Chapter 2

MANAGERIAL RESOURCES AND NEW VENTURE PERFORMANCE IN EMERGING AND ESTABLISHED ECONOMIES: A META-ANALYTIC REVIEW

ABSTRACT

The social capital and human capital have been conceptualized as key resources that may facilitate the performance of new ventures. Yet, despite a surge of studies examining the role of social capital and human capital in the entrepreneurial process, no quantitative assessments have been made of the empirical evidence to date. In an effort to systematically review past research results, I conducted a meta-analysis examining the strength of the link between different social capital and human capital dimensions and new venture performance as well as potential moderators affecting this relationship. Analysis of 49 selected studies revealed that on average, human capital and social capital are both positively related to new venture performance. The results revealed that on average, human capital and social capital are both positively related to new venture performance. Surprisingly, the overall relation between social capital and firm performance was significantly stronger in comparison to the relation between human capital and firm performance. The results also revealed that the relation between social capital and venture performance is
significantly stronger in emerging economies, thus confirming a moderating role of institutional context.

**Keywords:** Networks, social capital, human capital, new ventures
2.1. Introduction

The relative scarcity of innovative, fast growing new ventures combined with their economic significance has stimulated a burgeoning stream of research exploring the determinants of new venture performance outcomes (see Gilbert, McDougall, & Audretsch, 2006). Although this work has identified numerous factors—including the characteristics of the entrepreneur (Baum, Locke, & Smith, 2001), the venture’s resources and strategy (Brüderl, Preisendörfer, & Ziegler, 1992), and its external environment (Aldrich & Martinez, 2001)—one key factor that has received increased attention concerns the social capital embedded in the personal networks of entrepreneurs (Hoang & Antoncic, 2003; Stuart & Sorenson, 2007). Unlike traditional supply- and demand-based perspectives that have conceptualized entrepreneurs as either rational, autonomous actors or as “cultural dopes” without agency (Thornton, 1999), the network perspective maintains that ‘entrepreneurship is embedded in a social context, channeled and facilitated or constrained and inhibited by people’s positions in social networks’ (Aldrich & Zimmer, 1986: 4). Social capital plays a critical role in the entrepreneurial process as it may provide entrepreneurs with privileged access to knowledge, financial, reputational, and other types of resources that facilitate the discovery and exploitation of entrepreneurial opportunities (Elfring & Hulsink, 2003; Hite & Hesterly, 2001).

According to Burt (2000) the society can be viewed as a market where people exchange various goods and ideas. Some people enjoy greater success than others. Human capital explains this difference by focusing on
the personal characteristics of those who are more successful. That is, these people are generally more skilled, more educated, more intelligent, and more attractive. Whereas social capital is the contextual complement to human capital. The rationale of social capital is that better connected people are more successful. They are connected to other people, or groups with whom they exchange information, give and receive trust, and support. Resources that result from such structure are defined as social capital (Bourdieu & Wacquant, 1992).

Although a large body of research has been conducted on the influence of human capital and social capital on new venture performance, past results have been mixed and sometimes even contradict one another (Baum and Silverman, 2004). Studies by Li and Zhang (2007), Peng and Luo (2000), and Xin and Pearce, (1996), amongst others, confirmed a positive relation between social capital and new venture performance. Yet the study of Batjargal (2003) indicated that some aspects of social capital (relational and resource embeddedness) had direct positive effects on performance, while other aspects (structural embeddedness) did not have direct impact on performance. In a different study of Batjargal (2007), some aspects of social and human capital (structural holes, and start up experience) had no direct effect on performance, whereas other aspect of human capital (managers’ Western experience) did have a direct influence on performance. Furthermore, attributes of human capital such as education, experience, knowledge and skills have been argued to be a key source of entrepreneurial firms (e.g., Florin, Lubatkin & Schulze, 2003; Sexton and Bowman-Upton, 1985). However, while some authors argue that human
capital has been overemphasized (Baum and Silverman, 2004); others argue that human capital is key to entrepreneurial success (Haber and Reichel, 2007). The relationship between social capital and performance and human capital and performance appears complex and highly contingent, thus highlighting the need for a systematic assessment of existing empirical evidence to identify common patterns in, and potential moderators of the link between social capital and new venture performance, and human capital and new venture performance.

