

**Research Article**

## **DISCUSSING THE RELATION BETWEEN INTELLECTUAL CAPITAL AND ORGANIZATIONAL PERFORMANCE AMONG THE EMPLOYEES OF I.R.I'S MINISTRY OF SPORT AND YOUTH**

**Elham Esmaili, \*Majid Soleimani and Sirus Ahmadi**

*Department of Physical Education and Sport Sciences, Hamadan Branch,  
Islamic Azad University, Hamadan, Iran*

*\*Author for Correspondence*

### **ABSTRACT**

The purpose of this research is to discuss the relationship between intellectual capital and organizational performance among the employees of I.R.I's ministry of sport and youth. The research was performed under descriptive-correlative and field methods. The population is consisted of the entire employees of the ministry of sport and youth as 911 individuals. The sample also includes 269 individuals selected based upon availability sampling method. The data collection instruments include the standard questionnaire of intellectual capital and organizational performance. The validity of this questionnaire was approved by university professors and also its reliability was calculated as 0.93 by Cronbach's alpha. For the purpose of data analysis, the Spearman's correlation test and the Regression test were used. Results indicated that there exists a significant relation between and among intellectual capital and organizational performance.

**Keywords:** *Intellectual Capital, Organizational Structure, Human Capital, Relational Capital Organizational Performance*

### **INTRODUCTION**

Since knowledge is considered as an important element in growth and development of companies and firms in future and the capability of firms in measurement is going to be dependent on management and development of knowledge and expertise, companies and firms should change constantly in order to be able to confront the circumstances of markets; however these changes in the context of technology can develop the necessary competence for acceptance and alignment with the environment. In this context, human resources and the management of the firm in addition to strategies become important components and furthermore, knowledge itself becomes an important asset for companies and firms. Rapid technological advances in terms of calculation power, communicational technologies, the nature of knowledge and expertise can lead to improvement of talents and individuals' empirical knowledge in working environment. Nowadays, the market's global information require different types of workers with competences, different specialties and rapid intellectual capabilities which guide the person towards regular and important brainstorming in knowledge oriented environments (Bontis, 2004).

In today's world in which the trades environment has become more competitive compared to past and also has become more unpredicted, companies are forced to implement newer approaches for development of their competences and capabilities at the time of confronting uncertainty and in this way they are able to survive and obtain their business goals. With the occurrence of technological revolution, there were changes imposed on the general pattern of global trades. In today's economy, knowledge is substituted with financial and physical capitals and has become the most important capital and this is known as intellectual capital (Mojtahed, 2004). By realization of the nature, components, models and methods of evaluation of intellectual capitals, the possibility for planning and optimization, continuous control and monitoring ability is provided for companies. By bringing up the concept of value of intellectual capital, one might be able to claim that a large portion of the difference between market value and booked value of companies in addition to their level of success on the market is determined by the value of their intellectual capitals (Setayesh and Kazem, 2010). Stewart believes that intellectual capital is a set of knowledge, information, intellectual properties, experience, competition and organizational

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learning which could be implemented for creation of wealth. In fact the intellectual capital of entire employees includes the organizational knowledge and its abilities for creation of added value and leads to continuous competitive advantages (Ghelich and Moshabaki, 2007). Bontis (1999) defines intellectual capital as a set of intangible assets (resources, capabilities and competition) which is obtained through organizational performance and creation of value.

Intellectual capital is a compound of intangible assets which empowers firms for accomplishment of their responsibilities. Human capital is a compound of knowledge, skills and experiences of employees of a firm. Relational capital is defined as relations established with people and individuals who are involved in companies business trades. These people generally include customers but it can also include suppliers. Customer capital is also called relational capital. Structural capital: this capital includes capitals which are not related to human capitals and includes technologies, processes, innovations, intellectual properties, cultural properties and methods which empower the firm for accomplishment of its tasks (Mojtahed, 2004).

Organizational performance is the outcome of executive processes and realization of organization's goals. In another definition, organizational performance is defined as accomplishment of tasks which are tasked to human resources by the organization (Casco, 1989). Organizational performance almost includes the entire goals of competitiveness and is related to costs, flexibility, speed, trustworthiness or quality. In addition, organizational performance could be described as an umbrella which includes the entire concepts related to success and the activities of the entire organization. Organizations with better performances have special characteristics in terms of perspective and organization's goals, purposes, strategic thinking, leadership, design of the organization, technology and organizational processes. In an organization with improved performance, the main drives of performance are determined through statement of missions. One of the most important and fundamental specialties of an organization with improved performance are mission and perspective (Waal, 2005). Organizations with improved performance can determine more clarified and measurable goals (Hardesty, 2003).

