Investigating the Role of Social Capital in Organizational Readiness to Facilitating the Establishment of Knowledge Management (Case Study: Ilam University Staff)

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Abstract

Objective: In this study we sought to investigate the role of social capital in organizational readiness to facilitate the establishment of knowledge management. Method: The present study is applied, descriptive, and a survey. To analyze the data, SPSS 19 and LISREL 8/8 software were used. The target population was the staff of the State University of Ilam. The sample size was 180 (Crohnbach's alpha for entire equation was.785). Results: trust, coherence, and participation to make preparation for the creation and sharing of knowledge management were equal to .683, .508, .663, respectively (the overall equation of social capital in preparing the formation of knowledge management was equal to .734). Conclusion: The more trust, coherence, and participation exists in the companies, the more cooperation they have; and this results in the organizations readiness to transfer, exchange, create, and share the knowledge in the organizations. This causes the reduction of destructive conflicts in organizations and aligns contradictory goals of the groups with the organization's goals.
Keywords: Social Capital, Knowledge Management, Trust, Coherence, Participation

1. Introduction

The profits of knowledge management has led the organizations to apply this process, but the first attempts in most of the organizations face many challenges; despite investment on the management of expanding knowledge, the outcome is slow (Bourdieu,1985). The main reason for this is the low degree of readiness for acceptance and practice of knowledge management. Therefore, a proper understanding of the level of willingness to find ways that can help establishing a successful knowledge management seems to be necessary. One of these methods is social capital, Social capital results in better knowledge sharing, saves the organizational knowledge, builds relationships based on trust and cooperation, spirit of teamwork, helping the education, increasing activities related to organizational stability, and shared understanding(Chung Hung et al,2005). Therefore, in this study we sought to study the relationship between social capital and organizational readiness to establish the knowledge management.

2. Theoretical framework

2.1. Knowledge management

Many definitions of knowledge management has been presented so far, among which we mention the following:

Bontis (2001) believes that knowledge management is the process of creating, spreading, and applying that knowledge. In his view, knowledge has two physical and non-physical aspects. Many researchers agree on the definition given by Davenport and Prusak (1998): knowledge management is the exploitation and development of the knowledge assets of an organization to achieve its goals. The knowledge which is managed includes both the implicit and explicit knowledge. The management of this knowledge includes all processes associated with the identification, sharing, and producing the knowledge, and requires a system to produce and maintain knowledge sources and also promote and facilitate knowledge sharing and organizational learning(Dietz and Hartog,2005, p.9) Successful organizations consider knowledge as an organizational asset and expand their organizational values and principles in order to support knowledge production and sharing(Bontis,2001).

2.2. Organizational readiness to establish knowledge management

Holt(2000) defines readiness as a prerequisite for successful encountering with organizational change. Implementing knowledge management requires organizational factors including organizational structure, organizational culture, technology, and human resources which have specific characteristics and must be coherent. Lack of coordination among these factors hinders the successful implementation of knowledge management(Walczak,2005). Thus, knowing the organizational factors for implementing knowledge management can provide a strong foundation for the next steps in this direction. Table 1. summarizes the key factors in successful knowledge management.

	Experts	Key factors in success
1	Davenport (1998)	organizational and technical infrastructure, structure of the knowledge, dominance of culture and friendly atmosphere in the organization, clear objectives and a common language, presence of multiple routes for transferring knowledge, supporting excellent management, elimination of motivational obstacles

2	Davenport, Prusak (1998)	technology, knowledge creation, knowledge transfer, electronic knowledge storing, training, culture and leadership, trust
3	Mayer (1995)	the availability of knowledge, correct and updated knowledge
4	Lee,_Choi (2003)	training, employee participation in knowledge management processes, grouping empowerment, supporting excellent management, organizational obligation, knowledge structure
5	Soliman, Spooner (2000)	Having a compelling perspective, knowledge leadership, knowledge distribution culture, intelligent learning, and technical infrastructure

