

Research Article

**PREDICTING THE SOCIAL CAPITAL BASED ON THE KNOWLEDGE
MANAGEMENT AND ITS DIMENSIONS IN ISLAMIC AZAD
UNIVERSITY OF SHAHR REY**

***Fattah Nazem and Masomeh Korpi**

*Department of Education, College of Education and Counselling, Roudehen Branch, Islamic Azad
University, Roudehen, Iran*

**Author for Correspondence*

ABSTRACT

The purpose of this study is to predict the social capital based on the knowledge management and its dimensions in Islamic Azad University of Shahr Rey. This study seeks to investigate the effectiveness of knowledge management on the growth and development of social capital in organizations. This study has descriptive type. The statistical population of research also includes the employees at Islamic Azad University. The statistical sample size estimation is done based on Cochran technique and a total of 200 employees are considered as the sample size. The research tool includes Sallis & Jones knowledge management questionnaire (2002), "With dimensions of leadership and management of knowledge sharing and creation and the learning communities, and a 24-item questionnaire of "Abili's social capital questionnaire" (2010) with cognitive, structural and relational dimensions. The results of multivariate regression indicate that there is a significant correlation between social capital and knowledge management variables and the maximum effect was done by direct impact of organizational culture, intellectual capital and learning organization in knowledge management dimension on the trust and participation variables in social capital dimension.

Keywords: *Knowledge Management, Social Capital, Dimensions of Social Capital*

INTRODUCTION

"Social capital" is among the key concepts in the social sciences and has allocated a significant portion of social sciences literature in terms of theoretical and experimental fields (Bankston, 2002). This concept is almost associated with all issues raised in humanities and social sciences due to its nature and content. Despite the fact that this relationship and correlation indicates the functional significance of social capital, it leads to the complexity, extension and diversity of subject and its outcome can be searched in being multi-dimension, utilizing various analytical levels and units, conceptual complexity and other items (Portes, 1998). Sinjer (2009) considers the social capital consisting of social networks in human relationship. "Knowledge Management" refers to the process of knowledge creation, dissemination and application in the organization.

The ultimate goal of knowledge management is the knowledge sharing among the employees to enhance the value added of existing knowledge in the organization. The knowledge management field includes the concepts and principles which promote the ability to apply and share knowledge in the institute (such as the staff expertise, skills and experiences) and plays a key role in development and improvement of quality, productivity and profitability of organization (Sinjer, 2009). Therefore, it can be concluded that the knowledge management (KM) refers to the effort to explore the latent asset in individuals' minds and converting this latent treasure to organizational asset in a way that a wide range of subjects, who are involved in decisions of organization, have access to this wealth and use it (Marr and Giovanni, 2001). The knowledge management is able to improve the ability of organizations and companies to perform these four concepts. In other words, the knowledge management is a systematic approach to creating, receiving, organizing, accessing and utilizing the knowledge in organizations. The knowledge management helps to improve decision-making, increase the flexibility, enhance the profits, reduce the workload, increase the productivity, create the new business opportunities, reduce the costs, increase the market share, and improve the employee motivation in organizations and companies (Daft, 1998). The

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knowledge management can be applied for various activities such as the normal, rational, complex, and unexpected measures.

Furthermore, the preparation of an appropriate space for human mind development in a knowledge-based organization is the managers' main challenge in this era. Therefore, the knowledge management and social capital have become the managers' essential skills in these organizations (Heidari, 2008). In current economy, the competitive advantage of companies is based on their intangible assets particularly the social capital which is achieved by establishing the proper communication with specialists and the old customers and gaining the required experience in this way as well as relying on the organizational knowledge and techniques and professional skills.

The organizations convert their existing information to social capital through available knowledge and processes in knowledge management and thus move towards the industrial to knowledge economy (Khavandkar and Mottaghi, 2009).

The idea of paying attention to social capital, as introduced by Cohen and Prusak, is relatively new (Anderson, 2002). However, according to Adler and Kwon's views on assuming the childhood for application of social capital in organizational life, the studies indicate that the social capital of organization can protect the individuals' mental knowledge (Adler and Kwon, 2002, quoted by Mirshahi, 2009). According to the organizational approach, Nahapiet & Ghoshal classified different aspects of social capital into three following categories: Cognitive, relational and structural capital. (Nahapiet and Ghoshal, 1998; quoted by Mirshahi, *ibid*)

Given the importance of social capital and knowledge management at universities, the researcher in this study seeks to examine the relationship between these variables and ultimately provide a mathematical model of social capital based on the knowledge management in central organization of Islamic Azad University.

MATERIALS AND METHODS

This research has descriptive-correlative method. The statistical sample of this study includes the employees at Islamic Azad University of Shahr Rey. The statistical sample size is estimated based on Cochran method and thus a total of 200 employees are selected as the sample size.

