International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. IX, Issue 6, June 2021

http://ijecm.co.uk/

THE MODERATING ROLE OF COGNITIVE SOCIAL CAPITAL IN THE RELATIONSHIP BETWEEN BRIDGING SOCIAL CAPITAL AND FIRM PERFORMANCE

Ermira Repaj
Department of Management, Faculty of Economy, University of Tirana, Albania
ermira.repaj@gmail.com

Abstract

This paper investigates the impact of the strong ties in the relationship between weak ties and performance. Specifically, we address the role of cognitive social capital as a moderator on the relationship between bridging social capital and firm performance. Using data from 129 firms located in 7 tourism clusters in Albania, we analyzed the effect of the bridging social capital and cognitive capital on firms' performance and the moderation relationship through multivariate regression techniques. The hypotheses are tested employing model four for moderation analyses of the PROCESS macro for SPSS. Our findings support the hypothesis that there is a significant positive relationship between bridging capital and firm's performance and a positive moderation effect of the cognitive capital. This study's findings provide insights regarding the role of bridging social capital on firm performance and the moderating role of cognitive capital in the relationship. Findings suggest that firms should maintain and improve the cognitive social capital of the strong ties and ensure that their business values, mission, and meaning are shared and communicated between relevant parties. They should increase efforts on improving the weak ties with external actors, which are essential in providing access to resources and new knowledge.

Keywords: Bridging social capital; cognitive social capital; networks; tourism; weak ties

INTRODUCTION

The consequences of strong and weak ties on business performance have been examined extensively. The role of the social capital in the survival, value creation, and success of entrepreneurial firms has been acknowledged and demonstrated by researchers in different studies (Nahapiet and Ghoshal, 1998; Pennings et al., 1998; Zucker et al., 1998). Firms rely on networks to access resources such as operational, technological know-how, relationships with other actors (Ford et al., 2003), potential investment (Varaldo and Ferrucci, 1996).

Studies in the context of clusters have suggested that strong ties and physical proximity facilitate interaction and communication, resource and information exchange, creating an internal group homogeneity (Rosenfeld, 1998), providing an opportunity to the firm to create new knowledge or improve existing one (Chen and Huang, 2009; Lin, 2007). Firms belonging to these clusters benefit from mutual knowledge and experience, mutual trust, and cooperation. Requena, Morales & Villaverde's (2010) empirical study evidence that the firms' capacity to share goals and culture (cognitive dimension of social capital) with other members influences the firms' capacity to acquire knowledge and, consequently, to improve innovation and performance in a context of geographical proximity. Other studies suggest that although the proximity and close relationships facilitate resource exchange and trust between members, the closure of networks often isolates organizations from the external world, creating a filter, or myopia for external information and knowledge (Gargiulo and Benassi, 2000; Inkpen & Tsang, 2005; Uzzi, 1997). Boari and Presutti's empirical study (2004) in a high-tech cluster in Italy shows that closer localization seemed to build trust and reduce control costs (the relational and cognitive dimensions of social capital), but negatively affected knowledge transfer and innovation. External agents and contacts, also defined as weak ties, often serve as a bridging instrument that brings new knowledge and valuable information for firms in these contexts.

The main claim of our research is that cognitive social capital, as a dimension of the strong ties, moderates the relationship between weak ties and performance. More precisely, we hypothesize that the positive relationship between bridging capital and business performance is strengthened by cognitive capital.

We test hypotheses on a sample of 129 firms in 7 tourism clusters based on six different regions in Albania. The owners, administrators, or firms' managers with responsibilities related to innovation activities were selected as informants for the data collection.

Our study contributes to the literature on social capital in the context of tourism clusters. It provides empirical support to the theses that weak ties contribute to the firm performance, and their contribution is strengthened by the cognitive dimension of the social capital. The study suggests that firms should invest resources to create and maintain external weak ties and, at

the same time to strengthen cognitive elements of the bonding social capital. Development policies in regions should aim and encourage to build up social capital for SMEs through incentivizing collaboration and external networking that provide opportunities for external knowledge, information, and resource exploitation, with the potential for innovation and improved business performance.