3.2. Social capital

Presenting a comprehensive definition of social capital is one of the problems scholars of management encounter(Seturbuk,1995). A review of definitions which the experts suggest reveals that in all cases the focus is on connections, interactions, networks, and so on. Social capital is the collection of all the existing norms in the social systems which promote cooperation between members of the society and thereby lowers the cost of transactions and communications (Putnam.2002, p.5). In other words, this concept points out the communication links between members of network as a valuable source, which with creating norms and mutual trust leads the members to achieve their goals. From an organizational perspective, Nahapiet and Ghoshal (1998) describe social capital as the sum of actual and potential resources embedded within, available through, and derived from the network of relationships of an individual or a social unit. In their view, social capital is one of the most important organizational capabilities and assets that can help many organizations to create and share knowledge to their advantage to create a sustainable organization. Social capital is divided into three categories: structural, cognitive, and communication (Taylor and Wright, 2004).

2.3.1. Structural element (cohesion)

Structural element of social capital refers to the overall pattern of contacts between individuals, i.e. to who and how they access(Hansen et al,1999). The most important aspects of these elements are the network of relationships between individuals, appropriate organizational, and network configuration(Miztal,1996). A. network relationships: the main proposition of social capital theory is that the network of relationships provides access to resources (such as knowledge) and decreases time and investment for collecting the information. B. form and combination of network relationships: C. characteristics of network structure: density, connection, and hierarchy result in the flexibility and ease of information exchange through effecting the amount of connection or the accessibility of the network members(Nonaka,1995; Mayer and Schoorman,1995; Hansen et al,1999). For example, Burt(1992) argues that scattered networks with a small number of connections provide more informational advantages. Also Hansen (1999) maintains that weak connections hinder the transferring of the knowledge. C. proper organization: proper social organizations can develop a potential access network to individuals and their resources such as information and knowledge and trough the cognitive and relational dimensions guarantee social motivation and capability. However, these organizations may hinder this exchange (Hoffman et al,2005). Research shows how the current activities of an organization may isolate the organizational

groups instead of coordinating them, or restrict them rather than enabling them to learn and create the intellectual capital (Gabbay and Leenders, 2003, p.554).

2.3.2. Cognitive element (participation)

Cognitive dimension provides a common perspective of goals and values for the members as well as making a foundation for functioning in the social system(Coleman,1998). Burt et al(2001) believe that in organizational level, creating a shared perspective among the members and causing them to have closer views is considered one of the ways of developing the cognitive dimension. The cognitive element refers to the resources which provide the symbols, interpretations, and systems of shared meanings among groups(Coleman, 1990). The most important aspects of these dimension include common language and codes, and common anecdotes. A. common language and codes: due to various reasons, the common language influences the condition of combination and exchange of knowledge. First, language has a direct and important function in social relations. Second, the language has an influence on our understanding. Also, the codes provide a frame of reference for interpreting the environment. And third, a common language increases the ability to combine information. B. Common anecdotes and stories: the rise of common anecdotes in society creates and transfers new interpretations and facilitates the combination of different forms of knowledge which are often hidden. Coleman(1990) elaborates how narratives facilitates the exchange of a hidden experience among experts.

2.3.3. The relational element (trust)

The relational element of social capital describes a kind of personal relationship which individuals establish based on their shared background(Cohen and Prusak,2001; Dietz and Hartog,2005). The most important aspects of social capital include: trust, norms, obligations and expectations, and identity. A. Trust: trust is a set of beliefs about the other party (trustee), which makes the person who trusts assume that actions of the trustee has positive outcome for them. Dietz and Hartog (2005) believe that trust can have many forms: trust as a belief, trust as a decision, and trust as an act (action). Miztal asserts that trust provides communication and discourse. Bontis (2001) also suggests that trust can facilitate the creation of intellectual capital. B. Norms: cooperation norms can create a strong foundation to create intellectual capital(Cicourel,1973). Social norms of integrity and teamwork are key characteristics of knowledge-based companies. The interactional norms that have been shown to be significant in the development of intellectual capital include: willingness to give value and respond to diversity, being open to critic, and having failure tolerance. C. Requirements and expectations: requirements represent an obligation or duty to carry out something in the future. Nahapiet and Ghoshal(1998) discuss that in creating the intellectual capital, requirements and expectations affect the individuals' and groups' access and motivation to exchange and combine knowledge. D. Identity: identity is a process in which individuals feel they are members of a single group alongside others. Lewicki (1996) and Burt (1996) believe that significant group identity may not only increase opportunities for information exchange, but may also increase the frequency of actual cooperation between members. In contrast, where the groups have distinct identity and are antithetical, they may be a major barrier to information sharing, learning, and create knowledge(Cohen and Prusak,2001; Dietz and Hartog,2005).

