

# The Effect of Social Capital on Knowledge Management in Boy's High Schools in Malekshahi city, Iran

Mazdak Jamshidi<sup>1</sup> and Behzad Abdollahi<sup>2</sup>

<sup>1</sup>Public Administration, Payame Noor University, West Tehran Branch; <sup>2</sup> Research Center for Prevention of Psychosocial Disorders, Ilam University of Medical Sciences

## Abstract

The present research studies the effects of social capital on knowledge management in high schools for boys in Malekshahi city, Ilam, Iran. Through The research is an applied which follows a descriptive-survey method. For this purpose, three hypotheses were proposed. The statistical population in this study included all the teachers of high schools for boys in Malekshahi, i.e. 88 persons (N=88). Questionnaires were used to collect data from the participants. The observed results indicated that there was a positive and significant relationship between research hypotheses (knowledge management, knowledge creation and knowledge transfer) and social capital.

**Keywords:** social capital, knowledge management, getting knowledge, knowledge creation.

## Introduction

Knowledge management is a social approach aimed at mapping a widespread and integrated perspective for organizations. Its main focus is the creation and application of knowledge and finally reaching organizational effectiveness. Of course, the major challenge of knowledge management is transform implicit knowledge into explicit knowledge as much as possible (Adli, 2005). By constituting and developing knowledge capital in an organization, knowledge management helps achieve organization goals and requires all activities related to the identification, sharing and creation of knowledge. This requires systems for making and sustaining knowledge resources, developing and facilitating knowledge, and promoting organizational learning. In this regard, organizations achieve suc-

cess that recognize knowledge as a capital, developing organizational values and norms that lead to support knowledge creation and sharing. Knowledge management focuses on creation, sharing and influence of knowledge in individuals' mind, thoughts and imagination and it attempts to collect and manage individuals' widely distributed knowledge in such a way that contributes to the creation of new knowledge (Yogesh, 2009).

Successful organizations are those which transform their staff knowledge into organizational ability. Despite considerable investment in utilizing created knowledge in organizations, they do not achieve much success, while staggering hardware and software investments for the continuation of knowledge management have not had yielded expected results (Wrong, 2004).

Along the same lines, the main concern of this study is to trace any possible relationship between social capital and development of knowledge management in statistical population under study.

## Theoretical principles and literature review

There are various and numerous definitions for knowledge management depending on experts' point of view and their consideration of particular factors (O'Dell, 1996).

### *Categorization of organizational knowledge*

Groff states that organizational knowledge, according to its features, can be divided into two parts: First one is the very general kind of knowledge, implicit or hidden knowledge, and the second one is documented knowledge also called explicit or obvious knowledge. Implicit knowledge is based on personal knowledge and experiences; it includes

**Corresponding author:** Behzad Abdollahi, Research Center for Prevention of Psychosocial Disorders, Ilam University of Medical Sciences. E-mail: behzadabdollahy@yahoo.com.

intangible factors such as personal beliefs, viewpoints and values. The process of implicit knowledge transfer to others is very problematic. But explicit knowledge consists of implicit knowledge which is documented in a processing process; it is declared clearly in official language and distributed easily among individuals (Groff, 2003).

Choi and Lee state that explicit knowledge can be readily analyzed, but implicit knowledge is hidden in human's subjective, psyche and perception. So, it has its own difficulties for analysis and categorization (Choi & Lee, 2003). According to the role of these two kinds of knowledge, in this approach, some have categorized applications of organization

knowledge management in to four groups: dynamic, human-oriented, system-oriented and passive. In this categorization, the level of implicit knowledge depends on the degree of marking and sustaining one's required information. In addition, the degree of implicit knowledge depends on knowledge distribution through the interrelationships among individuals (Afraze, 2005).

The main purpose of applying knowledge management to the organization is the transformation of employees' implicit knowledge into explicit one as an important source for decision-making and an attempt to access a way to codified knowledge for achieving organizational goals (Doroodi, 2005).

**Table 1. Various definitions of knowledge management form experts' point of view**

| Researcher     | Definition  |
|----------------|---|
| Jones (2005)   | An integrated and systematic approach to the identification, management and sharing of all intellectual capitals such as databases, documents, procedures, existing policies, and subjective individual experiences.  |
| Danram (2005)  | The application of systematic and purposeful criteria for guiding and controlling an organization's tangible and intangible knowledge capital for the purpose of using existing knowledge inside and outside of the organization for creating new knowledge, value, invention and improvement.  |
| O'Dell (2000)  | Knowledge management is a systematic approach to discovery, understanding and use of knowledge to create value.   |
| Smith (2003)   | A mechanism for creating a workplace in which knowledge and proficiency are distributed easily and make a condition that knowledge and information can be provided timely in works effective and productive ways.   |
| Choi (2005)    | It is a framework for the application of structures and processes at individual, group and organizational levels in a way that the organization can learn from what it already knows and, if necessary, learn new knowledge and create value for customers and interested persons. Such managerial framework integrates processes and technology for stable action development. |
| Beckman (2004) | A mechanism for access to expertise, knowledge and experience which provides new capabilities, improves action, encourages creativities, and increases desired values for customers.  |

