three research questions (1) why, when, and how opportunities for the creation of goods and services come into existence; (2) why, when, and how some people and not others discover and exploit these opportunities; and (3) why, when, and how are different modes of action used to exploit entrepreneurial opportunities (p. 218).	Entrepreneurship is about "organizing," and this phenomenon has a greater likelihood of being understood through the study of firm creation (Gartner, 1985, 1988, 1990, 1993).
Specification of Theoretical Perspective		
Two perspectives: strategic adaptation and population ecology. In both perspectives, entrepreneurship researchers take a more dynamic view of entrepreneurship as a process that occurs over time is.	Need for a conceptual framework that explains and predicts a set of empirical phenomena that are not explained or predicted by the conceptual frameworks already in existence in other fields (p. 217).	A shift in theoretical perspectives in terms of level of analysis.

Specification of Focus		
<p>Emphasis on the entrepreneur as the focus of entrepreneurship. The activities of entrepreneurs are not only based on the characteristics of the entrepreneurs themselves, but on the influences of organizational, environmental, and creation processes as well (Carsrud, Olm, and Eddy, 1986; Gartner, 1985).</p>	<p>Focus on the existence, discovery, and exploitation of opportunities; examination of the influence of individuals and opportunities, rather than environmental antecedents and consequences; and consideration of a broader framework than firm creation (p. 219).</p>	<p>Shane and Venkataraman require research that must recognize opportunities and individuals, not just individuals, and that the exploitation of opportunities is a process that can be seen in situations beyond firm creation.</p>
Specification of Level of Analysis		
<p>Five levels of analysis: individual, group, organization, industry, and society. Multi-level studies are encouraged.</p>	<p>Discussion of the discovery and exploitation of opportunities centers on arguments that appear to require the actions of individuals (p. 221-224), expanding insights from individuals to firms and institutions via modes of exploitation (p. 224).</p>	
Specification of Time Frame		
<p>Process that occurs over time. Their examples of the time frame used in entrepreneurship research range from a focus on the start-up process (Gartner, 1985; Stevenson et al., 1985) to stages of growth in fully launched organizations (Churchill and Lewis, 1983; Greiner, 1972).</p>	<p>No direct way to ascertain how time frame is considered.</p>	<p>Generation of opportunities, their discovery, and exploitation. The life of the opportunity (its inception, evolution, and eventual demise), therefore, would seem to be the boundaries for time.</p>
Specification of Methodology		
<p>Longitudinal studies, experimental designs are encouraged (p. 155).</p>	<p>Many different methodologies.</p>	<p>Many methods for theory creation and testing</p>

Source: adapted from Gartner, 2001; Low & MacMillan 1988; Shane & Venkataraman, 2000

Entrepreneurship scholars have noticed the difficulty of integrating entrepreneurship theory-development efforts into any coherent scheme. According to Bull and Willard (1993):

Despite the number of published papers that might be considered related to the theory of entrepreneurship, no generally accepted theory of entrepreneurship has emerged... Despite the potential for richness and texture that such a diverse mix of disciplines brings, a major weakness is that, in many cases, researchers from one discipline have tended to ignore entrepreneurship studies by researchers in the other disciplines (p. 184).

Gartner (2001) also believes that entrepreneurship research embraces a diverse range of theories and there is no theory of entrepreneurship that can encompass the diverse topics that are studied by entrepreneurship scholars.

Schildt et al. (2006) analyzed co-citation patterns of entrepreneurship-related articles published in the years 2000 to 2004 and identified 25 most central research streams in the field of entrepreneurship. According to the authors, although many of the groups are related, each group reflects a distinct theme in entrepreneurship research. The most common topic analyzed in entrepreneurship research is entrepreneurial networks and resource accumulation. The focus in this line of research is centered on entrepreneurial networks and their role in resource accumulation. The topics analyzed in these studies include the nature of entrepreneurial networks, how they differ from other types of networks, the roles that these networks play in transmitting knowledge and resources, various types of networks and how they complement or substitute each other, and the growing importance of social and relational capital in determining success and failure of new

and other venture activities (p. 402). The authors suggest that according to their analyses there are four key qualities of extant research in entrepreneurship. These are:

First, this research remains highly fragmented, perhaps reflecting the ‘pre-paradigmatic’ stage of the field (Zahra, 2005). Second, research findings appear to be noncumulative, evidenced by the limited citations of prior published works. This could further limit the scholarly evolution of the field and its progress. Third, although entrepreneurship research is mostly centered on the United States, other countries exhibit their own strong traditions. Fourth, and finally, even research in areas that are widely considered at the core of the field of entrepreneurship (e.g., new venture creation) is not highly cited by others outside the field, reinforcing the growing sense of isolation that some entrepreneurship researchers have come to experience in their own departments and universities. This also underscores the possibility that entrepreneurship researchers do not communicate their findings well to others outside their immediate ‘territory,’ which limits the impact of their research and its potential contributions (p. 410).

Entrepreneurial Success

Aldrich and Martinez (2001) highlight the importance of entrepreneurial success by stating that “understanding how and why some entrepreneurs succeed remains a major challenge for the entrepreneurship research community” (p.41). There are

many studies with conflicting results regarding entrepreneurial performance (e.g., Dess, Lumpkin, & Covin, 1997; Lumpkin & Dess, 1996; West & Meyer, 1998). The main purpose of those studies is to find out the factors that bring success. Throughout the literature, four groups of factors, namely, environmental, personal, resource-related, and strategic, have been found to have an influence on entrepreneurial success (e.g., Gartner, 1985; Miller, 1987; Mugler, 2000).

There are several performance indicators used by researchers throughout the literature (Brush & Vanderwerf, 1992; Haber & Reichel, 2005; Murphy, Trailer & Hill, 1996). First of all, performance measures can be most broadly categorized as financial and non-financial measures. Traditional measures for business success relate to employment growth or financial performance, such as profit, turnover, average revenue growth, or return on investment (Brüderl & Preisendörfer, 1998; Ibrahim & Goodwin, 1986; Kalleberg & Leicht, 1991). As defined by Venkatraman and Ramanujam (1986), financial performance is the narrowest conception of business performance lying at the core of the organizational effectiveness domain. Financial measures of performance assess the economic goals of the firm and are widely used in empirical research.

In their review of the empirical entrepreneurship literature, Murphy, Trailer and Hill (1996) explored the performance dimensions considered in various articles. They found that the vast majority of the studies used only financial measures. Seven of the eight performance dimensions that they listed were financial measures including efficiency, growth, profit, size, liquidity, success/failure, and market share. Among these, efficiency, growth and profit were reported to be the most commonly considered dimensions.

Literature suggests that assessing performance based on solely financial measures is not sufficient to define overall effectiveness of the organization (Haber & Reichel, 2005; Murphy, Trailer & Hill, 1996). To capture the multidimensional nature of performance, it is often suggested to use multiple measures (Haber & Reichel, 2005; Kollman & Stöckman, 2012). Venkatraman and Ramanujam (1986) proposed that nonfinancial measures should be used in addition to financial measures for a broader conception of business performance. They suggest measures of efficiency such as market-share, new product introduction, product quality, marketing effectiveness, and manufacturing value-added (Venkatraman & Ramanujam, 1986). Murphy, Trailer and Hill (1996) found that market share is the only nonfinancial performance dimension that is considered by empirical entrepreneurship studies. However, other nonfinancial measures may include satisfaction, global success ratings made by business owners (Rauch, Wiklund, Lumpkin & Frese, 2009) and support received by the entrepreneur, work experience of the entrepreneur, and involvement of the entrepreneur (Ramana, Aryasri, & Nagayya, 2008). Several of the non-financial measures of success, such as autonomy, job satisfaction, ability to balance work and family responsibilities (Green & Cohen, 1995; Kuratko et al., 1997; Parasuraman et al., 1996) are quite difficult to quantify due to their subjective nature. Nevertheless, this operational difficulty should not diminish their importance, which has been beautifully explained by Jennings and Beaver (1997) as:

...contrary to popular belief, and a great deal of economic theory, money and the pursuit of a personal financial fortune are not as significant as the desire for personal involvement, responsibility and the independent quality and style of life which many small business owner-managers strive to achieve.

Consequently, the attainment of these objectives becomes one of the principal criteria for success, as defined by the entrepreneur/owner-manager (p. 63).

Social Networks and Social Capital

Social Networks in General, Social Network and Social Capital Theories

Network research has been influenced by several disciplines, especially anthropology and sociology. Sociologists and anthropologists have used social network theory to show the interaction that takes place between individuals (Harland, 1995; Maguire, 1983). In general terms, a social network can be described as the actual set of links of all kinds amongst a set of individuals (Mitchell, 1973). Through those links, one can get privileged information, access opportunities and thereby obtain resources. When compared with information obtained from formal sources, information received from network ties is generally assumed to be more useful, reliable, exclusive, and less redundant.

When network theory is applied to the domain of ventures, firms are no longer viewed as single, self-fulfilling units as they were once viewed. Instead, they are considered to be embedded in networks of social, professional and exchange relationships with other actors (e.g., Granovetter, 1985; Gulati & Gargiulo, 1999). A single firm within a network has several relationships with other constituencies, such as customers, suppliers, competitors, or public research institutions. These relationships interact with each other and make up a wider network structure (Cook & Emerson, 1978). In the domain of entrepreneurship, the firm and the individual entrepreneur are hard to differentiate from one another in terms of their networks.

Hence, from this point on, as the focus of the entrepreneurial network, the individual entrepreneur and his or her entrepreneurial venture will be used interchangeably.

According to the social network theory, economic action is embedded in social networks and the relationships within social networks affect economic outcomes. Firms need several resources in both emergence and growth, to exploit new opportunities and continue to grow. Individuals acquire such resources through their social networks. As Powell (1990) states, “networks are particularly apt for circumstances in which there is a need for efficient, reliable information” (p.304). Thus, through their networks, firms can access reliable information. Sawyer et al. (2003) defined networking as “the process of sharing contacts and obtaining resources”, and personal networks as “the persons with whom a decision maker has direct relationships or indirect relationships via direct relationships” (p.270).

When individuals’ social networks contribute to their goals, then these networks are considered as their social capital. Gabbay and Leenders (1999) define corporate social capital as “the set of resources, tangible or virtual, that accrue to a corporate player through the player’s social relationships, facilitating the attainment of goals” (p. 3). Social capital theory suggests that, a firm’s external networks play a significant role in contributing to its performance (Leenders & Gabbay, 1999). As Lee et al. (2001) state, according to the theory, start-ups, in order to succeed, should pursue strategies that focus on the development of valuable networks with external resource holders (p. 616). According to the basic argument of the theory, one can access resources through network ties.

Granovetter’s (1973) notion of ties has attracted a lot of attention in the network literature. According to Granovetter (1973, p.1361) the strength of an interpersonal tie within a network defines the strength and quality of relations and it

is a linear interaction of the amount of time, the emotional intensity, the intimacy, and the reciprocal services. The author differentiates between the two types of ties, namely strong and weak ties, and describes how the diversity and homogeneity of these ties have an impact on the actions of individuals. As Burt (1992a) claims, weak ties are described as heterogeneous ties and are important in social structure because they enable information to flow into other social clusters and the broader society. Burt (1992b) suggests that weak ties are more beneficial because strong ties are likely to provide redundant information since information gathered through strong ties may circulate in similar social circles. Several researchers agree that homogeneity of strong ties is less effective (Granovetter, 1973; Ibarra, 1993; Maguire, 1983). Weak ties are assumed to provide valuable information, because this information generally comes from distant parts of the social system (Granovetter, 1974, 1983).

In addition to the strength of ties, network size is also a topic in network literature that has attracted many scholars' attention. As defined by Dunbar and Spoor (1995), the innermost layer of network is called the support clique. It refers to "all those individuals from whom one would seek advice, support or help in times of severe emotional or financial distress" (Roberts et al., 2009, p.138). The average number of people in one's support clique is said to be about five (Milardo, 1992). The next layer is called the sympathy group. It refers to "those with whom an individual contacts at least monthly, and averages 12-15 members (Roberts et al., 2009, p.138). The active network, on the other hand, is defined as to include people with whom one feels as having a personal relationship and tries to keep in contact or with whom one has contacted within the last two years (Roberts et al., 2009, p.138).

How Do Networks Function and Benefit the Firm?

The role of network support in the success of newly founded businesses is unquestionable. In the related literature, scholars define functions served by networks (Powell & Smith-Doer, 1994, p. 372) and describe mechanisms by which networks improve success. The three mechanisms commonly referred to are as follows: (1) Social relations and social contacts are important channels for access to information. (2) Network contacts give access to customers and suppliers and by this way friends and acquaintances as first customers might spread information on the new firm via their own networks. (3) Network contacts may open up the possibility to broaden the financial basis of a new firm.

In addition to these general network functions, Brüderl and Preisendorfer (1998) identified other mechanisms by which special network types increase success. For instance, a family network gives access to unpaid family work and provides emotional support. The reasons include: (1) unpaid work from family members can compensate for financial restrictions, (2) loyalty of employees who are family members reduce the effort required to control workers, and (3) emotional support received from the spouse might be very helpful in sustaining emotional stability.

There is an agreement on the conclusion that social networks affect economic performance (Arrow, 2000). For instance, Granovetter (1992, p. 25) argued that economic action is embedded in ongoing networks of personal relationships and Young (1998) concluded that economic actions are conditioned by ongoing structures of social relations.

In line with the related literature, Walter et al. (2006) found out that performance variables (growth in sales, sales per employee, profit attainment, perceived customer relationship quality, realized competitive advantages, and long-term survival) are influenced by a start-up's network capability.

Measurement and Operationalization Issues in Network Literature

The most intuitive and common network measure is size. Size is defined as the number of direct links between a focal actor and other actors and it measures the extent to which resources can be accessed at the level of the entrepreneur (Aldrich & Reese, 1993; Hansen, 1995) and the organization (Baum et al. 2000; Freeman, 1999; Katila, 1997; Katila & Mang, 1999).

Another measure is centrality, which explicitly includes the ability to access resources through indirect, as well as direct links. In other words, it is the ability of actors to reach other actors in their network through intermediaries. Network centrality has been studied less compared to network size, because it is difficult to gather relationship data from all actors within a network. Varying degrees of access to resources have been described by measuring centrality at the interpersonal (Brajkovich, 1994) and interorganizational levels (Powell et al. 1996; Johannisson et al., 1994).

Another measure used in network research is Granovetter's (1973) notion of tie strength. In this context, researchers are mainly interested in weak ties, which refer to ties that are outside of individuals' immediate cluster of contacts. Actors can

gain access to new information and ideas through weak ties. Weak ties are derived from direct and indirect linkages and they are typically operationalized in terms of frequency and primariness of the contact.

Complementary to weak ties, there are bridging structural holes; defined as the absence of ties between actors. By bridging structural holes, actors can benefit from establishing ties that bridge these unconnected actors (Burt, 1992b). Due to the challenges of gathering data on cross-cutting relationships in order to analyze the bridging concept, research on the development of bridging structural holes is not widespread.

Another characteristic of a network is network density (Burt & Raider, 2000; McEvily & Zaheer, 1999) and heterogeneity among network contacts as proxies (Baum et al., 2000; Hara & Kanai, 1994; Silverman & Baum, 2002; Zhao & Aram, 1995); which is measured by the extent to which an actor's contacts are interconnected. The denser one's direct network of contacts, the less likely that new resources will enter and the more likely that resources will simply recirculate within the group.

Network diversity is another characteristic to measure while assessing a particular network. Diversity is defined by the similarity of the entrepreneurs and other connections in the network in terms of background, education, occupation, or experiences, and by their ability to provide resources (Jenssen & Greve, 2002).

Brüderl and Preisendorfer (1998) suggest two strategies for the operationalization of networks in the context of entrepreneurship. Related with the general characteristics of the personal network of entrepreneurs, the first operationalization includes network size, network density, network diversity, the

preponderance of strong or weak ties, and network redundancy. This approach does not measure the extent to which founders make use of their opportunities; thus, does not measure directly the support received from the network. The second approach is to look at activities carried out by entrepreneurs in the formation stage of their businesses and the amount of support they received out of their network. This is a more direct way compared to the former one.

Another concept is network capability; which is defined as a firm's ability to develop and utilize inter-organizational relationships to gain access to various resources held by other actors (Walter et al., 2006). Network capability includes four dimensions: coordination, relational skills, market knowledge, and internal communication. It is defined as an organization-wide characteristic. Coordination activities are boundary-spanning activities (Adams, 1980). They connect the firm to other firms and connect different individual relationships into a network of mutually supportive interactions. Relational skills are also called social competence (Baron & Markman, 2003). They are related to management of relationships and include aspects such as communication ability, extraversion, conflict management skills, empathy, emotional stability, self-reflection, sense of justice, and cooperativeness (Marshall et al., 2003). Partner knowledge is defined as the organized and structured information about a firm's upstream and downstream partners (suppliers and customers) and competitors. Internal communication is about assimilating and disseminating up-to-date information on partners, their resources and agreements with them to all involved departments.

Finally, in their study, Lee et al. (2001) used partnership-based and sponsorship-based linkages to measure external networks. Partnership-based linkages are cooperative, bilateral relationships in which partners give and take resources and

maintain long-term ties (Lee et al., 2001, p. 620). Partnership-based linkages were measured by strategic alliances with other enterprises and venture capitalists, collaboration with universities of research institutes, and participation in venture associations. Sponsorship-based linkages are unilateral relationships as the sponsor commits unilateral support to a business venture without receiving explicit rewards (Lee et al., 2001, p. 620). Sponsorship-based linkages consisted of financial and nonfinancial support from commercial banks and the government.

To sum up, the most commonly used network-based variables as antecedents of entrepreneurial success include: network size, number of strong ties, frequency of contacts, multiplicity of relations, number of weak ties, range and intensity, time used to develop relationships, time used to maintain relationships, time used travelling to make contacts, number of business relationships, number of indirect ties, and number of bridges in the network (Aldrich et al., 1986, 1987; Greve, 1995; Greve & Salaff, 2003, Hansen, 1995; Zhao & Aram, 1995). The following table summarizes these variables from the relevant literature.

Table 2. Summary of Measures in Network Research

Measure	Measure Definition	Sub-dimensions	Items	References
Network capability	Abilities of a firm to initiate, maintain, and utilize relationships with various external partners	Coordination: Six-item measure assesses synchronizing, planning, and controlling activities in both inter-organizational and inter-functional settings.	We analyze what we would like and desire to achieve with which partner.	Some items were adapted from Mohr & Spekman (1994), and some were newly developed by Walter et al. (2006)
			We match the use of resources (e.g., personnel, finances) to the individual relationship.	
			We inform ourselves of our partners' goals, potentials and strategies.	
			We judge in advance which possible partners to talk to about building up relationships.	
			We appoint coordinators who are responsible for the relationships with our partners.	
		We discuss regularly with our partners how we can support each other in our success.		
		Relational skills: Four-item measure appraises the extent to which employees in a spin-off are able to cultivate and shape close relationships.	We have the ability to build good personal relationships with business partners.	
			We can put ourselves in our partners' position.	
			We can deal flexibly with our partners.	
		Partner knowledge: Four items capture the availability of information within a spin-off organization on network partners.	We almost always solve problems constructively with our partners.	
We know our partners' markets.				
We know our partners' products/procedures/services.				
We know our partners' strengths and weaknesses.				
Internal communication: Five-item measure that reflects the communication quality and information dissemination in a spin-off organization.	We know our competitors' potentials and strategies.			
	In our organization, we have regular meetings for every project.			
	In our organization, employees develop informal contacts among themselves.			
	In our organization, communication is often across projects and subject areas.			
	In our organization, managers and employees do give intensive feedback on each other.			
			In our organization, information is often spontaneously exchanged.	

Partnership-based linkages	Strategic alliances with other enterprises and venture capitalists, collaboration with universities of research institutes, and participation in venture associations		The number of other firms with which a focal firm has a strategic alliance for marketing or technology development	Lee et al. (2001)
			The number of venture capital firms that invested equity in the focal firm	
			The number of collaborating R&D projects and technology exchange programs with universities or research institutes	
			The number of entrepreneurial associations in which the entrepreneur of the start-up actively participated	
Sponsorship-based linkages	Financial and nonfinancial support from commercial banks and the government	Sponsorship from commercial banks	The frequency with which financial institutions named the focal firm as a 'promising small enterprise'	Lee et al. (2001)
			The number of financial services firms from which the focal firm received a loan with a below market rate	
		Sponsorship from the governmental agencies	The frequency with which central or local governmental agencies named the focal firm as a 'promising small enterprise'	
			The number of government-sponsored research projects that were carried out in the focal firm, alone or with other organizations	
Network size	The number of ties indicated by respondents			Batjargal (2006), Burt (1983b), Marsden (1990)
Network diversity	Proportion of contacts from other industries within each respondent's network			Batjargal (2006), Burt (1983b), Marsden (1990)

Network resourcefulness	The number of high rank officials in ministries, local governments, managers of large trade firms, and managers of large resource sector firms			Batjargal (2006), Lin & Dumin (1986), Marsden & Hulbert (1988)
Strong versus weak ties	A linear combination of the amount of time, the emotional intensity, the intimacy, and the reciprocal services	Degree of friendship	Strong - if the entrepreneur describes the contact as a friend or close friend weak - if the entrepreneur describes the contact as a loose acquaintance or acquaintance	Krackhardt (1992)
			Number of friends, the number of acquaintances, frequency and primariness of the contact	Burt (1983a)
Network centrality	The ability of actors to reach other actors in their network through intermediaries			Brajkovich (1994), Powell et al. (1996), Johannisson et al. (1994)
Network density	The extent to which an actor's contacts are interconnected			McEvily & Zaheer, 1999; Burt & Raider, 2000
Network redundancy	A network property indicating the degree of overlap between entrepreneurs' contacts	Total number of ties between the network relations = t Total number of people in the social network = n	Redundancy = $2t/n$	Borgatti (1997), Jenssen & Greve (2002)

Evolving Nature of Networks

It is important to understand how social networks have an influence on the outcomes of their actions. Since changes in networks are likely to have significant effects on outcome variables like firm performance, it is highly important to explain how networks evolve over time. Many scholars have touched upon the evolving nature of social networks. According to Steier and Greenwood (2000), at the start-up stage of a new venture, individuals are expected to seek out investors and business angels for capital; thereby, their networking strategy highly focuses on capital providers. As the new venture grows, networks will consist of more clients and suppliers instead of initial investors; and this will lead to changes in structural composition, relational content and resource volumes of networks. Business relationships will become more formal when compared with the initial informal relations based on individual acquaintances. In other words, as firms emerge, their networks include primarily socially embedded ties drawn from cohesive sets of connections. As firms move into the early growth stage, their networks evolve toward more ties based on a calculation of economic costs and benefits (Hite & Hesterly, 2001). The authors call the former networks as identity-based and the latter as calculative networks. According to the authors:

The shift from an identity-based network to more calculative networks is grounded upon a firm's attempts to acquire necessary resources for growth and generates changes in the firm's network on three specific dimensions. These changes include shifts (1) from primarily socially embedded ties to a balance of embedded and arm's-length relations; (2) from networks that emphasize

cohesion to those that exploit structural holes; and (3) from a more path-dependent to a more intentionally managed network (p. 279).

Hite and Hesterly (2001) define identity-based networks as egocentric networks where some type of personal or social identification with the other actor motivates or influences economic actions (Granovetter, 1992; Uzzi, 1996). Therefore, in regards to identity-based networks the identity of the network ties is more important than the resources this tie can provide to a firm. On the other hand, as to the characteristics of calculative networks, the ties in the calculative networks are more market-like rather than socially embedded and are more likely to be less redundant, more sparse, and better able to bridge structural holes (Burt, 1992a; Portes & Sensenbrenner, 1993; Woolcock, 1998).

Networks in Entrepreneurship Research – Entrepreneurial Networks

Brass (1992) defined social networks as a set of actors, individuals or organizations, and a set of linkages between the actors. According to Aldrich and Zimmer (1986a), the entrepreneur is embedded in a social network that plays a critical role in the entrepreneurial process.

Entrepreneurship seems to offer an interesting and fruitful setting to explore issues related to networks. Entrepreneurs are provided with ideas, exchange opportunities and access to valued resources through social and professional networks (Araujo & Easton, 1996, p. 97). Several studies demonstrate that the ability to network effectively is an important factor in facilitating entrepreneurial activity

and sustaining business development (Pettitt & Thompstone, 1990). Researchers have found out that networks are important for (1) entrepreneurship (Aldrich & Zimmer, 1986a; Birley, 1985; Carsrud & Johnson, 1989; Greve & Salaff, 2003; Hansen, 1995; Johannisson & Peterson, 1984); (2) entrepreneurial networking is necessary for the survival of the business (Brüderl & Preisendorfer, 1998; Huggins, 2000; Szarka, 1990); and (3) the resource base necessary to start and develop a business comes from networks. Many have argued that networks are expected to improve success by supplementing the entrepreneur's own business resources (Anderson & Jack, 2002; Brüderl & Preisendorfer, 1998; Foss, 1994; Hansen, 1991; Jack & Anderson, 2002; Johannisson, 1986, 1987; Johannisson & Peterson, 1984; Ostgaard & Birley, 1994). Thus, social relations, in other words, networks play an important role for firms both in the establishment (Greve & Salaff, 2003; Hite, 2003) and its following development phases (Hoang & Antoncic, 2003; Shane & Cable, 2002; Uzzi & Gillespie, 2003).

Types of Entrepreneurial Networks

In the broadest terms, as Brüderl and Preisendorfer (1998) express, there are two different network approaches in entrepreneurship. The first one relates to the personal network of entrepreneurs, including individual relations of business founders as focal persons; and the second one relates to the organizational network of businesses, including collective relations that new firms are embedded in (Dubini & Aldrich, 1991; Uzzi, 1996). Most research in the field uses the former one, which is the personal network perspective. In this perspective, entrepreneurship is seen as a

social role, embedded in a social, political, and cultural context. Thereby, entrepreneurs are viewed as actors involved into a special micro-context rather than as isolated and autonomous decision makers.

As Aldrich and Zimmer (1986b, p. 14) state, “the approach focuses on entrepreneurship as embedded in a social context, channeled and facilitated or constrained and inhibited by people’s positions in social networks”. Social networking is directly connected to the idea of entrepreneur as entrepreneurs are considered as organizers and coordinators of resources (Hebert & Link, 1989). In order to create a new business, existing social relations have to be activated and new ones should be created. By the help of social activity and social interactions, an entrepreneur can organize and coordinate the resources. Thus, entrepreneurship is a relational task and “inherently a networking activity” (Dubini & Aldrich, 1991, p. 306). In this study, personal network approach to entrepreneurship will be adapted.

Elements of Entrepreneurial Networks – Content, Governance and Structure

In the entrepreneurship network literature, Hoang and Antoncic (2003) argue that three elements of networks are critical to theoretical and empirical research. These three components are the key elements in models that attempt to explain the process of network development during entrepreneurial activity and the impact of networks on entrepreneurial outcomes. The first component is the nature of the content that is exchanged between actors; in terms of the content, both interpersonal and interorganizational relationships ought to be considered. They are seen as the media

through which actors gain access to a variety of resources held by other actors.

Although a few studies focused on the role of networks to access capital (Bates, 1997; Light, 1984; Zimmer & Aldrich, 1987), majority of the research investigate the role of networks for entrepreneurs to access to intangible resources. Entrepreneurs consistently use networks to get ideas and gather information to spot entrepreneurial opportunities (Birley, 1985; Hoang & Young, 2000; Singh et al., 1999; Smeltzer et al., 1991).

The second component is the governance mechanisms in relationships. In defining governance mechanisms, trust between partners is often used as a critical element of network exchange that in turn improves the quality of the resource flows (Larson, 1992; Lorenzoni & Lipparini, 1999). It is also defined by the reliance on “implicit and open-ended contracts” that are supported by the social mechanisms.

Finally, the third component corresponds to the network structure created by the crosscutting relationships between actors. Network structure is defined as the pattern of direct and indirect ties between actors. Generally, it is proposed that actors’ differential positioning within a network structure has an important impact on resource flows; therefore, on entrepreneurial outcomes. In network structure, the position of the actors is much more important than who the actors are.

The Strength of Ties in Entrepreneurial Networks

Granovetter’s (1973) concept of strength of ties is highly elaborated on in the context of entrepreneurship literature and linked to network characteristics and content.