3. Methodology:

The present study is an applied research, has a descriptive method, and is a survey. To analyze the data SPSS 19 and LISREL 8/8 software were used. The target population was the staff of the State University of Ilam. The sample size is 180. Because the size of the population was small, we used census. For blank options or the questionnaires which were not filled correctly, the moderate tendency toward the center was considered. The data was collected via a questionnaire (five Likert scale questionnaire). To measure the independent and dependent variables, 5 components were considered. Furthermore, the reliability of the questionnaire was calculated by SPSS 19 software, and Crohnbach's alpha for entire equation (r) was.785.

3.1. Research hypotheses:

The main hypothesis:
1. There is significant and positive relationship between social capital and organizational readiness in establishing knowledge management?

Minor hypotheses:
1. There is significant and positive relationship between social trust and organizational readiness in establishing the knowledge management.

2 - There is significant and positive relationship between social coherence and organizational readiness and establishment of knowledge management.
3. There is significant and positive relationship between social cooperation and organizational readiness and establishment of knowledge management.

4. Data analysis by LISREL8.8
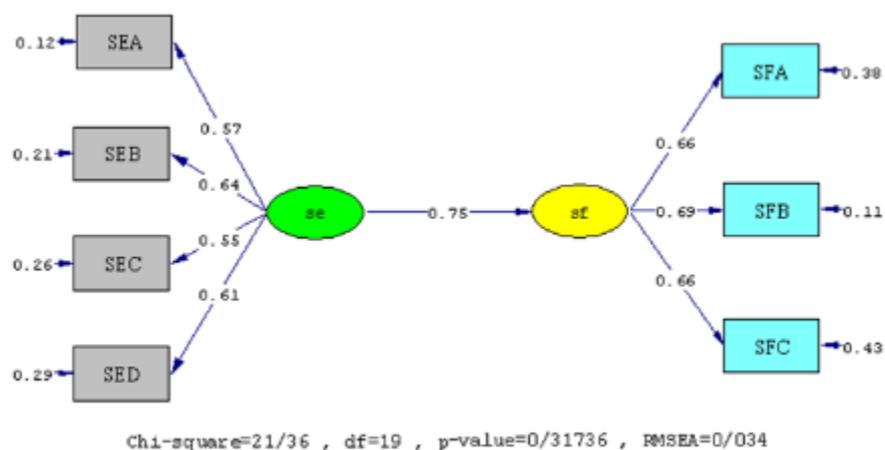### 4.1. Model of the main hypothesis of the study

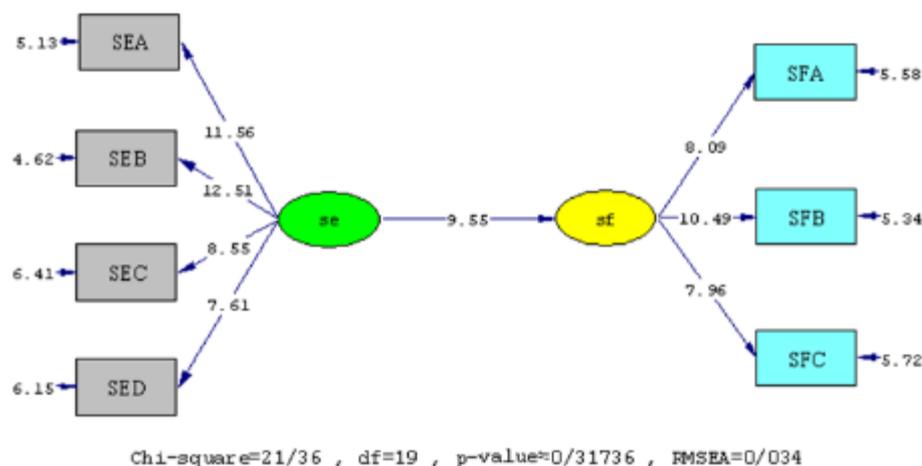Fig 1. Model in the standard estimation mode

