THE RELATIONSHIPS BETWEEN STRATEGIC THINKING, KNOWLEDGE MANAGEMENT AND INTELLECTUAL CAPITAL IN THE OFFICE OF YOUTH AND SPORTS OF THE SELECTED PROVINCES OF IRAN

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Abstract
The aim of this study was the designing of causal relationships between strategic thinking, knowledge management and intellectual capital in the Office of Youth and Sports the selected provinces of Iran. The used research method in this research was descriptive (correlation). The population of this research was all of Offices staff of Youth and Sports The selected provinces (N= 430), according to Morgan table, 347 employees were selected as Statistical samples which the correct questionnaires returned 288 case. Sampling method in this study was cluster - random. For gathering the data, questionnaires were used (Strategic thinking, knowledge management and intellectual capital questionnaire). Validity and reliability of instrumentation were confirmed with Cronbach alpha. In order to test the hypotheses, descriptive and inferential statistics were used. With using the tests: skewness and kurtosis for investigating the normalizing and structural equation modeling was used and level of 0.95 considered as significant(software AMOS & SPSS). The results showed that it was effect of strategic thinking on knowledge management and intellectual capital and also it was effect of knowledge management on intellectual capital in the Office of Youth and Sports the selected provinces of the country.

Key words: knowledge management, intellectual capital, strategic thinking, The Office of Youth and Sport.

Introduction
For proper and reasonable decision-making, one should have proper insight and understanding of the issues being decided upon, and making decision in organizations is no exception. To this end, for proper and logical decision-making in accordance with the circumstance in which the organization is, managers and staff of organizations should have the proper thinking, insight, and understanding. Therefore, organizations must be able to develop or recreate thinking, insight, and understanding of their managers and employees according to the current and changing circumstances, so that they can make strategic decisions effective in achieving success, competitive advantage, and survival.

Therefore, organizations should use “strategic thinking” approach (Miraheoori, 2013). According to Mintzberg, strategic thinking is a process of mental synthesis that through creativity and intuition creates a unified view of the business in mind (Mintzberg, 1994). In fact, it implies the ability of managers to see the future and understand the dynamics of the environment and the effective presence of the organization to achieve continued success over time (Arabshahi, 2008). Along with the global trend of increase in tendency towards utilizing the tools and techniques of strategic management (Ribgy and Bilodeau, 2007), for some reason including privatization and readiness to join the World Trade Organization, the need for effective use of such tools is increasing in Iran as well. Thus, improving strategic thinking ability in managers- as one of the key factors in efficiency of strategic management process- needs more attention. One of the vital and strategic requirements of management in leading organizations is access to up-to-date organizational knowledge and information in a comprehensive way to realize the main duties of the management and strategic decision-making. In recent years, “knowledge management” has become a critical issue discussed in organizational texts. Both scientific and business communities believe that knowledge-based organizations can maintain their long-term supremacy in the competitive arena. The sources of review and competitive perspectives of organizations indicate the impact of this view on the strategic outlooks of organizations. Given this importance, theoreticians of organization science and management, with extensive studies in the field of organization offered a new theory called knowledge management (Kalseth, 1999). The subjects of knowledge and its management gradually become important in organizations.

Nowadays, managers of organizations believe that machinery, equipment, and buildings cannot be the main assets of the organization. What are considered the important asset of any organization are its organizational knowledge and its proper management, which will gain competitive advantage for the organization and ultimately win over the competitors (Badri Azarin et al., 2012). Knowledge management overshadows information technology fast and even overrides it (Adli, 2005). On the other hand, capital in organizations refers to any asset that generates future cash flows. Most of the known assets have a clear and objective nature, so tangible asset refers to physical and financial assets of the organization. The value of these assets is disclosed periodically and can be easily found on the balance sheet obtained from the
financial statements of these organizations. Physical assets can be land, inventory, equipment, and so on, while financial assets are equity, accumulated gains, working capital, prepayments, receipts, etc. The importance of intangible assets (such as labor skills and organization) in determining future profits is increasingly (Zarger et al., 2012). Roos et al. (1997) referred to a new term called Intellectual Capital as an intangible asset that could be used to create and apply knowledge to increase the value of an organization (Roos et al., 1997). In these organizations, intellectual properties, especially human capital, are among the most important organizational assets, and the success of organizations is rooted in their ability to think rather than tangible assets (Zargar, 2013).