In this study, I conducted a meta-analysis to quantitatively evaluate existing empirical evidence on the relationship between social capital and new venture performance and human capital and new venture performance. Meta-analysis is a powerful tool for advancing cumulative knowledge, enabling accumulation across studies to establish facts, and revealing the hidden meaning of research literature (Hunter and Schmidt, 2004: xxvii). Because it allows researchers to systematically combine and integrate published research results (Capon, Farley, and Hoenig, 1990), meta-analysis has gained increasing prominence as a method in the entrepreneurship literature (e.g., Rauch, Wiklund, Lumpkin, Frese, 2009). My meta-analysis builds on these prior studies by both identifying the average effect size of social capital on new venture performance and human capital and new venture performance, and examining potential moderators of this relationship. Specifically, I investigate whether the performance impact of social capital and human capital varies across institutional contexts.
My meta-analytic review helps to reconcile some of the mixed findings that have been noted in prior reviews (Elfring & Hulsink, 2003; Jack, 2010). By assessing the moderating role of institutional-level characteristics I respond to calls for more research that simultaneously considers linkages between entrepreneurial processes, contexts, and outcomes (Aldrich & Martinez, 2001).

2.2. Theory and hypotheses

2.2.1. Social capital and new venture performance

Despite the numerous definitions of social capital in the literature, there is no consensus on a single clear definition of social capital. The definitions tend to vary depending on whether the focus of the study is primarily on (1) the relations an actor maintains with other actors, (2) the structure of relations among actors within a collectivity, or (3) both types of linkages (Adler and Kwon 2002). However, social capital can be generally described as the value of social networks, bonding similar people and bridging between diverse people, with norms of reciprocity (Uslaner & Dekker, 2001).

One of the main reasons for (new) venture success has been referred to network theory. This theory investigates the personal networks of entrepreneurs and their effects on success of new ventures (Aldrich, Rosen and Woodward, 1987). This kind of reasoning has been called the ‘network success hypotheses of entrepreneurship theory’. It states that networks of the founder will enable them to gain access to resources more cheaply, than if they were to use market mechanisms. Furthermore, the founders can
acquire resources from the networks that would otherwise not be available (Witt, 2004).

Empirical study of Evans and Jovanovic (1989) found that financial constraints were the most restricting factor of entrepreneurship. The social network of the founder can affect the capital raising process by two means. First, the investors use their social network to identify promising investment opportunities. Better connected founders are more likely to attract the attention of potential investors. Second, investors prefer to invest in companies where they have a cohesive relation with company principals. This is because entrepreneurs generally tend to mislead or hide valuable information concerning the new-venture. Strong social structures will enable the investor to access this hidden information and, safeguard them from potential risks (Stuart & Sorenson, 2007). Venture capitalists will mostly invest in entrepreneurial ventures that have been brought to their attention by their close contacts (Shane & Stuart, 2002). These close contacts enjoy a mutually beneficial, strong relation with the venture capitalist. Providing inaccurate or false information can jeopardize the continuation of this mutually beneficial relation (Coleman, 1990).

New ventures will have to compete with well-established organizations to attract highly skilled labor. Potential employees will prefer to choose for established companies with higher job security over a new company with uncertain future. In this sense they face similar information asymmetry as the potential investors. Entrepreneurs with more extensive social networks will have more contacts with potential employees or close contacts of potential employees. Entrepreneurs will not jeopardize the
close ties by providing misinformation. Potential employees will therefore be able to gather the required information about the new venture. This will ultimately help the entrepreneurs with extensive contacts to attract highly skilled employees (Stuart & Sorenson, 2007).

Organizations that are able to mobilize tacit knowledge will enjoy sustained profitability in different industries and achieve substantial advantage over their rivals (Rivkin, 2001; Klepper & Sleeper, 2005). However, tacit knowledge cannot be codified, and is difficult to exchange in the open market. Potential buyers are unable to fully recognize the potential value of the information, and sellers cannot easily address their concerns without revealing the valuable information. Entrepreneurs can access this valuable knowledge through their existing social relations. This will help them by engendering the trust necessary for exchange to take place (Coleman, 1990). Moreover, network size has proved to positively influence sales growth (Lechner, Dowling, Welpe, 2006), financial performance (Hansen, 1995), and new venture survival (Raz & Gloor, 2007). Thus, in entrepreneurial process networks facilitate opportunity recognition, mobilization of (tacit) knowledge, and financial and reputational resources.