One of the important questions regarding trades and business has been that why some of the organizations are successful while some others are broke or bankrupted? Organizational performance is the most important issue for both governmental and private organizations. Being informed of effective elements on organization's performance is extremely crucial for managers because this issue is important for taking proper steps at the initiation of work. Still, defining, conceptualizing and measuring performance is not an easy task. Scholars have different opinions and definitions for organizational performance but it still remains as a challenging issue and yet the element considered as one of the most important elements that can have positive effects on organizational performance is intellectual capital. One of the important organizational dimensions is the context of optimization and improvement of performance which lead to growth and development of the firm. Therefore with respect to mentioned issues and problems, and with respect to the importance of intellectual capital, in this research the researcher has tried to answer the question that if there exists a significant relation between intellectual capital and organizational performance among the employees of I.R.I's ministry of youth and sport or not?

## **MATERIALS AND METHODS**

### **Methods**

In terms of data collection method, the present research is considered as a descriptive-correlative research performed under field methods. Also in terms of purpose it is considered as an applicable research. The population of this research includes the entire employees and managers of I.R.I's ministry of youth and sport as 911 individuals. Among this population, a number of 269 individuals were selected as the sample through availability sampling method. Data collection instruments include the standard questionnaire of intellectual capital and organizational performance which employed the Likert's scale. This questionnaire studies three main variables of intellectual capital (structural capital, human capital and relational capital) and organizational performance. The validity of the questionnaire was previously approved by a number of university instructors and furthermore, its' reliability was determined through distribution of the

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questionnaire among the first 30 people of the sample. For the purpose of data analysis the Kolmogorov-Smirnov test, Spearman's correlation test and regression test for anticipation of variables were used.

## RESULTS AND DISCUSSION

### Results

Before studying the research hypotheses, we are required to investigate their normality assumption through the Kolmogorov-Smirnov test as follows:

**Table 1: Kolmogorov-Smirnov test for testing the normality of hypotheses**

p	Kolmogorov-Smirnov Z	Standard deviation	Average	Variable
0.001	2.36	0.599	3.15	Human capital
0.001	3.07	0.429	3.08	Structural capital
0.005	1.72	0.602	3.33	Relational capital
0.005	1.72	0.617	3.57	Organizational performance

With respect to table 1 and because meaningfulness of responsiveness variables is 0.001 units less than 5%, the H1 hypothesis (normality of these variables) is denied and instead the other hypotheses is accepted. Therefore, for testing these hypotheses we used non-parametric methods.

### First Hypothesis

There is a significant relation between human capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth

**Table 2: Correlation between variables of human capital and organizational performance**

Organizational performance	Features	Human capital
**0.542	Spearman's correlation coefficient	
0.001	Significance value	
261	number	

With respect to table two and by comparing the test's significance level with the error value of 0.05 and also by considering the fact that the significance level is less than 0.05, the H0 hypothesis is denied and instead the H1 hypothesis is accepted.

Therefore it can be concluded that there exists a significant relation between human capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth.

### Second Hypothesis

There is a significant relation between structural capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth

**Table 3: Correlation between variables of structural capital and organizational performance**

Organizational performance	Features	structural capital
0.586**	Spearman's correlation coefficient	
0.001	Significance value	
261	number	

With respect to table three and by comparing the test's significance level with the error value of 0.05 and also by considering the fact that the significance level is less than 0.05, the H0 hypothesis is denied and instead the H1 hypothesis is accepted.

Therefore it can be concluded that there exists a significant relation between structural capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth.

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### Third Hypothesis

There is a significant relation between relational capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth

**Table 4: Correlation between variables of relational capital and organizational performance**

Organizational performance	Features	relational capital
0.655**	Spearman's correlation coefficient	
0.001	Significance value	
261	number	

With respect to table four and by comparing the test's significance level with the error value of 0.05 and also by considering the fact that the significance level is less than 0.05, the H0 hypothesis is denied and instead the H1 hypothesis is accepted. Therefore it can be concluded that there exists a significant relation between structural capital and organizational performance among the employees of Islamic republic of Iran's ministry of sport and youth.

### Fourth Hypothesis

Components of intellectual capital are proper anticipators for organizational performance of employees of Islamic republic of Iran's ministry of sport and youth.

**Table 5: Results of variance analysis test**

Test	F Statistic	Second	Power	Freedom	Second	Power	Resources
Significance		Average		Degree	Sum		
0.001	91.76	17.09		3	51.27		Between
		0.186		257	47.86		groups
				260	99.13		Inter-groups
							total

With respect to table five and by comparing the test's significance level with the error value of 0.05 and also by considering the fact that the significance level is less than 0.05, the H0 hypothesis is denied and instead the H1 hypothesis is accepted. Therefore we may conclude that the regression is meaningful. In other words three anticipator variables of human capital, structural capital and relational capital are able to significantly anticipate the variable of organizational performance.