Sports and youth departments in the provinces are of the most important sources of exploration and development of sports champions in the country. The more ability their staff has, the more success they will have in this regard and will keep the sport of the province and the country alive. For this reason, intellectual capital and its realization in physical education departments are one of the strategies of successful leadership of the departments in the discovery and development of sports talents and then sporting success of the cities. Various studies have investigated the effect of strategic thinking on knowledge management and its components in different organizations (Taleghani and Sarallah, 2016; Forghani and Dehghanpour, 2015; Nasimi et al., 2015; Khaki et al. 2015; Nami Saghti et al., 2015; Ali Majid Abad et al. 2014; and Mohammadpour et al., 2013).

There are many studies concerning the effect of other research variables in sporting and non-sports organizations on intellectual capital (Moharramzadeh et al., 2016; Dadashi and Ghanem, 2015; and Abdolmaleki and Nourizadeh, 2014). However, we did not find any studies concerning studying strategic thinking and intellectual capital. Moreover, the effect that knowledge management has on intellectual capital has been discussed in many research papers (Bozorgzad and Kuchebbaghi 2016) Rezgi Rostami and Mansouri (2016), Yazan-Panah et al. (2015), Golbandi Nazif (2015), Babaei et al. (2015), Rafiee-Pour et al. (2015), Anousheh Taheri (2015), Taheri (2015), Asadi et al. (2015), Mir Mohammedi (2015), Amini (2015), Mohebali (2015), Allameh and Sheikh Abu Musaudi (2015), Fattahpour Marandi et al. (2014), Mohseni-Fard et al. (2013), Rezaei et al. (2013), Badiyan (2008), Wang et al. (2016), Guzman et al. (2016), Wang et al. (2014), Kantou et al. (2014), Eychung and Hong (2010), Shang et al. (2009) and Morrison (2005)).

Given the above, and the fact that knowledge, skills, and abilities of employees are one of the most important and renewable sources that organizations can use in their strategic management, knowledge management is more important than ever.

According to experts, the use of knowledge management can help organizations promote affairs and improve organizational performance. The researchers have examined the performance of organizations in different ways and the effect of various variables on their performance, but the effect of strategic thinking on knowledge management and intellectual capital, as well as the impact of knowledge management on intellectual capital in the form of a model has been less considered. Among the organizations, one can refer to sports organizations, which is one of the most important pillars of administrative, executive, and sports development.

Given the increasing progress of sport and its transformation into an industry, the researchers are more interested in it. Therefore, the purpose of this study is to design the causal model of the relationship between strategic thinking, knowledge management, and intellectual capital in sports and youth departments of selected provinces of the country and seek to answer the question. Have strategic thinking on knowledge management and intellectual capital and knowledge management on intellectual capital in form of a model been effective in sports and youth departments of the selected provinces?

**Methods**

Regarding the purpose, this study was applied, and in terms of data collection, it was descriptive-correlational in terms of method. For collecting information and data required and to assess the research hypotheses, we used questionnaire in the form of field operations. The population of this research was all employees of sport and youth departments of selected provinces (Bushehr province [representative of south country], Fars province [representative of central part of the country], Mazandaran province [representative of north], North Khorasan [representative of east], and Kermanshah [representative of the west]) both male and female, with different educational levels (with different ages in different positions) who are 430 people. The sample was selected as 347 people according to Morgan table, of whom 288 questionnaires were returned correctly. The sampling method is convenience random-cluster.

A questionnaire was used to collect information. The checklist of individual characteristics of the research samples includes marital status, gender, age, work record, and education level. The questionnaires used in this study were Goldman's Strategic Thinking Questionnaire (2005) with 40 questions and four components, Probest et al. Knowledge Management Questionnaire (2005) with 26 questions and six components, and Bontis' Intellectual Capital Questionnaire (1998) with 53 questions and three Components. These questionnaires are standard questionnaires used and validated repeatedly in various studies. The validity of the measurement tool was verified by three ways: face validity, content validity and
construct validity, and for the reliability, after the preliminary studies, we used Cronbach's alpha coefficient that was confirmed (α ≥ 0.79). Convergent validity: The correlation of questions of a construct or variable with each other in a model (if it is not in the model, it is Cronbach's Alpha). Divergent validity: This means that the questions of a construct are distinct from questions of other constructs. In convergent validity:

1. All factor loadings are meaningful is suitable.
2. All factor loadings are above 0.5 is suitable.
3. AVE: 0.5% is is suitable.
4. AVE <CR is suitable.