_Hypothesis 1. There is a positive relationship between social capital and new venture performance_
2.2.2. Human capital and new venture performance

Human capital theory has been adopted by entrepreneurship researchers and has stimulated a considerable number of studies that include human capital into their prediction models of entrepreneurial success (e.g., Chandler and Hanks, 1998; Davidsson and Honig, 2003). Variables such as: formal education, training, employment experience, start-up experience, owner experience, parent's background, skills, knowledge, and others have been used to signify human capital. The most prominent definition of human capital is that of Becker (1964), where human capital is defined as skills and knowledge that individuals acquire through investments in schooling, on-the-job training, and other types of experience. Human capital theory states that human capital investments “improve knowledge, skills, or health, and thereby raise money or psychic incomes” (Becker, 1964, p. 1). The underlying idea of human capital theory is that people attempt to receive a compensation for their investments in human capital (Becker, 1964). Thus, individuals try to maximize their economic benefits given their human capital. Highly educated people might choose not to become entrepreneurs, since entrepreneurship might lead to income that is less compared to other employment opportunities (Cassar, 2006; Evans and Leighton, 1989). However, according to entrepreneurship literature, once individuals have decided to become entrepreneurs, those with greater investments in their human capital will be more successful. The success can be achieved because human capital improves the capability of individuals to discover and exploit business opportunities (Shane and Venkatraman, 2000). Human capital is also positively related to planning and venture
strategy, which in turn, positively impacts success (Baum et al., 2001). Human capital can also be useful in acquiring other necessary resources such as financial and physical capital (Brush, Greene & Hart, 2001) or even partially compensate a lack of financial capital (Chandler and Hanks, 1998). Finally, human capital enables further learning and effective accumulation of new knowledge and skills (e.g., Ackerman and Humphreys, 1990; Hunter, 1986). Thus, entrepreneurs with higher human capital should be more effective and efficient in running their business than entrepreneurs with lower human capital.

Hypothesis 2. There is a positive relationship between human capital and new venture performance

2.2.3. The moderating role of institutional context

One particularly important facet of the institutional context, emerging from the literature on international entrepreneurship (Batjargal, 2006), involves the distinction between emerging and established economies. Recent research suggests that institutional differences between both types of economies create distinct challenges for entrepreneurs (Hoskisson, Eden, Lau, and Wright, 2000), this raises the possibility that the forms of social capital that are most conducive to venture performance differ across the two contexts.

Ventures in emerging economies face specific challenges that affect the types of social capital that entrepreneurs must develop. Social and economic transformations in emerging economies tend to make social
exchanges more dynamic and turbulent than in more stable and established economies (Batjargal, 2006). Institutional and social uncertainties, underclass poverty, general lack of trust between exchange partners and legal system increases the reliance of entrepreneurs on their preexisting social relationships (Hurlbert, Beggs, & Haines, 2001; Podolny, 1994; Xin and Pearce, 1996). These relations are generally based on high level of mutual trust and cohesion stemming from long history of the contact, and can positively influence venture performance (Park and Luo, 2001; Peng and Luo, 2000). Furthermore, the institutional voids that appears in emerging economies due to a lack of market-supporting institutions, force entrepreneurs to perform many functions that are normally regulated by market mechanisms. These functions include obtaining market information, settling payments, interpreting regulations and enforcing contracts (Ouchi, 1980; Pfeffer and Salancik, 1978). Research on Chinese entrepreneurs reveals that they utilize close personal ties with highly placed officials in order to help their company gain institutional support for overcoming the challenges arising from market uncertainty (Peng and Luo, 2000). In some of the emerging economies such as Russia and China, the phenomenon of social capital is indigenous and is deeply rooted in local cultural and historical tradition (Batjargal, 2006). The Russian “svyazi” and Chinese “guanxi” are examples of such culturally rooted phenomena. These ties are generally based on long standing cohesive personal relations between network members that reduce uncertainties in financial transactions (Guseva and Rona-Tas, 2001), enhance performance
(Batjargal, 2003; Park and Luo, 2001), and facilitate access to resources (Sedaitis, 1998).

