

## Effect of Social Capital on Resource Exchange of a State University

Ma. Cresilda M. Caning  
*De La Salle University*  
*Central Bicol State University of Agriculture*  
*ma\_cresilda\_caning@dlsu.edu.ph*

**Abstract:** This paper examined the effect of the relational aspect of social capital to the internal resource exchange of a state university. We predicted that the presence of the relational social capital dimension will have a positive effect on the university's research exchange and productivity. We tested our hypotheses on 38 faculty researchers coming from 7 academic units of a state university using the Social Capital and Value Creation Model developed by Tsai and Ghoshal (1998). Our results indicated that the presence of the relational dimension of social capital which is manifested in the degree of trust the departments have of each other and the perceived trustworthiness of the academic departments can facilitate exchanges of information and knowledge among the different units to enhance their resource exchange and facilitate the pursuit of common organizational goals.

Key Words: social capital; relational social capital dimension; research performance

### 1. SECTION

#### 1.1 Subsection

State universities and colleges (SUCs) are expected to be knowledge generators who are adept at quickly transferring the knowledge and ideas generated to its different stakeholders. Moreover, SUCs are also expected to use its own resources to meet the challenge of self-sufficiency and improve its performance. An important predictor of group and organizational performance is its use of social capital or the actual and potential resources embedded within relationships among actors, available through, and derived from the network of relationships of individuals or of a social unit (Adler & Kwon, 2002; Nahapiet & Ghoshal, 1998).

Since social capital is perceived as the contextual complement to human capital; it assumes that people who do better are somehow better connected; that people or groups are connected to certain others, trust certain others, are obligated to support certain others, and are dependent on exchange with certain others (Burt, 2000). One's social capital could be external or internal or both (Adler & Kwon, 2002) since social capital is believed to reside in its internal structure or believed in its external linkage. Tsai & Ghoshal (1998) posited that social capital can take on a structural, relational and cognitive dimensions. The structural dimension posits that one's social interaction or the location of one's contacts in a social structure can provide certain advantages since it can be used to obtain information or to access specific resources. As a complement to the structural dimension of social capital, the relational dimension of social capital emphasizes the development of assets such as trust and trustworthiness. Trust is a characteristic of a relationship, but trustworthiness is an attribute of an individual actor involved in the relationship. The 3<sup>rd</sup> social capital

dimension, the cognitive dimension, is illustrated in the presence of organizational attributes like a shared code or a shared paradigm necessary for a common understanding of collective goals and proper ways of acting in a social system. A shared vision and/or a set of common values facilitates individual and group actions that can benefit the whole organization. The structural dimension of social capital, manifesting as social interaction ties, may stimulate trust and perceived trustworthiness, which represent the relational dimension of social capital (1998:465).

It is within this context that this study sought to answer the question "how do the different dimensions of social capital influence resource combination and exchange among the different academic units of a state university? Specifically, this study aimed to empirically test the Model of Social Capital and Value Creation developed by Tsai and Ghoshal (1998) to determine how to use social capital towards enhancing resource exchanges of the Central Bicol State University of Agriculture. Specifically, the research aims to examine the link between the relational dimensions of social capital and resource exchange and examine the link between the structural and cognitive dimensions of social capital to the relational dimensions of social capital. Since this proposed research is anchored on Tsai and Ghoshal's model, I am similarly taking and adopting their research propositions.

#### Hypotheses of the Study

H<sub>1</sub>: The structural dimension of social capital, manifesting as social interaction ties, may stimulate trust and perceived trustworthiness which are relational dimensions of social capital

H<sub>2</sub>: The relational dimension of social capital encourages product resource exchange and combination

H<sub>3</sub>: The interaction of the structural dimension and the relational dimension of social capital is positively associated with resource exchange and combination

## 2. METHODOLOGY

The research was conducted over a two-month period from mid of February to the 1st week of April 2014 in one of the state universities in the Bicol Region. A total of 38 faculty members and research personnel were personally interviewed by the researcher. The respondents were purposively chosen based on those who have been actively involved in research for the last three years as they are also highly involved in resource exchange activities.