In a divergent validity:

1- MSV <AVE is suitable.
2. ASV <AVE is suitable.

In fact, construct validity is a combination of convergent and divergent validity (differential and diagnostic). Therefore, our model has construct validity. In order to analyze the data, we used descriptive statistics (frequency, mean, standard deviation, charts) and inferential statistics. In order to determine the validity and reliability of the research tools, we used Cronbach's alpha and confirmatory factor analysis; to study the normal distribution of data, we used ketosis and skewness of confirmatory factor analysis; to study the normality of the data. The results showed that skewness is -3 and 3 and kurtosis is -5 and 5. Therefore, the data have a normal distribution, and we can use covariance-based software. Then, we ran the measurement of variables related to the study and found that the critical ratio in all cases is significant (critical ratio should be between -1.96 and 1.96 and significance level less than 0.05). Moreover, in all critical ratios of the items, the critical ratio is more than 2.58, so at 99% level of confidence, they are significant. Thus, as all items are significant, no questions are removed. Furthermore, in standard mode, all factor loadings are higher than 0.5 (the most stringent case), so in standard mode, no items were removed. There are a number of key indices to ensure fitness of the model, which must be examined in the measurement model stage, and if the model has appropriate fitness parameters, there is no need to modify the model. However, if these key indices are not controlled and the desired result are not achieved, we should connect the errors and improve the indices in accordance with the proposals announced by the software until the desired values are corrected and improved to an extent that fitness measures of the model are approved (Klein, 2005). Hence, in this model, we first measured fit indices in the measurement model. The results showed that the majority of indices were approved. All thrifty indices (RMSEA, PNFI, and 1 - df/chi-square) were confirmed. All absolute indices of AGFI were confirmed. Of comparative indices, all indices (NNFI, IFI and CFI, NFI, RFI) were confirmed.

Of the terms of fitness approval, all thrifty, absolute, and comparative indices (Klein, 2005), all indices were verified and fitness was certified, so there is no need to reform and re-fit. Then, structural model was provided in two models separately. As the conceptual model of the study was in the form of first and second order factor analysis, first, we had to run the second stage and then added to the original model. The structural models are presented in Figure 2 and 3. Obtained regression coefficient (CR) (β or critical ratio) of the relationship between strategic thinking and knowledge management is 5.660, and if it is not in the range -1.96 and 1.96, it is significant at 0.95 level of confidence t, and t value is more than 2.58, it is significant at 0.99 level of confidence and the error rate of 0.01. Therefore, it can be stated that at the confidence level of 0.99, it was approved.

Thus, strategic thinking affects knowledge management in the General Directorate of Youth and Sport of the country's provinces. Obtained regression coefficient (CR) (β or critical ratio) of the relationship between strategic thinking and intellectual capital equals to 2.282. Therefore, it can be stated that at 0.95 confidence level, it is approved. Therefore, strategic thinking affects intellectual capital in General Directorate of Youth and Sport of the country's provinces. In determining the prediction of intellectual capital components by knowledge management, obtained regression coefficients (CR) (β or critical ratio) of the relationship between knowledge management and intellectual capital components all are more than 2.58. Therefore, we can state that at 0.99 confidence level, it was approved. Thus, knowledge management affects intellectual capital components in the General Directorate of Youth and Sport of the country's provinces.
Figure 1. Structural model 1 in the standardized mode.

Figure 2. Structural model 2 in the state of the standard coefficients.

<table>
<thead>
<tr>
<th>assumptions</th>
<th>Path coefficient</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic thinking affects knowledge management.</td>
<td>0.369</td>
<td>0.352</td>
<td>0.062</td>
<td>5.660</td>
<td>0.001</td>
</tr>
<tr>
<td>Strategic thinking affects intellectual capital.</td>
<td>0.221</td>
<td>0.280</td>
<td>0.101</td>
<td>2.282</td>
<td>0.001</td>
</tr>
<tr>
<td>Knowledge management affects intellectual capital.</td>
<td>0.362</td>
<td>0.520</td>
<td>0.113</td>
<td>4.588</td>
<td>0.001</td>
</tr>
<tr>
<td>Knowledge management affects human capital</td>
<td>0.253</td>
<td>0.496</td>
<td>0.112</td>
<td>4.428</td>
<td>0.001</td>
</tr>
<tr>
<td>Knowledge management affects customer capital</td>
<td>0.268</td>
<td>0.513</td>
<td>0.109</td>
<td>4.710</td>
<td>0.001</td>
</tr>
<tr>
<td>Knowledge management affects structural capital</td>
<td>0.307</td>
<td>0.644</td>
<td>0.118</td>
<td>5.472</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Discussion and conclusion

