

STRUCTURAL MODEL OF SOCIAL CAPITAL BASED ON THE KNOWLEDGE MANAGEMENT IN ISLAMIC AZAD UNIVERSITY OF SHAHR REY

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ABSTRACT

This study aims at providing the social capital model according to the knowledge management. The statistical population of this research includes the employees in central organization of Islamic Azad University of Shahr Rey and 200 are selected as the samples according to the random simple sampling. 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 with Cronbach's alpha of 0.97, and a 24-item "Abili's social capital questionnaire" (2010) with cognitive, structural and relational dimensions with Cronbach's alpha of 0.93. The results of multivariate regression indicate that there is a mutual correlation between social capital and knowledge management variables, so that the creation and development of knowledge management will strengthen and stabilize the social capital.

Keywords: *Knowledge Management, Social Capital*

INTRODUCTION

In today's ultra-competitive era of organizations, we are faced with an environment characterized by increased complexity, dynamism and globalization; therefore, the organizations are faced with new challenges for survival and thus coping with these challenges requires the greater attention to developing and strengthening internal capabilities and this is achieved by organizational knowledge principles and social capital which are utilized by organizations to achieve better performance in business world. The social capital and knowledge are known as the sustainable strategies for achieving and maintaining the competitive advantage of organizations (see: Bankston, 2002; Daft, 1988; Lopes, 2010). Therefore, in today's knowledge-based world, the "organizational capabilities are based on the social capital and knowledge and the managers need to understand what capabilities are required to maintain the competitive advantage". (Hamidizadeh, 2007) The knowledge assets and social capital in every organization are converting to a strategic tool for managing the business performance and continuous innovation in that organization, thus the organization not only produce goods and service now, but also they should create the value-added for being survived in new economy. On the other hand, the knowledge management, which has been seriously discussed among the management experts and elites for nearly three decades, is one of the most important principles of future's management in organizations (Lussier, 2002). 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. The knowledge management is like a key strategy for achieving the organizational success and survival in today's competitive and unpredictable environment and it has attracted the great attention (Shahriari, 2005). Nowadays, most of the managers in different organizations have considered the knowledge management as a process which enables the organizations to use their knowledge assets for creating the value in organizations.

The concept of social capital is a sociological concept which is utilized in the fields of business, economy, human sciences and public health for referring to inter and intra group communications. Despite the fact that there are various definitions for this concept, the social capital is generally considered as a kind of "solution for all problems" in modern society (Singh, 2007). According to the main idea, the "social

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networks have values". As the physical or human capital both can individually and collectively increase the efficiency, the social communications also affects the individual and group efficiency. According to the organizational view, Nahapiet and Ghoshal (1998) have defined the social capital as the sum of internal actual and potential resources which are available due to the network of communication by a person or a social unit. According to their viewpoints, the social capital is an important organizational capability and asset which can help the organizations to create and share knowledge and make the sustainable organizational advantage for them compared to other organizations (Nahapiet and Ghoshal, 1998).

The knowledge management is a wide range of activities which are utilized for managing, sharing, creating or enhancing the intellectual capital at the macro level. The knowledge management refers to the intelligent design of processes, tools, structures, etc with the aim at increasing, renewing, sharing or promoting the use of knowledge in each of three elements of intellectual capital including the structural, social and human aspects (Hamidizadeh, 2005). The knowledge management is a process which helps the organizations to identify, select, organize, and publish the important skills and information which are considered the organizational memory and are typically not organized. This enables the management of organizations to solve the learning problems, strategic planning and dynamic decision-making effectively (Chitsazian, 2010).

Due to the complexity of knowledge concept and the existence of different approaches to knowledge management, there is no a unit attitude towards the knowledge management. Soknan (1998) (quoted by Abtahi and Salvati, 2006) has declared that some of KM definitions have downgraded it even to the level of data management. Malhotra has defined the knowledge management as follows: "The KM is a process by which the organizations acquire the skills in the field of learning (internalizing the knowledge), coding the knowledge (externalizing the knowledge) and the knowledge distribution and transfer" (Conger and Kanungo, 1988). Therefore, the knowledge management is a set of procedures governing the exploration and exploitation of intellectual resources in an organization or the fully exploitation of individual minds in an organization (Sanke *et al.*, 2009).