The rest of the paper is organized into five sections. In section 2, we develop the hypotheses of the study; section 3 analyses data, data collection procedures, measures, and the empirical model employed. Section 4 presents the empirical research findings. We conclude with discussions, conclusions, and limitations of the study.

HYPOTHESES DEVELOPMENT

The concept of social capital has been discussed extensively in the scientific literature since the mid-1980s, starting with the contribution of Bourdieu (1985), Coleman (1988), and Burt (1992) to explaining the notion and later on with the influential work of Putnam (1995), Nahapiet & Ghoshal (1998), Lin (2001). Though there is no consensus on one precise definition, according to Adler and Kwon's (2002) work in the concept review, the various conceptualizations are broadly consistent or complementary.

Nahapiet and Ghoshal's (1998, p. 243) definition of social capital as "the sum of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by individuals or social units" is one of the most frequently used from scholars. Burt (1992) defines *social capital* as the relationship networks and the resources made available through it. Most scholars agree that social capital represents the resources, an individual or a collective gain through a social structure or network of relationships (Lin, 2001). Other scholars classify the social capital in two main categories as bonding and bridging social capital (Adler & Kwon, 2002; Burt, 1997; Lin, 1999; Payne et al., 2011; Sharma, 2008), associating it with the network theories. Most of the researchers in this regard build on Granovetter's (1985) concept of "the weak ties" and Burt's (1997) concept of "structural holes". *Bonding social capital* is defined as internal social relationships within a collective or groups with similar characteristics (Payne et al., 2011) that provide consistent access to resources. It is generally associated with strong ties, network closure, exclusive intra-relationships (Claridge, 2018). In contrast, *bridging social capital* refers to the external network relationships (Burt, 1997; Lin, 1999; Sharma, 2008). Authors associate bridging capital to inter-relationships between organizations, groups with different characteristics, weak ties, structural holes (Claridge, 2018).

Social capital is praised for its contribution in obtaining new knowledge or improving existing one (Tsai, 2000), affecting innovation processes and firm performance. Through building trust in relationships, it reduces transaction costs and uncertainty (Dosi, 1988). Furthermore, personal ties and networks of social relations between firms differentiate them and explain firms' superior performance (Granovetter, 1985). Authors evidenced a positive relationship between social capital and firm performance (Boohene et al., 2019; Ciambotti and Palazzi, 2015; Clarke et al., 2016; Easmon et al., 2019; Meng et al., 2016; Stam et al., 2014).

Bridging Social Capital and Firm Performance

Social capital and its effects on the firm have been studied extensively, especially in economic geography and cluster studies. Members' physical proximity facilitates interaction and communication, resource and information exchange, creating a group homogeneity.

There is contradictory evidence regarding the effects of social networks and relationships in organizational performance, especially in the context of a cluster. Although the proximity and close relationships facilitate resource exchange and trust between members, it has been argued that closed networks restrain the capacity to detect and access new ideas and other knowledge resources and block their development processes (Granovetter, 1985, Portes, 1998). These strong ties of bonding social capital often isolate organizations from the external world, creating a filter for external information and knowledge (Gargiulo and Benassi, 2000; Parra-Requena et al., 2009; Uzzi, 1997). Uzzi (1997) argues that although strong, dense ties provide benefits such as trust, joint arrangements, complex adaptation, and reduced costs, it is the weak ties that provide new knowledge and novel information (Uzzi 1997). Portes (1998) and Woolcock (1998) claim that in order to develop, firms have to evolve their network or "linkages" beyond their community to serve as new sources of knowledge and innovation. Non-redundant ties, such as external agents and contacts, operating in a broader social context, also defined as weak ties, often serve as a bridging instrument that brings in a wider range of knowledge and diverse information (Burt, 1992; Schilling & Phelps, 2007; Ruef, 2002), increasing innovation potential and output. Adler & Kwon (2002) also argue that bridging social capital increases the ability of the firm to access and gather information, also enhances its ability to recognize new business opportunities. It contributes to enhancing firm's intellectual capital (Nahapiet & Ghoshal, 1998), firm innovation (Zheng, 2010), and performance (Acquaah, M. 2007).