Obtained regression coefficient (CR) (β or critical ratio) of the relationship between strategic thinking and knowledge management is 5.660, so strategic thinking affects knowledge management in the General Directorate of Youth and Sport of the country’s provinces. The results of the research are consistent with the results of the studies by Taleghani and Sarallah (2016), Forghani and Dehghanpoor (2015), Khaki et al. (2015), Nasimi et al. (2015), Naami Soghad et al. (2015), Ali Majid Abad et al. (2014) and Mohammadpour et al. (2013), and no research results were found to be inconsistent with the results of this study. The results showed that strategic thinking affects knowledge management in the General Directorate of Youth and Sport of the country’s provinces. Therefore, having strategic thinking by the staff of these departments’ leads to increased and improved knowledge management in them. With the addition of staff and changes in different organizations, different knowledge sources are added or subtracted. The organization is successful that can use these various knowledge sources. On the other hand, according to the research findings by Jafari et al. (2015) in their study entitled “Exploring biographical characteristics (education, age, years of service and number of family members),” there is a significant relationship among individual biographical characteristics and models of strategic thinking. Moreover, by changing any of the properties mentioned, significant changes occur in the model of strategic thinking.
Thus, an organization can be called a set of thinking models that are constantly changing, so the managers and leaders in organizations are suggested monitoring and guiding the quantity and quality of this ongoing process of strategic thinking through monitoring mechanisms regularly to realize the strategic goals of their organizations. Therefore, with these results and to the importance of knowledge management and their impact on strategic thinking, it is recommended that managers of Sport and Youth Administrations of the selected provinces provide the conditions to improve and increase knowledge resources in their employees to improve and increase strategic thinking in their employees and ultimately, increase of productivity. Moreover, they should selected the employees for their organization that have more knowledge in their jobs. In general, knowledge management enables the organization to gain the ability of solving strategic problems and identifying essential issues from non-essential ones. By understanding causal relations and using effective mechanisms in risk management through planning, definition of performance and achievements indicators, performance evaluation, comparison, providing information that underlies the affective decisions of their leaders, these organizations realize achieving strategic goals and move towards realizing the vision set. The results showed that knowledge management affects the components of the intellectual capital in the General Directorate of Youth and Sport of the country’s provinces. These results are consistent with the results of the studies by Bozorgzadeh and Kuchehbaghi (2016), Rezaghi, Rostami, and Mansouri (2016), Yazanpanah et al. (2015), Golbandi Nazif et al. (2015), Babai et al. (2015), Rafipour et al. (2015), Anousheh and Taheri (2015), Taheri (2015), Assadi et al. (2015), Mirmohammadi (2015), Amini (2015), Mohebali (2015), Fbahshpour Marandi et al. (2014), Mohsenifard et al. (2013), Badiyian (2008), Wang et al. (2016), Guzman et al. (2016), Wang et al. (2014), Kianto et al. (2014), and Zhang et al. (2009). The results showed that knowledge management affects intellectual capital and its components in General Administration of Sport and Youth of the country’s provinces. Thus, the managers of these organizations should take some measures to improve the effectiveness of their organizations and to achieve the maximum institutional knowledge of their staff, as well as their intellectual capital (human, structural, and customer capital).

For this purpose, teaching effective communication, creating a competitive environment for learning, promoting teamwork and group learning, improving communication and interaction between employees and managers both inside and outside the organization, solving problems systematically, creating an organizational culture and climate with cooperation, mutual trust and team and group will accelerate development of intellectual capital of the organizations. Moreover, by setting up and enrichment of databases, improving documentation system for business registration and records, one can bring about maximum use of knowledge management in organizations.

References


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Received: September 7, 2018
Accepted: September 15, 2018
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