There is a debate on whether strong or weak ties are more beneficial for entrepreneurial networks; however, a consensus is yet to be reached.

According to Janssen and Koenig (2002), the strength of the relationship determines the type of resources obtained through the network. They suggest that strong ties provide motivation; on the other hand, it is claimed that weak ties provide opportunities for diverse resources and information (Aldrich et al., 1987; Bloodgood et al., 1995; Katrisha et al., 1993; Monsted, 1995).

It is suggested that a personal network characterized by strong ties is inefficient in terms of information relating to opportunities (Hills et al., 1997; Ibarra, 1993). In time, the interest on the utility and function of each type of tie in entrepreneurial networks research rapidly increased. According to Aldrich et al. (1987), Hansen (1995) and Lechner and Dowling (2003) close strong ties are also important in justifying the choices made by the entrepreneur and solving the problems. Some have posited that entrepreneurs benefit from ready access to resources (Hoang & Antoncic, 2003). In a similar manner, according to the study conducted by Brüderl and Preisendorfer (1998), strong ties and family support seem to be crucial resources in the context of entrepreneurship and small business formation. This line of research suggests that support from strong ties show more convincing effects than support from weak ties and in particular support from the family network increases success; whereas support from the outside network shows much less effect.

Another line of research emphasizes that weak ties are more important for entrepreneurship. One reason is that an entrepreneur embedded in a broad and

diverse network is expected to receive more help and resources compared to an entrepreneur embedded in a confined network (Brüderl & Preisendorfer, 1998).

Although a consensus is not reached on the debate, many argue that the ideal entrepreneurial network should consist of both strong and weak ties (Burt, 1992a, 1992b; Granovetter, 1973; Johannisson, 1986). As an example, Batjargal (2006) claims that successful entrepreneurs would keep the existing strong and weak ties because they perceive a proportional balance within their networks. According to the author, while too many strong ties may encourage costly claims, too many weak ties may increase transaction costs because there is less personal trust and more monitoring is required in arms' length relationships. Since different forms of ties are expected to provide distinct resources, the effectiveness of the network is argued to depend upon the presence of both strong and weak ties.

Networks and Entrepreneurial Success

Although there is no agreement on whether networks have a positive impact on firm success or not, the debate itself calls for further attention. Several scholars agree that networks play a central role in successful firm emergence and growth (e.g., Aldrich & Reese, 1993; Birley, 1985; Hansen, 1995; Hite, 1999; Larson & Starr, 1993; Stuart, Hoang, & Hybels, 1999). Both the relational view (Dyer & Singh, 1998) and the resource-based view (Penrose, 1959) suggest that the firm's network relationships offer critical avenues for obtaining resources necessary for firm survival and growth (Gulati, 1998; Jarillo, 1989).

On the other hand, there are several empirical studies that did not find any positive effect of networking on entrepreneurial performance and success (e.g., Aldrich et al., 1987; Bates, 1994; Yoon, 1991). As to the results of the study conducted by Bates (1994), heavy use of social support networks represents the less profitable and more failure-prone businesses. The author concludes that networking activities and extensive network support may not be beneficial to newly established businesses. In a study conducted by Yoon (1991), it has been found that businesses benefited from ethnic networks only during the start-up phase.

Network redundancy, a concept related with the success of entrepreneurial firms, is a network property indicating the degree of overlap between entrepreneurs' contacts (Jenssen & Greve, 2002, p. 255). In networks where there is high redundancy, most of the contacts know each other and have the same information. On the other hand, in cases when few of the direct contacts know each other, network redundancy is low, which promotes higher information content from each relationship (Burt, 1992a). Thus, according to Burt (1992a), low redundancy in the social network promotes entrepreneurial success. The advantages of low redundancy in social networks comprise the following: (1) in non-redundant networks, the entrepreneurs' contacts do not know each other and therefore usually they do not have the same information, and (2) low redundancy gives entrepreneurs better information and allows them to combine resources from non-redundant sources. However, according to the results of the study conducted by Jenssen and Greve (2002), redundancy has no direct effect on business start-up success and it is positively related to access to information and support.

Hoang and Antoncic (2003) identified two general trends in network-based entrepreneurship research, one of which includes outcome-oriented studies and the

other includes process-oriented studies. The former stream of research relates to “how networks affect the entrepreneurial process and lead to positive outcomes for entrepreneurs or their firm” (Hoang & Antoncic, 2003, p.168) in which networks are proposed as independent variables. Networks play an important role that influences the entrepreneurial process and outcomes. The latter stream of research, on the other hand, relates to the development and evolution of networks over the venture formation process, in which networks are treated as dependent variables (Hoang & Antoncic, 2003).

In this dissertation, I draw attention to the former stream of research; in other words, to outcome-oriented literature on social networks in entrepreneurship in order to identify how networks relate to the entrepreneurial process and produce outcomes out of this process.

Human Capital and Human Capital Theory

Human capital is considered as one of the key success factors for entrepreneurial ventures (Brüderl et al., 1992; Cooper et al., 1994; Dimov and Shepherd, 2005; Hart et al., 1995; Santarelli & Tran, 2013). In line with Becker's (1964) human capital theory, Unger et al. (2011) defined human capital as "skills and knowledge that individuals acquire through investments in schooling, on-the-job training, and other types of experience" (p. 343). According to the human capital theory (Becker, 1964), employees' human capital, which consists of primarily education and work experience, contributes to their success; hence employees' with more and higher quality human capital will be more successful in their jobs than those with less human capital (Becker, 1975; Davidsson & Honig, 2003).

Although the theory focuses on employees, Brüderl et al. (1992) applied it to entrepreneurs, suggesting that entrepreneurs' with higher human capital are expected to perform better compared to those with less human capital. Although some scholars pointed out the inconclusive and mixed results regarding the relationship between human capital and entrepreneurial success (Florin et al., 2003; Honig, 2001; Reuber & Fisher, 1994), there are many studies that have found a relationship between human capital and entrepreneurial success (Bosma et al., 2004; Brüderl et al., 1992; Colombo & Grilli, 2005; Cooper et al., 1994; Florin et al., 2003; Van der Sluis et al., 2005). In particular, Parker (2004) suggests that, entrepreneurs' formal education and labor market, managerial and entrepreneurial experience have a significant effect not only on their choice of becoming entrepreneurs, but also on their performance. The meta-analysis conducted by Cooper and Gimeno-Gascon (1992) revealed

significantly positive relationships between education and performance. According to Santarelli and Tran (2013), “start-up entrepreneurs with a greater endowment of human capital should be more efficient in running their business than those with less human capital” (p. 436). Unger et al. (2011) found a positive overall relationship between human capital and success.

Types and Elements of Human Capital

According to Becker’s (1993) classification, there are two categories of human capital, one of which is named general human capital and the other specific human capital. General human capital is related to the skills and knowledge that an employee can easily transfer from one job to another, whereas specific human capital relates to skills and knowledge that an employee cannot transfer easily from one setting to another due to its narrower scope of applicability (Gimeno et al., 1997). When applied to entrepreneurs, general human capital means skills and knowledge gained through formal education, training, and work experience; while, specific human capital refers to skills and knowledge that the entrepreneur has and can apply to his role as being self-employed (Ganotakis, 2012).

Becker (1964) states that knowledge and skills are gained by investing in human capital such as education and work experience. In the related literature, the most widely used elements included in human capital are education level and work experience (Reuber & Fischer, 1994). In addition to these two, training, parents’ background and certain type of experience such as start-up experience, owner

experience and employment experience are also used as proxies to measure entrepreneurs' human capital.

Education is one of the most important and frequently used proxies of human capital (Ganotakis, 2012; Ucbasaran et al., 2008). The effect of entrepreneurs' education level on entrepreneurial success has frequently intrigued researchers. There are many studies that have shown that there is a relationship between entrepreneurial success and entrepreneurs' level of education (Bates, 1985; Baum et al., 2000; Bird, 1989; Cooper et al., 1994; Davidsson, 1995; Gimeno et al., 1997; Honig, 1996; Reynolds, 1997). It is suggested that individuals may extend their skills and knowledge by formal or nonformal education. An example of the former includes university education; whereas an example related to the latter includes specific training courses. It is suggested that education not only increase knowledge, skills, discipline, motivation, and self-confidence (Cooper et al., 1994), but also enables one to handle more complex problems more easily (Davidsson & Honig, 2003). Formal education provides individuals with the cognitive skills, which are necessary in adapting to environmental changes (Hatch & Dyer, 2004).

Work experience, which supports the integration and accumulation of new knowledge, is another key component of human capital (Castanias & Helfat, 2001). There are several studies, which indicate that labor market experience, management experience, and previous entrepreneurial experience are significantly related to entrepreneurial activity (e.g. Bates, 1995; Gimeno et al., 1997). Work experience is considered to be helpful for adapting to new situations (Davidsson & Honig, 2003) and increasing productivity (Parker, 2006). Having managerial or self-employment experience increases one's human capital, which in turn is found to be related with increase in identifying and pursuing business opportunities (Bates, 1990). Several

studies investigated the relationship between performances of entrepreneurial ventures with entrepreneurs' industry specific experience (Bosma et al., 2004; Brüderl et al., 1992; Brüderl & Preisendorfer, 2000; Feeser & Willard, 1990). Entrepreneurs who have similar-sector experience benefit from not only the past relationships regarding suppliers and buyers (Marvel & Lumpkin, 2007), but also from the knowledge of technological and marketing opportunities that provide a potential for market exploitation (Shane, 2000).

Human Capital and Entrepreneurial Success

Human capital theory suggests that human capital leads to entrepreneurial success. Many scholars have tested and found a positive association between human capital and entrepreneurial success (Bozeman, 2004; Brüderl et al., 1992, Cooper et al., 1994; Hart et al., 1995). Specifically, there are several studies, which found that schooling has a positive effect on entrepreneurial performance (e.g. Bosma et al., 2004; Van der Sluis et al., 2005). Regarding the other indicator of human capital, work experience, several studies have found that the effects of industry experience on entrepreneurial success are strong; based on the argument that, entrepreneurial success increases as entrepreneurs have more preexisting knowledge regarding buyers and suppliers (Bosma et al., 2004; Brüderl et al., 1992; Brüderl and Preisendorfer, 1998).

Unger et al. (2011, p. 343) mention numerous explanations of how human capital increases entrepreneurial success. One of these is that human capital increases

the capability of entrepreneurs to discover and exploit opportunities (Shane & Venkatraman, 2000). Additionally, human capital is positively related to planning and venture strategy, which in turn increases success (Baum et al., 2001). Another explanation suggests that, knowledge helps to acquire utilitarian resources such as financial and physical capital (Brush et al., 2001). Lastly, human capital assists in further learning and the accumulation of new knowledge and skills (Ackerman & Humphreys, 1990). Education level can also increase an individual's communications and social abilities in addition to his/her learning ability (Avermaete et al., 2004). It is claimed that, entrepreneurs' experience help them identify viable business opportunities, which helps them to improve decision-making (Boeker & Karichalil, 2002).

In line with the relevant literature and the ongoing debate, the main research question of this thesis is to determine whether social networks are associated with entrepreneurial success or not in the context of Turkey. Specifically, the mechanism through which network characteristics interact with human capital of entrepreneurs in predicting entrepreneurial success will be examined.

CHAPTER 3

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

This chapter aims to provide a theoretical explanation for the relationship between 1) social capital and elements of network structure of the entrepreneurs, and entrepreneurial success, emphasizing the mediating effect of access to resources and 2) the role of human capital in the process through which entrepreneurial success is determined. Following the explanations, the hypotheses based on theories and the literature will be formulated and the research models will be presented.

Theoretical Framework

In this dissertation, the theory of social networks will be rested upon, besides the resource-based view of the firm. Resource-based view (Penrose, 1959) of the firm stresses the importance of the resources for firms as the assets that contribute to success. As Barney (1991) states, “firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness” (p.101).

The underlying assumption of social network theory is that entrepreneurs achieve the necessary and critical resources through their personal networks. In other words, social networks are vital mechanisms through which one can access several resources, which may lead to success (Birley & Cromie, 1988). Ostgaard and Birley (1996) refer to two basic premises of the theory; “first the entrepreneurial process involves the gathering of scarce resources from the environment, and second, resources are usually obtained through the entrepreneur’s personal network” (p. 37). As entrepreneurs gather the necessary resources, they need to utilize them properly to achieve success. In this respect, those who invested more in their human capital, either in the way of education or work experience, would have more knowledge that would assist them in utilizing the critical resources in the most appropriate way and thereby succeed.

Firm performance is an outcome of an entrepreneurial process in which resource acquisition is vital (Shane & Venkataraman, 2000). Networks offer a variety of resources and through the ties embedded in a network, entrepreneurs can access resources they need for both venture creation and growth. The success of a venture is highly dependent on the resources the network offers. The connections of the entrepreneurs provide them with information and resources they may access (Nahapiet & Ghoshal, 1998). How much effort entrepreneurs spend to extend and maintain their relationships in the network, as well as the trust among the members of the network, are highly important aspects in obtaining resources, and, in turn, reaching success.

Resource acquisition takes place through an exchange relationship between the entrepreneur and the members of the network (Aldrich & Zimmer, 1986a; Ostgaard & Birley, 1996). Social network research primarily emphasizes the claim

that entrepreneurs attain resources either through personal contacts of the primary network or indirect connections of the secondary network. The former relates to those individuals the entrepreneur knows and the latter represents the individuals that are known by the individuals the entrepreneur knows. The structural elements of the entrepreneur's network, including its size, diversity, and tie strength also have an influence on the ability of entrepreneurs to access necessary and critical resources.

Entrepreneurs use their social networks and through the access of necessary resources achieve success. Some factors may have an influence on this relationship. Although they can reach the necessary resources, the utilization of these resources is also vital for success. In this respect, the importance of the investments entrepreneurs made in their human capital looms large.

Hypotheses Development

Social Capital, Network Structure and Access to Resources

There are many studies that have shown that entrepreneurs use their social networks to acquire resources (e.g., Birley, 1985; Aldrich & Zimmer, 1986a; Starr & MacMillan, 1990; Dubini & Aldrich, 1991; Larson, 1992). Through network links, entrepreneurs get privileged information, access to opportunities and thereby obtain resources. Nahapiet and Ghoshal (1998) stated that "social relations, often established for other purposes, constitute information channels that reduce the amount of time and investment required to gather information" (p.252).

As the relational view (Dyer & Singh, 1998) and the resource-based view (Penrose, 1959) suggest, a firm's network relationships provide them with resources necessary for firm survival and growth (Gulati, 1998; Jarillo, 1989). The entrepreneur, in order to establish the new business, needs several resources and, in order to obtain these resources, he/she can directly reach a number of persons who are willing to give support. Previous research suggests that personal networks give entrepreneurs the ability to gain information, advice, and social support from network members (Birley, 1985). Social networks also provide sources for the acquisition of scarce means, including capital and information (Portes, 1995).

Due to "bounded rationality" (Simon, 1976), in making a decision, rationality of individuals is limited by the information they have, their cognitive abilities, and the limited amount of time available to them. An entrepreneur's social network can

help expand the boundaries of rationality by offering access to information and knowledge not possessed by the individual entrepreneur (Singh et al., 1999).

When compared with information obtained from formal sources, information received from network ties is generally assumed to be more useful, reliable, exclusive, and less redundant. Since people trust information that they get from someone they know well, social networks are seen as sources of reliable information (French & Raven, 1959). As Powell (1990) states, “networks are particularly apt for circumstances in which there is a need for efficient, reliable information” (p.304).

Networking is defined as “the strategically most significant resource of the firm” (Johannisson, 1990, p. 41). Sawyer et al. (2003) refer to networking with individuals outside the organization as “external networking” (p.271). There is empirical evidence documenting that business owners engage in a variety of external networking relationships (Aldrich et al., 1986; Birley, 1985; Dubini & Aldrich, 1991; Hansen, 1995; Johannisson, 1996). Engaging in networking activities is viewed as vital for entrepreneurs as they devote a huge amount of time and energy in order to establish and maintain relationships with contacts (Aldrich et al., 1987; Birley et al., 1990; Dubini & Aldrich, 1991; Hansen, 1991; Mugler, 1988; Starr & MacMillan, 1990). As the results of the study conducted by Van de Ven et al. (1984) show, more externally oriented entrepreneurs who created and maintained a broad and complex network performed better. Similarly, Ostgaard and Birley (1996) found that new venture growth is related to the level of networking activities; in other words, to the extent to which the entrepreneur spends time and effort establishing and maintaining the network.

Chow and Chan (2008) refer to three clusters of social capital attributes including structural, relational, and cognitive. The relational dimension is related to

the level of trust between people. Trust among network members is argued to be a critical element, which is necessary to increase the quality of the resource flows and knowledge sharing (Hoang & Antoncic, 2003). When individuals trust each other, they assume that what will be done will be predictable and acceptable for both parties (Das & Teng, 1998; Powell, 1990; Uzzi, 1997). When each party has these kinds of expectations, transaction costs diminish. Additionally, especially when the subject being exchanged is information, the exchange relations become deeper and richer when mutual trust exists among members. (Hite, 2000; Lorenzoni & Lipparini, 1999; Saxenian, 1991).

Resource acquisition in an entrepreneurial network also depends on the structural characteristics of the network. Among the network structural elements, network size is the most commonly used one. It is defined as the number of direct links between a focal actor and other actors. It measures the extent to which resources can be accessed at the level of the entrepreneur (Aldrich & Reese, 1993; Hansen, 1995) and the organization (Baum et al. 2000; Freeman, 1999; Katila, 1997; Katila & Mang, 1999). Previous studies have found that network size is positively related to new venture creation and initial performance (Aldrich, Rosen, & Woodward, 1987; DiMaggio, 1992; Johannisson, 1986; Nohria, 1992; Van de Ven, Hudson & Schroeder, 1984). Entrepreneurs need several resources from their environments, including product or service ideas, information, and capital. Since they gain access to these resources through exchange relationships with various members of their social networks (Hansen, 1995), as the number of members in one's network increases, the probability of accessing the necessary resources increases as well.

Tie strength is another element of network structure. According to Granovetter, (1973, p.1361) the strength of an interpersonal tie within a network defines the strength and quality of relations and is a function of the amount of time, the emotional intensity, the intimacy, and the reciprocal services. According to Burt (1992a) weak ties are described as heterogeneous ties and are important in social structure because they enable information to flow into other social clusters and the broader society. Burt (1992b) suggests that weak ties are more beneficial because strong ties are likely to provide redundant information since information gathered through strong ties may move in similar social circles. Several researchers agree that homogeneity of strong ties is less effective (Granovetter, 1973; Ibarra, 1993; Maguire, 1983). Weak ties are assumed to provide valuable information, because this information generally comes from distant parts of the social system (Granovetter, 1974, 1983). Prior research reveals many informational benefits of weak ties, such as the non-redundant information they provide (Granovetter, 1973; Ardichvili, Cardozo & Ray, 2003).

Another element of network structure is network diversity. It is defined by the similarity of the entrepreneurs and other connections in the network in terms of background, education, occupation, or experiences, and by their ability to provide resources (Jenssen & Greve, 2002, p. 255). In social network research, the concept of network diversity is related with the flow of information. Specifically, similar to tie strength, diversity is concerned with the extent to which the information provided by one's network is redundant or not (Burt, 1992a; Granovetter, 1973). As one's network becomes more homogeneous in terms of education, occupation, experiences or relational type (affinal kin, nonaffinal kin, acquaintances) it is more probable that

one would get similar, or redundant information and resources from the members of this network, which would ultimately bring less value to the entrepreneur.

On the basis of the above analysis, I formulated the following hypotheses:

Hypothesis 1: Entrepreneurs' extent of networking will be positively related to their access to resources; implying that, the more effort entrepreneurs spend for networking activities, the more resources they will access.

Hypothesis 2: Social trust will be positively related to entrepreneurs' access to resources; implying that, the higher the social trust among entrepreneurs' network members, the more resources they will access.

Hypothesis 3: Entrepreneurs' network size will be positively related to their access to resources; implying that, the larger the size of entrepreneurs' networks, the more resources they will access.

Hypothesis 4: Entrepreneurs' tie strength will be negatively related to their access to resources; implying that, as the entrepreneurs' networks consist of weaker ties, the more resources they will access.

Hypothesis 5: Entrepreneurs' tie strength and network size together will be negatively related to their access to resources; implying that, entrepreneurs with a larger network consisting of weaker ties will have access to more resources.

Hypothesis 6a: Entrepreneurs' network diversity in terms of occupation (occupational diversity) will be positively related to their access to resources; implying that, the more diverse the entrepreneurs' networks, the more resources they will access.

Hypothesis 6b: Entrepreneurs' network diversity in terms of the relational types (acquaintances, affinal kin, non-affinal kin) of the ties (relational diversity) will be positively related to their access to resources; implying that, the more diverse entrepreneurs' networks, the more resources they will access.

Access to Resources and Entrepreneurial Success

Eisenhardt and Martin (2000) point out the importance of resources for firms focusing on the resource-based view of the firm and state that “resources are those specific physical, human, and organizational assets that can be used to implement value-creating strategies” (p. 1107). There is strong evidence documenting the importance of resources for firm survival and growth (Bates, 1995; Birley, 1985; Brüderl & Preisendorfer, 1998; Cooper, Woo, & Dunkelberg, 1988; Gimeno, Folta, Cooper, & Woo, 1997; Kirchoff, 1994). It is suggested that firms, which lack necessary resources, cannot grow, and their activities would be limited (Covin & Slevin, 1997; Penrose, 1959).

Entrepreneurs need to access, gather and utilize the necessary resources in order to achieve success. Unless they reach necessary resources, may it be information, financial capital, or social support; the failure of the venture is inevitable.

The above discussion suggests the following hypotheses:

Hypothesis 7: An entrepreneur's access to resources will be positively related to entrepreneurial success.

Mediating Effects

According to the network perspective, entrepreneurial success depends on the entrepreneurs' ability in identifying opportunities and accumulating the necessary resources for both the creation and growth of the firm. From the relationships among members in a network, entrepreneurs can gain access to a variety of resources, including information, knowledge, or capital. As stated by Cromie and Birley (1992), "if the entrepreneur can expand his or her social network or gain a more central position in a network, additional resources and opportunities might be uncovered and this could facilitate business expansion" (p.6).

It is argued that the entrepreneurial outcome, which is the success of the venture, is to be achieved through the social relations embedded in one's network. Proper utilization of these resources would bring success. When one fails to reach necessary resources, information or knowledge, the entrepreneurial process' failure is inevitable. Thus, it is essential to get access to these resources for entrepreneurial success.

The above discussion leads to the following hypotheses:

Hypothesis 8: Access to resources mediates the effect of networking on entrepreneurial success.

Hypothesis 9: Access to resources mediates the effect of social trust on entrepreneurial success.

Hypothesis 10: Access to resources mediates the effect of network size on entrepreneurial success.

Hypothesis 11: Access to resources mediates the effect of tie strength on entrepreneurial success.

Hypothesis 12: Access to resources mediates the interaction effect of network size and tie strength on entrepreneurial success.

Hypothesis 13a: Access to resources mediates the effect of occupational network diversity on entrepreneurial success.

Hypothesis 13b: Access to resources mediates the effect of relational network diversity on entrepreneurial success.

Moderating Effects of Human Capital Variables

According to Becker (1964), knowledge and skills are gained by investing in human capital such as education and work experience. In the related literature, the most widely used elements included in human capital are education level and work experience (Reuber & Fischer, 1994). In addition to these two, training, parents' background and certain type of experience such as start-up experience, owner

experience and employment experience are also used as proxies to measure entrepreneurs' human capital.

The most important and frequently used proxy of human capital is the education level (Ganotakis, 2012; Ucbasaran et al., 2008). The effect of entrepreneurs' education level on entrepreneurial success has frequently attracted researchers attention. There are many studies that have shown that there is a relationship between entrepreneurial success and entrepreneurs' level of education (Bates, 1985; Baum et al., 2000; Bird, 1989; Cooper et al., 1994; Davidsson, 1995; Gimeno et al., 1997; Honig, 1996; Reynolds, 1997). It is suggested that individuals may extend their skills and knowledge by formal or nonformal education. An example of the formal education includes university education; whereas an example related to the nonformal education includes specific training courses. It is suggested that by education, not only knowledge, skills, discipline, motivation, and self-confidence (Cooper et al., 1994) increases, but one can also deal more easily with more complex problems (Davidsson & Honig, 2003). Formal education provides individuals with the cognitive skills, which are necessary in adapting to environmental changes (Hatch & Dyer, 2004).

Another key component of human capital is work experience, which supports the integration and accumulation of new knowledge (Castanias & Helfat, 2001). There are several studies indicating that labor market experience, management experience, and previous entrepreneurial experience are significantly related to entrepreneurial activity (e.g. Bates, 1995; Gimeno et al., 1997). Work experience is considered to be helpful for adapting to new situations (Davidsson & Honig, 2003) and increasing productivity (Parker, 2006). Having managerial or self-employment experience increase one's human capital, which in turn is found to be related with

increase in identifying and pursuing business opportunities (Bates, 1990). Several studies investigated the relationship between performances of entrepreneurial ventures with entrepreneurs' industry specific experience (Bosma et al., 2004; Brüderl et al., 1992; Brüderl & Preisendorfer, 2000; Feeser & Willard, 1990). Entrepreneurs who have similar-sector experience benefit not only from the past relationships regarding suppliers and buyers (Marvel & Lumpkin, 2007), but also from the knowledge of technological and marketing opportunities that provide a potential for market exploitation (Shane, 2000).

According to Unger et al. (2011, p. 343) there are numerous arguments on how human capital increases entrepreneurial success. As to one of the arguments, human capital increases the capability of entrepreneurs to discover and exploit opportunities (Shane & Venkatraman, 2000). Additionally, human capital is positively related to planning and venture strategy, which increases success (Baum et al., 2001). Another argument suggests that, knowledge helps to acquire utilitarian resources such as financial and physical capital (Brush et al., 2001). Lastly, human capital assists in further learning and the accumulation of new knowledge and skills (Ackerman & Humphreys, 1990). Education level can also increase an individual's communications and social abilities in addition to his/her learning ability (Avermaete et al., 2004). It is claimed that, entrepreneurs' experience help them identify viable business opportunities, which helps them to improve decision-making (Boeker & Karichalil, 2002).

The aforementioned literature has conceptualized human capital as having direct effects on entrepreneurial success. Yet, several studies adopting this perspective have also found contradicting results (e.g., Aldrich et al., 1987; Bates, 1994; Yoon, 1991). In a review conducted by Reuber and Fisher (1994), while eleven

significantly positive effects are found, eleven non-significant effects, and two significantly negative effects are also observed. Driven by the equivocal nature of the findings, in the present dissertation, human capital is introduced into the conceptual model of entrepreneurial success as a moderator. The underlying reason for this conception was the suspicion that the direct effect of human capital on success may be overshadowed in the extant studies by other exogenous factors that may have disproportionately stronger direct effects via higher contextual relevance with success (i.e., network structure, network position). The main proposition here is that human capital, as a facilitator of better utilization of resources accessed via network characteristics, would amplify the direct effect of access to resources on entrepreneurial success.

In line with the argument above, I propose the following hypotheses:

Hypothesis 14: The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by education level of the entrepreneur.

Hypothesis 15: The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by general work experience of the entrepreneur.

Hypothesis 16: The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by industry-specific work experience of the entrepreneur.

Research Models

The qualitative study (Study1) is conducted in order to make explorations about the perceptions entrepreneurs have in regard to the effects of human and social capital on entrepreneurial success. The quantitative studies, on the other hand, aim at testing 1) the mediating effect of access to resources on the relationship between social capital and elements of social network structure and entrepreneurial success, in addition to 2) the moderating effect of human capital on the relationship between access to resources and entrepreneurial success. Two studies are conducted in accordance with these aims. The reason to conduct two separate studies instead of one is that, since Study2 is part of a larger project as mentioned before, the survey form included several questions that are not used in this dissertation. Thus, in order to lower the burden of the respondents, the name generator analysis, which is used to measure network structure of entrepreneurs, is not included in Study2. The models depicting the hypothetical relationships are presented in Figure 1 (the model is tested in Study2) and Figure 2 (the model is tested in Study3). All hypotheses are listed in Table 3. Hypotheses 1, 2, 7, 8, 9, 14, 15, and 16 are tested with Study 2; and hypotheses 3, 4, 5, 6a, 6b, 7, 10, 11, 12, 13a, 13b are tested with Study3.