Given the importance of social capital and knowledge management at universities, the researcher seeks to investigate the correlation between these variables and ultimately providing the 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

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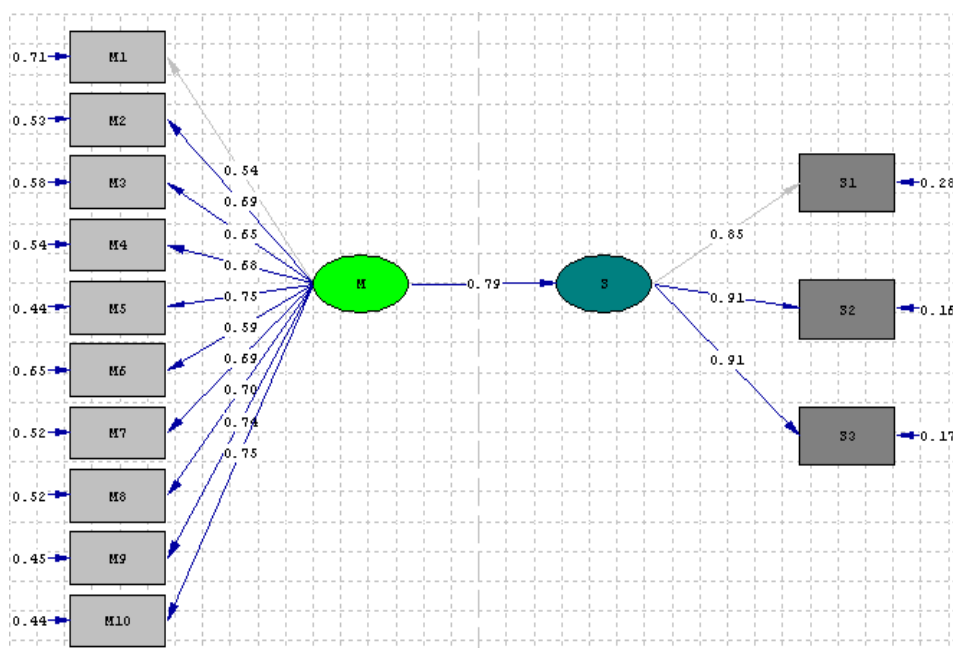
data is entered into SPSS software version 21 for describing and inferring the data and observations after collecting, reviewing and coding them. In the sector of statistical inferences, different methods and techniques such as regression and Shapiro-Wilk Test are utilized for investigating the data normalization and also the path analysis method is provided for structural model.

RESULTS AND DISCUSSION

Results

In this research, the subjects include the employees from six different deputies of university and 118 are male and the rest of them female.

Path Analysis of Knowledge Management according to Social Capital



The figure above shows the model of correlation between the dimensions of knowledge management (M) including M1 (Leadership and Management) by 6 questions, M2 (teamwork and learning communities) by 4 questions, M3 (Knowledge Sharing) by 3 questions, M4 (knowledge creation) by 3 questions, M5 (Digital Justice) by 4 questions, M6 (ideas and mission) by 3 questions, M7 (strategy) by 4 questions, M8 (Organizational culture) by 5 questions, M9 (Intellectual Capital) by 4 questions, and M10 (Learning organization) by 6 questions as the independent variables with dimensions of social capital (S) including S1 (awareness) by 6 questions, S2 (trust) by 11 questions, and S3 (participation) by 7 questions as the dependent variables and it is not different from the actual model of data.

The amount of Lambda (loading or impact) of dimensions of KM (M) as the latent variable consists of M1 (leadership and management) equal to 0.54, M2 (teamwork and learning communities) 0.69, M3 (Knowledge sharing) 0.65, M4 (knowledge creation) 0.68, M5 (Digital Justice) 0.75, M6 (Idea and mission) 0.59, M7 (strategy) 0.69, M8 (organizational culture) 0.70, M9 (Intellectual capital) 0.74, M10 (learning organization) 0.75; and the knowledge management variable is obtained from integration of these indexes and it has totally the impact factor of 0.79. In other words, 79% of changes in social capital as the dependent variable will be covered by a set of these indexes and other cases are predicted by other variables. The learning organization variable indicates the maximum degree of internal consistency in latent external variable.