Hypothesis 3. The relation between social capital and performance will be stronger for ventures that are operating in emerging economies than for ventures that are operating in established economies.

In contrast, established economies enjoy higher levels of social and economic stability, mutual trust, and well developed institutions. Social exchange is generally stable and there is little institutional or social uncertainty. In similar conditions it is possible to engage in normal market style transactions. I therefore expect that human capital will have a stronger positive relationship with venture performance in established economies than in emerging economies.

Hypothesis 4. The relation between human capital and performance will be stronger for ventures that are operating in established economies than for ventures that are operating in emerging economies.

2.3. Data and methods

2.3.1. Search strategy

Present study explores how social capital and human capital influence venture performance. Prior to starting the literature search on this relation, I first set up the following three search criteria: 1) literature should measure effects of social capital and human capital on venture
performance; 2) different aspects of social capital and human capital should be measured on individual level rather than on organizational or team level; and 3) the studies need to include zero-order correlation (or convertible equivalents) between social capital/human capital and performance. Consistent with approaches of other meta-analysis (Lowe, Kroeck, & Sivasubramaniam, 1996; Rauch, et al., 2009) I employed several methods to locate studies reporting relationships between social capital/human capital and venture performance. First, I conducted a computer-based literature search in specialized databases (PsycInfo, 1987-2009; ABI/Inform, 1971-2009; EconLit, 1967-2009; and Social Science Citation Index, 1972-2009). Second, I continued manual search in the following journals: Entrepreneurship & Regional Development, Small Business Economics, Journal of Small Business Management, Journal of International Business Studies, Academy of Management Journal and Journal of Organization Science. To avoid publication bias (Hunter & Schmidt, 2004) and include unpublished studies, the database of social science research network (SSRN), conference proceedings of the Academy of Management (1984-2009) and the Babson College Entrepreneurship Research Conference (1981-2009) were searched. Finally, the reference lists of located studies were further combed to find additional studies.

Once relevant studies were identified, the references of these studies were further combed to find additional studies. After adding the crossed-referenced studies so far a total of 189 studies have been collected that met the initial search criteria. Next, an effort was made to ensure that the articles were of quantitative nature, represented a correct measurement of
the relation between independent and dependent variables, and reported a
correlation matrix with at least one antecedent of performance and one
performance measure. This procedure reduced the number of appropriate
research studies to 49 studies and 50 samples.

During the coding process effort was taken to refer the scales that
were reported in the primary studies. This will safeguard from
inappropriate combining of dissimilar elements, thus conceptually similar
variables would not be coded separately to compensate for slight
differences in labels that have been used by authors to refer to similar
constructs (Henard and Szymanski, 2001).

2.3.2. Measures

To make the analysis more transparent and interpretable,
appropriate categories grounded in the literature’s existing frameworks
were generated (Chrisman, Bauerschmidt, and Hofer, 1998; Song et al.,
2008). New venture performance is examined in terms of financial (e.g.,
profitability), operational (e.g., market share and stakeholder performance),
and growth dimensions (e.g., sales and employee growth). According to
Carton and Hofer (2007: 28) these are the most commonly used measures of
organizational performance. Next, human capital is reflected by TMT’s
functional, industry, and start-up experience. Functional experience
captures the extent that the members of TMT have functional experience in
sales/marketing, R&D/engineering, manufacturing, finance, and
administration. This indicates TMT’s overall experience across various
functional areas (Li and Zhang, 2007). Industry relevant experience refers
to the prior experience in the industry wherein the new venture is set to compete. Start-up experience concerns TMT’s prior experience with setting-up/managing of new ventures. Finally, I examine social capital by coding studies that have examined different facets of TMT’s social network including its structure, strength, and content (Hoang and Antoncic, 2003).

Context is operationalized as emerging economies, and established economies. The term ‘emerging market’ was originally coined by International Finance Corporation (IFC) to describe a fairly narrow list of middle-to-higher income economies among the developing countries, with stock markets in which foreigners could buy securities. The term’s meaning has since been expanded to include more or less all developing countries. Developing countries are those with a Gross National Income (GNI) per capita of $9,265 or less (World Bank, 2002). These categories were reviewed by three researchers for appropriateness and completeness. Consequently, content analysis was conducted. Content analysis is a classification technique that assigns variables to a particular category.