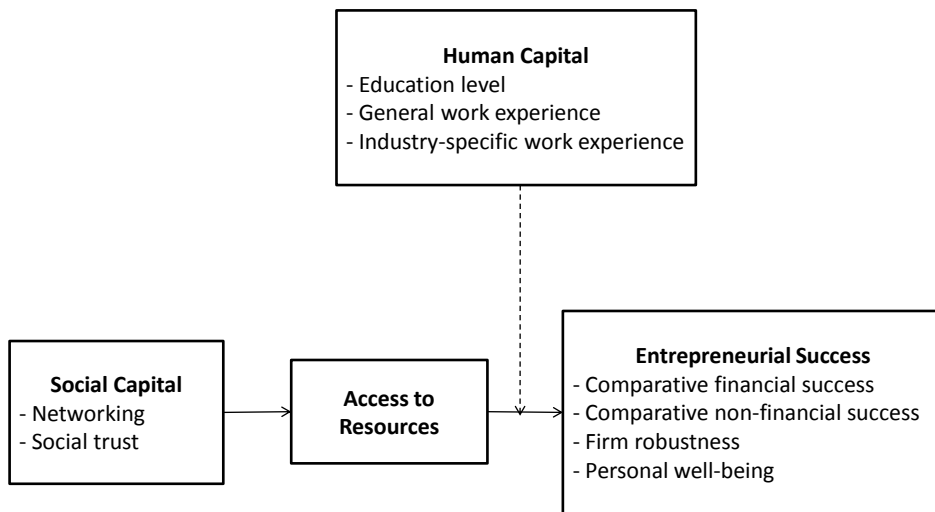


Figure 1. The conceptual model tested in Study2

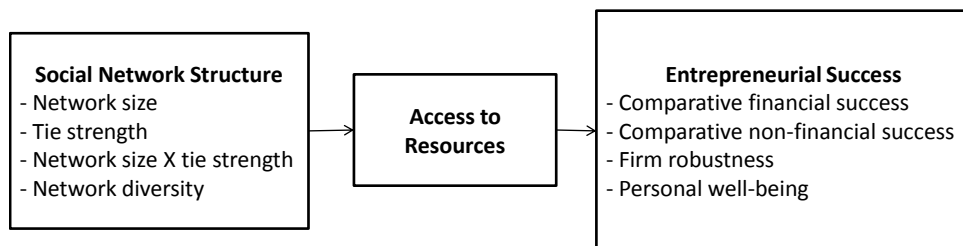


Figure 2. The conceptual model tested in Study3

Table 3. List of Hypotheses

No.	Hypothesized Statement
H1:	Entrepreneurs' extent of networking will be positively related to their access to resources; implying that, the more effort entrepreneurs spend for networking activities, the more resources they will access.
H2:	Social trust will be positively related to entrepreneurs' access to resources; implying that, the higher the social trust among entrepreneurs' network members, the more resources they will access.
H3:	Entrepreneurs' network size will be positively related to their access to resources; implying that, the larger the size of entrepreneurs' networks, the more resources they will access.
H4:	Entrepreneurs' tie strength will be negatively related to their access to resources; implying that, as the entrepreneurs' networks consist of weaker ties, the more resources they will access.
H5:	Entrepreneurs' tie strength and network size together will be negatively related to their access to resources; implying that, entrepreneurs with a larger network consisting of weaker ties will have access to more resources.
H6a:	Entrepreneurs' network diversity in terms of occupation (occupational diversity) will be positively related to their access to resources; implying that, the more diverse the entrepreneurs' networks, the more resources they will access.
H6b:	Entrepreneurs' network diversity in terms of the relational types (acquaintances, affinal kin, non-affinal kin) of the ties (relational diversity) will be positively related to their access to resources; implying that, the more diverse entrepreneurs' networks, the more resources they will access.
H7:	An entrepreneur's access to resources will be positively related to entrepreneurial success.
H8:	Access to resources mediates the effect of networking on entrepreneurial success.
H9:	Access to resources mediates the effect of social trust on entrepreneurial success.
H10:	Access to resources mediates the effect of network size on entrepreneurial success.
H11:	Access to resources mediates the effect of tie strength on entrepreneurial success.

H12:	Access to resources mediates the interaction effect of network size and tie strength on entrepreneurial success.
H13a:	Access to resources mediates the effect of occupational network diversity on entrepreneurial success.
H13b:	Access to resources mediates the effect of relational network diversity on entrepreneurial success.
H14:	The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by education level of the entrepreneur.
H15:	The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by general work experience of the entrepreneur.
H16:	The indirect effects of extent of networking and social trust, through access to resources, on entrepreneurial success is moderated by industry-specific work experience of the entrepreneur.
No.	Hypothesized Statement
H1:	Entrepreneurs' extent of networking will be related to their access to resources; meaning that, the more effort entrepreneurs put for networking activities, they have access to more resources.
H2:	Social trust will be related to entrepreneurs' access to resources; meaning that, the higher the social trust among entrepreneurs' network members, they have access to more resources.
H3:	Entrepreneurs' network size will be related to their access to resources; meaning that, the higher the size of entrepreneurs' network, they have access to more resources.
H4:	Entrepreneurs' tie strength will be negatively related to their access to resources; meaning that, the more weak ties entrepreneurs have in their networks, they have access to more resources.
H5:	Entrepreneurs' tie strength and network size together will be related to their access to resources negatively; meaning that, as the higher the network size and the more weak ties entrepreneurs have in their networks, they have access to more resources.
H6a:	Entrepreneurs' occupational network diversity will be related to their access to resources; meaning that, the more diverse entrepreneurs' network, they have access to more resources.
H6b:	Entrepreneurs' relational network diversity will be related to their access to resources; meaning that, the more diverse entrepreneurs' network, they have access to more resources.

H7:	An entrepreneur's access to resources will be positively related to entrepreneurial success.
H8:	Access to resources mediates the effect of networking on entrepreneurial success.
H9:	Access to resources mediates the effect of social trust on entrepreneurial success.
H10:	Access to resources mediates the effect of network size on entrepreneurial success.
H11:	Access to resources mediates the effect of tie strength on entrepreneurial success.
H12:	Access to resources mediates the interaction effect of network size and tie strength on entrepreneurial success.
H13a:	Access to resources mediates the effect of occupational network diversity on entrepreneurial success.
H13b:	Access to resources mediates the effect of relational network diversity on entrepreneurial success.
H14:	The indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by education level of the entrepreneur.
H15:	The indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by general work experience of the entrepreneur.
H16:	The indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by industry-specific work experience of the entrepreneur.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

General Issues

As Hoang and Antoncic (2003) suggest, qualitative research is a means of developing richer and more dynamic theories for studying networks in the context of entrepreneurship. As such, qualitative studies have been argued to be preferable when referring to the process, content and dynamics of networks (Lechner & Dowling, 2003; O'Donnell et al., 2001). Hoang and Antoncic (2003) while expressing the limitations of qualitative research concerning their generalizability and being descriptive rather than predictive (Borch & Arthur, 1995), insist that more qualitative, inductive research would stimulate further work by introducing new theoretical ideas.

As a way to overcome the limitations faced by qualitative research, utilization of multimethod studies is encouraged. A survey based on the insights generated from qualitative research is more likely to capture network dynamics and be more predictive of subsequent entrepreneurial outcomes. By the use of quantitative research, researchers would be able to assess and statistically control for other competing theories. By conducting multimethod studies, researchers can yield richer

insights and support strong causal claims regarding the role of networks in entrepreneurship (Hoang & Antoncic, 2003).

This study combines the merits of both qualitative and quantitative research. In-depth interviews are used in the exploratory stage of the research. Qualitative data helps researchers to gain in-depth understanding of the phenomenon under investigation and is used to identify possible leads to be followed that have not yet been covered by prior research in the relevant literature. Then, quantitative data is collected via survey administration to entrepreneurs of SMEs in Istanbul.

The critical review conducted by Hoang and Antoncic (2003) is a well-documented summary that combines network and entrepreneurship literatures. The authors, in this review, examine and criticize the three areas in network-based research in entrepreneurship. These are: content of network relationships, governance, and structure. Content of network relationships is related to interpersonal and interorganizational relations that provide access to resources for the entrepreneur. Governance mechanisms are seen as a way of coordinating network exchange. Since trust improves the quality of resource flows, it is found to be an important element of network exchange (Larson, 1992; Lorenzoni & Lipparini, 1999). Network structure is defined as the pattern of direct and indirect ties between actors (Hoang & Antoncic, 2003). In this thesis, we measured entrepreneurs' access to resources in relation to the first element in both Study 2 and Study 3. With regard to the second element, we measured trust in Study 2. Lastly, with respect to the third element, we measured several structural characteristics of entrepreneurs' networks including network size, network diversity, and the ties in the network in Study 3.

In this chapter, I will discuss the methodological issues. In this thesis, three studies are conducted, one of which is a qualitative one consisting of in-depth interviews with the entrepreneurs, and the other two are quantitative studies conducted by surveys. This chapter is grouped according to the studies, and details relating to each study will be presented respectively.

For each study, I will explain the design of the research instrument, specifically the in-depth interviews for Study 1 and surveys for Study 2 and Study 3. Next, for all three studies, the criteria for the chosen sample and the data collection procedures will be discussed. Afterwards, the demographic characteristics of the respondents will be presented for all of three studies. Lastly, for Study 2 and Study 3, I will elaborate on the measurement of variables, their operationalizations and the reliability and validity of the measures.

The first study, the qualitative one, is conducted in order to gain insights about key success factors, and also to explore success definitions of the entrepreneurs. Since the findings reached in Study1 are to be used as inputs in Study2 and Study3, the results of the Study1 are also discussed in this chapter.

Study 1 – Qualitative Study

Study 1 – Sampling and Data Collection

In Study1, in-depth interviews are conducted with 37 entrepreneurs among whom 21 are women and 16 are men. The interviews took more than one hour and all of the interviews are transcribed verbatim. The interviews were semi-structured and the questions asked for this dissertation included individual and firm demographics, the entrepreneur's story, his/her definition of success, and key success factors, including human capital and social capital (see Appendix A for the interview form in Turkish and Appendix B in English). The questions are determined after a series of discussions with the research group and based on the related literature. The interviews are content analyzed using NVivo software. NVivo is a qualitative data analysis computer software package. It intends to help users organize and analyze non-numerical or unstructured data. NVivo enables researchers to collect, organize and analyze content from interviews, focus group discussions, surveys, audio, social media, videos and webpages. (http://www.qsrinternational.com/products_nvivo.aspx)

In order to identify the respondents to be included in the sample, the most important institutions related with entrepreneurs are contacted and the registered entrepreneurs' lists are requested. These institutions included KOSGEB, TOBB, Istanbul Chamber of Commerce (ITO), KAGIDER and several Chamber of Tradespersons and Artisans in several major cities. Some of the institutions did not share the lists due to privacy concerns. After several visits, Istanbul Chamber of Commerce shared their list. The major problem faced during this phase was the fact

that the lists were not up to date, had missing information, and/or did not reflect the truth. In other words, there were some registered firms, which were inactive, or there were some firms that are registered on someone, but in reality he/she was not the person who really owns the business. In order to overcome these problems, it is decided that entrepreneurs in the registered list would be called and checked whether the firm is still active and the information in the list is correct. Thus, convenience sampling method is employed.

The data is collected from Istanbul. Since Istanbul is the major city in Turkey and gets a lot of migration from all around Turkey, it is thought that Istanbul itself may reflect the characteristics of Turkey as a whole.

In defining the entrepreneur, two of the criteria used by Yetim (2008) are taken into account. These include: “Those who have a business established in their own name at a place other than the house; those who work in that enterprise alone or with an employee employed by the employer and/or who work there as the associate owner” (p. 871). These criteria were fully employed in the filtering process.

Besides these criteria, we required that the firm should be active for at least three years. Since we are after entrepreneurial success, it is thought that a healthy (corrected for extraordinary peaks and downs in performance) assessment of success would require the firm to be operating at least three years.

The list that Istanbul Chamber of Commerce shared included SMEs, and according to SME definition stated in *Resmi Gazete*, firms employing less than 50 employees and either yearly net sales revenue or balance sheet is not exceeding one million Turkish Liras are defined as micro firms; firms employing less than 100 employees and either yearly net sales revenue or balance sheet is not exceeding eight

million Turkish Liras are defined as small firms, and firms employing less than 250 employees and either yearly net sales revenue or balance sheet is not exceeding 40 million Turkish Liras are defined as medium firms (<http://www.resmigazete.gov.tr/eskiler/2012/11/20121104-11.htm>). The sample consisted of micro, small and medium firms.

After the interviews are conducted, they are transcribed verbatim and content analyzed using NVivo software.

Sample Characteristics

A total of 37 entrepreneurs, 21 women and 16 men, participated in the interviews. The mean age is 47.19 (s.d. 11.60). According to the last degree of education received, 8.1 % of the participants had primary school degree, 2.7% had secondary school degree, 21.6% had high school degree, 56.8% had university degree, 8.1% had graduate degree, and 2.7% had Ph.D. degree. Among the 37 entrepreneurs, 23 (62.2%) are married, 12 (32.4%) of them have no children, 29.7% have one child, 24.3% have two children, 13.5% have three or more children.

With regard to firm demographics, the mean firm age is 17.97 (s.d. 15.54) with a range of from three to 68.

The table showing the demographics information is given below:

Table 4. Sample Demographics of Study1

Demographic Characteristic N=37	Category	Frequency	Valid Percent
Personal Characteristics			
Age	younger than 25 years	0	0
	26-35 years	8	21.6%
	36-45 years	7	18.9%
	46-55 years	15	40.5%
	older than 56 years	7	18.9%
Gender	men	16	43.2%
	women	21	56.8%
Marital status	single	13	36.1%
	married	23	63.9%
Number of children	no child	12	32.4%
	1-3 children	22	59.5%
	more than 4 children	3	8.1%
Education level	primary school	3	8.1%
	secondary school	1	2.7%
	high school	8	21.6%
	university	21	56.8%
	masters	3	8.1%
	Ph.D.	1	2.7%
Firm Characteristics			
Firm age	younger than 5 years	9	24.3%
	6-15 years	10	27.0%
	16-25 years	8	21.6%
	26-35 years	2	5.4%
	36-45 years	3	8.1%
	older than 46 years	5	13.5%

Results of Study 1

The interviews provided several valuable insights. First of all, a comprehensive understanding is gained related to the varying definitions of success. Other insights are related to the key success factors; including human capital and social capital. Human capital consisted of the educational background and prior work experience of the entrepreneur, and social capital included the entrepreneur's network. Each of these will be discussed in the next section in a more detailed manner.

One of the main inferences of the interviews is related to the definition of entrepreneurial success, which is subsequently used in the quantitative studies as dependent variables. For this purpose, the research team content analyzed all interview forms. NVivo call codes "nodes" and distinguishes free nodes and tree nodes. Typically when a node is first created, it is a free node, which is just kept in a list. Tree nodes have all the properties of free nodes, but in addition they are organized into a hierarchy or tree. In the analysis, all the information relating to success definitions are taken as free nodes. Then the research group is divided into two and formed the tree nodes combining these free nodes. The number of tree nodes is found to be 28 with the inter-judge reliability of 0.89. The disagreement points are resolved and a consensus is reached after long hours of discussions. Then, these 28 categories are grouped under 6 main headings. These are: sustainability, prestige, creativity, having an impact, self-actualization, and goal orientation. These success definitions are then grouped into two, one being "firm robustness" and the other "personal well-being"; which are used as dependent variables in the quantitative studies (Study 2 and Study 3). Firm robustness refers to the criteria by which the

entrepreneur perceives the organization as successful when achieved. Personal well-being, on the other hand, is defined as the criteria, which increases the entrepreneur's subjective well being when achieved. These success definitions are provided in measures section of Study 2 in a more detailed manner.

Another inference from the interviews is related to the entrepreneur's human capital. Human capital is the capital that the entrepreneur possesses with his/her educational background and prior work experience. In addition to other success factor questions, we specifically asked two questions in the interviews to understand whether education and prior work experience separately had an impact, either positive or negative, on entrepreneurs' success. In analyzing the impact of human capital on entrepreneurial success, we not only content analyzed the answers given to these questions, but all interview forms are taken into consideration.

The results indicate that, among the 37 entrepreneurs, only one stated that education had a negative impact, 26 (70.3%) stated that education had a positive impact, and seven (18.9%) stated that education had no impact on their success. Sample quotations selected randomly from the sample are (see Appendix C for original transcripts in Turkish):

Interviewee #36: "Education has no limits, what we can get is for our own good.

Psychology provided a great start for me. I benefited a lot from studying psychology; it also helped me in my personal development."

Interviewee #37: "Education had a positive effect. I graduated from Marmara University, Faculty of Economics, Department of Labor Economics and Industrial Relations. Our curriculum consisted of courses related to both management and

economics. I realized that I got the tools that help me analyze the current economic conditions or company structures from my university education. During my education, I thought I could study another area, but now I see that the knowledge that I accumulated those days help me a lot in doing my job. I realized that what I studied is functional for my job, and contributes to it.”

Interviewee #32: “I believe having a psychology degree is beneficial for me. In other words, I benefit from having studied psychology before culinary.”

Interviewee #28: “Education definitely has a positive effect, a lot, indeed. Having a degree from a good school, having a good education, it certainly provides benefits.”

Interviewee #25: “Education has certainly had positive effects. I studied international relations, but I do not work in that area. Because, the curriculum of our department was more politics-oriented. In complete contrast, I work in the private sector. Of course, it affected positively. For instance, debate trainings, the art of throwing a speech in front of a crowd, etc. Additionally, I benefit from some of the courses, such as economics or mathematics today in doing my job.”

Interviewee #16: “I have a different perspective for education. I believe that education improves one’s illiteracy in terms of what he/she is studying. Life is more different, the conditions we face in life are more different. Some experiences can just be learnt through living it. Thus, my success is a combination of both my education and also my experiences.”

Interviewee #15: “Education has positive effects, certainly, positive. In each and every way, it has positive effects.”

Interviewee #10: “Education had positive influences on my job. Because in our job, fieldwork is extremely important, but observing the field is as much important. During my education, I learnt a lot, such as to what conditions I should be paying attention, how the good examples should be, etc. I tried to apply what I learnt to the field. And the most important issue to show what you did is reporting. We could provide important contributions to our companies in this respect. With the education that I studied, I could present different examples, or learn to read a report, etc. Thus, I am so satisfied with the school that I graduated from and from the benefits it provided me that I can use in my job. Yes, I believe education has positive effects.”

Interviewee #2: “By the help of the education you get, you learn how to reach information. It helps you question what you can get from where. From these perspectives, education has several benefits.”

Interviewee #3: “Yes, education and the schools that I graduated from contributed me a lot. Once upon a time, there were more opportunities. The certificates that I gathered from all of the countries that I visited 25 years ago contribute a lot to my success.”

Interviewee #6: “You can succeed by experience. If you have education, it helps you climb up the steps faster. One can go forward 10 years in business by 2-3 years of education. I value education a lot.”

Regarding prior work experience, among 37 entrepreneurs, 28 (75.7%) stated that prior work experience had a positive impact on their success. Sample quotations

selected randomly from the sample are (see Appendix C for original transcripts in Turkish):

Interviewee #36: “All of my work experiences contributed to something; I believe that there is a good reason for having such an experience that time. All accumulated. In order to perceive this job today, I needed to do that job that day. I did market research and then worked in a journal. All contributed positively to me.”

Interviewee #37: “Yes, the trainings I received from sales and marketing led me to meet with people who work in these industries. It helped me to get the picture of them including their problems and achievements. Thus, I believe it has positive effects. I am glad to have such an experience.”

Interviewee #32: “I believe work experience has many positive effects.”

Interviewee #28: “Work experience has a lot of effects. People not only learn by education, but also by the experiences that they go through. If you suddenly decide to start a business without any knowledge and experience, you have to try harder. At least 8-9 years of time is not a short time. I am a quick learner. Maybe one can learn these in one year, too, but when you work 8-9 years you can learn a lot more.”

Interviewee #16: “Experience has positive effects. It is about expanding one’s horizon. Since we have university degree which is combined with work experience, we have the ability to see behind 2-3 walls, not just one wall only.”

Interviewee #29: “The work experiences that I get have many benefits.”

Interviewee #9: “I certainly believe that work experience has positive effects; I am thankful for each and every one of them separately.”

Interviewee #1: “Of course, my work experiences are highly important, I mean, I come this far going through all these experiences. Our job requires this, you need a lot of work experience, and you cannot just graduate from school and start working. Our time required us to work a lot and learn by making mistakes, we educated ourselves during our prior work experiences.”

Interviewee #4: “Work experience had a lot of positive effects. Since I worked in media industry, I have a quick hand. Since we try to bring up news, we used to manage spontaneous crises; therefore my mind works so fast. I can do empathy, too. These are the attributes that I obtained from my prior work experiences.”

The findings related to human capital suggest that, entrepreneurs agree on the contributions that education and work experience bring to them. It is frequently stated that both education and work experience have important contributions for their success. Specifically, they point out to the role of human capital elements in enhancing their knowledge and helping them in effective utilization of the knowledge that they gained. The quotations by entrepreneurs such as, “we have the ability to see behind 2-3 walls, not just one wall only.”; “the trainings I received from sales and marketing led me to meet with people who work in these industries. It helped me to comprehend the profiles of these people in terms of their problems and achievements.”; “now I see that the knowledge that I accumulated these days help me a lot in doing my job.” point out the importance of human capital in terms of knowledge utilization. In other words, entrepreneurs perceive human capital

investments as a facilitator in utilizing their knowledge they obtained through these investments and thereby leading them to succeed.

For social capital, we asked specific questions related to entrepreneurs' networks to see both how much importance they give to their networks and their network structures (see Appendix A for the questions in Turkish and Appendix B in English). These questions include: how has your network changed from start-up to now?; who are primarily involved in your network, strong ties like your family and relatives or weak ties like acquaintances?; do you think your network has a role in your success?; do you think having close and strong ties has a role in your success?; do you have people in your network from other sectors and are they beneficial for you?; do you think your capability to do networking and investing in human relations are needed for your success?; how important is the support taken from government and banks for your success?; do you spend effort to do networking, such as attending meetings, forming partnerships with universities or other institutions?; which one do you think is more important; having a lot of people in your network, or few but important people?; do you think that you and networks of people that you have a relationship with interact a lot; and does this cause you to have the same kind of information?; and can you reach networks of the people in your network easily; how closely connected the people in your network?

When these questions are content analyzed, it is seen that among 37 entrepreneurs, 32 (86.5%) stated that their social capital contributed to their success positively. Sample quotations selected randomly are (see Appendix C for original transcripts in Turkish):

Interviewee #36: "I believe that social capital has a vital effect. I see myself as a part of my social network. I try to be around and visible as much as possible. I try to become a well-known brand. I don't have an isolated life. I believe so."

Interviewee #37: "Yes, networking is highly important. I believe that relationships among people are the most important impetus in doing a job. For instance, at the point of production, I sometimes make visits, and the results of the job depend on the contacts that we make. This is a true evidence for me. The jobs cannot be performed without being in a relationship with others. There is certainly the role of communication."

Interviewee #28: "Certainly, networking has a positive effect. I am a person who can make friends easily. When I become friends with someone, I can consult on that person, get his/her ideas. I don't have to use all I get, but it gives me power."

Interviewee #16: "Without a social network, success is not possible. Networking is definitely necessary; success and networking are linked, it is unquestionable."

Interviewee #10: "Social networks are absolutely important. I believe in the power of communication. Even if you are so successful, you know your job very well, you have a lot of knowledge, but if you do not have the communication skills, then you can neither share these with anybody nor transfer these to someone else. On the other hand, if you have good communication skills, even if you don't know anything, you can learn a lot by this skill. I believe communication is a very powerful weapon for every subject matter. Social networks in today's world are very popular. A child in primary school who has 30 friends can even target and share his/her characteristics with a lot more people due to the social networks. Therefore, networks are extremely important for everybody, from age 7 to 77."

Interviewee #29: “Networking has certainly had a positive effect. Let me tell you a short story. Normally, no one can start a business from zero point; it is extremely difficult. My partner’s network was highly important when we were in the start up stage. No one gives a checkbook to a newly founded business before it gets over two balance sheet periods. Our partner arranged a checkbook and credit for our business. He used to work in a bank, and the relationships that he established working there provided the checkbook and the credits. This way, we could buy company cars. I mean, we spend one trillion, but what get out of our pocket were two hundred thousand Liras. This was due to his network and relationships.”

Interviewee #1: “Human relations are highly important in achieving success as an entrepreneur. In my industry, social relationships are the most important contributors of success.”

Interviewee #35: “Networking is so important; I will improve my networking more. There are some people, who produce just for themselves, but I am open to external stimuli, thus it is so important.”

Interviewee #33: “Relationships with people and with the environment, they are both important.”

Interviewee #24: “Relationships have a positive effect. The people that you work with are really important. Certainly, according to me, the most important part of our job is communication.”

Interviewee #21: “Absolutely, networking has positive contributions.”

Interviewee #11: “Relationships and networking are very important. I highly value personal relationships.”

Interviewee #13: “Networking is necessary. I believe I have good relationships with people. I value personal relationships. I have good relationship with both my family and friends. When I want something from someone, he/she does whatever he/she can to help me. My friends are very good at helping me.”

The findings related to social capital suggest that, entrepreneurs agree on the contributions that social networks bring to them. It is frequently stated that relationships and trust among network members have important contributions for their success. Specifically, they point out to the role of social capital elements in obtaining necessary and critical resources for their businesses. Entrepreneurs highlight the benefits of networking and trust in such a way that, they specifically give examples about how they access to financial resources or information via their networks. The quotations by entrepreneurs such as, “my partner’s network, his relationships with these people, for instance the relationships that he had formed when he was working previously helped this to happen, to get the checkbook and get our credit application approved.”; “I make friends easily, and when we become friends, I can consult to that person and get his/her ideas.”; “I have good relationships with both my family and friends. When I want something from someone in my network, he/she does whatever he/she can do to help me. My friends and family are very good at helping me.” emphasize the importance of social capital in terms of accessing to resources. In other words, entrepreneurs perceive their social networks as a way to reach necessary resources, may they be financial or informational, which in turn, lead them to succeed.

The findings of Study1 are used as inputs in Study2 and Study3. First of all, two measures of success are created with the insights gained in qualitative study. Additionally, the results of the qualitative study shed light on the importance of human capital and social capital on entrepreneurial success. Thus, we aimed at testing this perception of the entrepreneurs with quantitative studies.

Study 2

Study 2 – Sampling and Data Collection

The second study is a quantitative study conducted with a survey. Since the data came from a larger project examining key success factors for women entrepreneurs, the survey composed of several parts, but only the parts related to demographics, human capital, access to resources, social capital, and success are developed and used for this dissertation (see Appendix D for the survey form in Turkish and Appendix E in English).

In selecting the sample, the same criteria used in the qualitative study (Study 1) are employed.

Sample Characteristics

A total of 268 entrepreneurs, each representing one company, filled out the survey form in face-to-face interviews. Among them 124 (46.3%) are men and 144 (53.7%) are women. The mean age is 43.6 (s.d. 9.81). Among the participants, 192 (71.6%) are married, 200 (74.6%) have children. Among these 200 participants, 53 (26.5%) have one child, 101 (50.5%) have two children, and 46 (23.0%) have three or more children. With respect to education level, the last degree that the entrepreneur

obtained is taken into account. 34 (12.7%) had primary school degree, 24 (9.0%) had secondary school degree, 86 (32.1%) had high school degree, 103 (38.4%) had university degree, 16 (6.0%) had graduate degree, and five (1.9%) had Ph.D. degree.

With regard to firm demographics, the mean firm age is 12.66 (s.d. 10.83), the mean number of employees is 14.02 (s.d. 24.90), and 26 firms (9.7%) are from manufacturing industry; whereas 143 of them (53.6%) are from service industry. 74 of them (27.7%) are sales firms, and 24 (9.0%) firms function in one more area besides sales.