The Lambda rate of latent internal variable for dimensions of social capital (S) contains S1 (awareness) equal to 0.85, S2 (trust) 0.91, and S3 (participation) 0.91, and the social capital variable is obtained from

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integration of these indexes. The trust and participation variables show the maximum rate of internal coherence in latent internal variable and the awareness variable indicates the minimum internal coherence.

Since the amount of "goodness of fit" in this model is equal to 0.91, it can be argued that this model has acceptable fit with reality. The amount of obtained coefficient indicates a direct effect of knowledge management on the intellectual capital. Furthermore, this model indicates that the maximum direct effect can be considered as the direct effect of organizational culture, intellectual capital and learning organization in dimension of knowledge management on the trust and participation in dimension of social capital.

The following table represents the indexes associated with provided model fit by researcher:

Index	Value	Interpretation
Tucker Lewis index (TLI) or Non-normed fit index (NNFI)	0.91	Excellent fit (criterion more than 0.90)
Bonett- Bentler index (BBI) or normed fit index (NFI)	0.91	Excellent fit (criterion more than 0.90)
Holter	0.71	Excellent fit (criterion more than 0.70)
Root Mean Square Error of Approximation	0.042	Excellent fit (criterion less than or equal to 0.05)
GFI	0.91	Excellent fit (criterion more than 0.90)

By emphasis on five indexes of goodness of fit, we can focus on the developed fit model on the one hand and the experimental data on the other hand. Therefore, an appropriate consistency INS obtained between the illustrated model or structural model and experimental data; and the good fit indicates the structural equation modeling with emphasis of knowledge management on social capital. The final conclusion of this study indicates that the proposed model by researcher has a good fit because the Tucker Lewis non-normed fit index (0.91) and Bonett- Bentler normed fit index (0.91) are higher than 0.90. Furthermore, Holter Index (0.71) is higher than 0.70 indicating a good fit. Moreover, the Root Mean Square Error of Approximation (0.042) is less than 0.05 indicating the fit of research model.

Discussion

During the past decade, the intangible capital especially the social capital has been taken into more account in developing countries such as Iran. Since the universities are considered as the main actors of national innovation system, the research and higher education organizations in Iran have paid attention to processes which make them flexible, transparent and competitive. In this regard and according to the fact that Iran is a developing country, there is no choice but intensive attention to knowledge in sustainable development. Undoubtedly, the Islamic knowledge cannot be revived regardless of the effective infrastructures. In current conditions, the main task of universities is to make effort to create the appropriate context for creating, transferring and developing the knowledge which has national religious orientation and this is possible only by relying on a knowledge-based management and utilizing the social and intellectual capital existing at university.

However, for the central question of this research based on the nature of relationship between dimensions of knowledge management and social capital, it should be concluded that the regression is applied for responding to this question. The correlation between variables above is equal to 0.84 and at a high level. Furthermore, the coefficient of determination indicates that 71% of changes in intellectual capital as the dependent variable will be covered by a set of KM dimensions. Since the f value is equal to 46.74 and the significance level less than 0.01, the regression model is confirmed and the independent variable is able to predict the changes in dependent variable.

The correlation between dimensions of knowledge management and social capital is equal to 0.84 and the coefficient of determination equal to 0.71. In more precise words, 71% of changes in social capital as the dependent variable will be covered by independent variables. The rate of beta for leadership and

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management is equal to 0.10 in predicting the dependent variable. 0.13 for teamwork variable, 0.14 for knowledge sharing, 0.17 for idea and mission, 0.21 for organizational culture, and 0.14 for intellectual capital. In other words, the increase in dimensions of knowledge management will lead to the enhanced social capital.

Research Suggestions

The research findings indicate that the social capital and capacities cannot be systematically and precisely utilized in educational institutions yet. The managers and staff in these centers have not paid more attention to new and established models in the field of social capital management and preferably take measures according to the existing conditions and primary needs. Therefore, it is suggested that the executives and employees in training centers should be aware of the latest managerial findings especially in the field of social capital in the form of short and long-term plans.

The research project indicates that there is a direct correlation between the variables of this study; and identification and development of capacities associated with social capital and knowledge management can lead to the tangible effective results in the process of improving the employee performance as well as the total improvement of business 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 employees as 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 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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