Fig 2. Model of significance coefficient

4.2. Testing the hypotheses of the study and model's goodness of fit

The following table presents the indexes of model fitness, such as chi-square, RMSEA, GFI, and etc. If χ^2 is low, and the proportion of χ^2 to degrees of freedom (df) is smaller than 3, RMSEA smaller than 1, and GFI and AGFI greater than 90%, it can be conclude that the applied model has good fitness. The standard coefficient of the equation would be significant if the t value is bigger than 2 or smaller than -2 with confidence level of 99%.

Table 2: Results of structural equation model between the variables of proposed model

Hypotheses	Chi-square	RMSEA	Df	GFI	AGFI	Effect (standard mode) B	T-value	evaluation
Main	21.36	.034	19	.97	.94	.75	9.55	Confirmed
Minor 1	203.83	.060	146	.96	.95	.65	9.58	Confirmed
Minor 2	203.82	.060	146	.94	.96	.53	10.08	Confirmed
Minor 3	203.82	.060	146	.95	.92	.68	9.23	Confirmed

As it can be seen in the above table, due to the significant of t value, the model's goodness of fit is confirmed, since the chi-square value, RMSEA, the proportion of chi-square to degrees of freedom is low, and the GFI and AGFI are higher than 90%. Thus, all hypotheses (main hypothesis and minor hypotheses of research model) are confirmed.

4.3. Data analysis software SPSS19:

Kolmogorov- Smirnov test was used to check the normality of data. The results showed the following values.

Table 3: Kolmogorov-Smirnov test

	Social capital	Knowledge management
Number	360	360
Mean	63.5000	40.8000
SD	5.51372	7.85268
Upper deviation	.108	.096
Lower deviation	-.086	-.137
Z test	2.053	2.599
Sig (p-value)	.000	.000

In this paper, confidence level of .95 and the error of measurement equal to .05 are considered. Hence, the value of the sig or the P-value is less than the error of measurement which is considered in this paper, therefore it can be claimed that the data of the considered variables are not normal (data is not normal). So, to estimate the relationship between the related variables, Spearman r was used (if the data were normal, Pearson r would be used). The following table shows the amount of the relationship between the variables.

Table 4: Spearman r values:

		trust	coherence	participation
Knowledge management	r (relationship) sig (significant level) Sample size	.683 .000 360	.508 .000 360	.662 .000 360

R is equal to .734 for the equation (sig=.000)

5. Results:
The main hypothesis:
1. There is a direct and positive relationship between social capital and organizational readiness for establishing the knowledge management. Confirmed (R= .734)

   Minor hypotheses:
1. There is a direct and positive relationship between social trust and organizational readiness for establishing the knowledge management. Confirmed (R= .683)
2. There is a direct and positive relationship between social coherence and organizational readiness for establishing the knowledge management. Confirmed (R= .508)
3. There is a direct and positive relationship between social participation and organizational readiness for establishing the knowledge management. Confirmed (R= .662)

6. Discussion and Conclusions:
All the hypotheses in this study were confirmed. This reveals that social capital and its dimensions play an important role in the creation of organizational readiness and facilitating knowledge management. An organization is a collection of individuals and groups in an organizational environment who work together to achieve organizational goals. It is true that groups within an organization try to achieve the same goals, but this does not means that their objectives is completely in line with those of other groups. Organizational conflicts and organizational incompatible goals are inevitable, but an effort should be made to change the

destructive competition to a beneficial competition. Groups should share their achievements and use the experiences and knowledge of other organizational groups. Therefore, establishing rapport and readiness requires building and improving social capital in groups. Also, the results show that the higher the trust, coherence, and participation are, the more cooperation in the organization would be built, and this makes the organization ready to transfer, make, and share knowledge. This reduces the destructive conflicts in organizations and makes groups with conflicting goals in line with each other and in line with main goals of the organization as well. Hence, managers and all those involved in the organization are advised to put the members of the organization alongside each other in seminars and meeting, and by building constructive relationships and friendship among them build social capital in order to increase the social capital and pave the path for increasing cooperation among individuals in organizational groups. This leads to sharing the knowledge management in the organizations. For further research, it is suggested that researches conduct similar studies in different organizations and times and compare the results with the results of the current study.