### **Knowledge creation or identification**

The strategic importance of the knowledge creation process is obvious for organizational learning and creativity. Soo et al. suggest a five-sided model for knowledge creation process:

1. Getting information and knowledge from inter-actional networks;
2. Integration of internal and external knowledge;

3. Creation of New knowledge based on information and its application for problem-solving;

4. Affecting new knowledge on creativity and functioning of company

5. Regulating the roles of individual and organizational factors in all parts of process (Soo et al., 2002).

By testing and assessment of their proposed model, Soo et al conclude that firstly, the importance

of formal networking as a source for getting information is not equal to informal one. Secondly, specific knowledge or skills are not produced directly within the network; rather it can be achieved indirectly through getting information. Thirdly, to obtain new knowledge, incentives and systems of organization, the individual ability is fundamentally a determinant for the combination of knowledge and specialized skill. Fourthly, this knowledge and skill play a role in organization operation through creativity level in problem-solving.

In line with generalization principles and consensus, it is a key factor in the level of newly created knowledge by the organization. And finally, new knowledge directly affects the creative outcome of organization and by its own turn, it is considered as a positive and effective factor in organization performance (Anvarab Rostami, 2009).

### *Knowledge transfer*

Knowledge transfer is a process through which an organization distributes information among its members and promotes learning and makes new knowledge or perception (Sarлак, 2007). Dovenport & Prosak define knowledge transfer as either information transfer to receiver or its attraction and transformation by individual or group receiver (Dovenport & Prosak, 1998).

### *Social capital*

First time social capital term was used in Jane Jacob; "life and death of Great American Cities", a classic work. Bourdieu (1985), the French sociologist, proposed an extended hypothesis of social capital, explaining that capital is a process in which is inherently linked with power. Fukuyama (1999) gives another definition of social capital and points out that it can be readily defined as an existing certain collection of informal norms or values.

From different perspectives, researchers focus on social capital within intellectual capital framework which can help understand the relationship between social capital and knowledge. Among them, Rahnema and Hemati (2009) considered the concept of social capital and its constitutive components, such as human social capital, by relying on other's research. All of them are on the basis of this principle that intellectual capital is a collection of intangible assets, such as knowledge (a part of human capital), structural, organizational, internal and external capital. Considering these researchers' approaches, brief definitions and constitutive components of intellectual capital are given in following Table 2.

**Table 2. Brief definitions and constitutive components of intellectual capital offered by researchers**

| Researcher              | Components   | Intellectual capital   |
|-------------------------|--|--|
| Benetis (1996, 1999)    | Human capital<br>Structural capital<br>Communication capital                 | Intellectual capital is considered a new source for organization, competition and success in the market.   |
| Roos & Roos (1997)      | Human capital<br>Structural capital  | Intellectual capital includes intangible assets of an organization, like commercial symbols, invention rights and etc. which cover all assets not mentioned in financial statements. Intellectual capital is the most important source for creating competitive advantage in organization. |
| Stewart (1997)          | Human capital<br>Structural capital<br>Customer capital                      | Intellectual capital includes knowledge, information, intellectual assets and experience known as superior mind or key knowledge.  |
| Edwinson & Malon (1997) | Human capital<br>Structural capital<br>Customer capital                      | Intellectual capital implies the difference between market value and office value of the organization.   |
| Soybi (1998)            | Staff qualification and adequacy<br>Internal structure<br>External structure | Intellectual capital is knowledge used for the creation of value. According to this definition, intellectual capital includes knowledge, skills and abilities that can be transformed into wealth and values, resulting in the creation of value.  |
| Anderis & Stem (2004)   | Human sources<br>Organizational sources<br>Communication sources             | Intellectual capital contains intangible sources of an organization which gives a suitable advantage to them. Their combination will have future benefits.   |

Since the participative management involves the participation of all employees, from the top-most to lowest ranks, in organizational decision-making (Haghayegh & Arkiyan, 2005), employees must be encouraged to participate in organization affairs by increasing of social capital in the organization. Finally, it contributes to increasing the degree of participative management in the organization. Social capital is existing norms in social systems which promote its members' cooperation and reduce transaction and communication costs (Fokobama, 1999).