2.3.3. Statistical procedure

Meta-analysis is a statistical research integration technique that analyzes data consisting of findings from previous empirical studies (Hunter and Schmidt, 1990). Meta-analysis makes use of statistical procedures that are designed to integrate the results of a set of primary empirical studies. This enables meta-analysis to pool together all of the existing literature on a certain topic, while compensating for the quality
differences by correcting for different artifacts and sample sizes (Hunter and Schmidt, 1990, 2004).

For this paper Hunter & Schmidt (1990) method for the meta-analysis has been used. The meta-analysis has been conducted with the formulas of Hunter and Schmidt (2004) and the statistical software of Schmidt and Le (2004). The method of Hunter and Schmidt allows for making of comparisons across existing research studies. Pearson correlation or the regression coefficient between the metafactor and the dependent variable can be used to make the comparison. Hunter and Schmidt (1990) advise using Pearson correlation as the input. This is because correlations between two variables are independent of the other variables in the model, whereas regression coefficients depend on the particular variables included in the model and the models tend to vary across studies. Pearson correlation has been used by other meta-analytic studies (Gerwin and Barrowman, 2002; Montoya-Weiss and Calantone, 1994; and Song et al., 2008).

The method of Hunter and Schmidt (1990) makes use of random effect (RE) models instead of fixed effect (FE) models (Hunter and Schmidt, 2004, p. 201). The difference between these two models lies in the way that population parameters are assumed. The FE models assume that that exactly the same correlation value between metafactor and dependent variable underlies all studies, whereas RE models allow for the possibility those population parameters vary from study to study. Due to the broad range of definitions that were used in the selected primary studies to define social capital, the choice for RE models was the most appropriate.
First, meta-analysis was conducted onto the effects of human capital, and social capital on new venture performance in both contexts combined. Consequently, the subgroup method advocated by Hunter and Schmidt (1990) was implemented and two separate groups (established and emerging economies) were formed. The different measures of human capital and social capital were used to create the following subgroups: Functional experience, education, industry experience and start-up experience formed the human capital subgroups. Network size, social capital bridging, social capital bonding, network content interfirm ties, network content intergovernmental ties, and network diversity formed the social capital subgroups. Meta-analysis was conducted in each of these groups separately.

Cronbach’s alphas are being used to remedy measurement errors and increase accuracy (Hunter and Schmidt, 1990). However, only 7 of the 15 selected primary studies provided reliability measures. In similar situations the missing reliabilities are being reconstructed by using the mean value of available alpha’s (0.77) (Hunter and Schmidt, 1990, 2004). In cases whereby no reliability estimates are provided, the reliability of the studies is assumed to be 1 (Schmidt and Le, 2004). Initially both methods were implemented. However, due to the marginal (r=.04) difference between the outcome of these methods, and the small number of available reliability estimates I opted to use the latter method. The significance of the relations was tested by calculating the 95% confidence level using the formula provided by Hunter and Schmidt (2004). A statistical significance test was further performed to determine whether the difference between
the correlations across the moderator-based subgroups was significant (see Aguinis & Branstetter, 2007; Hunter and Schmidt, 2004).

To determine the significance of the correlations I calculated the 95% confidence level around the estimated population correlation. A correlation is assumed to be significant when the interval does not include zero (Judge, Heller, & Mount, 2002). Homogeneity of the correlation was tested by using the 75% rule. With this rule effects are considered homogeneous if more than 75% of the observed variance is due to sampling error variance, and heterogeneous if the number is less than 75% (Hunter and Schmidt, 1990). For testing the statistical significance of the difference between each moderator pare I used a z-test (Hunter and Schmidt, 1990, p.348).