The research tool includes the following questionnaires:

Sallis and Jones knowledge management tool (2002) considering the dimensions of leadership and management of knowledge sharing and creation and learning communities with Cronbach's alpha of 0.97, and a 24-item Abili's social capital questionnaire (2010) with cognitive, structural and relational dimensions and Cronbach's alpha of 0.93.

Sallis and Jones knowledge management questionnaire (2002) with dimensions of management and objectives and strategies of organizational culture, rational capital, digital justice, learning organization, the leadership and management, knowledge sharing and creation, and learning communities. The reliability of questionnaire is obtained equal to 0.97 by Cronbach's alpha.

In this research, the social capital is measured through the 24-item Abili's social capital questionnaire (2010) which has cognitive, structural and relational dimensions. The reliability of questionnaire is equal to 0.93 through Cronbach's alpha.

The face validity is obtained from these two questionnaires in the form of a unit questionnaire by researcher, and the experts and professors' viewpoints on management are utilized for validating the content validity. The reliability of questionnaire is measured through Cronbach's alpha method. The data analysis is conducted in both sectors of descriptive and inferential statistics. Furthermore, the relevant data is entered into SPSS software version 21 for describing and inferring the data and observations after collecting, reviewing and coding them. In the sector of statistical inferences, different methods and techniques such as regression and Shapiro-Wilk Test are utilized for investigating the data normalization and also the path analysis method is provided for structural model.

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RESULTS AND DISCUSSION

Results

Table 3: Distribution of central indexes and dispersion of knowledge management and its dimensions

	Learning organization	Intellectual capital	Organizational culture	Strategy	Ideas and missions	Digital justice	Knowledge creation	Knowledge sharing	Teamwork and learning communities	Leadership management	Knowledge management
Mean	14.59	12.39	12.33	9.830	7.580	10.59	7.525	7.985	10.23	16.49	109.5
Median	14.00	12.00	13.00	9.000	7.000	10.00	7.000	8.000	10.00	16.00	109.0
Mode	12.00	10.00	10.00	8.00	6.00	8.00	6.00	9.00	8.00	18.00	86.00
Range of changes	18.00	15.00	15.00	12.00	9.00	12.00	9.00	9.00	12.00	15.00	124.00
Minimum score	6.00	5.00	5.00	4.00	3.00	4.00	3.00	3.00	4.00	9.00	46.00
Maximum score	24.00	20.00	20.00	16.00	12.00	16.00	12.00	12.00	16.00	24.00	170.00
Total score	2919.00	2478.00	2466.00	1966.00	1516.00	2119.00	1505.00	1597.00	2046.00	3298.00	21910.00

As shown, the lowest score of "Knowledge management" belongs to those with score of 46 and the highest score belongs to those who have obtained the score of 170 and the total score is 21910. Thus, the distribution range of scores is equal to 124. The knowledge management score for most of people is equal to 86. The knowledge management score is equal or less than 109 for a half of respondents and more than this amount for another half of people. The average score of "knowledge management" for statistical sample is equal to 109. The overall evaluation of knowledge management variable and its dimensions indicates that this variable has adverse status in studied sample because this variable and its dimensions are far from the normal distribution. It is suggested taking better measures to improve the situation of this tendency to a normal distribution for knowledge management and its dimensions.

Table 4: Distribution of central indexes and dispersion of social capital variable and its dimensions

	Participation	Trust	Knowledge	Social Capital
Mean	17.8850	28.5150	18.2450	61.9500
Median	18.0000	29.0000	19.0000	62.5000
Mode	14.00	22.00	14.00	48.00
Range of changes	21.00	33.00	21.00	72.00
Minimum score	7.00	11.00	7.00	24.00
Maximum score	28.00	44.00	28.00	96.00
Total score	3577.00	5703.00	3649.00	12390.00

As shown, the lowest score of "social capital" belongs to those who have obtained the score of 24 and the maximum score for those with score of 96 and the total score is equal to 12390. Thus, the distribution

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range of scores is equal to 72. The social capital score for most of people is equal to 48. The social capital score is equal or less than 62 for a half of respondents and more than this amount for another half of people.

The average score of "social capital" for statistical sample is equal to 61.95. The overall evaluation of social capital variable and its dimensions indicates that this variable has adverse status in studied sample because this variable and its dimensions are far from the normal distribution. It is suggested taking better measures to improve the situation of this tendency to a normal distribution for social capital and its dimensions

For central question of this research based on the nature of relationship between dimensions of knowledge management and social capital, it should be noted that the regression is applied to respond to this question.