**Research Instrument.** This research used questions on measuring social capital developed and validated by other researchers such as Tsai & Ghoshal (1998), Reagans & Zuckerman (2001), Rodan & Galunic (2004), Moran (2005), Chiu et al (2006) and Aslam et al (2013). Specifically, this study similarly used the following measures for each of the social capital dimensions: structural social capital was measured in terms of social interaction ties; relational social capital was measured in terms of trust and trustworthiness; and, cognitive social capital was measured in terms of shared vision. All of the scales were measured on 7-point Likert Scale ranging from 1 = strongly disagree to 7 – strongly agree. This study used multivariate regression using STATA 11 to test the hypotheses and the variable-inflation-factor tests conducted indicated no problems of multicollinearity.

## 3. RESULTS AND DISCUSSION

This study evaluated the effects of the structural and relational dimensions of social capital to resource exchange and combination in a state university. Descriptive statistics and bivariate correlations of all the variables are presented in Table 1. The individual hypotheses were tested using multiple regression, the results of which are presented in Table 2. Several of the independent variables in the regression models are significantly correlated with one another. Regression diagnostics were performed to assess the presence of multicollinearity among the independent variables that might affect the correctness of the parameter estimates.

Table 1. Correlations

Variables	1	2	Mean	S.D
			3	4
Research Exchange	4.94		0.85	1.00
Relational Dimension	0.70	1.00	5.23	1.10
Social Interaction	0.68	0.92	4.96	1.10
			1.00	

N = 38, p<0.05

In Table 2, series of regression equations was done to test the relations of the different independent variable. The beta coefficients and significance levels for each independent variable remained stable over each of the additional regressions. Table 2 showed the results of the multiple regression equation used to test the hypotheses regarding the effect of social interaction and relational factors to resource exchange. From Table 2, the social interaction and relational factors had a significant beta coefficient and was along the posited direction, signifying

that they were significant predictors of resource exchange. Hence, hypotheses 1, 2, and 3 were all supported by the data generated. The location of researchers in the structure as well as their trust and level of trustworthiness facilitates resource exchanges in organizations.

Table 2. Regression analysis of the relational and structural dimensions of social capital to resource exchange

Independent Variables	Model 1	Model 2	Model 3
	β	β	β
Constant	0.156 (0.16)**	2.033 (2.18)**	1.632 (1.37)
Social Interaction	1.002 (5.41)		2.656 (0.52)
Relational Dimension		0.581 (3.19)**	0.414 (0.89)
R <sup>2</sup>	0.786	0.530	0.640
N	38	38	38

\* p<0.05; \*\* p<0.01

The literature claims that frequent and close social interactions permit actors to know one another, to share important information, and to create a common point of view. Hence, an actor occupying a central location in a social interaction network is likely to be perceived as trustworthy by other actors in the network (Tsai & Ghoshal, 1998). Trustworthiness and trust are used as measures of relational social capital. In this study, the test relating social interaction to the relational construct gave a highly significant p-value of 0.001 implying the premium researchers place on the said construct. Unfortunately, one's research network may be regarded as truthful but reliability can appear to be a problem since some respondents do not believe they can rely on other units without any fear that the other will not take advantage of them or their unit when the opportunity arise.

## 4. CONCLUSIONS

According to the social network theory and the knowledge-based view of the firm, collaboration enhances competitive advantage through enabling resource exchange and combination (Galunic and Rodan, 1998; Nahapiet and Ghoshal, 1998 as cited by Weck, 2006).