Several empirical results indicate the positive effect of bridging social capital on firm performance (Peng & Luo, 2000; Geletkanycz & Hambrick,1997). Ding & Zhang (2013) provide evidence from businesses in China, showing a positive relationship between bridging social

capital with government officials and firm performance. Crescensi et al. (2011) provide another evidence from Italian cluster companies regarding the positive effects of the bridging capital on firm innovation performance. In view of the above we hypotheses that:

H1. Bridging social capital has a positive effect on firms' performance.

Bridging Social Capital, Cognitive Social Capital and Firm Performance

The cognitive dimension of social capital focuses on the contexts of communication among and between actors, shared interpretation, shared meanings, shared goals and mission, and sense of belonging (Nahapiet and Ghoshal, 1998), which facilitate the exchange of information, knowledge, and resources, organizational learning (Kang et al., 2007).

Social relationships, trust, and shared mission and goals are elements of the social capital (Putnam et al., 1993) that facilitate resource exchange and information access. While weak ties bring in a wider range of knowledge and information (Burt, 1992), the above elements of the strong ties contribute to information exchange, collaboration and resource mobilization, members' ability to recognize and use new business opportunities, increasing innovation potential and output.

Building on the work of Nahapiet & Ghoshal (1998), Tsai & Ghoshal (1998) examined the relationship among the three dimensions of social capital with resource exchange and product innovation. They argue that shared vision and goals (cognitive capital) as a source of trust and trustworthiness increase resource exchange and resource combination, which in turn increase innovation and value creation.

An empirical study on 679 Dutch SMEs confirms a positive effect of the shared vision element of the bonding social capital on bridging social capital (Uhlaner et al., 2015). Parra-Requena et al. (2010) evidence a positive influence of the cognitive dimension of social capital in firm's ability to acquire new knowledge and innovate in a context of geographical proximity in the Spanish footwear industry. Thus, the following hypothesis is proposed:

H2. Cognitive social capital strengthens the positive relationship between Bridging social capital and firms' performance.

RESEARCH METHODS

Sampling Design

The sample consists of 129 firms randomly selected from a data set of 747 firms located in the six cities of Albania (see table 1). Using this geographical distribution of firms, a stratified random sampling method was applied. After direct company visits, out of 284, only 129 responded to our request. Sample representation for Kruja was lower than expected due to a

high number of excluded (non-acceptable) cases, such as closed businesses or with passive status, businesses with only one employee.

Table 1: Sample frame

No.	Cities	Population	Sample
1	Gjirokaster	65	17
2	Shkoder	113	17
3	Tirane	206	33
4	Korçë	149	31
5	Kruje	137	13
6	Berat	77	18
	Total	747	129

Instrument and data collection

Questionnaire protocols were used to collect data from managers or owners of businesses. The questionnaire was developed to assess various measures based on existing measures developed by renowned researchers (see appendix A). Additional improvements were made during the piloting phase. Ambiguous and unclear items were further refined.

All questionnaires were filled in using face-to-face interviews. Data collectors were trained researchers. Moreover, they were provided with written guidelines on the proper way to conduct the interview and address survey items. The data were collected from September 2018 to March 2019.

Measures and reliability

All of the variables were operationalized using multi-item indicators on a five-point Likert-type scale, based on existing literature. Details of the constructs and operationalization are provided in Appendix A and discussed below.

Independent variable

Bridging capital: Following Vilaseca (2002) and Tiwana (2008), we assess bridging capital using six questions. Three items were dropped in later analysis. At 0.855 (standardized Cronbach Alpha coefficient), the reliability of this construct is well above the recommended threshold of 0.7 suggested by Nunnally (1978).

Moderating variable

Cognitive capital: Cognitive capital was measured using the original scale of Pearson et al. (2008); Oh et al. (2006); Leana and Van Buren (1999); Nahapiet and Ghoshal (1998). The 5-item construct yielded a Cronbach Alpha of 0.827.