The table showing the sample characteristics is below:

Table 5. Sample Demographics of Study2

Demographic Characteristic N=268	Category	Frequency	Valid Percent
Personal Characteristics			
Age	younger than 25 years	6	2.2%
	26-35 years	55	20.5%
	36-45 years	99	36.9%
	46-55 years	77	28.7%
	older than 56 years	31	11.6%
Gender	men	124	46.3%
	women	144	53.7%
Marital status	single	76	28.4%
	married	192	71.6%
Number of children	no child	68	25.4%
	1-3 children	183	68.3%
	more than 4 children	17	6.3%
Education level	primary school	34	12.7%
	secondary school	24	9.0%
	high school	86	32.1%
	university	103	38.4%
	masters	16	6.0%
	Ph.D.	5	1.9%
Firm Characteristics			
Firm age	younger than 5 years	95	35.4%
	6-15 years	90	33.6%
	16-25 years	54	20.1%
	26-35 years	16	6.0%
	36-45 years	8	3.0%
	older than 46 years	5	1.9%
Number of employees	less than 50 employees	253	95.5%
	51-100 employees	7	2.6%
	101-250 employees	5	1.9%
	more than 251 employees	0	
Industry	manufacturing	26	9.7%
	service	143	53.6%
	sales	74	27.7%
	more than sales	24	9.0%

Study 2 – Measures

In this part, the measurement instruments for the constructs in the conceptual model will be detailed.

Dependent variables

In order to assess entrepreneurial success, four different measures of success are used; two of these are generated through qualitative study (Study 1) and two are taken from the related literature. The measures taken from the literature are named as comparative success criteria including both financial and non-financial measures of success totaling 11 items. For financial comparative success, the 5-item financial and market performance scale developed by Denison (2000) is adapted. Items in this scale include overall profitability, sales growth, market share, and return on sales, and return on assets. Overall profitability, sales growth, and market share, return on investment and growth rate are used in the present study. For non-financial comparative success, the 4-item qualitative performance scale developed by Denison (2000) is used. The items are quality improvements, new product development capability, employee satisfaction, and employee commitment. In addition to these items, we added two more: brand awareness and customer satisfaction. For both of the measures, the respondents are asked to rate themselves in comparison to their competitors with 5-point scale, where “1” is “much lower than my competitors” and “5” is “much higher than my competitors”. Factor analysis (EFA) revealed two

factors, and items were grouped as expected. Loading of only one item (growth rate) was lower than the cut-off point of 0.5; the item later poorly loaded to its hypothesized factor in the Confirmatory Factor Analysis (reported in detail in the next section) as well, thus it was eliminated from the study. The reliability values of both of the scales are high with Cronbach's Alpha of 0.901 and 0.859 for financial and non-financial comparative success measures, respectively.

As mentioned in Study 1, two measures of success generated through qualitative research are employed in survey studies (Study 2 and Study 3). The first dependent variable derived from Study 1, firm robustness, is operationalized with the following eight items: reaching the targets put forth for the organization, generating employment opportunities, sustainability, being the leader in the sector, training and developing the employees, being different than others, being well-known, and earning trust of the employees and customers. The question "How successful do you perceive yourself as an entrepreneur in these subjects?" answered on a 5-point scale, where "1" is "very unsuccessful" and "5" is "very successful".

The second measure is personal well-being and includes the following 10 items: this job makes me feel freer, I like my job, I am satisfied doing everything on my own, I can be resilient when facing difficulties, I develop myself, I am at peace doing my job, I am happy with my life, I can be of help to others, I can contribute to my country by my performance, I am being appreciated. In the question the entrepreneur is asked to evaluate the contributions of the job and assess how frequently he/she experiences these situations on a 5-point scale, where "1" is "never" and "5" is "always". The items for the two success measures correspond to the mutually exclusive success definitions identified throughout the qualitative analysis

in Study 1. Factor analyses revealed a 1-factor solution for each of the scales as expected. However, one item (this job makes me feel freer) in personal well-being scale is eliminated from the study due to poor loading (loading<0.5) both in EFA and CFA. The reliability values of both of the scales are high with Cronbach's Alpha of 0.897 and 0.928 respectively for firm robustness and personal well-being measures.

Independent variables

The independent variables consist of social capital variables. For social capital, the elements relating to network governance identified by Hoang and Antoncic (2003) are utilized. The items assessed the extent to which the entrepreneur spends effort for forming and sustaining his/her network and the level of trust among the people in the entrepreneur's network.

The first independent variable, networking, measures how much effort the entrepreneur spends for networking activities, and it is assessed by two items, on a 5-point Likert scale, where "1" is "definitely disagree" and "5" is "definitely agree". The items are: "I socialize with people to extend my network and/or to sustain the existing one even if it is not directly related to my business" and "I attend meetings and join membership groups in order to extend my network and/or to sustain the existing one". The scale is found to be reliable ($r=0.889$, $p<.01$).

The second independent variable is social trust, and is measured with three items, with a 5-point Likert scale, where "1" is "definitely disagree" and "5" is "definitely agree". It is adapted from Chow and Chan (2008) and the focus on "my

organizational members” in the items is changed to “people in my network”. Items include “I know people in my network will always try and help me out if I get into difficulties”; “I can always trust people in my network to land me a hand if I need it”; and “I can always rely on people in my network to make my job easier”. Last item is deleted due to poor loading. The scale is found to be reliable ($r=0.911$, $p<.01$).

Moderating Variables

In order to assess entrepreneurs’ human capital, three questions are asked. These include education level and work experience. Education level is a one-item question asking the level of latest education degree of the entrepreneur. Work experience question is two-fold; including both the general and industry-specific work experience. In order to assess the former, total number of years the entrepreneur had as prior work experience is asked, and for the latter, the number of years he/she had in a sector related to the one that he/she is operating currently is asked.

Mediators

The elements relating to network content presented by Hoang and Antoncic (2003) are used as mediators. Access to resources is measured in terms of three types of resources; namely, informational, financial, and motivational. The scale developed

by Spreitzer (1996) includes three items for access to resources. These are “I can obtain the necessary resources to support new ideas”, “When I need additional resources to do my job, I can usually get them”, and “I have access to the resources I need to do my job well”. We adapted these three items to each type of resource (i.e., informational, financial, and motivational) separately. Each employed a 5-point Likert scale where “1” is “definitely disagree” and “5” is “definitely agree”. Factor analyses resulted in one-factor solution with a high internal reliability, Cronbach’s alpha of 0.951. Thus, nine items are grouped as one factor, named as access to resources.

The table below shows the summary of the measures and reliability values for all variables used in Study2.

Table 6. Measures and Cronbach’s Alpha Values for the Variables used in Study2

Variable Name	Source	Number of Items	Reliability
Comparative financial success	Denison (2000)	5 items (1 item deleted due to poor loading)	$\alpha=0.901$
Comparative non-financial success	Denison (2000)	4 items + 2 items by the researchers	$\alpha =0.859$
Firm robustness	Author generated	8 items	$\alpha =0.897$
Personal well-being	Author generated	10 items (1 item deleted due to poor loading)	$\alpha =0.928$
Networking	Author generated	2 items	$r=0.889$
Social trust	Chow and Chan (2008)	3 items (1 item deleted due to poor loading)	$r =0.911$
Education level	Author generated	1 item	-
General work experience	Author generated	1 item	-
Industry-specific work experience	Author generated	1 item	-
Access to resources	Spreitzer (1996)	9 items	$\alpha =0.951$

Study 3

Study 3 – Sampling and Data Collection

Study 3 is a quantitative study focusing on the structural elements of social networks, and their relation to entrepreneurial success. The tool for data collection was a face-to-face survey. The survey included questions related to demographics, network structure, access to resources, and entrepreneurial success (see Appendix F for the survey form in Turkish and Appendix G in English).

In selecting the sample the same criteria used in the qualitative study (Study 1) and Study 2 are employed.

Sample Characteristics

A total of 103 entrepreneurs, 61 (59.2%) men and 42 (40.8%) women, participated in the survey. The mean age is 42.6 (s.d. 10.22). Among the participants, 78 (75.7%) are married. With respect to education level, the last degree that the entrepreneur had is taken into account. 15 (14.6%) had primary school degree, seven (6.8%) had secondary school degree, 39 (37.9%) had high school degree, 34 (33.0%) had university degree, seven (6.8%) had graduate degree, and one (1.0%) had Ph.D. degree.

With regard to firm demographics, the mean firm age is 12.22 (s.d. 8.78), the mean number of employees is 10.29 (s.d. 16.13), and 13 firms (12.6%) are from manufacturing industry; whereas 90 of them (87.4%) are from service industry.

The table showing the sample characteristics is below:

Table 7. Sample Demographics of Study3

Demographic Characteristic N=103	Category	Frequency	Valid Percent
Personal Characteristics			
Age	younger than 25 years	1	1.0%
	26-35 years	29	28.2%
	36-45 years	34	33.0%
	46-55 years	27	26.2%
	older than 56 years	12	11.7%
Gender	men	61	59.2%
	women	42	40.8%
Marital status	single	25	24.3%
	married	78	75.7%
Education level	primary school	15	14.6%
	secondary school	7	6.8%
	high school	39	37.9%
	university	34	33.0%
	masters	7	6.8%
	Ph.D.	1	1.0%
Firm Characteristics			
Firm age	younger than 5 years	28	27.2%
	6-15 years	47	45.6%
	16-25 years	18	17.5%
	26-35 years	8	7.8%
	36-45 years	2	1.9%
	older than 46 years	5	1.9%
Number of employees	less than 50 employees	100	97.1%
	51-100 employees	2	1.9%
	101-250 employees	1	1.0%
	more than 251 employees	0	
Industry	manufacturing	13	12.6%
	service	90	87.4%

Study 3 – Measures

In this section, the measurement instruments deployed to operationalize the constructs in the conceptual model will be presented.

Dependent Variables

The same four scales of success measures utilized in Study 2 are used in Study 3, as well. These are comparative financial success, comparative non-financial success, firm robustness and personal well-being. The reliability of each of the scales were high, with a Cronbach's alpha of 0.791 for comparative financial success, 0.828 for comparative non-financial success, 0.817 for firm robustness, and 0.915 for personal well-being.

Independent Variables

The network structure elements identified by Hoang and Antoncic (2003) are used as independent variables. In this study, a name generator analysis is used, where the initials of the name of each member of the entrepreneur's network is obtained from the participants. The procedure is adapted from Baer (2010). As employed by Roberts et al. (2009), respondents were asked to list all people in their network with

whom they consider to have some kind of personal relationship and for whom all of the following three conditions apply: 1) they have contact details; 2) they have had some sort of contact within the last 12 months; 3) they feel they would wish the relationship to continue. In a similar way as employed by Roberts et al. (2009), respondents were asked to look through mobile telephone address book or e-mail address book to prompt their memory. In the name generator matrix, respondents were asked whether they have communicated anything related to business with that person, that person's profession, whether that person is a 1) friend / acquaintance / colleague, 2) affinal relative or 3) non-affinal relative; and lastly how frequently the entrepreneur communicates with that person. The frequency of the communication is measured on a 5-point scale, where "1" is "less frequently than yearly", "2" is "one or a couple of times in a year", "3" is "one or a couple of times in a month", "4" is "one or a couple of times in a week", and "5" is "daily".

As employed by Baer (2010), the number of the initials that a respondent named indicated the network size of that respondent. Baer (2010) employed Blau's (1977) index of heterogeneity based on the affiliations assigned to each contact. Accordingly, heterogeneity = $1 - \sum p_i^2$, where p_i is the proportion of contacts in the i th category (e.g., Processing, Marketing). In this thesis, the network diversity is measured in two ways. The first one (occupational network diversity) classifies the names listed in the generator according to their professions; the proportion with different professions constitutes a measure of the diversity. Another diversity measure (relational network diversity) is related to tie. The respondents are asked to choose from among one of the three options for each person they listed; friend / acquaintance / colleague, or affinal relative or non-affinal relative. Again, by

calculating the proportion of similar ties in one's list one could measure the diversity in his relational network.

Baer (2010) asked three questions to measure tie strength, averaged responses to the three items across all contacts in one's network and then averaged these scores across items (Baer, 2010). In order to reduce the burden on respondents, we asked only one question; frequency of communication. Thus, to calculate one's tie strength, we averaged frequency of communication scores across all contacts in one's network.

Mediators

Access to resources is questioned in two parts. In the first part, it is asked how easily the entrepreneur can reach informational, financial and motivational resources; and in the second part, the support of the network in reaching these resources is questioned. Both parts are measured on 5-point Likert scales, where 1 is "definitely disagree" and 5 is "definitely agree". A sample item for the first part is "I can easily access to necessary information to do my job better"; and one for the second part is "I gain information from the individuals in my network who help me perform my job better". Factor analyses resulted in one-factor solution with a high internal reliability, Cronbach's alpha of 0.849. Thus, six items are grouped as one and named as access to resources.

Table 8. Measures and Cronbach's Alpha Values for the Variables used in Study3

Variable Name	Source	Number of Items	Reliability
Comparative financial success	Denison (2000)	5 items (1 item deleted due to poor loading)	$\alpha = 0.791$
Comparative non-financial success	Denison (2000)	4 items + 2 items by the researchers	$\alpha = 0.828$
Firm robustness	Author generated	8 items	$\alpha = 0.817$
Personal well-being	Author generated	10 items (1 item deleted due to poor loading)	$\alpha = 0.915$
Network size	Baer (2010)	Name generator	-
Tie strength	Baer (2010)	1 item	-
Occupational diversity	Baer (2010)	1 item	-
Relational diversity	Roberts et al. (2009)	1 item	-
Access to resources	Spreitzer (1996)	6 items	$\alpha = 0.849$

Reliability and Validity of the Measurement Theory

The measurement theory employed in the present study involves multi-item constructs; hence, the psychometric properties of these measures must be assessed before moving to hypothesis testing. A confirmatory factor analysis (CFA) was conducted using AMOS 18.0 to assess construct validity. The visual diagram of CFA, which depicts the measurement theory of the present research, was drawn in the input editor of AMOS 18.0 and is shown in Figure 3, below:

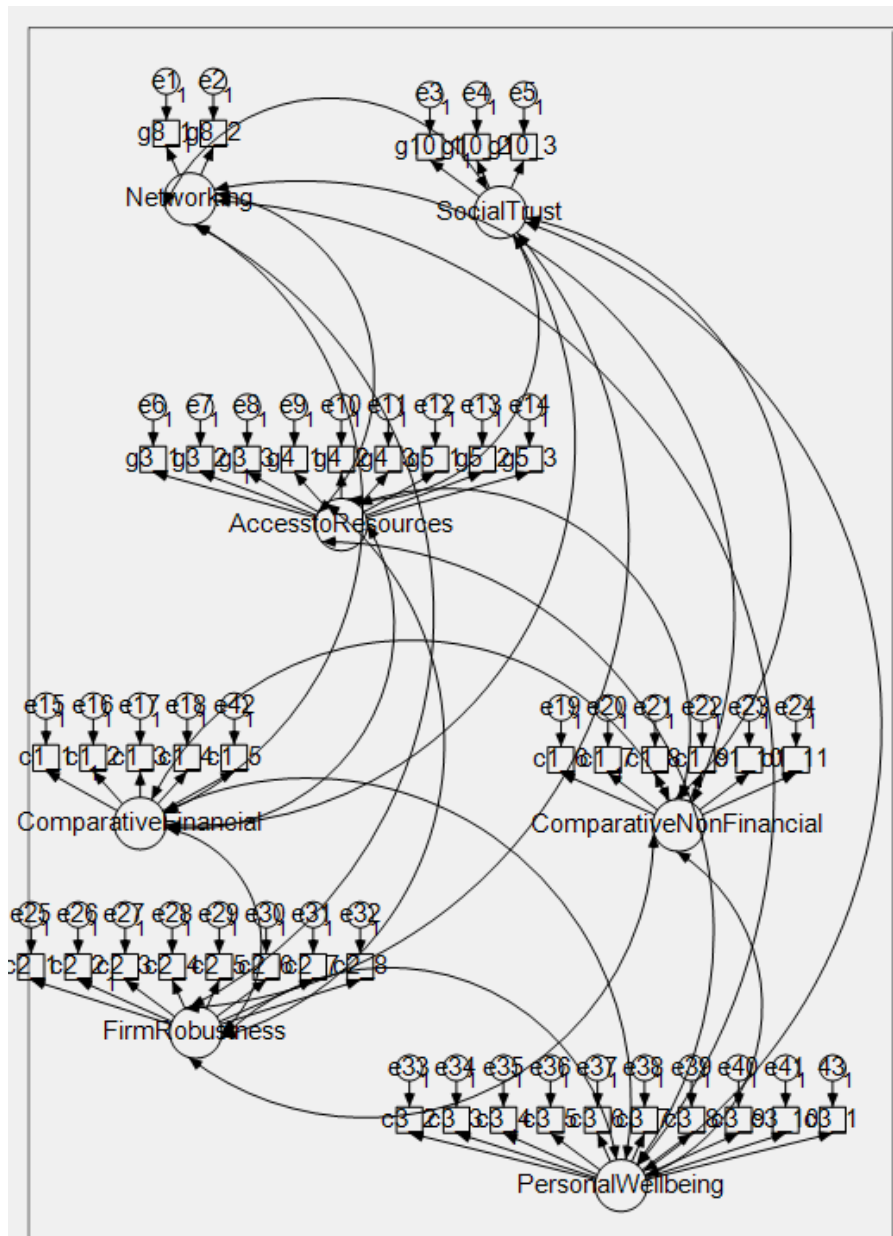


Figure 3. Visual depiction of the measurement model

Construct validity refers to the degree to which a construct measures the phenomenon it is purported to measure. It has four components, namely, reliability, convergent validity, discriminant validity, and nomological validity. Reliability is the degree to which a measure is free from random error. It is established either by internal consistency by assessing the correlation of each indicator with the total score of the whole scale, or assessing the degree of consistency between multiple

measurements of the construct at different points in time. Cronbach's Alpha and composite reliability provides evidence for internal consistency, while test-retest is a means for the latter. Cronbach's Alpha values and correlation coefficients (for scales with two items) are reported in the previous section, which shows that the reliability scores are high. Composite reliabilities will be reported in this section. Convergent validity is the extent to which an item correlates highly with other items measuring the same construct, whereas discriminant validity is about the uniqueness of the construct, and the extent to which it is not correlated with other constructs that are not supposed to be related with it. Finally, nomological validity refers to the degree that the relationships among the constructs in a measurement theory are explicable by theory (Hair et al., 2010).

Indicators of convergent validity provided by CFA are the factor loadings, average variance extracted, and composite reliability. All factor loadings must be statistically significant and standardized loading estimates should be higher than 0.5 (Hair et al., 2010). As shown in Table 9, below, the standardized loadings for the items SocTrust3 ("I can always rely on people in my network to make my job easier") ($\lambda_i = 0.482$), CompFin5 ("growth rate") ($\lambda_i = 0.352$), and PersWell10 ("this job makes me feel more free") ($\lambda_i = 0.303$) were below the acceptable cut-off point of 0.5, hence are eliminated from the scale. The rest of the standardized loadings were significant ($p < 0.001$) and higher than 0.5. As the second indicator of convergent validity, average variance extracted (AVE) is computed by dividing the sum of squared standardized loadings to number of items. AVE of 0.5 or higher is considered as acceptable for convergent validity (Hair et al. 2010). All AVE values were above 0.5. Finally, composite reliability is computed from the squared sum of factor loadings (λ_i) and the sum of the error variance terms (δ_i) as follows:

$$\text{Composite Reliability} = \frac{\left(\sum_{i=1}^n \lambda_i\right)^2}{\left(\sum_{i=1}^n \lambda_i\right)^2 + \left(\sum_{i=1}^n \delta_i\right)}$$

Table 9. Indicators of Convergent Validity

Construct	Item	Stan. Loadings	AVE	Composite Reliability
Networking	Networking1	0,922	0,50	0,67
	Networking2	0,965		
Social Trust	SocTrust1	0,952	0,50	0,67
	SocTrust2	0,956		
Access to Resources	AccRes1	0,788	0,50	0,90
	AccRes2	0,803		
	AccRes3	0,819		
	AccRes4	0,780		
	AccRes5	0,825		
	AccRes6	0,829		
	AccRes7	0,878		
	AccRes8	0,856		
	AccRes9	0,899		
Comparative Financial Success	compFin1	0,924	0,50	0,80
	compFin2	0,958		
	compFin3	0,980		
	compFin4	0,513		
Personal well-being	PersWell1	0,794	0,50	0,90
	PersWell 2	0,745		
	PersWell 3	0,795		
	PersWell 4	0,780		
	PersWell 5	0,838		
	PersWell 6	0,796		
	PersWell 7	0,796		
	PersWell 8	0,827		
	PersWell 9	0,644		
Firm Robustness	FirmRob1	0,594	0,50	0,89
	FirmRob2	0,734		
	FirmRob3	0,824		

	FirmRob4	0,818		
	FirmRob5	0,715		
	FirmRob6	0,777		
	FirmRob7	0,802		
	FirmRob8	0,666		
Comparative Nonfinancial Success	compNonFin1	0,747	0,50	0,86
	compNonFin2	0,738		
	compNonFin3	0,668		
	compNonFin4	0,682		
	compNonFin5	0,726		
	compNonFin6	0,706		

All indicators of convergent validity shown in Table 9 suggest adequate convergent validity for the measurement model.

Discriminant validity is assessed by comparing each factor's variance extracted with the square of the correlation estimate between that factor and other factors (Fornell & Larcker, 1981). Discriminant validity is established when the variance extracted estimates are greater than the squared correlation estimates, which means that the latent construct explains its indicators better than it explains other constructs (Fornell & Larcker, 1981). Diagonal values in the matrix shown in Table 10, gives the average variance extracted for each construct and the rest of the matrix includes squared correlation estimates between constructs. As seen in Table 10, for all the constructs, the variance extracted values are higher than the squared correlation estimates between others. This fact provides good evidence for discriminant validity.

Table 10. Squared Correlation Coefficient Matrix and AVEs (diagonal values)

	NE	ST	AR	CFS	CNS	FR	PW
Networking	0.50						
Social Trust	0.08	0.50					
Access to Resources	0.17	0.12	0.50				
Comparative Financial	0.05	0.08	0.03	0.50			
Comparative Non-financial	0.09	0.03	0.09	0.09	0.50		
Firm Robustness	0.08	0.08	0.13	0.17	0.39	0.50	
Personal well-being	0.08	0.03	0.09	0.07	0.25	0.20	0.50

Nomological validity is assessed by examining whether the correlations among the constructs in the measurement theory makes sense (Hair et al., 2010). Table 11 shows the matrix of construct correlations. Strong correlations exist among the four constructs capturing entrepreneurial success. Additionally, networking is correlated with access to resources, and access to resources is mildly correlated with three out of four success measures. These constructs are hypothesized to be correlated in this manner and are explicable by extant literature. This overview provides supportive evidence for nomological validity.

Table 11. Correlation Coefficient Matrix

	NE	ST	AR	CFS	CNS	FR	PW
Networking	1						
Social Trust	0.28*	1					
Access to Resources	0.41*	0.35*	1				
Comparative Financial	0.22*	0.29*	0.16	1			
Comparative Non-financial	0.30*	0.17	0.31*	0.29*	1		
Firm Robustness	0.28*	0.29*	0.36*	0.41*	0.62*	1	
Personal well-being	0.28*	0.18	0.31*	0.26*	0.50*	0.44*	1

* Correlations are significant at 0.001 level.

CHAPTER 5

DATA ANALYSES AND HYPOTHESES TESTING

Study 2

Table 12 below shows the correlation matrix of all variables used in Study2 in addition to the descriptive statistics, including mean and standard deviation values for each.

As it is demonstrated in the table, strong correlations exist among the four constructs capturing entrepreneurial success. Additionally, the components of social capital, namely, networking and social trust are correlated with access to resources, and with all of the success variables. Access to resources is also correlated with all four success measures.

Table 12. Descriptive Statistics and Pearson Correlations for Study2

	Mean	S.D	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Firm age	12.66	10.83												
(2) Number of employees	14.02	24.90	-.029											
(3) Industry	2.36	0.78	.182**	-.085										
(4) Networking	3.94	1.14	.017	.081	.053									
(5) Social trust	3.49	1.03	.101	.111	-.038	.268**								
(6) Education level	3.22	1.16	-.105	.032	-.041	.058	.205**							
(7) General work experience	21.14	11.29	.688**	-.036	.139*	.023	.106	-.184**						
(8) Industry-specific work experience	13.93	11.04	.857**	-.061	.196**	.008	.119	-.141*	.701**					
(9) Access to resources	4.69	0.55	-.094	.094	-.043	.385**	.326**	.233**	-.039	-.078				
(10) Comparative financial	3.58	0.82	.170**	.179**	.046	.231**	.295**	.073	.100	.094	.174**			
(11) Comparative non-financial	4.61	0.50	.005	.123*	.052	.288**	.164**	.179**	.044	.079	.281**	.343**		
(12) Firm robustness	4.19	0.65	.230**	.230**	.032	.275**	.291**	.187**	.194**	.251**	.354**	.468**	.562**	
(13) Personal well-being	4.74	0.46	.025	.132*	.080	.274**	.178**	.131*	-.026	.006	.302**	.301**	.454**	.420**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Study 2 – Model Testing

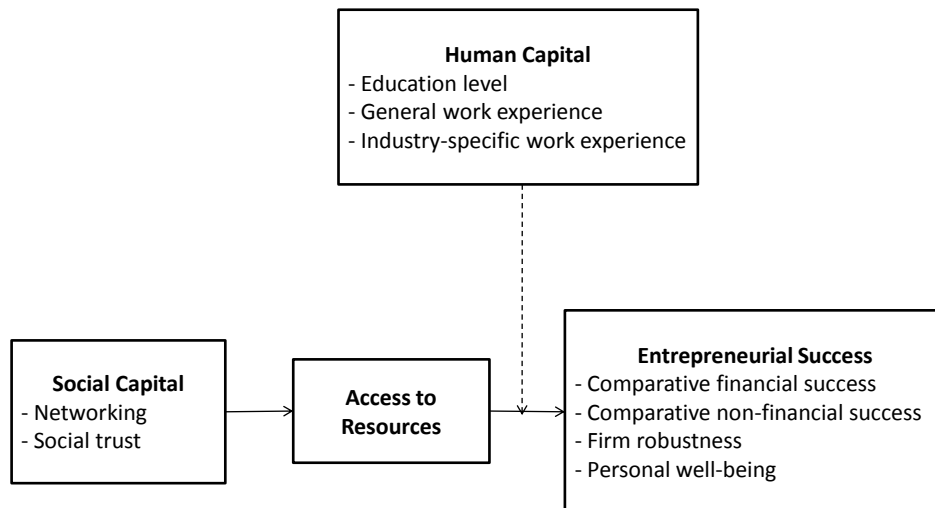


Figure 4. The research model of Study2

In Study2, the research model posits that social capital elements positively influence access to resources, which in turn predicts entrepreneurial success (H7). In other words, the main hypothesis is that access to resources mediates the effect of social capital on entrepreneurial success. A least-squares multiple regression is performed for each of the entrepreneurial success constructs (comparative financial success, comparative non-financial success, firm robustness, and personal well-being) to test the overall model predicting entrepreneurial success, involving social capital elements (networking and social trust) and access to resources as independent variables; firm age, number of employees and industry as control variables; and

entrepreneurial success constructs as dependent variables. The regression analyses were performed in two blocks; where the first block included the control variables to account for the variance explained by them, and then the second block included the independent variables.

The tables below show the results of the least-squares multiple regression analysis for the first dependent variable, comparative financial success:

Table 13. Results of the Least-squares Multiple Regression Analysis for Comparative Financial Success – Study2

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	,254 ^a	,065	,053	,79269	,065	5,823	3	253	,001	
2	,414 ^b	,172	,152	,75038	,107	10,778	3	250	,000	2,175

a. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAge

b. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAge, NETWORKEFFORT, SOCIALTRUST, ACCESSTORESOURCES

c. Dependent Variable: COMSUCCESSFIN

Table 14. Regression Coefficients for Comparative Financial Success – Study 2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
	1						
(Constant)	3,240	,167		19,422	,000		
Firm age	,013	,005	,169	2,733	,007	,972	1,029
Number of employees	,006	,002	,189	3,091	,002	,991	1,009
Industry	,041	,065	,039	,632	,528	,964	1,037
2							
(Constant)	1,800	,444		4,058	,000		
Firm age	,011	,004	,141	2,371	,018	,943	1,061
Number of employees	,005	,002	,146	2,508	,013	,975	1,026
Industry	,050	,062	,048	,815	,416	,954	1,048
Networking	,100	,046	,139	2,192	,029	,827	1,210
Social Trust	,183	,049	,232	3,712	,000	,845	1,183
Access to Resources	,092	,098	,062	,948	,344	,784	1,275

Dependent Variable: Comparative financial success

As the results suggest, networking ($B=0.139$, $t=2.192$, $p<.05$) and social trust ($B=0.232$, $t=3.712$, $p<.001$) are found to be significant factors predicting comparative financial success, along with the control variables of firm age ($B=0.141$, $t=2.371$, $p<.05$) and number of employees ($B=0.146$, $t=2.508$, $p<.05$) and 17.2% of the variance is explained by the model ($p<.001$). Contrary to expectations, the effect of access to resources is non-significant.