2.4. Results

The first two hypotheses were that human capital and social capital would positively relate to performance in both contexts combined. As can be observed from Table 2, human capital and social capital in emerging and established economies combined, significantly relate to performance (true score correlation ρ = .126 and .209). None of the confidence intervals include zero, meaning that all correlations differ significantly from zero. Thus, the first two hypotheses are supported. Human capital and social capital positively relate to new venture performance in both economies combined. Surprisingly, the overall relation between social capital and performance is significantly stronger than the relation between human capital and performance (Z=3.13**). Similarly, the relation between social capital and performance in emerging economies is also significantly stronger than the
relation between human capital and performance in emerging economies (Z=2.51*).
Table 2:
Results of meta-analysis

<table>
<thead>
<tr>
<th>Correlations</th>
<th>k</th>
<th>N</th>
<th>Rw</th>
<th>So</th>
<th>Se</th>
<th>Sampling error (% variance)</th>
<th>Corrected r (cr)</th>
<th>95 % Confidence Interval</th>
<th>95 % Credibility Interval</th>
<th>Sign Test</th>
<th>Fail-Safe k</th>
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<tr>
<td>Human Capital</td>
<td>14</td>
<td>4284</td>
<td>.090</td>
<td>.0047</td>
<td>.0031</td>
<td>43.27</td>
<td>.126</td>
<td>.054 to .126</td>
<td>.048 to .204</td>
<td>Z=3.13**</td>
<td>163</td>
</tr>
<tr>
<td>Social Capital</td>
<td>14</td>
<td>4284</td>
<td>.169</td>
<td>.0051</td>
<td>.0048</td>
<td>34.69</td>
<td>.209</td>
<td>.132 to .206</td>
<td>.175 to .243</td>
<td></td>
<td>285</td>
</tr>
<tr>
<td>Human capital emerging</td>
<td>8</td>
<td>2937</td>
<td>.083</td>
<td>.0082</td>
<td>.0026</td>
<td>19.51</td>
<td>.119</td>
<td>.020 to .146</td>
<td>-.027 to .265</td>
<td>Z=2.51**</td>
<td>88</td>
</tr>
<tr>
<td>Social capital emerging</td>
<td>8</td>
<td>2937</td>
<td>.183</td>
<td>.0077</td>
<td>.0032</td>
<td>13.68</td>
<td>.231</td>
<td>.123 to .244</td>
<td>.100 to .362</td>
<td></td>
<td>182</td>
</tr>
<tr>
<td>Human capital established</td>
<td>6</td>
<td>1347</td>
<td>.124</td>
<td>.0041</td>
<td>.0029</td>
<td>20.23</td>
<td>.187</td>
<td>.073 to .175</td>
<td>.120 to .254</td>
<td>Z=1.28**</td>
<td>108</td>
</tr>
<tr>
<td>Social capital established</td>
<td>6</td>
<td>1347</td>
<td>.107</td>
<td>.0036</td>
<td>.0022</td>
<td>25.83</td>
<td>.141</td>
<td>.059 to .155</td>
<td>.068 to .214</td>
<td></td>
<td>79</td>
</tr>
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</table>

Note. K=number of samples; N=overall number of observations; Rw=sample size weighted mean correlation; So=observed variance, Se=variance due to sampling error; Corrected r=size effect corrected for low reliabilities; z-values=statistic based on test for significance of difference in effect sizes; † p<.10, * p<.05, ** p<.01, two-tailed test; Fail-safe k=the number of unknown or unpublished studies of the same relationship with a true effect size of 0 that it would take to widen the reported 95% confidence interval enough to include zero, i.e. that the reported sample-weighted mean r is not significant.
Third and fourth hypotheses were that the relation between human capital and performance and social capital and performance would be significantly stronger in emerging economies than in established economies. In Table 2 it can be observed that the relation between human capital, social capital and performance in emerging economies (true score correlation $\rho=0.119$ and $0.231$) and established economies (true score correlation $\rho=0.187$ and $0.141$) are significant. None of the 95% confidence intervals include zero, meaning that all correlations differ significantly from zero. Thus, human capital and social capital are positively related to new venture performance in emerging and established economies. However, the correlation between human capital and performance is stronger in established economies ($\rho=0.187$ vs. $0.119$), whereas the correlation between social capital and performance is stronger in emerging economies ($\rho=0.231$ vs. $0.141$). Table 3 shows that the relation human capital and performance in established economies is not significantly stronger ($Z=1.64$) than the relation human capital and performance in emerging economies. On the other hand, the relation between social capital and performance is significantly stronger in emerging economies in comparison to established economies ($Z=2.27^*$). Thus, the results reject hypothesis 3 and support hypothesis 4.