Dependent variable

Performance: To measure business performance, respondents were asked to rate their firm performance compared to their direct competitor on five indicators: market share, revenues, profit, cash flow, and marketing (Auh and Merlo, 2012; Slater and Olson, 2000). One of these items was removed following factor analysis indications. The 4-item construct yielded a Cronbach Alpha of 0.876.

Firm controls: Size. Firm size and age are important factors affecting firm performance, because larger firms are thought to possess or have the ability to access above-average resources and capabilities (Gooding and Wagner, 1985; Jansen et al. 2006; Tsai, 2001; Wang, 2011). We measured size as a logarithm of the number of firm employees. Similarly, we used the logarithm of the number of years since the foundation for measuring firms' age. We use a binary variable for the sector, with number one categorizing firms operating in the service sector and zero those in the production sector.

Construct validity

We performed a factor analysis with Promax rotation to test construct validity (see appendix B). The results for novelty design loaded reasonably high (0.830, 0.879, 0.880, 0.630). Item (FP) was a Heywood case; hence, it was removed from the analysis. All five items of the cognitive social capital have high loadings also (0.805, 0.704, 0.762, 0.798, 0.490). Three items of the bridging capital loaded above the acceptable standard of 0.4 proposed by Hinkin (1995) (0.682, 0.935, 0.811). The other three items (BSC4, BSC5, BSC6) were dropped due to cross-loading or low loading. After the validity tests, we concluded that the measures could be accepted to test the hypotheses.

Model estimation

We analyze the data using multivariate regression techniques. Our hypotheses are tested employing model four for moderation analyses of the PROCESS macro for SPSS (Hayes et al., 2012). We used the mean centering option to ease the interpretation of the coefficients for the two variables that define the interaction term (ibid).

Following Hayes (2013), we analyzed data for linearity by plotting residuals against predicted values in regressions where both the independent variable - bridging capital and the moderator - cognitive capital predicted performance. The Loess curve fit line indicates a linear relationship. Besides, the data are spread almost consistently through the plot indicating homoscedasticity (Field, 2013). Also, the residuals Q-Q plot shows that our data fit well with the diagonal line. Thus, estimation errors are normally distributed (ibid).

Furthermore, the value of skewness and kurtosis are within the range -1 and 1, except for cognitive social capital that shows mild to significant levels of kurtosis. However, our data are not excessively non-normal. Finally, the correlation between independent variables is not significant. The only significant but small correlation exists between bridging capital and performance, at 0.371. These results show that our data have no problems with multicollinearity (ibid).

Bias analyses

We controlled for common method bias (Podsakoff et al.,2003) using Harman's single-factor technique. The factor analysis results show that the first factor accounts for around 28% of the variance, well below the threshold of 50%. Hence, common method bias is not a problem in our study.

Further, following Groves (2006), we controlled non-response bias by comparing early versus late respondents. No difference was found in terms of firms' characteristics such as size ($\chi 2$ test, $p = 0.359$) and age ($\chi 2$ test, $p = 0.655$). Thus, non-response bias also is not a problem in our study.

RESULTS

Bootstrapping results (10.000 samples; 95% confidence interval) show a significant positive relationship between bridging capital and firms' performance ($p<0.01$), supporting hypothesis 1. Further, there is no significant relationship between cognitive capital and firms' performance. Finally, the effect of the interaction term is significant ($p<0.05$). Thus, our moderation hypothesis is supported.