The tables below show the results of the least-squares multiple regression analysis for the dependent variable comparative non-financial success:

Table 15. Results of the Least-squares Multiple Regression Analysis for Comparative Non-financial Success – Study 2

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.138 ^a	.019	.008	.50173	.019	1,666	3	257	.175	
2	.354 ^b	.125	.104	.47661	.106	10,266	3	254	.000	1,847

a. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRIMAGE

b. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRIMAGE, NETWORKEFFORT, SOCIALTRUST, ACCESSTORESOURCES

c. Dependent Variable: COMSUCCESSIONFIN

Table 16. Regression Coefficients for Comparative Non-financial Success – Study 2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	4,478	,105		42,805	,000		
1 Firm age	9,850E-005	,003	,002	,034	,973	,968	1,033
1 Number of employees	,003	,001	,129	2,077	,039	,992	1,008
1 Industry	,040	,041	,062	,984	,326	,961	1,040
2 (Constant)	3,281	,281		11,696	,000		
2 Firm age	,001	,003	,014	,224	,823	,938	1,066
2 Number of employees	,002	,001	,091	1,533	,126	,975	1,026
2 Industry	,036	,039	,056	,923	,357	,951	1,051
2 Networking	,085	,029	,190	2,934	,004	,824	1,214
2 Social Trust	,018	,031	,037	,580	,563	,845	1,183
2 Access to Resources	,174	,062	,187	2,810	,005	,779	1,283

Dependent Variable: Comparative non-financial success

As seen from the tables above, networking ($B=0.190$, $t=2.934$, $p<.005$) and access to resources ($B=0.187$, $t=2.810$, $p<.005$) are significant predictors of comparative non-financial success, and the model explains 12.5% of the variance ($p<.001$).

With respect to the third dependent variable, firm robustness, the tables below present the findings:

Table 17. Results of the Least-squares Multiple Regression Analysis for Firm Robustness – Study 2

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,329 ^a	,108	,098	,61571	,108	10,172	3	251	,000	
2	,506 ^b	,256	,238	,56594	,147	16,363	3	248	,000	1,779

a. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAGE

b. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAGE, NETWORKEFFORT, SOCIALTRUST, ACCESSTORESOURCES

c. Dependent Variable: FIRMSUCCESS

Table 18. Regression Coefficients for Firm Robustness – Study 2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,914	,129		30,452	,000		
	Firm age	,014	,004	,233	3,851	,000	,968	1,033
	Number of employees	,006	,002	,237	3,958	,000	,991	1,009
	Industry	,008	,050	,010	,160	,873	,960	1,042
2	(Constant)	1,924	,335		5,744	,000		
	Firm age	,014	,003	,242	4,284	,000	,942	1,062
	Number of employees	,005	,001	,191	3,439	,001	,974	1,027
	Industry	,015	,046	,019	,335	,738	,951	1,052
	Networking	,065	,035	,113	1,866	,063	,822	1,216
	Social Trust	,081	,038	,129	2,162	,032	,841	1,190
	Access to Resources	,307	,074	,259	4,156	,000	,771	1,296

Dependent variable: Firm robustness

As the results of the regression analysis demonstrate, social trust ($B=0.129$, $t=2.162$, $p<.05$) and access to resources ($B=0.259$, $t=4.156$, $p<.001$), along with the control variables of firm age ($B=0.242$, $t=4.284$, $p<.001$) and number of employees ($B=0.191$, $t=3.439$, $p<.005$), are significant factors that predict firm robustness and the model explains 25.6% of the variance ($p<.001$).

The results of the last dependent variable, personal well-being are shown in the tables below:

Table 19. Results of the Least-squares Multiple Regression Analysis for Personal Well-being – Study2

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,159 ^a	,025	,014	,44977	,025	2,238	3	259	,084	
2	,355 ^b	,126	,105	,42843	,101	9,815	3	256	,000	1,812

a. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAGE

b. Predictors: (Constant), SECTOR, NUMBERofEMPLOYEES, FIRMAGE, NETWORKEFFORT, SOCIALTRUST, ACCESSTORESOURCES

c. Dependent Variable: SUBJECTIVESUCCESS

Table 20. Regression Coefficients for Personal Well-being – Study2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4,582	,093				
	Firm age	,001	,003	,016	,251	,802	,966
	Number of employees	,003	,001	,140	2,270	,024	,993
	Industry	,049	,036	,084	1,349	,179	,960
2	(Constant)	3,479	,252		13,794	,000	
	Firm age	,001	,003	,026	,423	,673	,935
	Number of employees	,002	,001	,102	1,730	,085	,975
	Industry	,048	,035	,083	1,389	,166	,950
	Networking	,063	,026	,157	2,440	,015	,824
	Social Trust	,024	,028	,055	,861	,390	,845
	Access to Resources	,166	,055	,198	2,990	,003	,781

Dependent Variable: Personal well-being

Results suggest that networking ($B=0.157$, $t=2.440$, $p<.05$) and access to resources ($B=0.198$, $t=2.990$, $p<.005$) are significant predictors of personal well-being, and the model explains 12.6% of the variance ($p<.001$).

As the model is tested for each dependent variable, it is seen that access to resources is a significant factor predicting three out of four dependent variables of entrepreneurial success. Thus, H7 is partially supported. The table below summarizes the findings related to the main effects tested in Study2.

Table 21. Summary of Main Effects – Study2

	Comparative financial success	Comparative non-financial success	Firm robustness	Personal well-being
Networking	2.192*	2.934*	X	2.440*
Social trust	3.712***	X	2.162*	X
Access to resources	X	2.810*	4.156***	2.990**

* sig. at 0.05

** sig. at 0.005

***sig. at 0.001

Following the procedure suggested by Baron and Kenny (1986), the hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation for each dependent variable.

Study 2 – Mediating Effects

In hypothesis 8, it is stated that access to resources mediates the effect of networking on entrepreneurial success. For the dependent variable comparative financial success, mediation analysis is not conducted because the direct effect of access to resources is nonsignificant as seen from Table 14.

For the dependent variable comparative non-financial success: 1) networking is related significantly to access to resources ($B=0.379$, $t = 6.622$; $p < .001$), 2) networking is related significantly to comparative non-financial success ($B=0.271$, $t = 4.519$; $p < .001$), and 3) when access to resources is introduced into the relationship between networking and comparative non-financial success, the impact of networking remains to be significant, but with a smaller effect size ($B=0.195$, $t = 3.062$; $p < .005$). Thus, access to resources partially mediates the relationship between networking and comparative non-financial success, providing corroborative evidence for H8.

For the dependent variable firm robustness: 1) networking is related significantly to access to resources ($B=0.379$, $t = 6.622$; $p < .001$), 2) networking is related significantly to firm robustness ($B=0.247$, $t = 4.262$; $p < .001$), and 3) when access to resources is introduced into the relationship between networking and firm robustness, the impact of networking remains to be significant, but with a smaller effect size ($B=0.132$, $t = 2.191$; $p < .05$). Thus, access to resources partially mediates the relationship between networking and firm robustness, providing corroborative evidence for H8.

For the dependent variable personal well-being: 1) networking is related significantly to access to resources ($B=0.379$, $t = 6.622$; $p < .001$), 2) networking is related significantly to personal well-being ($B=0.247$, $t = 4.122$; $p < .001$), and 3) when access to resources is introduced into the relationship between networking and personal well-being, the impact of networking remains to be significant, but with a smaller effect size ($B=0.166$, $t = 2.607$; $p < .05$). Thus, access to resources partially mediates the relationship between networking and personal well-being, providing corroborative evidence for H8.

As a summary, first condition of mediation requires networking to be significantly related to access to resources (corresponds to H1). The results revealed a significant relationship between networking and access to resources ($B=0.379$, $t = 6.622$; $p < .001$); thus H1 is supported. Considering the results related to the mediating effect of access to resources between networking and entrepreneurial success, access to resources partially mediates the relationship between networking and entrepreneurial success for all of the dependent variables, except for comparative financial success; H8 is partially supported.

Hypothesis 9 states that access to resources mediates the effect of social trust on entrepreneurial success. Again, the hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation (Baron & Kenny, 1986). Since access to resources had no significant effect on comparative financial success, mediation analysis is not conducted for the dependent variable comparative financial success.

For the dependent variable comparative non-financial success: 1) social trust is related significantly to access to resources ($B=0.334$, $t = 5.668$; $p < .001$), 2) social

trust is related significantly to comparative non-financial success ($B=0.149$, $t = 2.409$; $p < .05$), and 3) when access to resources is introduced into the relationship between social trust and comparative non-financial success, the impact of social trust becomes insignificant ($B=0.066$, $t=1.024$). Thus, access to resources fully mediates the relationship between social trust and comparative non-financial success, providing corroborative evidence for H9.

For the dependent variable firm robustness: 1) social trust is related significantly to access to resources ($B=0.334$, $t = 5.668$; $p < .001$), 2) social trust is related significantly to firm robustness ($B=0.248$, $t = 4.247$; $p < .001$), and 3) when access to resources is introduced into the relationship between social trust and firm robustness, the impact of social trust remains to be significant, but with a smaller effect size ($B=0.146$, $t = 2.450$; $p < .05$). Thus, access to resources partially mediates the relationship between social trust and firm robustness, providing corroborative evidence for H9.

For the dependent variable personal well-being: 1) social trust is related significantly to access to resources ($B=0.334$, $t = 5.668$; $p < .001$), 2) social trust is related significantly to personal well-being ($B=0.162$, $t = 2.639$; $p < .05$), and 3) when access to resources is introduced into the relationship between social trust and personal well-being, the impact of social trust becomes insignificant ($B=0.079$, $t=1.245$). Thus, access to resources fully mediates the relationship between social trust and personal well-being, providing corroborative evidence for H9.

First condition of mediation requires social trust be significantly related to access to resources (corresponds to H2). The results revealed a significant relationship between social trust and access to resources ($B=0.334$, $t = 5.668$; p

< .001); thus H2 is supported. Considering the results related to the mediating effect of access to resources between social trust and entrepreneurial success, access to resources partially or fully mediates the relationship between social trust and entrepreneurial success for all of the dependent variables, except for comparative financial success; H9 is partially supported.

The table below summarizes the findings related to the mediating effects of access to resources tested in Study2:

Table 22. Summary of Mediating Effects of Access to Resources – Study2

	Comparative non-financial success	Firm robustness	Personal well-being
Networking	partial	partial	partial
Social trust	full	partial	full

Study 2 – Tests of Moderated Mediation

In the hypotheses 14, 15, and 16, it is hypothesized that the effect of access to resources on entrepreneurial success is moderated by the components of human capital. In other words, it is expected that the strength of the mediated effects in the model is linearly contingent on the level of human capital of the entrepreneur. This overview, the simultaneous occurrence of both moderation and mediation, is referred to as moderated mediation (Preacher, Rucker & Hayes, 2007).

Hayes's macro based on the bootstrap method to investigate conditional indirect effects in a model is used to test the hypotheses involving moderated mediation (MODMED macro v1.1, Model 3). "The macro, once executed, creates a new command in SPSS called MODMED. Using the MODMED command, the user provides information about which variables in the model to be estimated function as the independent variable, the mediator, the outcome, and the moderator in the desired analysis" (Preacher et al., 2007, p. 207). The macro defined for Model 3 applied to this research is as follows:

modmed dv = entrepreneurial success / med = access to resources / dvmodel = access to resources human capital elements / mmodel = social capital elements.

The macro is executed for each dependent variable of entrepreneurial success, for each human capital and social capital element separately.

Three separate bootstrap analyses, using 5000 bootstrap resamples and a bias corrected and accelerated 95% confidence interval (CI) as recommended by Preacher et al. (2007), are employed to assess the moderated mediation effect of access to

resources on success for each of the human capital moderators, namely, education, general work experience, and industry-specific work experience. The analyses were repeated for the success measures that were found to be significantly related with access to resources (comparative non-financial success, firm robustness, and personal well-being).

In hypothesis 14, it is stated that the indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by education level of the entrepreneur. The results of the test of conditional indirect effects are reported in Table 23 for the dependent variables comparative non-financial success, firm robustness, and personal well-being, respectively.

For the dependent variable comparative non-financial success, when the indirect effects are examined, it can be seen from Table 23, that the indirect effect of the extent of networking is stronger and significant in the high education group, but is weaker and nonsignificant in the low education group (providing corroborative evidence for H14). The indirect effect of social trust is stronger and significant in the high education group, although weaker but still significant in the low education group. Further, as recommended by Preacher et al. (2007), bias corrected and accelerated confidence intervals are examined, none were found to be zero ($CI_{\text{Extent of Networking}}: 0,0149 - 0,0697$; $CI_{\text{Social Trust}}: 0,0218 - 0,0804$). Preacher et al. (2007) state that the “null hypothesis of no conditional indirect effect can be rejected if the CI does not contain 0” (p.199). This means that it can be safely concluded that education moderates the mediated effects of extent of networking in the model for comparative non-financial success, providing support for Hypothesis 14, but not for social trust.

For the dependent variable firm robustness, when the indirect effects are examined, it can be seen from Table 23, that levels of education are all significant and have similar effect sizes. Thus it is concluded that level of education does not have a moderating impact on the indirect effects of networking and social trust through access to resources on firm robustness.

For the dependent variable personal well-being, when the indirect effects are examined, it can be seen from Table 23, that the indirect effect of the extent of networking is stronger and significant in the high education group, but is weaker and nonsignificant in the low education group (H14). The indirect effect of social trust is stronger and significant in the high education group, although weaker still significant in the low education group (H14). Further, when the bias corrected and accelerated confidence intervals are examined, none were found to be zero ($CI_{\text{Extent of Networking}}: 0,0153 - 0,1044$; $CI_{\text{Social Trust}}: 0,0190 - 0,1113$). Providing support for hypothesis 14, it is concluded that education moderates the mediated effects of extent of networking in the model for personal well-being, but not for social trust.

Considering the above discussion about the moderating effect of education level on entrepreneurial success, it is concluded that education level of the entrepreneurs moderates the mediated effects of extent of networking in the model for the dependent variables comparative non-financial success and personal well-being; thus H14 is partially supported.

Table 23. Moderated Mediation Results for Education Level of the Entrepreneurs

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Education	-1 SD	0,022	0,014	1,599	0,109	0,031	0,013	2,352	0,019
	Mean	0,032	0,013	2,519	0,012	0,039	0,013	3,096	0,002
	+1 SD	0,041	0,018	2,291	0,022	0,048	0,018	2,649	0,008

Dependent Variable: Comparative Non-Financial Success

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Education	-1 SD	0,053	0,019	2,821	0,005	0,054	0,018	2,923	0,004
	Mean	0,062	0,018	3,515	0,001	0,061	0,017	3,479	0,001
	+1 SD	0,071	0,025	2,886	0,004	0,068	0,024	2,833	0,005

Dependent Variable: Firm robustness

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Education	-1 SD	0,022	0,012	1,803	0,071	0,028	0,012	2,357	0,018
	Mean	0,038	0,011	3,204	0,001	0,042	0,012	3,474	0,001
	+1 SD	0,053	0,017	3,107	0,002	0,057	0,018	3,217	0,001

Dependent Variable: Personal well-being

In hypothesis 15, it is stated that the indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by general work experience of the entrepreneur. The results of the test of conditional indirect effects are reported in Table 24 for the dependent variables comparative non-financial success, firm robustness, and personal well-being, respectively.

For the dependent variable comparative non-financial success, although the indirect effects are stronger in the high general work experience group, when compared to the low general work experience group, the differences are negligible. Further, zeros were found in the confidence intervals ($CI_{\text{Extent of Networking}}$: - 0,0049 – 0,0792; $CI_{\text{Social Trust}}$: 0,0024 – 0,0893), hence it is concluded that general work experience does not moderate the mediated effects in the model for comparative non-financial success.

For the dependent variable firm robustness, when the indirect effects are examined, it can be seen that levels of general work experience are all significant and have similar effect sizes. Thus it is concluded that general work experience does not moderate the mediated effects in the model for firm robustness.

Finally, for the dependent variable personal well-being, the indirect effect of extent of networking did not differ among high and low general work experience groups. Although the indirect effect of social trust was stronger in the high general work experience group, when compared to the low general work experience group, zeros were found in the confidence intervals ($CI_{\text{Extent of Networking}}$: - 0,0250 – 0,0651; $CI_{\text{Social Trust}}$: - 0,0156 – 0,0695). Hence, contrary to Hypothesis 15, it is concluded that general work experience does not moderate the mediated effects in the model for personal well-being.

Considering the above discussion about the moderating effect of general work experience on entrepreneurial success, it is concluded that general work experience of the entrepreneurs does not moderate the mediated effects in the model for none of the dependent variables of entrepreneurial success; thus H15 is not supported.

Table 24. Moderated Mediation Results for General Work Experience of the Entrepreneurs

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect Effect	SE	z	p	Conditional Indirect Effect	SE	z	p
General Work Exp.	-1 SD	0,034	0,017	2,027	0,042	0,039	0,017	2,355	0,018
	Mean	0,034	0,012	2,822	0,005	0,041	0,013	3,228	0,001
	+1 SD	0,036	0,015	2,405	0,016	0,042	0,015	2,876	0,004

Dependent Variable: Comparative Non-financial Success

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect Effect	SE	z	p	Conditional Indirect Effect	SE	z	p
General Work Exp.	-1 SD	0,069	0,023	2,995	0,003	0,065	0,023	2,879	0,004
	Mean	0,069	0,017	3,953	0,001	0,066	0,016	3,754	0,001
	+1 SD	0,069	0,02	3,439	0,001	0,066	0,02	3,343	0,001

Dependent Variable: Firm robustness

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect Effect	SE	z	p	Conditional Indirect Effect	SE	z	p
General Work Exp.	-1 SD	0,038	0,016	2,427	0,015	0,038	0,016	2,494	0,012
	Mean	0,036	0,011	3,216	0,001	0,039	0,011	3,404	0,001
	+1 SD	0,035	0,014	2,421	0,015	0,041	0,014	2,848	0,004

Dependent Variable: Personal well-being

In hypothesis 16, it is stated that the indirect effects of extent of networking and social trust through access to resources on entrepreneurial success is moderated by industry-specific work experience of the entrepreneur. The results of the test of conditional indirect effects are reported in Table 25 for the dependent variables

comparative non-financial success, firm robustness, and personal well-being, respectively.

For the dependent variable comparative non-financial success, the indirect effects of the extent of networking and social trust are stronger and significant in the high industry-specific experience group, but are weaker and nonsignificant in the low industry-specific experience group. Again, when the bias corrected and accelerated confidence intervals are examined, none were found to be zero ($CI_{\text{Extent of Networking}}: 0,0095 - 0,0519$; $CI_{\text{Social Trust}}: 0,0020 - 0,0612$). Providing support for hypothesis 16, it is concluded that industry-specific work experience moderates the mediated effects in the model for comparative non-financial success.

For the dependent variable firm robustness, when the indirect effects are examined, it can be seen that levels of industry-specific work experience are all significant and have similar effect sizes. Thus it is concluded that industry-specific work experience does not have a moderating indirect effect of networking and social trust through access to resources on firm robustness.

For the dependent variable personal well-being, the indirect effects of the extent of networking and social trust are stronger and significant in the high industry-specific work experience group, but are weaker and nonsignificant in the low industry-specific work experience group. Again, when the bias corrected and accelerated confidence intervals are examined, none were found to be zero ($CI_{\text{Extent of Networking}}: 0,0091 - 0,0913$; $CI_{\text{Social Trust}}: 0,0057 - 0,0851$). Providing support for hypothesis 16, it is concluded that industry-specific work experience moderates the mediated effects in the model for personal well-being.

Considering the above discussion about the moderating effect of industry-specific work experience on entrepreneurial success, it is concluded that industry-specific work experience of the entrepreneurs moderates the mediated effects in the model for the dependent variables comparative non-financial success and personal well-being; thus H16 is partially supported

Table 25. Moderated Mediation Results for Industry-specific Work Experience of the Entrepreneurs

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Industry-Specific Work Exp.	-1 SD	0,019	0,016	1,164	0,244	0,023	0,016	1,474	0,140
	Mean	0,035	0,012	2,863	0,004	0,041	0,012	3,246	0,001
	+1 SD	0,051	0,017	3,037	0,002	0,058	0,017	3,392	0,001

Dependent Variable: Comparative Non-Financial Success

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Industry-Specific Work Exp.	-1 SD	0,06	0,022	2,744	0,006	0,054	0,021	2,548	0,010
	Mean	0,071	0,017	4,116	0,001	0,068	0,017	3,886	0,001
	+1 SD	0,082	0,022	3,682	0,001	0,081	0,022	3,638	0,001

Dependent Variable: Firm robustness

Moderator	Level	Extent of Networking				Social Trust			
		Conditional Indirect				Conditional Indirect			
		Effect	SE	z	p	Effect	SE	z	p
Industry-Specific Work Exp.	-1 SD	0,019	0,015	1,306	0,191	0,023	0,014	1,609	0,107
	Mean	0,033	0,011	2,971	0,003	0,036	0,011	3,218	0,001
	+1 SD	0,047	0,014	3,347	0,001	0,050	0,014	3,475	0,001

Dependent Variable: Personal well-being

Overall, when comparative financial success is dropped from consideration (because access to resources does not mediate the relationship between elements of social capital and comparative financial success), results from the moderated mediation analyses provided support for the moderating effect of education (H14) for the indirect effect of extent of networking and industry-specific work experience (H16) for the indirect effects of extent of networking and social trust for the dependent variables comparative non-financial and personal well-being. However, hypothesis 15 was rejected for all of the dependent variables.

The table below shows the summary results of tests of moderated mediation conducted in Study2:

Table 26. Summary of the Moderated Mediation Tests – Study2

		Comparative non-financial success	Firm robustness	Personal well-being
Education level	Networking	✓	X	✓
	Social trust	X	X	X
General work experience	Networking	X	X	X
	Social trust	X	X	X
Industry-specific work experience	Networking	✓	X	✓
	Social trust	✓	X	✓

Study 3

Table 27 below shows the correlation matrix of all variables used in Study3 in addition to the descriptive statistics, including mean and standard deviation values for each.

As it is demonstrated in the table, strong correlations exist among the four constructs capturing entrepreneurial success. Among the structural elements, occupational diversity is highly correlated with dependent variables and access to resources. Access to resources is also correlated with three of the four success measures.

Table 27. Descriptive Statistics and Pearson Correlations for Study3

	Mean	S.D	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Firm age	12.22	8.78												
(2) Number of employees	10.29	16.13	.346**											
(3) Industry	0.87	0.33	.060	-.008										
(4) Network size	16.97	4.10	-.034	-.048	.047									
(5) Tie strength	4.33	0.55	.204*	.193	.028	-.151								
(6) Occupational diversity	0.79	0.10	.001	-.053	-.055	.465**	-.071							
(7) Relational diversity	0.44	0.17	.008	-.024	-.004	.389**	-.280**	.790**						
(8) Access to resources	3.61	0.62	-.016	-.105	-.038	.374	-.119	.435**	.383**					
(9) Comparative financial	3.31	0.61	.080	.085	-.072	.195	.001	.467**	.349**	.390**				
(10) Comparative non-financial	4.13	0.57	.170	.195*	-.095	.087	.443**	.152	-.031	.175	.361**			
(11) Firm robustness	3.95	0.47	.167	.339**	.118	.205	.042	.318**	.259**	.407**	.366**	.386**		
(12) Personal well-being	4.36	0.56	.011	.071	-.018	.199	.515**	.227*	.052	.275**	.204*	.605**	.300**	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Study 3 – Model Testing

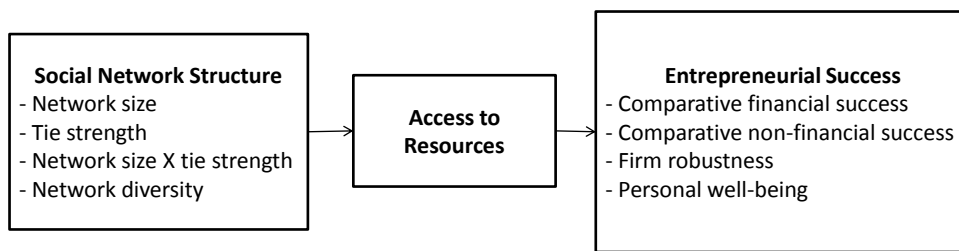


Figure 5. The research model of Study3

In Study 3, the research model posits that elements of social network structure positively influence access to resources, which in turn predicts entrepreneurial success (H7). In other words, the main hypothesis is that access to resources mediates the effect of social network structure on entrepreneurial success. A least-squares multiple regression is performed for each of the entrepreneurial success constructs (comparative financial success, comparative non-financial success, firm robustness, and personal well-being) to test the overall model predicting entrepreneurial success, involving elements of social network structure (network size, tie strength, the interaction of network size and tie strength, and diversity) and access to resources as independent variables; firm age, number of employees and industry as

control variables; and entrepreneurial success constructs as dependent variables. The regression analyses were performed in two blocks; where the first block included the control variables to account for the variance explained by them, and then the second block included the independent variables.

The tables below show the results of the least-squares multiple regression analysis regarding the first dependent variable, comparative financial success:

Table 28. Results of the Least-squares Multiple Regression Analysis for Comparative Financial Success – Study3

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	,126 ^a	,016	-.014	,61076	,016	,533	3	99	,661	2,015
2	,537 ^b	,289	,220	,53567	,273	5,950	6	93	,000	

a. Predictors: (Constant), industry, numberofemployees, firmage

b. Predictors: (Constant), industry, numberofemployees, firmage, diversity2, sizeXtiestrength, accesstoreources, tiestrength, diversity, networksize

c. Dependent Variable: comsuccessfin

Table 29. Regression Coefficients for Comparative Financial Success – Study3

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,351	,186		18,036	,000	
	Firm age	,004	,007	,063	,593	,554	,876
	Number of employees	,002	,004	,063	,590	,557	,879
	Industry	-,137	,182	-,076	-,757	,451	,995
2	(Constant)	,363	2,114		,172	,864	
	Firm age	,003	,007	,044	,465	,643	,852
	Number of employees	,004	,004	,116	1,216	,227	,848
	Industry	-,065	,161	-,036	-,403	,688	,976
	Access to resources	,258	,099	,264	2,616	,010	,753
	Network size	,000	,117	-,003	-,004	,997	,012
	Tie strength	,042	,467	,038	,091	,928	,043
	Size X tie strength	-,002	,026	-,077	-,092	,927	,011
Occupational diversity	2,661	,940	,453	2,829	,006	,298	
Relational diversity	-,283	,571	-,078	-,495	,622	,311	

Dependent Variable: Comparative financial success

Regression analysis revealed that access to resources ($B=0.264$, $t=2.616$, $p<.05$) and occupational diversity ($B=0.453$, $t=2.829$, $p<.05$) are significant factors predicting comparative financial success and the model explains 28.9% of the variance ($p<.001$).