Social capital has an essential effect on various fields of human life and its development. This social capital reflects the features of social interaction in an organization, making possible better use of physical, financial and human resources of the organization (Debta, 2000). Social capital promotes cooperation and participation. The reason for increasing staff participation can be the trust invested in social capital which encourages employees to rely on goals and plans of organization and develop the tendency to participate in achieving these goals. In fact, participation is an inherent and natural requirement of human beings. For long, it has been an important tool for human life. Nowadays, in successful organizations, employees participate in decision-making relative to their works (Feyzi, 2005).

Ghalichkhani (2006), in his PhD thesis concerned with investigating the role of intellectual and social capital in organization's competitive advantage, concludes that social capital is one of the important organizational capabilities which can help organizations create and share knowledge, and also make a stable competitive advantage in comparison with other organizations.

Ahmadi (2004), in a study on social capital and its evaluation criteria, focused on the explanation and description of social capital and its evaluation criteria. Mohammadi (2006), proposed a model for the evaluation of preparation level for knowledge management, in a study concerned with the evaluation of provision of knowledge management through designing a comprehensible model.

The next research is about social capital as a development factor and considers different aspects of social and general benefits: it was applied by Alvani & Shiravani. In this study, first social capital is addressed, and then its social and general benefit aspects are dealt with, and then issues about creating, sustaining and destroying social capital. Next, the

role of government in making social concept was described and finally it addressed the roles of functional factors of a state organization in creating social capital through presentation of a model.

Moreover, in their research, Adler and Vacwon (2002) indicated that there is a significant relationship between social capital and knowledge transfer in organizations. Bolito et al. (2002) found indicative evidence about the relationship between social capital, managers and knowledge. Coca and Periscut (2008) also achieved sufficient evidence about the mutual effect of social capital, knowledge creation and application. Hoffman (2005) showed the relationship between social capital, knowledge management and higher efficiency by organization in his research.

### *Research hypotheses*

- Social capital has a positive and significant effect on knowledge management in boys' high school of Malekshahi city, Iran.
- Social capital has a positive and significant effect on knowledge creation in boys' high school of Malekshahi city, Iran.
- Social capital has a positive and significant effect on knowledge transfer in boys' high school of Malekshahi city, Iran.

### **Materials and Methods**

Methodologically, this research is descriptive-analytic because it described the events as they are. To explain the existing condition of variables, the descriptive data and statistical methods were used, and to evaluate the effective rate of variables, the analytical method and inferential statistics were used. The library method was used for collecting and regulating literature review, either Persian or non-Persian sources. Two social capital questionnaires of Nahayp and Goshal (1998) and knowledge management questionnaire of Philips et al. (2000) were used for data collection. The population of this study included all teachers of boys' high school of Malekshahi, Iran (N=88). And the questionnaires were distributed among participants and then collected.

### **Results**

Before the evaluation of research hypotheses, first nonparametric Kolmogorov–Smirnov test was used to analyze the normality of variable distribution. And the results showed that data were normal.

**Table 3. Description of research data**

| Variable             | Number | Mean  | Standard deviation |
|----------------------|--------|-------|--------------------|
| Social capital       | 88     | 80.26 | 3.46               |
| Knowledge management | 88     | 52.3  | 2.16               |
| Knowledge creation   | 88     | 28.63 | 0.81               |
| Knowledge transfer   | 88     | 25.68 | 0.78               |

**Table 4. Multi-variable regression**

| Variables            | Regression coefficient | Standard error | Beta  | t-test | Significance level |
|----------------------|------------------------|----------------|-------|--------|--------------------|
| Constant             | 0.137                  | 1.281          | ---   | 0.107  | 0.915              |
| Knowledge management | 0.971                  | 0.143          | 0.480 | 6.811  | 0.000              |
| Knowledge creation   | 0.817                  | 0.209          | 0.267 | 3.903  | 0.000              |
| Knowledge transfer   | 1.197                  | 0.172          | 0.545 | 6.968  | 0.000              |

## Conclusion

Results indicated that there was a positive and significant relationship between social capital and knowledge management (sig. = 0.000). The intensity of this relationship is high. That is, in studying population, as social capital indicator increased, knowledge management increases as well.

In the second hypothesis, the data demonstrated that there was a positive and significant relationship between social capital and knowledge creation (sig. = 0.000). In other words, the results of tests show that a positive and significant relationship was observed between social capital and knowledge creation components such as objective cooperation with similar organizations, employees' encouragement in the field of new knowledge achieving, continual updating of documents of organization, and encouragement for creativity and new ideas in new knowledge.

In the third hypothesis, there was a positive and significant relationship between social capital and knowledge transfer (sig. = 0.000). This relationship is strong. In other words, the test results indicate that a positive and significant relationship exists between social capital and knowledge transfer components such as application of employees' experiences, sufficient distribution of knowledge in different units, employees' ease of access to existing knowl-

edge, giving rewards for sharing knowledge, and holding regular classes for sharing knowledge.

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