The correlation between mentioned variables is equal to 0.84 and at the high level. Furthermore, the coefficient of determination indicates that 71% of changes in intellectual capital as the dependent variable is covered by a set of KM dimension variables. Since the F value is equal to 46.74 and the significance level less than 0.01, it indicates the confirmed regression model and the independent variable is able to predict the changes in independent variable.

The correlation between the dimensions of knowledge management and social capital is equal to 0.84 and the coefficient of determination equal to 0.71. In a more precise explanation, 71% of changes in social capital as the dependent variable are covered by independent variables. The beta of leadership and management variable is equal to 0.10 in predicting the dependent variable. The beta of teamwork variable is equal to 0.13, beta of knowledge sharing variable 0.14, idea and missions 0.17, organizational culture 0.21 and the intellectual capital 0.14. In other words, the social capital is increased by enhancing the dimensions of knowledge management.

Correlation between Knowledge Management and Social Capital

The regression is utilized to answer the research question whether there is a correlation between the knowledge management and social capital? The regression model and its equation are shown in the following table.

Correlation coefficient	Correlation square	coefficient	Adjusted coefficient square	correlation	Standard error of approximation
0.865 a	0.749		0.746		10.54822

The table above shows the correlation coefficient, correlation coefficient square or coefficient of determination, so that the correlation coefficient between these variables is equal to 0.86 and at a high level. Furthermore, the coefficient of determination indicates that 74% of changes in intellectual capital as the dependent variable is covered by a set of knowledge management and social capital variables.

Table 5: ANOVA

	Sum of squares	Degrees of freedom	Mean square	F	Significance level
Regression	65410.802	2	32705.401	293.942	0.000
Residual	21919.178	197	111.265		
Total	87329.980	199			

The significant level of table above indicates the confirmed regression model according to the F value equal to 293 and the significance level less than 0.01. The independent variable is able to predict the changes in dependent variable.

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Table 6: The coefficients of independent variables in terms of coefficients and non-coefficients values

Independent variable	Non-standardized coefficients		Standardized coefficients Beta	T	Significance level
	B	Standard error			
Constant value	258/9	955/4		869/1	063/0
Knowledge management	0.733	0.63	0.603	11.588	0.000
Social capital	0.620	0.100	0.322	6.183	0.00

The correlation between knowledge management and intellectual capital with social capital is equal to 0.86 and the coefficient of determination equal to 0.74. In a more precise explanation, 74% of changes in intellectual capital as the dependent variable are covered by independent. Therefore, the beta of knowledge management variable is equal to 0.60 in predicting the dependent variable and equal to 0.32 in social capital. In other words, the intellectual capital is increased by enhancing the knowledge management and social capital.

Discussion

The social capital develops the knowledge management by facilitating the combination and exchanging the knowledge resources of organization as well as providing the necessary conditions such as establishment of trust and interaction between members of organization. Therefore, the relationship between social capital and rate of implemented knowledge management are taken into account in this study. The compatibility of knowledge management with information era and the specific requirements of this era are among the cases which distinguish the knowledge management from other managerial theoretical principles. However, if the knowledge management principles are along with social capital in organizations, the conditions, namely the sustainable development which any organization is looking for, are created. Thus, the knowledge management has attracted much attention as a key strategy for achieving the organizational success and survival in competitive and unpredictable environment of this era. (Mottaghitalab and Balalaei, 2009)

Research Suggestions

- The research findings indicate that the capacity and social capital existing in educational institutions cannot be accurately and systematically utilized yet. The managers and staff have not paid special attention to new established models and work based on the current conditions and primary needs. Therefore, it is suggested that the managers and employees should be updated in the field of the latest managerial findings especially the social capital in the form of short and long-term curricula.
- This project indicate that there is a direct correlation between the studied variables in this study, and thus the identification and development of capacity associated with social capital and knowledge management can lead to the tangible and effective effects in the process of improving the staff performance and overall improvement of output in organizations. Therefore, it is suggested that the organizations and institutions (such as the higher education, universities, department of education, etc.) should provide practical solutions in line with developing these capacities by identifying them and thus facilitate the creation of appropriate job and organizational conditions as well as the significant growth of intellectual and social capital.
- The knowledge management issue is an issue which has not been sufficiently taken into account in our society and should be re-investigated in the form of studies with various topics in various managerial, psychological, social and cultural fields. This study pays attention to employees at academic institutions, while this issue can be re-investigated and obtain new scientific results according to the statistical population of education institutions, government officials, senior staff, officials in private units, and so on.
- The educational sessions and workshops should be held for all departments involved in knowledge management especially the body of higher education organizations and those involved in educational

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centers inside the country in order to explain the scientific plan and justify the necessary measures for providing the model and variables affecting the social capital in order to determine the new models and policies of management for future.

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