The results regarding the second dependent variable, comparative non-financial success are shown below:

Table 30. Results of the Least-squares Multiple Regression Analysis for Comparative Non-financial Success – Study3

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,245 ^a	,060	,032	,56044	,060	2,114	3	99	,103	
2	,552 ^b	,305	,237	,49739	,244	5,448	6	93	,000	1,607

a. Predictors: (Constant), industry, numberofemployees, firmage

b. Predictors: (Constant), industry, numberofemployees, firmage, diversity2, sizeXtiestrength, accesstoreources, tiestrength, diversity, networksize

c. Dependent Variable: comsuccessnonfin

Table 31. Regression Coefficients for Comparative Non-financial Success – Study3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4,125	,170		24,199	,000		
	Firm age	,008	,007	,124	1,190	,237	,876	1,141
	Number of employees	,005	,004	,151	1,458	,148	,879	1,137
	Industry	-,172	,167	-,101	-1,033	,304	,995	1,005
2	(Constant)	-,660	1,963		-,336	,737		
	Firm age	,004	,006	,057	,608	,545	,852	1,174
	Number of employees	,004	,003	,124	1,320	,190	,848	1,180
	Industry	-,160	,149	-,094	-1,071	,287	,976	1,024
	Access to resources	,180	,092	,196	1,964	,052	,753	1,328
	Network size	,099	,108	,710	,910	,365	,012	81,332
	Tie strength	,777	,433	,744	1,794	,076	,043	23,012
	Size X tie strength	-,020	,024	-,689	-,839	,404	,011	90,107
Occupational diversity	1,103	,873	,200	1,263	,210	,298	3,359	
	Relational diversity	-,561	,531	-,164	-1,058	,293	,311	3,212

Dependent Variable: Comparative non-financial success

As seen from the tables above, the only factor predicting comparative non-financial success is access to resources ($B=0.196$, $t=1.964$, $p<.06$), and the model explains 30.5% of the variance ($p<.001$).

The tables below show the results of the regression analysis for the third success variable, firm robustness:

Table 32. Results of the Least-squares Multiple Regression Analysis for Firm Robustness – Study3

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	,363 ^a	,132	,105	,44331	,132	5,004	3	99	,003	2,119
2	,602 ^b	,363	,301	,39182	,231	5,622	6	93	,000	

a. Predictors: (Constant), industry, numberofemployees, firmage

b. Predictors: (Constant), industry, numberofemployees, firmage, diversity2, sizeXtiestrength, accesstoresources, tiestrength, diversity, networksize

c. Dependent Variable: firmsuccess

Table 33. Regression Coefficients for Firm Robustness – Study3

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,673	,135		27,236	,000	
	Firm age	,003	,005	,048	,476	,635	,876
	Number of employees	,009	,003	,324	3,240	,002	,879
	Industry	,166	,132	,118	1,256	,212	,995
2	(Constant)	2,397	1,546		1,551	,124	
	Firm age	,002	,005	,031	,348	,729	,852
	Number of employees	,011	,003	,380	4,221	,000	,848
	Industry	,206	,118	,147	1,751	,083	,976
	Access to resources	,283	,072	,374	3,919	,000	,753
	Network size	-,033	,085	-,285	-,382	,703	,012
	Tie strength	-,121	,341	-,140	-,354	,724	,043
	Size X tie strength	,007	,019	,294	,375	,709	,011
Occupational diversity	1,056	,688	,233	1,535	,128	,298	
Relational diversity	-,164	,418	-,058	-,393	,695	,311	

Dependent Variable: Firm robustness

As the results of the regression analysis demonstrate, access to resources ($B=0.374$, $t=3.919$, $p<.001$) and number of employees ($B=0.380$, $t=4.221$, $p<.001$), are the predictors of firm robustness, and the model explains 36.3% of the variance ($p<.001$).

The results regarding the last dependent variable, personal well-being are shown in the tables below:

Table 34. Results of the Least-squares Multiple Regression Analysis for Personal Well-being – Study3

Model Summary ^c										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	,074 ^a	,006	-,025	,56556	,006	,184	3	99	,907	
2	,652 ^b	,425	,370	,44356	,420	11,326	6	93	,000	1,703

a. Predictors: (Constant), industry, numberofemployees, firmage

b. Predictors: (Constant), industry, numberofemployees, firmage, diversity2, sizeXtiestrength, accesstoresources, tiestrength, diversity, networksize

c. Dependent Variable: subjectivesuccess

Table 35. Regression Coefficients for Personal Well-being – Study3

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4,368	,172		25,388	,000	
	Firm age	-,001	,007	-,015	-,136	,892	,876
	Number of employees	,003	,004	,076	,709	,480	,879
	Industry	-,028	,168	-,017	-,168	,867	,995
2	(Constant)	-,032	1,750		-,018	,986	
	Firm age	-,007	,005	-,110	-1,291	,200	,852
	Number of employees	,001	,003	,034	,400	,690	,848
	Industry	-,033	,133	-,020	-,247	,806	,976
	Access to resources	,229	,082	,254	2,798	,006	,753
	Network size	,038	,097	,276	,389	,698	,012
	Tie strength	,667	,387	,650	1,725	,088	,043
	Size X tie strength	-,004	,022	-,133	-,178	,859	,011
Occupational diversity	,566	,779	,105	,726	,469	,298	
Relational diversity	-,066	,473	-,020	-,140	,889	,311	

Dependent Variable: Personal well-being

As seen from the results, access to resources ($B=0.254$, $t=2.798$, $p<.05$) is the only factor predicting personal well-being, and the model explains 42.5% of the variance ($p<.001$).

As the model is tested for each dependent variable, it is seen that access to resources is a significant factor predicting all four dependent variables of entrepreneurial success, providing support for H7. The table below shows the summary of the findings related to the main effects tested in Study3.

Table 36. Summary of the Main Effects – Study3

	Comparative financial success	Comparative non-financial success	Firm robustness	Personal well-being
Network size	X	X	X	X
Tie strength	X	X	X	X
Network size X tie strength	X	X	X	X
Occupational diversity	2.829**	X	X	X
Relational diversity	X	X	X	X
Access to resources	2.616*	1.964*	3.919***	2.798**

* sig. at 0.05

** sig. at 0.005

***sig. at 0.001

The hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation for each dependent variable (Baron & Kenny, 1986).

Study 3 – Mediating Effects

Hypothesis 10 states that access to resources mediates the effect of network size on entrepreneurial success. The hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation (Baron & Kenny, 1986). For the dependent variable comparative financial success: 1) network size is related significantly to access to resources ($B=0.373$, $t = 4.003$; $p < .001$), 2) network size is related significantly to comparative financial success ($B=0.205$, $t = 2.084$; $p < .05$), and 3) when access to resources is introduced into the relationship between network size and comparative financial success, the impact of network size becomes insignificant ($B=0.064$, $t=0.648$). Thus, access to resources fully mediates the relationship between network size and comparative financial success, providing corroborative evidence for H10.

For the dependent variable comparative non-financial success: 1) network size is related significantly to access to resources ($B=0.373$, $t = 4.003$; $p < .001$), but 2) network size is not related significantly to comparative non-financial success ($B=0.104$, $t = 1.062$). Thus, there is no need to check for the third condition of mediation; access to resources does not mediate the relationship between network size and comparative non-financial success, providing contrary evidence towards H10.

For the dependent variable firm robustness: 1) network size is related significantly to access to resources ($B=0.373$, $t = 4.003$; $p < .001$), 2) network size is related significantly to firm robustness ($B=0.218$, $t = 2.378$; $p < .05$), and 3) when access to resources is introduced into the relationship between network size and firm

robustness, the impact of network size becomes insignificant ($B=0.057$, $t=0.642$).

Thus, access to resources fully mediates the relationship between network size and firm robustness, providing corroborative evidence for H10.

For the dependent variable personal well-being: 1) network size is related significantly to access to resources ($B=0.373$, $t = 4.003$; $p < .001$), 2) network size is related significantly to personal well-being ($B=0.204$, $t = 2.060$; $p < .05$), and 3) when access to resources is introduced into the relationship between network size and personal well-being, the impact of network size becomes insignificant ($B=0.113$, $t=1.079$). Thus, access to resources fully mediates the relationship between network size and personal well-being, providing corroborative evidence for H10.

First condition of mediation requires network size be significantly related to access to resources (corresponds to H3). The results revealed a significant relationship between network size and access to resources ($B=0.373$, $t = 4.003$; $p < .001$); thus H3 is supported. Considering the results related to the mediating effect of access to resources between network size and entrepreneurial success, access to resources fully mediates the relationship between network size and three out of the four measures of entrepreneurial success; H10 is partially supported.

According to hypothesis 11, access to resources mediates the effect of tie strength on entrepreneurial success. The hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation (Baron & Kenny, 1986). First condition of mediation requires tie strength be significantly related to access to resources (H4). Since the relationship between tie strength and access to resources is insignificant ($B=-0.107$, $t = -1.045$), there is no need to check for other conditions. Hypotheses 4 and 11 are rejected.

Hypothesis 12 states that access to resources mediates the combined effect of network size and tie strength on entrepreneurial success. The hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation (Baron & Kenny, 1986). For the dependent variable comparative financial success: 1) the interaction of network size and tie strength is related significantly to access to resources ($B=0.315$, $t = 3.298$; $p < .005$), 2) the interaction of network size and tie strength, although marginally, is related significantly to comparative financial success ($B=0.185$, $t = 1.870$; $p < .065$), and 3) when access to resources is introduced into the relationship between the interaction of network size and tie strength and comparative financial success, the impact of the interaction of network size and tie strength becomes insignificant ($B=0.065$, $t=0.669$). Thus, access to resources fully mediates the relationship between the interaction of network size and tie strength and comparative financial success, providing corroborative evidence for H12.

For the dependent variable comparative non-financial success: 1) the interaction of network size and tie strength is related significantly to access to resources ($B=0.315$, $t = 3.298$; $p < .005$), 2) the interaction of network size and tie strength is related significantly to comparative non-financial success ($B=0.282$, $t = 2.996$; $p < .005$), but 3) when access to resources is introduced into the analysis, the impact of access to resources becomes insignificant ($B=0.114$, $t=1.145$). Thus, access to resources has no mediating effect on the relationship between the interaction of network size and tie strength and comparative non-financial success, providing contrary evidence towards H12.

For the dependent variable firm robustness: 1) the interaction of network size and tie strength is related significantly to access to resources ($B=0.315$, $t = 3.298$; $p < .005$), 2) the interaction of network size and tie strength is related significantly to firm robustness ($B=0.198$, $t = 2.138$; $p < .05$), and 3) when access to resources is introduced into the relationship between the interaction of network size and tie strength and firm robustness, the impact of the interaction of network size and tie strength becomes insignificant ($B=0.061$, $t=0.698$). Thus, access to resources fully mediates the relationship between the interaction of network size and tie strength and firm robustness, providing corroborative evidence for H12.

For the dependent variable personal well-being: 1) the interaction of network size and tie strength is related significantly to access to resources ($B=0.315$, $t = 3.298$; $p < .005$), 2) the interaction of network size and tie strength is related significantly to personal well-being ($B=0.440$, $t = 4.840$; $p < .001$), but 3) when access to resources is introduced into the analysis, the impact of access to resources becomes insignificant ($B=0.163$, $t=1.761$). Thus, access to resources has no mediating effect on the relationship between the interaction of network size and tie strength and personal well-being, providing contrary evidence towards H12.

First condition of mediation requires interaction of network size and tie strength be significantly related to access to resources (H5). The results revealed a significant relationship between interaction of network size and tie strength and access to resources ($B=0.315$, $t = 3.298$; $p < .005$). In hypothesis 5, we expected to observe a negative relationship between the interaction term of network size and tie strength and entrepreneurial success. According to the results of the regression analysis, although significant, the relationship was positive. Thus H5 is not supported.

Considering the results related to the mediating effect of access to resources between the interaction of network size and tie strength and entrepreneurial success, access to resources fully mediates the relationship between the interaction of network size and tie strength (network size X tie strength) and two out of the four measures of entrepreneurial success; H12 is partially supported.

Hypothesis 13a states that access to resources mediates the effect of network occupational diversity on entrepreneurial success. The hypothesized mediation effects are explored by running three consecutive regression analyses to satisfy the three conditions of mediation (Baron & Kenny, 1986). For the dependent variable comparative financial success: 1) occupational network diversity is related significantly to access to resources ($B=0.429$, $t = 4.721$; $p < .001$), 2) occupational network diversity is related significantly to comparative financial success ($B=0.469$, $t = 5.296$; $p < .001$), and 3) when access to resources is introduced into the relationship between occupational network diversity and comparative financial success, the impact of occupational network diversity remains to be significant, but with a smaller effect size ($B=0.365$, $t = 3.822$; $p < .001$). Thus, access to resources partially mediates the relationship between occupational network diversity and comparative financial success, providing corroborative evidence for H13a.

For the dependent variable comparative non-financial success: 1) occupational network diversity is related significantly to access to resources ($B=0.429$, $t = 4.721$; $p < .001$), but 2) occupational network diversity is not related significantly to comparative non-financial success ($B=0.155$, $t=1.601$). Thus, there is no need to check for the third condition of mediation; access to resources has no

mediating effect on the relationship between occupational network diversity and comparative non-financial success, providing contrary evidence towards H13a.

For the dependent variable firm robustness: 1) occupational network diversity is related significantly to access to resources ($B=0.429$, $t = 4.721$; $p < .001$), 2) occupational network diversity is related significantly to firm robustness ($B=0.344$, $t = 3.911$; $p < .001$), and 3) when access to resources is introduced into the relationship between occupational network diversity and firm robustness, the impact of occupational network diversity remains to be significant, but with a smaller effect size ($B=0.184$, $t = 2.034$; $p < .05$). Thus, access to resources partially mediates the relationship between occupational network diversity and firm robustness, providing corroborative evidence for H13a.

For the dependent variable personal well-being: 1) occupational network diversity is related significantly to access to resources ($B=0.429$, $t = 4.721$; $p < .001$), 2) occupational network diversity is related significantly to personal well-being ($B=0.231$, $t = 2.351$; $p < .05$), and 3) when access to resources is introduced into the relationship between occupational network diversity and personal well-being, the impact of occupational network diversity becomes insignificant ($B=0.133$, $t=1.242$). Thus, access to resources fully mediates the relationship between occupational network diversity and personal well-being, providing corroborative evidence for H13a.

First condition of mediation requires occupational network diversity be significantly related to access to resources (H6a). The results revealed a significant relationship between occupational network diversity and access to resources ($B=0.429$, $t = 4.721$; $p < .001$); thus H6a is supported. Considering the results related

to the mediating effect of access to resources on the relationship between occupational network diversity and entrepreneurial success, access to resources fully or partially mediates the relationship between occupational network diversity and three out of four entrepreneurial success measures; H13a is partially supported.

With respect to the second diversity measure, relational network diversity, for the dependent variable comparative financial success: 1) relational network diversity is related significantly to access to resources ($B=0.380$, $t = 4.098$; $p < .001$), 2) relational network diversity is related significantly to comparative financial success ($B=0.350$, $t = 3.731$; $p < .001$), and 3) when access to resources is introduced into the relationship between relational network diversity and comparative financial success, the impact of relational network diversity remains to be significant, but with a smaller effect size ($B=0.232$, $t = 2.387$; $p < .05$). Thus, access to resources partially mediates the relationship between relational network diversity and comparative financial success, providing corroborative evidence for H13b.

For the dependent variable comparative non-financial success: 1) relational network diversity is related significantly to access to resources ($B=0.380$, $t = 4.098$; $p < .001$), but 2) relational network diversity is not related significantly to comparative non-financial success ($B=-0.029$, $t=-0.298$). Thus, there is no need to check for the third condition of mediation; access to resources has no mediating effect on the relationship between relational network diversity and comparative non-financial success, providing contrary evidence towards H13b.

For the dependent variable firm robustness: 1) relational network diversity is related significantly to access to resources ($B=0.380$, $t = 4.098$; $p < .001$), 2) relational network diversity is related significantly to firm robustness ($B=0.267$, $t =$

2.956; $p < .005$), and 3) when access to resources is introduced into the relationship between relational network diversity and firm robustness, the impact of relational network diversity becomes insignificant ($B=0.111$, $t=1.248$). Thus, access to resources fully mediates the relationship between relational network diversity and firm robustness, providing corroborative evidence for H13b.

For the dependent variable personal well-being: 1) relational network diversity is related significantly to access to resources ($B=0.380$, $t = 4.098$; $p < .001$), but 2) relational network diversity is not related significantly to personal well-being ($B=0.054$, $t=0.533$). Thus, there is no need to check for the third condition of mediation; access to resources has no mediating effect on the relationship between relational network diversity and personal well-being, providing contrary evidence towards H13b.

First condition of mediation requires relational network diversity be significantly related to access to resources (H6b). The results revealed a significant relationship between relational network diversity and access to resources ($B=0.380$, $t = 4.098$; $p < .001$); thus H6b is supported. Considering the results related to the mediating effect of access to resources on the relationship between relational network diversity and entrepreneurial success, access to resources fully or partially mediates the relationship between relational network diversity and two out of the four entrepreneurial success measures; H13b is partially supported.

The table below shows the summary of the findings related to the mediating effects of access to resources tested in Study3:

Table 37. Summary of the Mediating Effects of Access to Resources – Study3

	Comparative financial success	Comparative non-financial success	Firm robustness	Personal well-being
Network size	full	X	full	full
Tie strength	X	X	X	X
Network size X tie strength	full	X	full	X
Occupational diversity	partial	X	full	full
Relational diversity	partial	X	full	X

CHAPTER 6

DISCUSSION AND CONCLUSION

Discussion

The present research examined the nature of the relationship between social capital and elements of social network structure with entrepreneurial success, with a focus on the intervening effect of access to resources. Additionally, the potential moderating effect of entrepreneurs' human capital on the aforementioned relationship is also explored.

This chapter intends to discuss the findings of the dissertation, the implications for theory and research, limitations of the present study, and conclusions of the dissertation.

This thesis consists of three consecutive studies, one of which adopts a qualitative approach conducted with in-depth interviews with entrepreneurs, and the other two studies are quantitative studies, where data is collected from entrepreneurs via surveys. As to the main findings, I will first elaborate on the inferences of the qualitative study, and then discuss the main findings of the quantitative studies, where several hypotheses are tested.

Qualitative study is conducted with the aim of exploring factors that lead to entrepreneurial success. Specifically, we intended to gain insights regarding the effects of social and human capital on entrepreneurial success. The in-depth interviews provided several valuable inferences.

One of the main inferences of the interviews is related to the definition of entrepreneurial success. The varying definitions extracted from the transcripts are used to form two success measures to be used in the consecutive quantitative studies as dependent variables. The research team content analyzed all interview forms and grouped success definitions of entrepreneurs under 6 main headings: sustainability, prestige, creativity, having an impact, self-actualization, and goal orientation. These success definitions are then grouped into two overarching concepts; firm robustness and personal well-being. Firm robustness is defined as the criteria by which the entrepreneur perceives the organization as successful when achieved. Personal well-being is defined as the criteria which increases the entrepreneur's subjective well being when achieved.

Another inference from the interviews is related to the entrepreneur's human capital. Human capital is the capital that the entrepreneur possesses in terms of his/her educational background and work experience. Specifically two questions are asked in the interviews to understand whether the entrepreneurs perceive their education and work experience separately as having an impact, either positive or negative, on entrepreneurial success. As the results regarding human capital demonstrate, the majority of the entrepreneurs agree that both education and work experience are vital and necessary for success. Entrepreneurs recognize the importance of human capital elements and emphasize the necessity of investing in

human capital for achieving success. Specifically, they point out to the role of human capital elements in enhancing their knowledge and helping in effective utilization of the knowledge that they gained properly. Entrepreneurs emphasize the benefits of education and work experience as these provide them with the necessary knowledge that they use for their businesses. In other words, entrepreneurs perceive human capital investments as a facilitator in utilizing their knowledge they obtained through these investments and thereby leading them to succeed.

For social capital, several questions are asked related to social networks of entrepreneurs in order to see both how much importance they give to their networks and characteristics of their network structures. The results regarding the effect of social capital on entrepreneurial success also highlight entrepreneurs' positive perception regarding the need of social capital for success as the majority of the entrepreneurs stated that social capital contributed to their success positively. Specifically, they point out to the role of social capital elements in obtaining necessary and critical resources for their businesses. Entrepreneurs highlight the benefits of networking and trust in such a way that, they specifically give examples about how they access to financial resources or information via their networks. In other words, entrepreneurs perceive their social networks as a way to reach to necessary resources, may they be financial or information, which in turn, lead them to succeed.

In conducting Study1, our intention was not to test hypotheses and reach conclusions, but merely to gain insights about the subject matter, as it manifests in the context of Turkey. We aimed at gaining a sense of the subject and making use of this in-depth understanding while forming the hypotheses, as well as reviewing the

related literature. Thus, as intended, the findings of the Study1 are used as inputs in Study2 and Study3. First of all, two measures of success that are created with the insights gained in qualitative study are used as dependent variables in Study2 and Study3. Additionally, the results of the qualitative study shed light on the importance of human capital and social capital on entrepreneurial success from entrepreneurs' perspective. Thus, we aimed at testing this perception with quantitative studies and reach conclusive results regarding the role of social and human capital on entrepreneurial success.

In the next part, I will elaborate on the findings of Study2 and Study3, emphasizing the hypothesized relationships in these studies.

The first three sets of hypotheses are related to the social capital of the entrepreneurs. Both social capital of the entrepreneurs and the elements in their network structures are used to examine whether they have an influence on entrepreneurs' access to resources. The mediating effect of access to resources on the relationship between social capital, elements of social network structure and entrepreneurial success is tested.

We hypothesized to find a mediation effect of access to resources on the relationship between social capital, elements of network structure and entrepreneurial success. Entrepreneurs in order to succeed need several resources. These resources may include tangible or intangibles. Information is seen as one of the main resources used to achieve success. Other resources may include capital or social support. Entrepreneurs, use their social capital to access to resources, which ultimately brings success.

Of the six mediating relationships that we hypothesized, we found support, either full or partial, for five. In the next section, I will elaborate on the hypothesized relationships and discuss the findings.

First, considering the social capital variables, we hypothesized and found mediation effect of access to resources for both the extent of networking that entrepreneurs develop and the social trust among network members, on entrepreneurial success.

Considering social capital of the entrepreneurs, as hypothesized and found in H1, entrepreneurs, who spend more effort in maintaining or extending their network relationships, have access to more resources. Entrepreneurs spend effort and energy for networking activities. These may include attending several meetings, going out with people for even non-business reasons, or joining memberships of several institutions. Entrepreneurs who value maintaining and extending their networks pay extra attention to these relationships and constantly nurture them. As hypothesized in H8, access to resources mediates the relationship between networking and success; except for comparative financial success. Comparative financial success differs from the other success measures on the basis that all the others heavily rely on entrepreneurs' subjective evaluations of their success from their personal vantage points, whereas comparative financial success provides a more objective assessment expressed in quantified financial terms. Our findings suggest that to the extent that entrepreneurs perceive themselves as paying attention to maintaining and extending their networks, they tend to have increased capabilities to access resources, and eventually experience more subjective fulfillment in terms of personal well-being and establishing a robust firm. It is plausible that their fulfillment originates from the

attribution of success to themselves in the process that ends with their successful access to the necessary resources.

Social trust implies that entrepreneurs trust to the members of their network. As hypothesized in H2, as the level of social trust increases in entrepreneurs' networks, they have access to more resources. This means that, as entrepreneurs trust to the members in their network, they can search for the resources they need in that network and thereby access those resources. Similar to the other component of social capital, social trust is also hypothesized (H9) and found to have an influence on entrepreneurial success through the mediating effect of access to resources; except for comparative financial success. Thus, as entrepreneurs trust the relationships in their social networks, they get access to the resources necessary for their business, and thereby succeed.

With respect to the elements of social network structure, network size, tie strength, and network diversity are tested for their effects on entrepreneurial success through the mediating effect of access to resources.

As hypothesized in H3, it is found that as entrepreneurs' network size increases, they can access to more resources. As one's network size increases, the probability that one can access to necessary information and resources increases, as well. As expected (H10), entrepreneurs' network size affects success through the mediating effect of access to resources. As the network size of entrepreneurs increases, they can access to more resources and thereby achieve success.

The only hypothesis that is not supported regarding the social network elements is H4, which suggests a negative relationship between entrepreneurs' tie strength and access to resources. Since H4 is not supported, H11 is not supported, as

well, as it suggested that access to resources mediates the relationship between tie strength and entrepreneurial success. We hypothesized that as the entrepreneurs' networks consist of weaker ties, they have access to more resources. This reasoning is supported with Granovetter's (1973) strength of weak ties argument, claiming that individuals get similar information and resources from those who are close them, in other words, from strong ties. On the other hand, weak ties are those with whom the individual has less frequent and less intimate relationship, and thereby the probability that fresh and new information and resources come from such contacts is higher.

I also tested tie strength in H5 with the interaction of network size, where it is hypothesized that network size and tie strength together will have a negative effect on access to resources. The reason to form such a hypothesis is to test the combined effect of size and tie strength on access to resources. The rationale was that tie strength cannot facilitate access to resources alone, especially in the case of very small networks. In other words, my expectation was that a network that consists of weak ties cannot guarantee access to resources when the size of the network is small. The advantage of weak ties would be more likely to be evident (access to more diverse and non-redundant resources) when the entrepreneur has a larger network. The significant effect of the interaction term provided support for our conception.

However, contrary to expectations the effect of the interaction term of tie strength and network size on access to resources was positive, meaning that the larger the network consisting of stronger ties instead of weaker ones, the more resources entrepreneurs will access. This unexpected finding might be explained by the cultural context of the study. There are several studies that suggest that strong ties offer more trustworthy information, thereby more influential for success. Turkey

ranks among the lowest countries in trust index (Delhey & Newton, 2005).

Accordingly, it is possible that Turkish entrepreneurs may find it difficult to trust the information or intelligence provided by the weak ties in their networks and hence cannot utilize them to access to resources. It may be a Turkish trait to rely on strong ties in making use of networks in entrepreneurial success. Since I did not develop any formal hypotheses regarding the effect of culture on the underlying mechanism through which structural elements of networks influence entrepreneurial success, I leave this discussion here as a fruitful future research avenue.

In line with Hypothesis 12 (the relationship between the interaction effect of network size and tie strength is mediated by access to resources) a significant mediation effect is found for two of the four dependent variables. Thus, although the direction of the relationship of the interaction effect of network size and tie strength is not on the expected way, it has been found that access to resources mediates the relationship between the interaction term of size and tie strength and entrepreneurial success.

The last network structure element used in the study is diversity. Diversity is measured in two ways, and hypotheses are tested for both measurements. First measurement (occupational diversity) relates to the diversity of one's network in terms of different occupations. The other measurement (relational diversity) relates to the tie relationship entrepreneurs have with their network members. As hypothesized (H6a and H6b), occupational and relational network diversity are found to be significantly related to access to resources; meaning that, as diversity increases in entrepreneurs' network, they can access to more resources. This is also related with reaching to new and diverse information and resources through network

members. With respect to occupational diversity, as entrepreneurs have more diverse networks consisting of individuals with different occupations, they can have different kinds of information as each has different specializations. As to the relational diversity, as different kinds of ties make up a network, entrepreneurs can access to different kinds of resources. For instance, families may be better for motivational support, whereas acquaintances may be better information sources. In hypotheses 13a and 13b, it is stated that access to resources mediates the relationship between network diversity and entrepreneurial success. This relationship is found to be significant for three out of four dependent variables for occupational diversity and for two out of four dependent variables for relational diversity measure. This outlook suggests that empirical support has been found for the mediation effect of access to resources on the relationship between network diversity and comparative financial success, firm robustness, and personal well-being for occupational diversity measure; and comparative financial success and firm robustness for relational diversity measure. As entrepreneurs have more diverse networks, they can access to more diverse resources, which leads them to succeed.

The fourth set of hypotheses (hypotheses 14 to 16) is related to human capital of the entrepreneur. In general terms, human capital of the entrepreneur is expected to result in success. In this study, we treated human capital variables differently, and instead of taking them as antecedents of entrepreneurial success, we hypothesized that elements of human capital of the entrepreneurs would moderate the indirect effects of social capital elements on success, occurring through access to resources. In other words, we claim that, although entrepreneurs may access to a variety of resources through their social networks, if they cannot utilize these resources properly, then the effect of their ability to access to resources on their success will

diminish. Accordingly, we hypothesized that entrepreneurs who have invested more in their human capital would have more knowledge about the industry, suppliers, buyers, and production procedures, which makes a difference in utilizing the resources that they have accessed. In short, we hypothesized that the indirect effects of the antecedents in the model of entrepreneurial success is moderated by the components of human capital. It is expected that the strength of the mediated effects in the model is linearly contingent on the level of human capital of the entrepreneur.

With respect to the human capital elements, the most widely used components throughout the literature, education level of the entrepreneur and his/her work experience (both general and industry-specific work experience) are used as moderating factors in the conceptual model (H14, 15, and 16). In order to test how human capital interacts with the mediated model of entrepreneurial success, separate moderated mediation analyses are conducted for three human capital variables for each dependent variable.