**Table 6: Results of regression test**

R	R <sup>2</sup>	sig	Beta	B	T value	Variables
0.719	0.512	0.033		0.434	2.144	Constant value
		0.006	0.156	0.160	2.776	Human capital
		0.001	0.270	0.388	4.886	Structural capital
		0.001	0.419	0.057	7.498	Relational capital

The value of multivariate determination coefficient of R2 is equal to 15%, 27% and 41%. This coefficient studies the anticipation ability of the dependent variable by independent variables. On this basis the variable of human capital anticipates 15% of the changes, the variable of structural capital anticipates 27% of the changes and the variable of relational capital anticipates 41% of the changes in organizational performance. With respect to table 6 it can be concluded that human capital has the least amount of anticipation (15%) and the relational capital has the most level of anticipation as 41 percent.

### Discussion and Conclusion

Results show that there is a significant relation between human capital and organizational performances of the ministry of youth and sport employees ( $p=0.001$ ,  $r=0.542$ ). The results match with the findings of Abdulmaleki *et al.*, (2013), Zia and Tutifar (2013), Ahmadian and Ghorbani (2012), Ramin *et al.*, (2012),

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Ibrahim *et al.*, (2012), Fallahi and Baharestan (2014), Zargar *et al.*, (2014), Akbari *et al.*, (2013), Ming (2013), Ahmed (2012), Pasvat *et al.*, (2011), Zaranlar *et al.*, (2011), Huango (2009) and non-compatible studies were not found. The results show that human capital can anticipate 15 % of the organizational performances' changes. Human capital is the only which can change itself and the other institutions of the organization and also balance them, make a basis for the innovation and cause economic growth at higher levels. Human capital, as the most significant form of intangible properties, includes the saving of the staff's knowledge which encompasses the competencies and the mindsets of the staff. The organizations have figured out that if they want to make themselves different from the others, they need to hire staff with outstanding capacities. The organization's emphasis on human capital shows that the organizations 'worth is less based on the tangible properties and it is more based on the intangible properties, especially human capital. Absorbing and keeping human resources and keeping the best employees are a part of this relation anyway. Human capital includes personal abilities, knowledge, skills and experiences of the managers and the employees of an organization which are related to their responsibilities and refers to the capacity of adding and saving knowledge, skill and experiences by learning.

Results show that there is a significant relation between structural capital and organizational performances of the ministry of youth and sport employees ( $p=0.001$ ,  $r=0.542$ ). The results match with the findings of Abdulmaleki *et al.*, (2013), Zia and Tutifar (2013), Ahmadian and Ghorbani (2012), Ramin *et al.*, (2012), Ibrahim *et al.*, (2012), Fallahi and Baharestan (2014), Zargar *et al.*, (2014), Akbari *et al.*, (2013), Ming (2013), Ahmed (2012), Pasvat *et al.*, (2011), Zaranlar *et al.*, (2011), Huango (2009) and non-compatible studies were not found. It should be noted that based on the findings of regression test, structural capital can anticipate 27% of the organizational performances' changes. Appropriate organizational structure and describing the organizational units' responsibilities are some of the most important concerns of the organizations so that neglecting it is one of the most important reasons of the lack of accountability in some of the actions or eliminating some affairs at the time of consequent proceedings' failure in the direction of pre-determined organizational purposes. In order to eliminate this problem so much efforts like performing hours of different expertly meetings have been done to change organizational structure which leads to the changing and repairing of the organizational structure, re-examining the statement of responsibilities, replacing and transmitting the employees or the organizational units in the organization and mostly leads to the change of supervisor with the boss or management with the assistance or replacing a unit under a supervision and assistance with other places, regardless of that a manager needs a project. Factors like considerations, organization excuses for some beneficiaries due to the existing problems and one person's influences in the organization, unofficial relations and things like these factors have the most influence in the organizations' changes. It is obvious that inefficiency of the organizational system is repeated in eliminating the employees' needs, steps of performing meetings and changes. In knowledge- based organizations, as the experts' accepted standard, repairing organizational structure and determining the general position of organizational units, optimizing organizational system and preparing or correcting the descriptions of processes and necessary instruction are on the agenda. Results show that there is a significant relation between the relational capital and organizational performances of the ministry of youth and sport employees ( $p=0.001$ ,  $r=0.542$ ). The results match with the findings of Abdulmaleki *et al.*, (2013), Zia and Tutifar (2013), Ahmadian and Ghorbani (2012), Ramin *et al.*, (2012), Ibrahim *et al.*, (2012), Fallahi and Baharestan (2014), Zargar *et al.*, (2014), Akbari *et al.*, (2013), Ming (2013), Ahmed (2012), Pasvat *et al.*, (2011), Zaranlar *et al.*, (2011), Huango (2009) and the findings of Ahmed (2012) are non-compatible. It should be noted that based on the findings of regression test, structural capital can anticipate 41% of the organizational performances' changes. Costumer capital shows the significant power of an organization because of the external intangible factors. Relational capital includes all of the relations between the organization with any other people and organizations. These people and organizations can include costumers, middlemen, employees, suppliers, legal authorities, societies, creditors, investors and etc. Costumer capital is considered to be a bridge and organizer of the intellectual capital and it is a significant factor in converting the intellectual capital to the market value. This capital includes the stability and loyalty of the costumer's relations.



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