Nahapiet and Ghoshal (1998) pointed out that the structural dimension of social capital refers to the overall pattern of connection between actors. The close social interactions permit people to know one another, to share important information, to create a common understanding related to task issues or goals, and to gain access to others' resources (Tsai & Ghoshal, 1998). The generation and implementation of new ideas are therefore fostered (Chen et al., 2008). Trust can be developed from people with a belief in the good intentions, openness, competence, and reliability of other actors that is developed through a history of interaction (Nahapiet & Ghoshal, 1998 as cited by Chen et al., 2008). At the project-team level, social interaction of team members can encourage communication and cooperative behavior, thereby

facilitating the development of new product (Putman, 1993). In this research, social interaction is significantly related to trust and similarly high trust leads to more exchange resource. This can be attributed to the propensity of people to deal and communicate more with people, researchers and units that they know they can trust best.

The mean SIT rating for most of the academic units is 4.96 while the mean rating for the relational dimension is 5.23 which emphasizes how much the researchers in the university valued trust and trustworthiness. When viewed against the research outputs, those units with high trust and social interaction ratings were able to generate more of each output. The challenge for the university is how to maintain close social relationship among the different academic units and researchers and how to increase the level of interaction among the researchers so they can use such social capital asset to gain access to important information and resources and to use such for increased performance, notwithstanding the very tight class schedule the faculty members must maintain as well as their 21 teaching-workloads. Frequency of communication must also be increased among the units and researcher's as it can lead to better social interaction. Further, there is a need to further work on increasing the level of trust on the individuals as well as their perceived trustworthiness. Trust is measured in terms of knowing that you can depend on other units and know that they will not take advantage of you. It also means keeping promises made to other units and individuals. These are highly valued constructs and the challenge is how to improve embeddedness of these constructs in the university.

This paper posited that the presence of social capital positively influences the research exchanges of the unit and this was validated by the result of the research. However, it is also important to categorically state that the current study suffered from limitations such as its focus on the bonding or internal social capital. It would be significant to similarly assess the effect of the external social capital to the resource exchange and performance of the university. Further, study of the exchanges of such resources between different units may provide greater insights for business strategies. Finally, other researchers might want to evaluate how social capital can be used to improve resource exchanges among other state universities and colleges.

## 5. REFERENCES

- Adler, Paul S. and Kwon, Seok-Woo (2002). Social Capital: Prospects for a New Concept, *Academy of Management Review*, Vol. 27, No. 1 (Jan., 2002), pp. 17-40
- Aslam, MM, Shahzad, K, Syed Aly and Ramish A (2013). Social Capital and Knowledge Sharing as Determinants of Academic Performance, 2013 Institute of Behavioral and Applied Management
- Battilana , Julie and Casciaro, Tiziana (2013). The Network Secrets of Great Change Agents, *Harvard Business Review*, hbr.org
- Boutilier, Robert G. (2007). Social Capital in Firm–Stakeholder Networks: A Corporate Role in Community Development, *Journal of Corporate Citizenship*, [www.greenleaf-publishing.com](http://www.greenleaf-publishing.com)
- Burt, Ronald (2000). The Network Structure of Social Capital. *Research in Organizational Behaviour*, vol 22, pages 345-423
- Callois, Jean-Marc and Aubert, Francis (2007). Towards Indicators of Social Capital for Regional Development Issues: The Case of French Rural Areas, *Regional Studies*, Vol. 41.6, pp. 809–821, <http://www.regional-studies-assoc.ac.uk>,
- Carmeli, Abraham, Ben-Hador, Batia, Waldman, David and Rupp Deborah E (2009). How Leaders Cultivate Social Capital and Nurture Employee Vigor: Implications for Job Performance, *Journal of Applied Psychology* © 2009 American Psychological Association, Vol. 94, No. 6, 1553–1561
- Chen, Ming-Huei Chen, Chang, Yuan-Chieh and Hung, Shih-Chang Hung (2008). Social capital and creativity in R&D project teams, *R&D Management* 38, 1, Journal compilation 2008 Blackwell Publishing Ltd, 21 9600 Garsington Road, Oxford, OX4 2DQ, UK and 350 Main St, Malden, MA, 02148, USA
- Chisholm , Andrew and Nielsen, Klaus (2009). Social Capital and the Resource-Based View of the Firm, *International Studies of Management. & Organization.*, vol. 39, no. 2, Summer 2009, pp. 7–32. © 2009 M.E. Sharpe, Inc.
- Erselcan, F., Kutlar, A. and Doganoglu ( \_\_\_\_). Social Capital and Economic Performance of SME's: A Case Study from Turkey, *Proceedings of the European Conference on Intellectual Capital*
- Finsveen, Ellen and Wim van Oorschot (2008). Access to Resources in Networks: A Theoretical and Empirical Critique of Networks as a Proxy for Social Capital, *Acta Sociologica*, Vol 51(4): 293-307, DOI: 10.1177/0001699308097375 [www.sagepublications.com](http://www.sagepublications.com)
- Inkpen, Andrew C. and Tsang, Eric W. K. (2005). Social Capital, Networks, and Knowledge Transfer Author(s): Source: *The Academy of Management Review*, Vol. 30, No. 1, pp. 146-165
- Keseljovic, Aleksander (2007). Understanding Social Capital within the Framework of Economic Theory of Organization: A Theoretical Approach, *Management*, vol 12, 1, 1-24
- Ming-Huei Chen, Yuan-Chieh Chang and Shih-Chang Hung (2008). Social capital and creativity in R&D project teams, *R&D Management* 38, 1, 2008, Blackwell Publishing Ltd, USA
- Ming-Huei Chen and Kaufmann, Geir (2008). Employee Creativity and R&D: A Critical Review, *Creativity and Innovation, Management*, vol 17, Number 1, Blackwell Publishing
- Monga R. C. (2006). Social Capital in Asia: An Exploratory Study, Report on the APO Basic Research XII on Social Capital and Its Impact on Productivity, Edited by Prof. Tan Wee-Liang
- Moran, Peter (2005). Structural vs Relational embeddedness: Social Capital and Managerial Performance, *Strategic Management Journal*, 1129-1151.