Table 1. Bootstrapping results

Variables	Coeff (se)	T	LLCI	ULCI
Constant	4.9751*** (0.4793)	10.3794	4.0263	5.9240
Cognitive social capital	0.0959 (0.1639)	0.5848	-0.2286	0.4204
Bridging social capital	0.3400** (0.1145)	2.9700	0.1134	0.5666
Interaction term	0.4166* (0.1841)	2.2624	0.0521	0.7811
Size (ln)	0.3768** (0.1393)	2.7046	0.1010	0.6526
Age (ln)	-0.2701† (0.1610)	-1.6773	-0.5889	0.0487
Sector	-0.2888 (0.3521)	-.8202	-0.9858	0.4082

*$0.01 \le p < 0.05$, **$p < 0.01$, ***$p < 0.001$, †$0.05 \le p < 0.1$

The R-square indicates that the model explains around 25.92 % of the response variable variation. However, the change in R square due to the moderation effect is not very steep at 3.63%. Besides, for low levels of cognitive social capital, the effect is not significant, while for average and high levels, the effect is significant and larger (respectively 0.34 and 0.5867). Using the Johnson-Neyman technique, we identified values of cognitive social capital demarcating regions of significance: -0.2041 and 0.5922 (centered values corresponding respectively to 4.2037 and 5 uncentered scores).

Finally, the effect of size is significant and positive as argued by strategy literature (Penrose, 1959; Wincent, 2005; Wu, 2006), while the effect of age is negative, but the results are not robust ($p<0.1$). There is no significant effect of the sector on firms' performance.

DISCUSSIONS AND CONCLUSIONS

The central purpose of this study is to explore how weak and strong ties and their interaction affects firms' performance. We used data from 129 innovative firms randomly selected from a data set of 756 businesses operating in seven tourism clusters located in Albania's historical centers of 6 major cities.

We confirmed the role of bridging social capital as a predictor of business performance. This result is in line with Uzzi (1997), Portes (1998), and Woolcock (1998), who claim that firm's network or "linkages" beyond their community, serve as new sources of knowledge and innovation.

In order to further extend our understanding of the relationship, we take into account the role of the cognitive dimension of the bonding social capital. We confirm the role of cognitive social capital in moderating the relationship between bridging social capital and performance. High levels of cognitive social capital through a shared mission, values, goals, and shared interpretations enhance the firm's ability and motivation to mobilize external networks and resources. It improves the firm's potential to acquire and exchange new knowledge, incentivizes collaboration for innovation or other business opportunities, contributing to improved business performance. This result aligns with Lin's (1999) argument on the role of cognitive social capital acting as a catalyst for external network mobilization. We also confirm that cognitive social capital per se has no significant direct effect on firm performance.

Our research contributes to SME research in clusters context and social capital research by empirically demonstrating that the firm's access to bridging social capital contributes to firm superior performance, and the cognitive dimension of the close relationships moderates the bridging social capital relationship with firm performance. Tourism cluster firms that benefit from

both these dimensions are able to perform better. The paper deepens the understanding of social capital dimensions and their combined effect on firm performance.

The study provides some practical implications. Based on the above conclusions, firms in tourism clusters, in order to develop and create value, should rely on and develop bridging social capital with agents and intermediaries, apart from inter-cluster relationships. The study suggests that firms should invest resources to create and maintain external weak ties and, at the same time to strengthen cognitive elements of the bonding social capital. These intermediaries could contribute to new information regarding tourism trends and needs, connections with new markets and other business opportunities, also information that could be translated into improved or new products and services such as new tourism packages, additional services, improved culinary, improved marketing, and superior performance.

Development policies in regions should aim and encourage to build up social capital for SMEs through incentivizing collaboration and external networking that provide opportunities for external knowledge, information, and resource exploitation, with the potential for innovation and improved business performance. Organizing international fairs, supporting the participation of the SMEs in international fairs, contributing to the creation of external partnerships, connections with chambers of commerce could be a powerful instrument to support local development, innovation, and generally improved performance.

STUDY LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study presents some limitations, which also indicate some directions for future research. Firstly, our study focuses on tourism clusters in Albania. The generalizability of our conclusion requires further testing for other economies. Secondly, the study is cross-sectional; therefore, we could not observe the changes and interactions between variables over time.

An avenue for further investigations is to examine the model in other industries and contexts. The other direction for further research would be to investigate the direct and indirect effects of other dimensions of social capital, such as bonding capital, on innovation and performance. In addition, it would also be interesting to study the relationship between social capital and innovation through other variables such as knowledge management, entrepreneurial orientation, environment.

