AN EMPIRICAL STUDY OF THE INFLUENCE OF SOCIAL CAPITAL ON ORGANIZATIONAL EFFECTIVENESS IN KNOWLEDGE-INTENSIVE FIRMS: AN ORGANIZATIONAL KNOWLEDGE EXCHANGE ENVIRONMENT PERSPECTIVE

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ABSTRACT

There is a growing need to understand how social capital assists or impedes organizational performance. In particular, the success of organization networks has spawned new conjectures about the competitive advantage of social forms of organization relative to market-based exchange systems. The application of social capital to intra-organizational contexts has seen an explosion of interest in the past several years. We find that the network or structural perspective not only adds explanatory power to organizations' behavior and effectiveness, but also expands the applicability of organizational socialization from a traditional autonomous to a relational view for studying and explaining organizational action and outcomes. We are developing an organizing framework based on both organizational and individual levels of network analysis to discuss with a description of social capital and the different levels to conceptualize it.

KEYWORDS

Social capital; organizational effectiveness; associability

INTRODUCTION

There is a broad consensus that social capital is a valuable asset, and that its value stems from the access to resources that it engenders through an actor's social relationships (Granovetter, 1992). Social capital has been characterized as durable and interconnected human relationships (Bourdieu, 1986; Coleman, 1990). As such, the extent to which organizations facilitate social capital to appropriate their value and influence organizational effectiveness is the fundamental question we are trying to investigate.

Many executives invest considerable resources in restructuring and optimizing their companies, only to be disappointed by the results. This is because much of the real work of companies happens beyond the formal organization. The informal networks of relationships that employees create across functions and divisions have been arising significant interest in organizational effectiveness filed. Therefore, if the formal organization is the skeleton of a company, the informal organization is the central nervous system driving the collective thought processes, actions, and reactions of its business units (Krackhardt and Hanson, 1993).

In our study, we restrict ourselves to the application of social capital to the intra-organizational level, which comprises ties between colleagues in a firm such as informal groups in an organization, or actors who are connected to one another through projects or assignments.

THEORETICAL FOUNDATION

First, like all other forms of capital, social capital is a long-lived asset into which other resources can be invested, with the expectation of a future (albeit uncertain) flow of benefits. Through investment in building their network of external relations, both individual and collective actors can augment their

social capital and thereby gain benefits in the form of superior access to information, power, and solidarity; by investing in the development of their internal relations, collective actors can strengthen their collective identity and augment their capacity for collective action.

Second, like other forms of capital, social capital is both "appropriable" (Coleman, 1988) and "convertible" (Bourdieu, 1985). Social capital is appropriable in the sense that an actor's network of friendship ties can be used for other purposes, such as information gathering or advice. Moreover, social capital can be "converted" to other kinds of capital: the advantages conferred by one's position in a social network can be converted to economic or other advantage.

Third, social capital needs maintenance. Social bonds have to be periodically renewed and reconfirmed or else they lose efficacy. Also, social capital does not have a predictable rate of depreciation. It may depreciate with non-use (and with abuse), but it does not depreciate with use; in contrast, it increases with use. Like human capital and some forms of public goods, such as knowledge, it normally grows and develops with use; for example, trust (which we argue is a key source of social capital) that is demonstrated today typically will be reciprocated and amplified tomorrow.

Two patterns have emerged in the various definitions of social capital. The first emphasizes the public goods aspect of social capital. Researchers following this approach tend to study the phenomenon at the macro or meso level. The achievements made from individuals' social actions that enhance social capital accrue directly to the social unit as a whole. The other approach is a private goods model of social capital. The private goods model has been applied at the individual (e.g., Belliveau et al., 1996), group (e.g., Krackhardt, 1990) and even organizational and industry (e.g., Gulati, 1995; Walker et al., 1997) levels of analysis, but the focus in terms of outcomes or benefit is always on the individual person or unit. In this regard, we can describe private goods models as operating at the individual level, at least in terms of outcomes.

Accordingly, social capital's impact on performance has been studied at multiple levels, ranging from individuals and small groups (Burt, 1992a; Brass and Burkhardt, 1993; Podolny and Baron, 1997) to larger organizations, including firms (Walker, Kogut, and Shan, 1997; Tsai and Ghoshal, 1998; Walker, 1998; Hansen, 1999; Rowley, Behrens, and Krackhardt, 2000).

Equation

We need to solve the following issues before we can investigate social capital's influence on organizational effectiveness.

$$\text{Level I: } \text{ESP}_{ij} = \beta_{0j} + \beta_{1j}\text{SC}_{ij} + \varepsilon_{ij}$$

$$\text{Level II: } \beta_{0j} = \gamma_{00} + \gamma_{01}Environment_j + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j},$$

where ESP is employee service performance, SC is the social capital at an individual level, i indexes individual level service performance, and SC is individual level social capital. In this model setting, the expected ESP depends on both SC and the environment. Substituting the Level II equations into a Level I equation, we can write it roughly as

$$\text{ESP}_{ij} = \gamma_{00} + \gamma_{01}Environment_j + \gamma_{10}\text{SC}_{ij} + \text{v}_{ij}$$

Clearly, γ_{01} represents the effect of organizational environment on EPS after controlling for SC. Therefore, we expect H1b: $\gamma_{01} > 0$.
Hypothesis 1c could be formed as the following model:

$$\text{Level I: } \text{ESP}_{ij} = \beta_{0j} + \beta_{1j}\text{SC}_{ij} + \varepsilon_{ij}$$

$$\text{Level II: } \beta_{0j} = \gamma_{00} + \gamma_{01}Environment_j + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}Environment_j + u_{1j}.$$

H1c: $\gamma_{01} > 0$.
[By using centralized variables, for example, SC – Average (SC), for easy presentation, it is noted that β_{0j} represents the average performance of organization j. Therefore, when we compare the organizational level performance, we could compare $E[\beta_{0j}]$ across j. Now this hypothesis means that

$E[\beta_{01}] < E[\beta_{02}]$ or, alternatively, $E(\beta_{01}) - E(\beta_{02}) = \gamma_{01}[Environment_1 - Environment_2] < 0.$
Therefore, we have $\gamma_{01} > 0$.]
Hypothesis 2 can be formed as the following model:

$$ESP_{ij} = \beta_0 + \beta_1 SC_{ij} + \varepsilon_{ij} \quad,$$

where ESP is employee service performance, SC is the social capital at the individual level, i indicates individual level service performance, and SC is individual level social capital.
H2: $\beta_1 > 0$.

$$\text{Level I: } ESP_{ij} = \beta_{0j} + \beta_{1j} SC_{ij} + \varepsilon_{ij}$$

$$\text{Level II: } \beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + u_{1j}.$$

H2: $\gamma_{10} > 0$.]

CONCLUSIONS

Several studies on intra-organizational communication have documented the importance of interunit interaction for the creation and diffusion of innovations within complex multiunit organizations.

Social capital theory is based on the individuals in the network and their mutual relationships. It stresses individual initiative, while in the meantime avoiding the assumption of low-degree socialization, which take external environment into account and the restriction posed to individuals by organization. Meanwhile individual initiative could also change social structure that restricts individuals. Therefore, there is a process of mutual effect and change between individual rational choice and collective restriction (Granovetter, 1985).

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