As hypothesized in H14, education level moderates the indirect effects of networking on two of the four success variables through access to resources. For comparative non-financial success and personal well-being the indirect effects gains significance in the high educated group, while this effect was not evident in the low-educated entrepreneurs. On the other hand, since access to resources was not a significant predictor for comparative financial success in none of the groups, the moderation hypothesis becomes redundant for this particular dependent variable.

With respect to the second element of human capital, general work experience, no support is found for H15.

Regarding the last element of human capital, industry-specific work experience, partial support is found for H16. Among the four dependent variables of entrepreneurial success, comparing the two samples, (those with low and high industry-specific years of work experience) industry-specific work experience moderates the mediated effects in the model for two of the success variables, namely comparative non-financial success and personal well-being for high experienced entrepreneurs. Industry-specific work experience amplifies the mediated effects on self-satisfaction of the entrepreneur (personal well-being); furthermore, it also increases the tendency of the entrepreneur who has access to resources to perceive their non-financial performance as superior when compared to others in the sector.

Contributions for Research and Theory

The findings of this dissertation have many contributions to theory and research. The core theoretical foundation of this dissertation rests on social network and social capital theories, in addition to human capital theory.

In this study, the extent of networking and social trust among network members are used as indicators of entrepreneurs' social capital, and network size, tie strength and network diversity are used to represent the structural characteristics of their networks. The main argument hypothesized and tested in this thesis is the role access to resources plays in the relationship between social capital, structural characteristics of social network and entrepreneurial success. Taken together, support for the mediating effect of access to resources for all of these dependent variables, except one (comparative financial success), has been corroborated. In this respect, four major contributions must be spelled out. First, although the literature frequently mentions the important role of the ability to identify and access resources in entrepreneurial success, very few studies have empirically scrutinized this proposition. Jenssen and Koenig (2002) have previously found empirical support for the mediating effect of access to resources for the effect of structural elements of the entrepreneurs' network. This dissertation corroborated the findings of Jenssen and Koenig (2002). As a major contribution to the relevant literature, it empirically tested the mediating effect of access to resources on the relationship between social capital and entrepreneurial success.

Second, with respect to the structural elements of entrepreneurial networks two findings of the study deserve attention in light of the relevant literature. Tie

strength alone had no effect on access to resources, while the interaction between size and tie strength had a significant positive relationship. There are two possible explanations, both of which represent valuable leads to be followed by future research in the field. First explanation relates to the context of the study, Turkey. As a major contribution in its own behalf, this dissertation is among the first to test these theoretical relationships in Turkey. Turkey ranks among the lowest countries in trust index (Delhey & Newton, 2005). Accordingly, it is possible that Turkish entrepreneurs may find it difficult to trust the information or intelligence provided by the weak ties in their networks and hence cannot utilize them to access resources. Granovetter (1985, p.490) states that strong ties offer multiple benefits because their maintenance is cheaper, they are more trustworthy, more reliable, more detailed and accurate. For the lack of trust in weak ties, it is possible that entrepreneurs operating in Turkey, or in cultural contexts similar to Turkey, rely heavily on strong ties in making use of networks in entrepreneurial success. Second explanation may be formulated by recognizing the differences between the types of resources an entrepreneur can access. Kanter (1983) differentiates among three types of resources, namely informational, motivational, and material resources. In the study conducted by Jenssen and Koenig (2002), the researchers analyzed the mediating effect of these three types of resources on the relationship between tie strength and firm success. Differentiation of resource types makes a difference on the results of the relationship, as it is suggested in the literature that weak ties provide more information resources due to the non-redundant and fresh information coming from those that are not very close to the person (Dubini & Aldrich, 1991; Greve & Gattiker, 1994). On the other hand, it is suggested that motivation resources (Johannisson, 1998) and financial resources (Jenssen & Koenig, 2002), especially at the venture creation phase, would

be provided more from strong ties. Thus, the failure to find a significant relationship between tie strength and access to resources may be due to the uni-dimensional nature of access to resources variable used in the study, which does not differentiate among the resource types. Putting forth the significant role of the concept of access to resources, another important flag raised by this dissertation is the danger associated with using a uni-dimensional measure for access to resources. Future studies should acknowledge independent linkages among social capital and network structure elements with separate dimensions of access to resources.

It should also be noted that as Rowley et al. (2000) suggest, the debate regarding the benefits of strong versus weak ties may require a contingency approach. Entrepreneurs' family and friends are often regarded as the ties in obtaining key resources necessary to establish a firm (e.g., Larson & Starr, 1993). Thus, the entrepreneur benefits from a cohesive network of embedded ties (Coleman, 1990; Walker, Kogut, & Shan, 1997). In contrast, there is another view suggesting that cohesive networks leads to constraint instead of benefit for emerging firms (Burt, 1992a) and that entrepreneurs must move beyond their close, cohesive networks for long-term success (e.g., Burt, 1997; Portes & Sensenbrenner, 1993; Woolcock, 1998). For instance, Aldrich et al. (1987) found that young firms, but not older firms, benefited from strong ties in terms of greater profitability. A focus on strong ties may be more relevant during the founding stage and early growth stage of a new venture when such ties are likely to be most valuable as ready, low-cost links to critical resources (Starr & Macmillan, 1990). As firms dynamically progress from emergence to early growth, the resources they need change. According to Hite and Hesterly (2001), due to the evolving resource needs, firms need to make a shift in their networks as they progress from emergence to growth.

Third major contribution arises from the qualitative study, the two dependent variables generated to measure entrepreneurial success, in addition to the ones that exist in the literature. In the consecutive quantitative phases of the dissertation convergent and discriminant validity of these new success measures are established and findings showed that each dependent variable used in the study has a unique predictive function, in other words different relationships with networks related antecedents. It can be argued that the constructs developed in this dissertation would help researchers to better capture different aspects of entrepreneurial success and hence contribute to its understanding from the vantage point of an entrepreneur.

When the main effects are analyzed, it is figured out that, as to the first dependent variable, the factors that predict comparative financial success are found to be networking, social trust (Study 2), and access to resources, occupational diversity (Study3). When the mediating effect of access to resources is of consideration, access to resources mediates the relationship between all of the structural elements in social network except tie strength and comparative financial success.

The predictors of comparative non-financial success are networking, access to resources (Study2), and access to resources (Study3). When the mediating effect of access to resources is considered, access to resources mediates the relationship between networking, social trust and comparative non-financial success. Access to resources mediates none of the social network structure elements and comparative non-financial success.

The factors that predict firm robustness are social trust, access to resources, firm age, number of employees (Study2), and access to resources (Study3). When the

mediating effect of access to resources is considered, access to resources mediates the relationship between all of the social capital and network structure elements except tie strength and firm robustness.

The predictors of last dependent variable, personal well-being are found as networking, access to resources (Study2), and access to resources (Study3). When the mediating effect of access to resources is of consideration, access to resources mediates the relationship between networking, social trust, network size, occupational diversity and personal well-being.

Finally, the fourth major contribution of this dissertation is the conceptualization of human capital as a moderator, amplifying the indirect effect of social capital on success through access to resources, instead of a direct antecedent of entrepreneurial success. Aiming to shed light on the equivocal findings in the literature in terms of the effect of social capital on entrepreneurial success, construing human capital as a moderator in the conceptual model helped to better scrutinize the mechanism through which access to resources drives entrepreneurial success. It is shown that human capital (education and industry-specific work experience) indeed changes the nature of the relationships in the predictive model of entrepreneurial success, such that in two out of four dependent variables a significant effect manifests only when human capital is high.

Limitations of the Study

There are several limitations of the study that cannot be disregarded. First of all, the study is a cross-sectional one, meaning that the relationships are examined at only a single point in time. Due to the cross-sectional nature of the study, one cannot talk about the dynamic aspects of the subject matter. However, networks are not stable; instead they are living phenomena and are subject to change through time.

Second limitation of the study is related to the self reports used to collect data which may cause self report bias, where the respondents may not give truthful answers for the survey questions. In the surveys, respondents were not asked to give any confidential information directly, such as financial data. Instead, they were asked to report their financial indicators in comparison to their competitors. Although this may prevent self report bias to a certain extent, the use of only self reports in the study is a limitation in itself.

Third, all of the data is collected from only Istanbul. Although Istanbul is recognized to represent the whole country as it attracts a lot of immigration from all parts of the country, and has a very large population, collecting data from a single city limits the generalizability of the findings.

Concluding Remarks

Social networks refer to the relations that hold a set of actors together. They consist of a series of direct and indirect ties from the main actors and a collection of other actors, whether they are individuals or organizations, within the network. The key is that the actors exchange resources which then connect them in networks. Resources may include data, information, goods and services, social support, or financial support (Marsden & Campbell, 1984). Social capital is seen as the benefits that can be derived from social networks. It facilitates the identification, collection and allocation of scarce resources (Birley, 1985; Uzzi, 1999) while speeding up the entrepreneurial exploitation process by providing and diffusing critical information and other essential resources (Davidsson & Honig, 2003). This dissertation provided corroborative empirical evidence for this theoretical mediating effect of access to resources on the relationship between entrepreneurial success and its network related antecedents.

Further, entrepreneurial success factors have not previously been analyzed in the context of Turkey. There are very few studies conducted in Turkey related to entrepreneurship, or entrepreneurs' social capital. Thus, this study, to our knowledge, being the first one conducted in Turkey, examining the effects of social capital and elements of social network structure of entrepreneurs on their success with the mediating effect of access to resources, and moderating effect of human capital on these relationships, shall contribute to the progress of entrepreneurial research in Turkey.

APPENDICES

Appendix A

Interview Form in Turkish

I. Demografikler

A. Kiři

- 1) Öncelikle sizi tanıyabilir miyiz?
- 2) Kaç yaşındasınız?
- 3) Evli misiniz, çocuđunuz var mı?
- 4) Eğitim durumunuz? Hangi lisede/üniversitede okudunuz?
- 5) Hayat boyu iş tecrübeleriniz neler? Hangi sektörlerde ne kadar süreyle çalıştınız?
(Çocukluđunuzdan itibaren iş olarak yaptığımız her şey)

B. Kurum

- 1) Şirketi ne zaman kurdunuz?
- 2) Yönetim yapınız nedir, kaç kişi çalışıyor? (Organizational chart)
- 3) Çalışan sayınız ile ilgili şirkete bađlı olanların dışında taşeron da kullanıyor musunuz? Onlar kaç kişi?
- 4) Kurulduđunuzdan bu yana çalışan sayınız, karlılıđınız, iş hacminiz, kazancınız, ofisiniz deđiřti mi, nasıl deđiřti?

- 5) Ortađınız var mı? Kurulum aşamasında var mıydı? Birlikte mi kurdunuz?
- 6) Ortak var ise: iş bölümünüz nasıl? O ne yapıyor, siz neler yapıyorsunuz?
- 7) Kurumsallaşma konusunda neredesiniz? Bunu biraz açar mısınız? İşlerinizi nasıl yürütüyorsunuz (Objektif, saydam finans ya da İK sistemleriniz var mı? Mesela sistemleşmiş bir işe alıp çıkarma prosedürünüz var mı?)Siz bu şirketten ayrılırsanız şirket yıkılır mı?
- 8) İçinde bulunduđunuz pazarı tanımlar mısınız?
 - a. İhracat ya da ithalat yapıyor musunuz? İleride yapmayı düşünüyor musunuz?
 - b. Hedef kitleniz kimler?
 - c. Sektördeki rekabet nasıl?

II. Hikaye

- 1) Kurulumdan bugüne hikayenizi özetleyecek olursanız nasıl bir hikaye anlatırdınız? Nasıl başladınız, nasıl gelişti?
- 2) Girişimci olmaya nasıl karar verdiniz?
- 3) Bu işe ne sebeple başladınız? (İhtiyaç mı, fırsat mı?)
- 4) Sizi motive eden faktörler nelerdi? Kurulum aşamasındaki faktörler nelerdi, şimdi neler öne çıkıyor?
- 5) Hedefler ve itici güç olarak o gün neler vardı, bugün neler var?
- 6) Fikir nereden çıktı? (Mesela önceki iş tecrübeleri ile mi alakalı, eğitim hayatı ile mi alakalı?)
- 7) O dönemin koşulları bununla ne kadar alakalıydı?
- 8) Kurulum aşamasındaki hedefiniz ile şimdiki hedefiniz nasıl değişti?
- 9) Başlangıçta çok zorluklar çektiniz mi? Nerelerde zorlandınız?

10) Bu girişimin aile hayatınıza yansımaları kurulum aşamasında nasıl oldu? (Pozitif mi negatif mi? Neden?) Şu an nasıl oluyor?

11) Kurulum aşamasında finansal desteği nasıl/nerden buldunuz?

12) Şu anki finansal kaynaklarınız nelerdir?

III. Başarı Tanımı

1) Girişimci olmak sizin için ne ifade ediyor? Size ne hissettiriyor?

2) Şirketinizin geldiği yerden memnun musunuz? Hayal ettiğiniz noktada mı?

3) Şirketinizle gurur duyuyor musunuz?

4) Bir girişimci olarak başarıyı nasıl tanımlarsınız?

5) Kendinizi ne kadar başarılı görüyorsunuz? Neden?

6) Genel anlamda başarınızı etkileyen faktörler nelerdir? (hiç yönlendirmeden)

7) a. Kadın için: Kadın olmanın size herhangi bir dezavantajı olduğunu düşünüyor musunuz?

b. Erkek için: Erkek olmanın bu süreçte size avantaj sağladığını düşünüyor musunuz?

IV. Başarı Faktörleri

A. Kişisel Deneyimler

1) Ailede başka girişimci var mı? Ya da yakın çevrede, arkadaş, eğitimci gibi?

Bunun sizde pozitif bir etkisi olduğunu düşünüyor musunuz? Başarınıza etkisi var mı?

2) Eğitim hayatınızın bu girişimde başarılı olmanızda olumlu/olumsuz etkileri olduğunu düşünüyor musunuz?

3) Eski iş tecrübelerinizin bu girişimdeki başarınıza olumlu/olumsuz etkisi olduğunu düşünüyor musunuz?

4) Bu şirketten önce başka girişimcilik deneyiminiz oldu mu yoksa bu ilk deneyiminiz mi? Varsa öncekiler başarılı mıydı?

B. Yapılan iş, pazar, hedef kitle

1) Daha önce bahsettiğiniz pazar, hedef kitle ve yapılan işin başarınız üzerinde etkisi nasıl oldu?

C. Ortaklık

1) a. Ortak varsa: Sizce bir ortağınızın olmasının girişimci olarak başarınız üzerinde olumlu ya da olumsuz etkileri var mı? Neden?

b. Ortak yoksa: Sizce ortağınızın olmamasının girişimci olarak başarınız üzerinde olumlu ya da olumsuz etkileri var mı? Neden?

D. Network

1) Networkunuz kurulum aşamasında kimlerden oluşuyordu, kaç kişiden oluşuyordu şimdi kaç kişiden oluşuyor, kimlerden oluşuyor, değişiklik var mı? Bu değişiklik nelerden kaynaklanıyor? Nasıldı, nasıl gelişti?

2) Networkunuz (sosyal ağınız) daha çok kimler oluşuyor? (Arkadaş/aile diye tanımlayabileceğiniz yakın çevreden mi yoksa tanıdık diye nitelendirebileceğiniz uzak çevreden mi?)

3) Sizce başarılı olmanızda networkun etkisi nasıldır?

4) Networkunuzun yakınlardan oluşması, networkteki ilişkilerinizin kuvvetli olması başarınıza etki etti mi?

- 5) Networkünüzde başka sektörlerden kişiler var mı? Faydaları oluyor mu?
- 6) Sizce network yapabilme beceriniz, insan ilişkilerine önem verip bunları geliştirmeye çalışmanız başarılı olmanız için gerekli midir? Çok önemli midir peki?
- 7) Bankalardan ya da devletten alınan destek başarınızı ne derece etkiliyor?
- 8) Network yapmak için çeşitli toplantılara katılıyor musunuz, üniversiteler ya da başka şirketlerle ortaklıklar kuruyor musunuz?
- 9) Sizce networkünüzde çok kişi olması mı daha önemli, yoksa az ama öz kişi olması mı, mesela belediyede çalışan üst düzey kişiler, ya da önemli şirketlerin yöneticileri gibi?
- 10) Siz ve sizin ilişkide olduğunuz insanların networkleri ne kadar kesişiyor, aynı kişilerden mi oluşuyor? Evet ise: Bu durum size hep aynı tip bilgilerin gelmesine yol açıyor mu, sizin operasyonlarınızı olumsuz yönde etkiliyor mu?
- 11) Networkunuz üzerinden tanıdıklarınızın tanıdıklarına rahatça erişebiliyor musunuz? Networkünüzdeki kişiler birbirleriyle ne kadar bağlantılı?
- 12) a. Kadınlar için: Girişimcilik daha çok erkeklere atfedilen bir şey, network geliştirmeye çalışırken zorluk yaşadınız mı (mesela finansal destek sağlamaya çalışırken, bankaya gittiğinizde?)
b. Daha çok kadınlarla mı network yapıyorsunuz?

E. Liderlik

- 1) Kendinizi nasıl bir yönetici/lider olarak nitelendirirsiniz?
- 2) Çalışanlar sizi nasıl görürler?
- 3) Şirkete ne kadar gidip geliyorsunuz? Günde kaç saat çalışıyorsunuz? Kurulum aşamasında da böyle miydi?

4) Yönetim tarzınızın başarınıza olumlu ya da olumsuz etkisi olduğunu düşünüyor musunuz?

F. Kişilik Özellikleri

1) Bu girişim sizin hangi kişilik özelliklerinizi yansıtıyor? Ön plana çıktığını düşündüğünüz özellikleriniz neler?

2) Bu özelliklerinizin girişimci olarak başarınıza olumlu/ olumsuz etkileri olduğunu düşünüyor musunuz?

G. Sıralama

1) Konuştuklarımızı düşünecek olursanız, girişimci olarak başarınız üzerinde en etkili olan faktörler sizce hangileridir? Neden?

Appendix B

Interview Form in English

I. Demographics

A. Person-related

- 1) Please introduce yourself.
- 2) How old are you?
- 3) Are you married? Do you have children?
- 4) Your education level? Which college, university are you from?
- 5) What are your lifelong work experiences? For how long have you worked in which industries?

B. Firm-related

- 1) When did you establish the firm?
- 2) How is your management structure? How many people are working?
- 3) About number of employees, besides the ones employed in the company, do you also do outsourcing? How many?
- 4) From the day the company is established, have you had any changes in your number of employees, profitability, revenues, income, and office? How is that?
- 5) Do you have a partner? If yes, was he/she with you from the very beginning? Did you establish the firm together?
- 6) If there is a partner: How is your distribution of work? What does he do and what do you do?

7) How institutionalized is your company? How do you execute your operations? (Do you have objective finance or HR systems, for instance? Such as a systematic recruitment process?) If you leave, can this company survive?

8) Could you describe the market that you are operating in?

a. Do you do export or import? Do you plan to do in the future?

b. Who are your target market?

c. How is the competition in the industry?

II. The Story

1) From the day that you established the firm till today, if you are to summarize us your story, how would it be? How did you start, how did everything progress?

2) How did you decide to become an entrepreneur?

3) For what reason did you start that business? (Necessity or opportunity)

4) What were the factors that motivated you? What were the factors at the beginning, what are they now?

5) As to the targets and goals, what did you have those days, and what do you have now?

6) Where did the business idea come from? (For instance, is it related to your prior work experiences or your educational background?)

7) How relevant were the conditions of those days with that idea?

8) How are your goals changed from the startup phase till today?

9) Did you face difficulties at the beginning? At what points did you face difficulties?

10) How did this startup reflect on your family life at the beginning? (Positive or negative? Why?) How is it now?

11) How and from where did you get financial support at the start up?

12) What are your financial sources today?

III. Definition of Success

1) What it means to be an entrepreneur for you? How does it feel?

2) Are you satisfied with the progress that your firm has taken? Is it at the point that you imagined?

3) Are you proud of your company?

4) How do you define success as an entrepreneur?

5) How successful do you perceive yourself? Why?

6) In general, what are the factors that influence your success?

7) a. For women: Do you think being a woman brings any disadvantages for you?

b. For men: Do you think being a man provides any advantages to you in this process?

IV. Success Factors

A. Personal Experiences

1) Is there any entrepreneur in the family? Or, in your close network, like friends?

Do you think this has a positive effect on you? Does this have any effect on your success?

2) Do you think your educational background has any positive/negative effects on your success for this start up?

3) Do you think your prior work experiences have any positive/negative effects on your success for this start up?

4) Did you have any entrepreneurial experiences before this one or is this the first one? If you had, were they successful?

B. The Business, Market and the Target Market

1) How did the conditions in the market, your target market, and the business that you are operating affect your success?

C. Partnership

1) a. If there is a partner: Do you think that having a partner have any positive or negative effects on your success as an entrepreneur? Why?

b. If there is no partner: Do you think that not having a partner have any positive or negative effects on your success as an entrepreneur? Why?

D. Network

1) Who made up your network at the start up phase of the business, how many people were in your network? Today, who make up your network, how many people are in your network? Is there a change? What are the reasons of the change? How was it, how it progressed?

2) Who are the people primarily involved in your network? (Close ties such as family and friends, or distant ties like acquaintances?)

3) What do you think about the effect of your social network on your success?

4) Do you think that having a network consisting of strong ties and having strong relationships with members in your network have an effect on your success?

5) Do you have people in your network that operate in other industries than you do? Are they beneficial for you?

- 6) Do you think that your capability of networking, giving importance to human relations and trying to nurture them is necessary for success? Are they very important?
- 7) To what extent the support taken from the banks or the government affect your success?
- 8) Do you attend several meetings or form partnerships with universities or other institutions for networking?
- 9) Which one do you think is more important? Having a large network or a small one but consisting of critical people such as high-level individuals working in municipalities or managers working in other important institutions?
- 10) How connected are the networks of yours and the people's in your network? Do they consist of the same people? If yes, does this cause you to have the same kind of information from each source, does this affect your operations in a negative way?
- 11) Can you reach the networks of people that are members of your network? How linked are the people in your network?
- 12) a. For women: Entrepreneurship is something mainly ascribed to men. When you try to extend your network, did you face difficulties? (Such as when you visited the bank to get financial support?)
b. Do you mainly do networking with women?

E. Leadership

- 1) How would you describe yourself as a manager/leader?
- 2) How do the employees perceive you?
- 3) How often do you go to your office? For how many hours do you work a day?
Was it the same at the start up phase?

4) Do you think your managerial style has any positive or negative effect on your success?

F. Personal Characteristics

1) Which characteristics of yours are reflected by this business? Which of those are more prominent?

2) Do you think these characteristics have any positive or negative effect on your success as an entrepreneur?

G. Rank order

1) Considering all we have talked, what are the factors that have the most significant effect on your success as an entrepreneur? Why?

Appendix C

Original Transcripts of Sample Quotations

Education Level:

Katılımcı #36: Olumsuz etkisi olmadı eğitim sınırsız bir şey. Ne alsak kar. Psikolojinin çok iyi bir başlangıç noktası olduğunu düşünüyorum çok iyi bir başlangıç noktası. Bana çok faydası oldu kişisel gelişimimde de faydası oldu.

Katılımcı #37: Eğitimin olumlu etkisi oldu. Marmara üniversite iktisat fakültesi, çalışma ekonomisi ve endüstri ilişkisi okudum ben ve bizim okuduğumuz bölümün dersleri hem işletme, hem iktisat, hem ekonomi içeren karma müfredata sahipti. Mevcut şundaki ekonomik yapıyı koklarken şirket yapılarını koklarken işime yarayacak araçları ben okulda fark etmeden edindiğimi gördüm. Ve o zaman daha farklı bölüm okusaydım diye sorgularken aslında o dönemdeki bilgi birikiminin ve ediniminin bugüne faydası olduğunu bugün görüyorum. Daha çok işlevsel bir bölüm okumuşum işim ile ilgili bence faydası var.

Katılımcı #32: Psikoloji okumanın bir etkisi var diye düşünüyorum. Yani daha doğrusu aşçılık okumanın ilk okumamış olmam avantaj düşünüyorum.

Katılımcı #28: Eğitimimin olumlu etkisi olmuştur tabii yani. Oldukça olmuştur. İyi bir okul, iyi bir eğitim. Mutlaka faydası olmuştur.

Katılımcı #25: Eğitim hayatının olumlu yönleri oldu tabii ki. Yani uluslararası ilişkilerde okudum ama aslında uluslararası ilişkilerle bağlantılı bir iş yapmıyorum. Çünkü benim okuduğum bölümde daha siyasal ağırlıklıydı, politika ağırlıklıydı. Ama ben tam tersi tamamen özel sektörde görev alıyorum. Artıları tabii ki oldu. Mesela münazara eğitimlerinin, topluluk önünde konuşma sanatı gibi... Bazı içinden çekeceğim ekonomi derslerimizin, matematik derslerimizin getirilerini şu anda yaşıyorum.

Katılımcı #16: Yani şimdi eğitime benim bakış açım biraz daha farklıdır eğitim, eğitim aldığınız dalla ilgili cehaletinizi giderir. Hayat farklıdır hayatın şartları farklıdır. Onları ancak yaşayarak bir şeyleri öğrenirsiniz benim o yaşamım ve eğitimim bütünleşerek bugün ki başarıyı ortaya çıkarmıştır.

Katılımcı #15: Olumlu, tabii ki olumlu yani... Her bakımdan olumlu...

Katılımcı #10: Olumlu etkileri oldu çünkü bizim yaptığımız işte evet saha çalışması çok önemli ama sahayı gözlemlemek de çok önemli. Ben hani aldığım eğitimlerde neye dikkat edilmeli işte hani iyi örnekler nasıl olmalı konusunda da o derslerde de bir sürü şeyler öğrendim onları sahaya uygulamaya çalıştım onun dışında yaptığınız işi göstermenin en büyük temel şeyi siz de raporlama. Hani o konuda ciddi farklar getirebildik firmalarımıza. Farklı örnekler sunabildik işte rapor okumayı bir sayının ne anlama geldiğini hani okuduğum okul sayesinde öğrenebildim. O yüzden hani ben hem okuduğum okuldan çok memnunum hem de yaptığım işte onun etkileri olmasından dolayı çok memnunum inanıyorum evet olumlu etki olduğuna.

Katılımcı #2: Eğitim neyi veriyor neyi nereden bulabileceğinizi sorgulamanızı bilgiye nasıl erişeceğinizi sorgulamanızı sağlıyor. Bu açılardan çok faydası da var

Katılımcı #3: Evet okullar bana çok katkıda bulundular yani çok evvelden imkanlar daha genişti bundan 25 sene önce falan gezdiğim bütün ülkelerden aldığım sertifikalar benim başarıma çok katkıda bulunmuşlardır.

Katılımcı #6: Belli bir yere geliyorsunuz ama tecrübe ile geliyorsunuz. Eğitiminiz olursa çok çabuk yol kat edersiniz.10 yıllık mesafeyi 2-3 yılda kat edersiniz. Eğitime çok önem veriyorum.

Work Experience:

Katılımcı #36: Hepsinden bir şeyler kattığımı düşünüyorum her şeyin o zamanda yaşamının bir sebebi olduğunu düşünüyorum hepsi birikti. O gün o işi yapmalıydım ki bugün bu işi algılayabileyim. Pazar araştırması yaptım ve sonra dergiye girdim galiba. Hepsinin etkisi oldu.

Katılımcı #37: Evet, satış ve pazarlamadan alınan eğitimler bu tip sektörlerde yer alan insanlar ile bir araya gelmeme sebep oldu. Onların hem problemleri hem başarıları, var etme şekilleri gibi bunlar ile ilgili resmi yakalama imkânı sundu o yüzden faydası olduğunu düşünüyorum iyi ki böyle deneyim yaşamışım.

Katılımcı #32: Didem Şenol: Çok olumlu etkisi olduğunu düşünüyorum.

Katılımcı #28: Onun çok fazla tabii ki iş tecrübesi çok etkiliyor. İnsan sadece okulda değil, çalışırken de birtakım şeyleri yaşayarak, görerek öğreniyorsun. Tamamen hiçbir şey bilmeden birden bire ben ticaret yapayım dersin daha çok çabalarsın. En azından 8-9 sene az bir zaman değil. Ben çabuk öğrenen bir insanım. Bir senede de

insan bunu belki öğrenebilir ama 8-9 sene çalışınca bayağı bir şeyler öğrenmiş oluyor insan.