REFERENCES

Acquaah, M. (2007). Managerial social capital, strategic orientation, and organizational performance in an emerging economy. *Strategic Management Journal, 28*(12), 1235–1255.

Adler, P.S. & S. Kwon. (2002). Social Capital: Prospects for a New Concept. *Academy of Management Review 27*(1), 17-40.

Auh, S., and Merlo, O. (2012). The power of marketing within the firm: Its contribution to business performance and the effect of power asymmetry. *Industrial Marketing Management, 41,* 861–873.

Boari, C. & Presutti, M. (2004). Social capital and entrepreneurship inside an Italian cluster: empirical investigation. *Occasional Papers*, 2004/2, Uppsala University, Department of Business Studies.

Boohene, R., Gyimah, R. A., & Osei, M. B. (2019). Social capital and SME performance: the moderating role of emotional intelligence. *Journal of Entrepreneurship in Emerging Economies, 12*(1), 79–99.

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), Handbook of theory and research for the sociology of education. 241–258. New York: Greenwood.

Burt, R., (1992). Structural Holes: The Social Structure of Competition. Cambridge MA: Harvard University Press.

Burt, R.S. (1997). A note on social capital and network content. *Social Network, 19*, 355-373.

Ciambotti, M., & Palazzi, F. (2015). Social Capital and SMES: An Exploratory Case Study. *Journal of International Business and Economics, 15*(2), 53–64.

Chen, C. & Huang, J. (2009). Strategic Human Resource Practices and Innovation Performance – The Mediating Role of Knowledge Management Capacity. *Journal of Business Research, 62*. 104-114.

Claridge, T. (2018). *Functions of social capital - Bonding, bridging, linking*. Social Capital Research.

Clarke, R., Chandra, R., & Machado, M. (2016). SMEs and social capital: exploring the Brazilian context. *European Business Review, 28*(1), 2–20.

Coleman, J. S. (1988), Social capital in the creation of human capital. *American Journal of Sociology, 94*: 95-120.

Cooke, P., Wills, D., (1999). Small Firms, Social Capital and the Enhancement of Business Performance Through Innovation Programmes. *Small Business Economics* 13, 219–234.

Crescenzi, R., Gagliardi, L., & Percoco, M. (2013). Social Capital and the Innovative Performance of Italian Provinces. *Environment and Planning A: Economy and Space, 45*(4), 908–929.

Ding, Y., Zhang, H., & Cao, J. (2013). Social capital and post-IPO firm performance: A Study of Chinese Entrepreneurial Firms. *Academy of Management Proceedings, 1*(1).

Dosi, G., (1988). Sources, Procedures and Microeconomic Effects of Innovation. *Journal of Economic Literature*, 36, 1126-1171.

Easmon, R. B., Kastner, A. N. A., Blankson, C., & Mahmoud, M. A. (2019). Social capital and export performance of SMEs in Ghana: the role of firm capabilities. *African Journal of Economic and Management Studies, 10*(3), 262–285.

Field, A. P. (2013). Discovering Statistics Using IBM SPSS Statistics. And Sex and Drugs and Rock'n'Roll. 4th edition. London: Sage.

Ford, D., Gadde L-E, Håkansson, H. & Snehota, I (2003). Managing Business Relationships, Second Edition, Chichester, Wiley, 2003.

Gargiulo, M., & Benassi, M. (2000). Trapped in Your Own Net? Network Cohesion, Structural Holes, and the Adaptation of Social Capital. *Organization Science, 11*(2), 183–196.

Geletkanycz, M. A., & Hambrick, D. C. (1997). The external ties of top executives: Implications for strategic choice and performance. *Administrative Science Quarterly, 42*(4), 654–681

Granovetter, M., (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology,* 91, 481-510.

Groves, R. M. (2006). Non-response Rates and Nonresponse Bias in Household Surveys. *Public Opinion Quarterly*, *70*(5), 646-675.