References

- Bontis N. (2001), Managing organizational knowledge by diagnosing intellectual capital, Idea Group Publishing: 271-301.
- Bourdieu P. (1985), The forms of capital, G. Richardson (Ed), Handbook of theory and research for the sociology of education, NewYork: Greenwood: 241-258.
- Burt R.S. (1992), Structural Holes: The social structure of competition. Cambridge, MA: Harvard University Press
- Chung Hung, Y, Ming Huang, S, Pin Lin, QuoTsai, M Ling. (2005), Critical factor in adopting a knowledge management system for the pharmaceutical industry, industrial management & Data systems; 105(2):164-183.
- Cicourel, A. V. (1973), Cognitive Sociology, Harmondsworth, England: Penguin Books.
- Cohen D, Prusak L. (2001), In good company-how social capital makes organizations work, Harvard Business School Press, Boston, Massachusetts.
- Coleman J, S. (1990), Foundations of social theory, Cambridge, MA: Harvard University Press.
- Coleman J. S. (1988), Social capital in the creation of human capital, American Journal of Sociology; 94: 95-120
- Davenport, T, Prusak, L. (1998), Working knowledge-How organizations manage what they know, Harvard Business School Press: Boston, MA.
- Dietz, G, Hartog, D, N. (2005), Measuring trust inside organizations, working paper.
- Fukuyama, F. (1995), Trust: The Social Virtues and the Creation of Prosperity, New York: Free Press, Chapter 9.
- Gabbay S.M, Leenders R.A. J. (2003), Creating trust through narrative strategy, Rationality & Society; 15: 553-83.
- Hansen, M, Nohria, N, Tierney, T. (1999), What's your strategy for managing knowledge, Harvard Business Review, March – April: 106-116.
- Hoffman, J, Mark, L, Hoelscher, K. (2005), Social capital, Knowledge management and Sustained Superior Performance, Journal of Knowledge management; 9(3): 93-100.

- Holt, D.T. (2000), The measurement of readiness for change: A review of instruments and suggestions for future research, Paper presented at the annual meeting of the academy of management, Toronto, Canada.
- Lewicki, R.J, Bunker, B.B. (1996), Developing and maintaining trust in work relationships. In R. M. kramer & T.M. Tyler (Eds), Trust in organizations: Frontiers of theory and research: Thousand Oaks, CA: Sage: 114-139.
- Miztal, B. (1996), Trust in modern societies, Cambridge, England: Polity Press.
- Nahapiet, J, Ghoshal, S. (1998), Social capital, intellectual capital, and the organizational advantage, Academy of management Review; 23(2): 242-266.
- Nonaka, T. (1995), The Knowledge-Creating Company Oxford University Press.
- Putnam, R.D. (2002), Democracies in flux, the evolution of social capital in contemporary society, Oxford University Press.
- Seturbuk, R.D. (1995), Bowling alone: the collapse and revival of American community, Simmon & Schuster.
- Soliman, F, Spooner, K. (2000), Strategies for implementing knowledge management: role of human resources management, The journal of knowledge management
- Taylor, W.A, Wright, G.H. (2004), Organizational readiness for successful knowledge sharing: challenges for public sector managers, Idea Group Inc.
- Walczak, S. (2005), Organizational knowledge management structure, The Learning organization; 12(4): 330-339.
- Lee, H, Choi, B. (2003), Knowledge Management enablers, Processes, and Organizational Performance: An integrative view and empirical examination, Journal of Management Information Systems; 20(1):10: 179-228.
- Mayer, R.C, Davis, J. H, Schoorman, F.D. (1995), An integrative model of organizational trust, Academy of Management Review; 20(3): 709-34.