Katılımcı #16: Olumlu etkileri vardır yani ufuk olayıdır yani ufukum sürekli olarak gelişmektedir. Bir duvarın arkasını değil 2-3 duvarın arkasını görebilme meziyeti alaylı olarak yetişmemizden ve onu da üniversite ile pekiştirmemizden kaynaklanıyordur.

Katılımcı #29: İş hayatında edindiğim tecrübelerin çok fazla faydası oldu.

Katılımcı #9: Olumlu etkileri olduğunu düşünüyorum kesinlikle ve her birine tek tek teşekkür ediyorum yani.

Katılımcı #1: Tabii ki tecrübelerim tabii çok önemli yani tecrübelerle pişe pişe geldim. Yani bir de bizim mesleğimiz öyle pişe pişe geliyorsunuz yani okulu bitirip gelmiyorsunuz. Şimdi öyle de bizim zamanımızda tecrübelerden deneme yanılma yöntemleriyle geldik yani kendi kendimizi eğittik. Kendi kendimizi eğittik yani sonuçta.

Katılımcı #4: Çok olumlu etkileri oldu. Ben medya sektöründe çalıştığım için elim çok hızlıdır benim çünkü biz haber çok yetiştirmeye çalıştığımız için çok ciddi anlık krizler yönetirdik dolayısı ile kafam o noktada çok hızlı çalışır. Çok empati yapabilirim. Bunlar bana o iş hayatımın getirileri.

Social Capital:

Katılımcı #37: Çok. Etkili olduğunu düşünüyorum... Ben kendi sosyal çevremde yapabileceğim olarak düşünüyorum.... Olabildiğince ortalıkta gözükmeye

çalışıyorum. Olabildiğince tanınan bir marka olmaya çalışıyorum. İzole bir yaşantım yok. Öyle sanıyorum...

Katılımcı #37: Evet, önemlidir çünkü şöyle düşünüyorum her ne kadar halen süreçleri insana en az duyacak şekilde kurgulamaya çalışsalar da mühendisler yönetim üzerinde çalışanlar ülkemiz için konuşabilirim. İnsan ilişkilerinin en önemli itici güç olduğunu düşünüyorum iş yaparken çünkü üretim noktasında zaman, zaman ziyaretlerde bulunuyorum. Bir sipariş aldık yapılırken. Orada yapan insanlar ile kurduğunuz temasa göre sonucun en kadar değiştiğini görüyorum bu benim için yeterli kanıttır. Dolayısıyla ilişkileri insanların öğretici bir yeri var hem de biz ne yapmak istiyorsak bizi destekleyen bir tarafları olduğunu düşünüyorum. Aynı şekilde bizde öyle çok monolog yaşam yaşanmıyorsa kesinlikle şu işler hiçbir şekilde insansız dönmez. Mutlaka iletişim var.

Katılımcı #28: Muhakkak. Kolay dost olabilen bir insanım. Onun için de dost olduğum zaman da o insana danışabilirim. Fikir alabilirim. Kullanmak manasında değil ama o da bana güç verir. Yani...

Katılımcı #16: Zaten sosyal çevre olmadan başarının olması da mümkün değil. Muhakkak olmalı olmazsa olmaz bağlantılıdır.

Katılımcı #10: Kesinlikle çok önemli çünkü biraz öncede söyledim ben iletişim gücüne çok inanıyorum. Hani çok başarılı olursunuz işinizi çok iyi bilirsiniz çok fazla bilgiye sahipsinizdir ama iletişim yeteneğiniz yoksa hani bunu ne kimseyle paylaşabilir ne bilgilerinizi başkasına aktarabilirsiniz. Ama iletişiminiz güçlüyse hiçbir şey bilmiyorsanız bile o kadar fazla şey öğrenebilirsiniz ki o iletişim gücünüzle o yüzden ben kesinlikle hani bu basılı görsel kendi sosyal networkünüzde her konuda iletişimin çok güçlü bir silah olduğuna inanıyorum..... Sosyal ağ zaten

günümüzde hiç kimsenin olmazsa olmazı hani bugün ilkokulda olup da sadece 30 kişilik arkadaş grubuna sahip bir çocuk bile sosyal ağlar sayesinde çok daha geniş kısıma hitap edebiliyor kendi özelliklerini bir sürü insanla paylaşabiliyor o yüzden o network çok önemli herkes için 7den 77ye önemlidir.

Katılımcı #29: Mutlaka oldu. Çünkü çok kısa bir hikâyeden bahsedeyim. Biz normalde kimse sıfırdan bir şirket kuramaz. Çok zordur. Şahin Bey'in networkü çok önemliydi. Yeni kurulan şirkete iki bilanço dönemini doldurmadan kimse çek karnesi vermez. Bize Şahin Bey çek karnesi de ayarladı, kredi ayarladı. Oradaki networkü, oradaki bağlantıları, daha önce emek verdiği firmada örnek veriyorum... Çalıştığımı Kuveyt Türk... Daha önce çalışıyordu, oradan gelen bağlantıyla çek karnemiz geldi. Kredilerimiz çıktı. Bu sayede araçlarımızı alabildik. Yani cebimizden sadece evimiz ve sattığımız araba parasının dışında 200 milyardı ama harcanan para 1 trilyonu. Bu da özellikle Şahin Bey'in networkünün çok büyük etkisi oldu.

Katılımcı #1: Başarıya ulaşmamın girişimcilikte tabi ki başarıya ulaşmamın sebebi insan ilişkilerim çok önemli o. Yani en önemlisi bu benim sektörümde.

Katılımcı #35: Network çok önemli bende bunu biraz daha geliştireceğim.... Sırf kendisi için üretenler vardır ama ben aldığım dış uyarılarla beslenen bir insanım onun için çok önemli.

Katılımcı #33: İlişki. İnsan ilişkisi çevre ilişkisi önce geliyor.

Katılımcı #24: Var. Çalıştığımız, iş yaptığımız insanlar önemli gerçekten.... Tabii. Yani bizim işin en önemli kısmı bana göre iletişim.

Katılımcı #21: Kesinlikle etkisi var. Olumlu olarak etkisi var.

Katılımcı #11: Çok hem de çok önemli. Ben insan ilişkilerine çok önem veririm.

Katılımcı #13: Gerekli. Dediğim gibi insanlarla iletişim derecemi iyi olduğunu düşünüyorum. Sonuçta benim şimdi mesela bireysel ilişkileri çok iyi tutarım.

İnsanlarla ilişkilerim çok iyidir. Ailevi olsun arkadaşlıklar olsun. Birisinden bir şey istediğim zaman kanla başla herkes böyle eminim bana yardımcı olur. O konuda sağ olsun arkadaşlarım hepsi çok iyiler yani.

Appendix D

Survey Form of Study 2 in Turkish

A. Katılımcı Bilgileri

Şirketin kurucusu siz misiniz? Evet / Hayır

Yaşınız:

Cinsiyetiniz: Erkek / Kadın

Medeni durumunuz: Evli / Evli değil

Çocuğunuz var mı? Evet / Hayır

Kaç tane?

Eğitim durumunuz nedir? En son mezun olduğunuz okulu belirtiniz.

1	İlkokul
2	Ortaokul
3	Lise
4	Üniversite
5	Yüksek lisans
6	Doktora

Şu anki işinizde içinde bulunduğunuz sektörden başlayarak, mesleki hayatınızda hangi sektörlerde çalıştığınızı geçmişe doğru sıralayınız. Bu sektörlerde toplam kaç yıl çalıştığınızı belirtiniz.

	Sektör	Toplam yıl sayısı
1		
2		
3		
4		
5		
6		

B. Firmanızın Özellikleri

Şirketinizin kuruluş tarihi nedir?

Şirketinizin faaliyet alanı / sektörü nedir?

Şirketinizin şu anki çalışan sayısı kaçtır?

C. Başarı

Sektörünüzdeki rakibiniz olan diğer KOBİ'lere göre kendinizi karşılaştırdığınızda, son 3 yıldaki firma performansınızı nasıl değerlendirirsiniz?					
	Rakiplerden çok daha düşük	Rakiplerden biraz daha düşük	Rakiplerle aynı seviyede	Rakiplerden biraz daha yüksek	Rakiplerden çok daha yüksek
Ciro artışı	1	2	3	4	5
Net karlılık	1	2	3	4	5
Pazardaki payınız	1	2	3	4	5
Yaptığınız yatırımın getirisi	1	2	3	4	5
Büyüme hızınız	1	2	3	4	5
Ürün / hizmet kalitesi	1	2	3	4	5
Yeni ürün / hizmet geliştirme, yenilikçilik (inovasyon)	1	2	3	4	5
Çalışan memnuniyeti	1	2	3	4	5
Çalışan sadakati	1	2	3	4	5
Marka bilinirliği	1	2	3	4	5
Müşteri memnuniyeti	1	2	3	4	5
Diğer (varsa belirtiniz)					
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Lütfen şimdi kendinizi bir girişimci olarak düşünün. Bir girişimci olarak aşağıdaki konularda şirketinizi ne kadar başarılı görüyorsunuz?					
	Çok başarısız	Başarısız	Orta derecede başarılı	Başarılı	Çok başarılı
Firma için koyduğum hedeflere ulaşmak	1	2	3	4	5
İstihdam / iş imkanı yaratmak	1	2	3	4	5
Süreklilik / kalıcı olmak	1	2	3	4	5
Sektörde öncü olmak	1	2	3	4	5
Çalışanları eğitmek / geliştirmek	1	2	3	4	5
Diğerlerinden farklı olmak	1	2	3	4	5
Tanınır olmak	1	2	3	4	5
Çalışanlarına / müşterilerine güven vermek	1	2	3	4	5
Diğer (varsa belirtiniz)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	2	4	5
-					

Bir girişimci olarak şu andaki işinizin size kattıklarını düşünün. Aşağıdaki cümlelerde verilenleri ne sıklıkta yaşadığınızı belirtin.					
	Hemen hemen hiç bir zaman		Bazen		Hemen hemen her zaman
Bu iş beni özgürleştiriyor.	1	2	3	4	5
İşimi severek yapıyorum.	1	2	3	4	5
Her şeyi kendi başıma yapmamın tatminini yaşıyorum.	1	2	3	4	5
Zorluklar karşısında dayanıklı olabiliyorum.	1	2	3	4	5
Bu iş sayesinde kendimi geliştiriyorum.	1	2	3	4	5
İşimde huzurluyum.	1	2	3	4	5
Hayatımdan memnunum.	1	2	3	4	5
İşim sayesinde başkalarına faydam dokunuyor.	1	2	3	4	5
Yaptığım iş ile ülkeme katkı sağlıyorum.	1	2	3	4	5
Takdir görüyorum.	1	2	3	4	5
Diğer (varsa belirtiniz)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

D. Network

İşinizle ilgili çevrenizdeki insanları düşünerek, lütfen aşağıdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	kesinlikle katılmıyorum				kesinlikle katılıyorum
Yeni fikirler geliştirmeme yardımcı olacak gerekli bilgileri elde edebilirim.	1	2	3	4	5
İşimi yapabilmek için ek bilgiye ihtiyacım olduğunda, çoğunlukla bulabilirim.	1	2	3	4	5
İşimi iyi yapabilmem için lazım olan bilgilere erişimim var.	1	2	3	4	5

İşinizle ilgili çevrenizdeki insanları düşünerek, lütfen aşağıdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	kesinlikle katılmıyorum				kesinlikle katılıyorum
Yeni fikirler geliştirmeme yardımcı olacak gerekli finansal kaynakları elde edebilirim.	1	2	3	4	5
İşim için ek finansal kaynağa ihtiyacım olduğunda, çoğunlukla bulabilirim.	1	2	3	4	5
İşimi iyi yapabilmem için lazım olan finansal kaynaklara erişimim var.	1	2	3	4	5

İşinizle ilgili çevrenizdeki insanları düşünerek, lütfen aşağıdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	kesinlikle katılmıyorum				kesinlikle katılıyorum
Yeni fikirler geliştirmeme yardımcı olacak gerekli moral desteğini elde edebilirim.	1	2	3	4	5
İşim için bazen motive edilmeye ihtiyacım olduğunda, çoğunlukla bulabilirim.	1	2	3	4	5
İşimi iyi yapabilmem için lazım olan moral desteğine erişimim var.	1	2	3	4	5

Lütfen aşağıda belirtilen ifadelere ne ölçüde katıldığınızı verilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
İşimle ilgili:	kesinlikle katılmıyorum				kesinlikle katılıyorum
Çevre oluşturmak ve olan çevreyi korumak için ahbaplık yapıyorum (iş ile ilgili olmasa da yemeğe çıkmak, birlikte zaman geçirmek gibi).	1	2	3	4	5
Çevre oluşturmak ve olan çevreyi korumak için ilgili dernek ve kuruluşlara üye oluyor ve toplantılarına katılıyorum.	1	2	3	4	5

Lütfen aşağıdaki cümlelere ne ölçüde katıldığınızı verilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	kesinlikle katılmıyorum				kesinlikle katılıyorum
Bir problem yaşarsam iş çevremdeki kişilerin bana her zaman yardım etmeye çalışacaklarını ve beni bu durumdan kurtarmaya çalışacaklarını biliyorum.	1	2	3	4	5
İhtiyacım olduğunda, bana bir el vereceklerine dair iş çevremdeki kişilere her zaman güvenebilirim.	1	2	3	4	5
İşimi kolaylaştırmak için iş çevremdeki kişilere her zaman güvenebilirim.	1	2	3	4	5

Appendix E

Survey Form of Study 2 in English

A. Participant Demographics

Are you the founder of the company? Yes / No

Age:

Gender: Man / Woman

Marital status: Married / Not married

Do you have any children? Yes / No

How many?

What is your education level? Please indicate the last degree received.

1	Primary school
2	Secondary school
3	High school
4	College
5	Masters
6	PhD

Starting from the industry that you are currently operating in, please indicate the industries that you worked in so far chronologically? Please indicate total number of years for each work experience.		
	Industry	Total years
1		
2		
3		
4		
5		
6		

B. Company Demographics

When did you establish the business?

What is the area of operation / industry of your business?

What is the number of employees?

C. Success

When you compare your company with other SMEs which are your competitors in your industry, how would you rate your company's performance for the last three years?					
	Much lower than the competitors	Lower than the competitors	The same as the competitors	Higher than the competitors	Much higher than the competitors
Sales growth	1	2	3	4	5
Profitability	1	2	3	4	5
Market share	1	2	3	4	5
Return on investment	1	2	3	4	5
Growth rate	1	2	3	4	5
Quality improvements	1	2	3	4	5
New product development capability	1	2	3	4	5
Employee satisfaction	1	2	3	4	5
Employee commitment	1	2	3	4	5
Brand awareness	1	2	3	4	5
Customer satisfaction	1	2	3	4	5
Other (please indicate)					
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Please consider yourself as an entrepreneur. As an entrepreneur, how successful do you perceive your company for the following?					
	Very unsuccessful	Unsuccessful	Mediocre successful	Successful	Very successful
Reaching the targets put forth for the organization	1	2	3	4	5
Generating employment opportunities	1	2	3	4	5
Sustainability	1	2	3	4	5
Being the leader in the sector	1	2	3	4	5
Training and developing employees	1	2	3	4	5
Being different than others	1	2	3	4	5
Being well-known	1	2	3	4	5
Earning trust of the employees and customers	1	2	3	4	5
Other (please indicate)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	2	4	5
-	1	2	2	4	5

Please consider the contributions of your business to you as an entrepreneur. Please indicate how frequently do you experience the following.					
	Almost never		Sometimes		Almost always
This job makes me feel freer	1	2	3	4	5
I like my job	1	2	3	4	5
I am satisfied with doing everything on my own	1	2	3	4	5
I can be resilient when facing difficulties	1	2	3	4	5
I develop myself	1	2	3	4	5
I am at peace doing my job	1	2	3	4	5
I am happy with my life	1	2	3	4	5
I can be of help to others	1	2	3	4	5
I can contribute to my country by my performance	1	2	3	4	5
I am being appreciated	1	2	3	4	5
Other (please indicate)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

D. Network

Considering your social network related to your business, please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I can obtain the necessary informational resources to support new ideas.	1	2	3	4	5
When I need additional informational resources to do my job, I can usually get them.	1	2	3	4	5
I have access to the informational resources I need to do my job well.	1	2	3	4	5

Considering your social network related to your business, please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I can obtain the necessary financial resources to support new ideas.	1	2	3	4	5
When I need additional financial resources to do my job, I can usually get them.	1	2	3	4	5
I have access to the financial resources I need to do my job well.	1	2	3	4	5

Considering your social network related to your business, please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I can obtain the necessary motivational resources to support new ideas.	1	2	3	4	5
When I need additional motivational resources to do my job, I can usually get them.	1	2	3	4	5
I have access to the motivational resources I need to do my job well.	1	2	3	4	5

Please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
Related to my business:	Strongly disagree				Strongly agree
I socialize with people to extend my network and/or to sustain the existing one even if it is not directly related to my business.	1	2	3	4	5
I attend meetings and join membership groups in order to extend my network and/or to sustain the existing one.	1	2	3	4	5

Please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I know people in my network will always try and help me out if I get into difficulties.	1	2	3	4	5
I can always trust people in my network to lend me a hand if I need it.	1	2	3	4	5
I can always rely on people in my network to make my job easier.	1	2	3	4	5

Appendix F

Survey Form of Study 3 in Turkish

A. Katılımcı Bilgileri

Şirketin kurucusu siz misiniz? Evet / Hayır

Yaşınız:

Cinsiyetiniz: Erkek / Kadın

Medeni durumunuz: Evli / Evli değil

Eğitim durumunuz nedir? En son mezun olduğunuz okulu belirtiniz.

1	İlkokul
2	Ortaokul
3	Lise
4	Üniversite
5	Yüksek lisans
6	Doktora

Bu girişime başlamadan önce toplam kaç yıllık iş deneyiminiz vardı?

Bu girişime başlamadan önce şu anda içinde bulunduğunuz sektörde kaç yıllık deneyiminiz var?

B. Firmanızın Özellikleri

Şirketinizin kuruluş tarihi nedir?

Şirketinizin faaliyet alanı / sektörü nedir?

Şirketinizin şu anki çalışan sayısı kaçtır?

C. Network

Bu bölüm sizin sosyal ağınız ile ilgili sayısal bilgiler elde etmek üzere hazırlanmıştır. Sizde iletişim bilgileri olan, son 1-2 ay içinde iletişim kurduğunuz ve ilişkinizin devam edeceğini düşündüğünüz tüm tanıdıklarınızın isminin baş harfini yazınız (aile üyeleriniz, akrabalarınız, arkadaşlarınız, sosyal çevreniz, önemli müşteriler, tedarikçiler, çalışanlar, ortaklar gibi iş çevreniz olabilir – hafızanızı tazelemek için cep telefonunuzun adres defterine bakmanızı rica ederiz)

	Baş Harf	İş ile ilgili herhangi bir konuda bu insanla hiç iletişim kurdunuz mu? (Tavsiye almak, soru sormak, maddi/manevi destek, fikir alışverişi gibi) 1: Evet 2: Hayır	Mesleği nedir?	Neyiniz oluyor? 1: Arkadaş / tanıdık / iş arkadaşı 2: Kan-bağı olan akraba 3: Kan-bağı olmayan akraba	Ne sıklıkla iletişim kuruyorsunuz?				
					1	2	3	4	5
1					1	2	3	4	5
2					1	2	3	4	5
3					1	2	3	4	5
4					1	2	3	4	5
5					1	2	3	4	5
6					1	2	3	4	5
7					1	2	3	4	5
8					1	2	3	4	5
9					1	2	3	4	5
10					1	2	3	4	5
11					1	2	3	4	5
12					1	2	3	4	5
13					1	2	3	4	5
14					1	2	3	4	5
15					1	2	3	4	5
16					1	2	3	4	5
17					1	2	3	4	5
18					1	2	3	4	5
19					1	2	3	4	5
20					1	2	3	4	5

Lütfen aşağıdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	Kesinlikle katılmıyorum				Kesinlikle katılıyorum
İşimi daha iyi yapmak için gerekli olan bilgilere kolayca erişebiliyorum.	1	2	3	4	5
İşimi daha iyi yapmak için gerekli olan maddi kaynaklara kolayca erişebiliyorum.	1	2	3	4	5
İşimi daha iyi yapmak için gerekli olan moral destek ve motivasyonu çevremden alabiliyorum.	1	2	3	4	5

Lütfen aşağıdaki ifadelere ne ölçüde katılıp katılmadığınızı belirtilen ölçek üzerinde işaretleyiniz (1=kesinlikle katılmıyorum, 5=kesinlikle katılıyorum).					
	Kesinlikle katılmıyorum				Kesinlikle katılıyorum
Çevremdeki kişilerden işimi daha iyi yapmamı sağlayan bilgiler alıyorum.	1	2	3	4	5
Çevremdeki kişiler sayesinde işimi daha iyi yapmamı sağlayan maddi kaynaklara daha kolay erişiyorum.	1	2	3	4	5
Çevremdeki kişilerden işimi daha iyi yapmama yardımcı olan moral destek ve motivasyonu alıyorum.	1	2	3	4	5

D. Başarı

Sektörünüzdeki rakibiniz olan diğer KOBİ'lere göre kendinizi karşılaştırdığınızda, son 3 yıldaki firma performansınızı nasıl değerlendirirsiniz?					
	Rakiplerden çok daha düşük	Rakiplerden biraz daha düşük	Rakiplerle aynı seviyede	Rakiplerden biraz daha yüksek	Rakiplerden çok daha yüksek
Ciro artışı	1	2	3	4	5
Net karlılık	1	2	3	4	5
Pazardaki payınız	1	2	3	4	5
Yaptığınız yatırımın getirisi	1	2	3	4	5
Büyüme hızınız	1	2	3	4	5
Ürün / hizmet kalitesi	1	2	3	4	5
Yeni ürün / hizmet geliştirme, yenilikçilik (inovasyon)	1	2	3	4	5
Çalışan memnuniyeti	1	2	3	4	5
Çalışan sadakati	1	2	3	4	5
Marka bilinirliği	1	2	3	4	5
Müşteri memnuniyeti	1	2	3	4	5
Diğer (varsa belirtiniz)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Lütfen şimdi kendinizi bir girişimci olarak düşünün. Bir girişimci olarak aşağıdaki konularda şirketinizi ne kadar başarılı görüyorsunuz?					
	Çok Başarısız	Başarısız	Orta Derecede Başarılı	Başarılı	Çok Başarılı
Firma için koyduğum hedeflere ulaşmak	1	2	3	4	5
İstihdam / iş imkânı yaratmak	1	2	3	4	5
Süreklilik / kalıcı olmak	1	2	3	4	5
Sektörde öncü olmak	1	2	3	4	5
Çalışanları eğitmek / geliştirmek	1	2	3	4	5
Diğerlerinden farklı olmak	1	2	3	4	5
Tanınır olmak	1	2	3	4	5
Çalışanlarına / müşterilerine güven vermek	1	2	3	4	5
Diğer (varsa belirtiniz)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Bir girişimci olarak şu andaki işinizin size kattıklarını düşünün.
Aşağıdaki cümlelerde verilenleri ne sıklıkta yaşadığınızı belirtin.

	Hemen hemen hiç bir zaman		Bazen		Hemen hemen her zaman
Bu iş beni özgürleştiriyor	1	2	3	4	5
İşimi severek yapıyorum	1	2	3	4	5
Her şeyi kendi başıma yapmamın tatminini yaşıyorum	1	2	3	4	5
Zorluklar karşısında dayanıklı olabiliyorum	1	2	3	4	5
Bu iş sayesinde kendimi geliştiriyorum	1	2	3	4	5
İşimde huzurluyum	1	2	3	4	5
Hayatımdan memnunum	1	2	3	4	5
İşim sayesinde başkalarına faydam dokunuyor	1	2	3	4	5
Yaptığım iş ile ülkeme katkı sağlıyorum	1	2	3	4	5
Takdir görüyorum	1	2	3	4	5
Diğer (varsa belirtiniz)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Appendix G

Survey Form of Study 3 in English

A. Participant Demographics

Are you the founder of the company? Yes / No

Age:

Gender: Man / Woman

Marital status: Married / Not married

What is your education level? Please indicate the last degree received.

1	Primary school
2	Secondary school
3	High school
4	College
5	Masters
6	PhD

How many years of work experience you had before starting this business?

How many years of work experience you had before starting this business in a sector similar to the one that you are currently operating?

B. Company Demographics

When did you establish the business?

What is the area of operation / industry of your business?

What is the number of employees?

C. Network

This part is prepared to gain quantitative information related to your social network. Please indicate the initials of the people in your social network that you have the contacts details, you communicated with within the last 1-2 months and you feel you wish the relationship to continue (may include family members, relatives, friends, important customers, suppliers, employees, partners – please refer to your address book to prompt your memory)

	Initials	Have you contacted with this person for any business related matter (Asking advice, financial or motivational support, etc.) 1: Yes2: No	Occupation?	Your relationship? 1: Friend / acquaintance / colleague 2: Affinal kin 3: Non-affinal kin	How frequently do you communicate?				
					1: Less frequently than yearly	2: One or a couple of times in a year	3: One or a couple of times in a month	4:One or a couple of times in a week	5:Daily
1					1	2	3	4	5
2					1	2	3	4	5
3					1	2	3	4	5
4					1	2	3	4	5
5					1	2	3	4	5
6					1	2	3	4	5
7					1	2	3	4	5
8					1	2	3	4	5
9					1	2	3	4	5
10					1	2	3	4	5
11					1	2	3	4	5
12					1	2	3	4	5
13					1	2	3	4	5
14					1	2	3	4	5
15					1	2	3	4	5
16					1	2	3	4	5
17					1	2	3	4	5
18					1	2	3	4	5
19					1	2	3	4	5
20					1	2	3	4	5

Please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I can easily access to necessary informational resources to do my job better.	1	2	3	4	5
I can easily access to necessary financial resources to do my job better.	1	2	3	4	5
I can easily access to necessary motivational resources to do my job better.	1	2	3	4	5

Please indicate the extent to which you agree or disagree with the following. (1=strongly disagree, 5=strongly agree).					
	Strongly disagree				Strongly agree
I get informational resources from my network members to do my job better.	1	2	3	4	5
I get financial resources from my network members to do my job better.	1	2	3	4	5
I get motivational resources from my network members to do my job better.	1	2	3	4	5

D. Success

When you compare your company with other SMEs which are your competitors in your industry, how would you rate your company's performance for the last three years?					
	Much lower than the competitors	Lower than the competitors	The same as the competitors	Higher than the competitors	Much higher than the competitors
Sales growth	1	2	3	4	5
Profitability	1	2	3	4	5
Market share	1	2	3	4	5
Return on investment	1	2	3	4	5
Growth rate	1	2	3	4	5
Quality improvements	1	2	3	4	5
New product development capability	1	2	3	4	5
Employee satisfaction	1	2	3	4	5
Employee commitment	1	2	3	4	5
Brand awareness	1	2	3	4	5
Customer satisfaction	1	2	3	4	5
Other (please indicate)					
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

Please consider yourself as an entrepreneur. As an entrepreneur, how successful do you perceive your company for the following?					
	Very unsuccessful	Unsuccessful	Mediocre successful	Successful	Very successful
Reaching the targets put forth the organization	1	2	3	4	5
Generating employment opportunities	1	2	3	4	5
Sustainability	1	2	3	4	5
Being the leader in the sector	1	2	3	4	5
Training and developing employees	1	2	3	4	5
Being different than others	1	2	3	4	5
Being well-known	1	2	3	4	5
Earning trust of the employees and customers	1	2	3	4	5
Other (please indicate)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	2	4	5
-					

Please consider the contributions of your business to you as an entrepreneur. Please indicate how frequently do you experience the following.

	Almost never		Sometimes		Almost always
This job makes me feel freer	1	2	3	4	5
I like my job	1	2	3	4	5
I am satisfied with doing everything on my own	1	2	3	4	5
I can be resilient when facing difficulties	1	2	3	4	5
I develop myself	1	2	3	4	5
I am at peace doing my job	1	2	3	4	5
I am happy with my life	1	2	3	4	5
I can be of help to others	1	2	3	4	5
I can contribute to my country by my performance	1	2	3	4	5
I am being appreciated	1	2	3	4	5
Other (please indicate)	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5
-	1	2	3	4	5

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