Gooding, R. Z., & Wagner, J. A. (1985). A Meta-Analytic Review of the Relationship between Size and Performance: The Productivity and Efficiency of Organizations and Their Subunits. *Administrative Science Quarterly, 30*(4), 462-481.

Hayes, A. F., Glynn, C. J., & Huge, M. E. (2012). Cautions regarding the interpretation of regression coefficients and hypothesis tests in regression models with interactions. *Communication Methods and Measures, 6*(1), 1-12.

Hayes, A. F. (2013). "Introduction to mediation, moderation, and conditional process analysis. A regression-based approach." New York, NY: The Guilford Press.

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967–988.

Inkpen, A. C., & Tsang, E. W. K. (2005). Social Capital, Networks, and Knowledge Transfer. *Academy of Management Review, 30*(1), 146–165.

Jansen, J. Van den Bosch, F. and Volberda, H., W. (2006). Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. *Management Science, 52*(11), 1661–1674.

Kang, S. C., Morris, S. S., & Snell, S. A. (2007). Relational Archetypes, Organizational Learning, and Value Creation: Extending the Human Resource Architecture. *Academy of Management Review, 32*(1), 236–256.

Leana, C.R., & Van Buren, H.J. (1999). Organizational social capital and employment practices. *Academy of Management Review, 24*(1), 538-555.

Lin, N. (1999). Building a network of social capital. Connections, 22, 28-51

Lin, N. (2001). Building a network theory of social capital. In Lin, N., Cook, K. & Burt, R.S. (Eds.), Social Capital: Theory and Research (3-29). NY: Aldine DeGruyter.

Lin, H. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower, 28*(3), 315-332.

Meng, F., Rieckmann, J., & Li, C. (2016). Empirical evidence how social capital effects the internationalisation process of SME in Zhejiang. *Transnational Corporations Review, 8*(3), 196–206.

Nahapiet, J. and Ghoshal, S. (1998) Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*. *23*(2), 242-266.

Nunnally JC. 1978. Psychometric Theory. McGraw-Hill: New York.

Parra-Requena, G., Molina-Morales, F. X., & Garcia-Villaverde, P. M. (2010). The Mediating Effect of Cognitive Social Capital on Knowledge Acquisition in Clustered Firms. *Growth and Change, 41*(1), 59–84.

Payne, G. T. & Moore, C. B. & Griffis, S. E. & Autry, C. W. (2010). Multilevel Challenges and Opportunities in Social Capital Research. *Journal of Management. 37*(2). 491-520.

Peng, M. W., & Luo, Y. (2000). Managerial Ties and Firm Performance in a Transition Economy: The Nature of a Micro-Macro Link. *Academy of Management Journal, 43*(3), 486–501.

Pennings, J. M., Lee, K., & Van Witteloostuijn, A. (1998). Human capital, social capital, and firm dissolution. *Academy of Management Journal, 41*(4), 425-440.

Podsakoff, M., S. B. MacKenzie, J. Y. Lee, & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology, 88*(5), 879–903.

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology 24*, 1-24.

Presutti, M., Boari, C., Majocchi, A., & Molina-Morales, X. (2019) Distance to Customers, Absorptive Capacity, and Innovation in High-Tech Firms: The Dark Face of Geographical Proximity, Journal of Small Business Management, 57(2), 343-361.

Putnam, R. D. (1993). The prosperous community: Social capital and public life. *American Prospect, 13*, 35–42.

Ruef, M. (2002). Strong ties, weak ties and islands: structural and cultural predictors of organizational innovation. *Industrial and Corporate Change, 11*(3), 427–449.

Rosenfeld, S. (1997). Bringing Business Clusters into the Mainstream of Economic Development. *European Planning Studies*, *5*(1), 3-23.

Schilling, M. A., & Phelps, C. C. (2007). Interfirm Collaboration Networks: The Impact of Large-Scale Network Structure on Firm Innovation. *Management Science, 53*(7), 1113–1126.

Sharma, P. (2008). Commentary: Familiness: Capital Stocks and Flows between Family and Business. *Entrepreneurship Theory and Practice, 32*(6), 971–977.