- Nahapiet, Janine and Ghoshal, Sumantra (1998). Social Capital, Intellectual Capital, and the Organizational Advantage, *Academy of Management Review*, Vol. 23, No. 2 (Apr., 1998), pp. 242-266
- Oh, Hongseok, Myung-Ho Chung, Giuseppe Labianca (2004). Group Social Capital And Group Effectiveness: The Role Of Informal Socializing Ties, *Academy of Management Journal*, Vol. 47, No. 6, 860–875
- Putnam Robert D. (1995). "Bowling Alone: America's Declining Social Capital" *Journal of Democracy*, January 1995, pages 65-78
- Reagans, Ray and Zuckerman Ezra (2001). Networks, Diversity, and productivity: The Social Capital of Corporate R & D Teams, *Organization Science*.
- Rodan, S., and Galunic, C (2004). More Than Network Structure: How Knowledge Heterogeneity Influences Managerial Performance and Innovativeness, *Strategic Management Journal* 25: 541-562 (2004) Published online in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/smj.398
- Tsai, Wenpin (2000). Social Capital, Strategic Relatedness and the Formation of Intraorganizational Linkages. *Strategic Management Journal*. 925-939.
- Tsai, Wenpin and Ghoshal, Sumantra (1998). Social Capital and Value Creation: The Role of Intrafirm Networks, *Academy of Management Journal*, Vol. 41, No. 4pp. 464-476
- Wu , Wann-Yih, Chang Man-Ling and Chih-Wei Chen (2008). Promoting innovation through the accumulation of intellectual capital, social capital, and entrepreneurial orientation, *R&D Management* 38, 3.
- Weck, Mona (2006). "Knowledge Creation and Exploitation in Collaborative R&D Projects: Lessons Learned on Success Factors , Knowledge and Process Management, Volume 13 Number 4 pp 252–263 (2006), Published online in Wiley InterScience, (www.interscience.wiley.com) DOI: 10.1002/kpm.261
- Woolcock, Michael and Narayan Deepa (2000). Social Capital: Implications for Development Theory, Research, and Policy World Bank Research Observer