<table>
<thead>
<tr>
<th></th>
<th>Corrected $r$</th>
<th>Z-Score</th>
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<td>1. Human capital est.</td>
<td>.187</td>
<td></td>
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<tr>
<td>2. Human capital emer.</td>
<td>.119</td>
<td>-1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Social capital est.</td>
<td>.141</td>
<td>-1.28</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>4. Social capital emer.</td>
<td>.231</td>
<td>1.08</td>
<td>2.51*</td>
<td>2.27*</td>
</tr>
</tbody>
</table>

Table 3:
Differences in average effect sizes between different network dimensions
2.5. Discussion

This study aimed to compare the overall effect between social capital and new venture performance with that of human capital and new venture performance in both emerging and established economies. The results revealed that on average, human capital and social capital are both positively related to new venture performance. This confirms prior literature finding that has argued that these are key resources for entrepreneurial firms. The findings also provide further support for the important role of social capital for new venture performance.

Consequently, I looked at the role of context by examining the relation between human and social capital with performance in emerging and established economies. The results confirm the moderating role of context. However, the results are also surprising. The overall average performance effects of human capital and social capital are not uniform across environmental contexts. I find that overall social capital is related significantly stronger to performance in comparison with human capital. This is especially the case in emerging economies. The significant difference in favor of social capital additionally supports the importance of social capital. It also indicates that social capital might be of greater value to firm performance than human capital, especially in emerging economies.

The differential effects of context also suggest that industries in emerging and established economies may yield different learning opportunities or that they yield the same opportunities but that their value is different. It could also indicate that in emerging economies the industries change so quickly that prior experience is more of a liability than an asset. Finally, perhaps trust is more important in emerging economies than prior experience or education, and enables effective extracting of value from networks.

2.5.1. Theoretical and practical implications

Existing research is generally focused on either human capital or social capital. This study looked at the average effect size of human capital and social capital on new venture performance corrected and sample size weighted effect size across all performance measures.

\[ r^* = \text{reliability corrected and sample size weighted effect size across all performance measures} \]

\[ * p < .10, \quad ** p < .05, \quad *** p < .01, \quad \text{two-tailed test} \]
performance, enabling us to assess both the absolute and relative magnitude of these effects. Doing so, my study extends prior narrative reviews by providing systematic quantitative evidence on the relative importance of human capital and social capital for new venture performance. Furthermore, by assessing the moderating role of industry context, this study revealed how relationships between human capital, social capital and performance differ across emerging and established economies. This can be an explanation of some of the mixed findings of past studies.

My paper builds fort on calls of different scholars (Li and Zhang, 2007; Aldrich and Martinez, 2001) to study entrepreneurial processes, contexts, and outcomes simultaneously and compare the effects of networking and experience between transition economies and market economies. It does so by comparing effect sizes across both antecedents and across both contexts. The moderating role of context could have practical use for entrepreneurs that are active in either emerging or established economies. In general the resources of entrepreneurs are limited and choices need to be made as to when and where to allocate them. Better understanding of the relation between different dimensions of human capital and social capital and new venture performance in different contexts can aid the decision making process on the allocation of available resources. Consequently, the entrepreneur would develop the required resources for the given context.

On a more general scale these findings could also be of practical use to managers of multi-national companies. Similar companies that are operating in different economies tend to export existing best practices to new contexts. Better understanding of the moderating role of the context can be used to devise and implement a strategy whereby human and social resource development is more in line with the given economy.

2.5.2. Limitations and future research

Despite relevant new results and contribute of my study, I have to address three limitations. First, due to the strict selection criteria, the number of papers for this meta-analysis
was limited. An additional meta-analysis can be conducted whereby more broad selection criteria are maintained.

Second, the strong and significant relation between social capital and new venture performance warrants a closer examination of performance effects of different dimensions of social capital. Conducting a meta-analysis on the relation between different dimensions of social capital and performance can provide better understanding of how and when does social capital influence performance.

Third, this study reveals consequences of human and social capital, however, in order to fully understand the mechanism by which social and human capital influence firm performance it is necessary to conduct empirical studies on the antecedents of human and social capital.