Slater, S. F., & Olson, E. M. (2000). Strategy type and performance. The influence of sales force management. *Strategic Management Journal, 21*(8), 813–829.

Stam, W., Arzlanian, S., & Elfring, T. (2014). Social Capital of Entrepreneurs and Small Firm Performance: A Meta-Analysis of Contextual and Methodological Moderators. *Journal of Business Venturing. 29*(1), 152-173.

Tiwana, A. (2008). Do bridging ties complement strong ties? An empirical examination of alliance ambidexterity. *Strategic Management Journal*, *29*(3), 251-272.

Tsai, W. (2000). Social capital, strategic relatedness and the formation of intraorganizational linkages. *Strategic Management Journal, 21*(9), 925–939.

Tsai, W. (2001). Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance. *Academy of Management Journal, 44*(5), 996–1004.

Tsai, W. & Ghoshal, S. (1998). Social capital and value creation: the role of intrafirm networks. *Academy of Management Journal, 41*(4), 464-476.

Uhlaner, L. M., Matser, I. A., Berent-Braun, M. M., & Flören, R. H. (2015). Linking Bonding and Bridging Ownership Social Capital in Private Firms. *Family Business Review, 28*(3), 260–277.

Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly, 42(*1), 35-67.

Vilaseca, A. (2002). The shareholder role in the family business: Conflict of interests and objectives between non-employed shareholders and top management team. *Family Business Review, 15*, 299-320.

Wang, C. H. (2011). Clarifying the Effects of R&D on Performance: Evidence from the High Technology Industries. *Asia Pacific Management Review. 16*(1), 51–64.

Wincent, J. 2005. Does size matter? A study of firm behavior and outcomes in strategic SME networks. *Journal of Small Business and Enterprise Development*, 12(3), pp. 437-453.

Woolcock, M. (1998). Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society, 27*, 151–208.

Wu, D. 2006. Detecting information technology impact on firm performance using DEA and decision tree. *International Journal of Information Technology and Management, 5*(2/3), 162-174.

Varaldo, R. & Ferrucci, L. (1996) The evolutionary nature of the firm within industrial districts. *European Planning Studies*, 4(1), 27-34.

Zheng, W. (2010). A social capital perspective of innovation from individuals to nations: Where is empirical literature directing us? *International Journal of Management Reviews*, *12(2)*, 151-183.

Zucker, L., Darby, M., & Brewer, M. (1998). Intellectual Human Capital and the Birth of U.S. Biotechnology Enterprises. *The American Economic Review, 88*(1), 290-306.

Appendix A: Survey Items and Measurement

Variables	Items	Code	Authors
Cognitive Capital (CC)	In our firm we have a shared vision	CC1	Pearson et al. (2008); Oh et al. (2006); Leana & Van Buren (1999); Nahapiet & Ghoshal (1998).
	The shared vision functions as a bonding mechanism that facilitates firms' management	CC2	
	Within the firm, we have internalised sets of accepted behaviour	CC3	
	Our family firm uses a language that is commonly known and understood by staff members	CC4	
	Companies collaborating with us understand our goals and interests	CC5	
Bridging Social Capital (BSC)	Many among your contacts are specialized in a great variety of activities	BSC1	Tiwana, (2008)
	Many among your contacts have very different and diverse experiences	BSC2	

	Many among your contacts own complementary abilities and skills	BSC3	
Firm Performance (PERF)	Market share	FMS	Auh & Merlo, (2012); Slater & Olson (2000).
	Revenues	FR	
	Cash Flow	FCF	
	Marketing	MAR	

Appendix B: Factor Analysis with Promax Rotation

	Factor*		
	F1	F2	F3
BSC1			.682
BSC2			.935
BSC3			.811
CC1		.805	
CC2		.704	
CC3		.762	
CC4		.798	
CC5		.490	
FMS	.830		
FR	.879		
FCF	.880		
MAR	.630		
Percentage variance explained	28.164	22.491	11.483

*Underlying dimensions as three factors: F1= performance, F2 = cognitive social capital, F3 = bridging social capital.