

# Investigating the Effect of Human Resources Management and Intellectual Capital on the Organizational Performance (Kermanshah Physical Education organization as a Case Study)

Mohamad Bagher Fallahi

M.A. of Management, Department of Management, Faculty of Administrative Sciences and Economics, University of Isfahan, Isfahan, Iran

Omid Baharestan

M.A. of Management, Department of Management, Faculty of Administrative Sciences and Economics, University of Isfahan, Isfahan, Iran

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v3-i3/946> DOI:10.6007/IJAREMS/v3-i3/946

Published Online: 06 June, 2014

## Abstract

The purpose of this study is to analyze the effect of human resources management and intellectual capital on the organizational performance. Indeed, this study has been done based on the human capital theory and objective-based theory. Human resource theory adopts a cost-benefit perspective in investigating human resource management. The theory describes the relationship between human resource management and intellectual capital. On the other hand, resource-based perspective implies that any organization is a unique institute in combining its resources and capabilities. The theory also indicates that more intellectual capital results in better organizational performance. The present study is a practical research from purpose view and is a descriptive-survey one from research methodology perspective. The statistical population includes 220 employees of physical education organization in the city of Kermanshah. A sample of 140 employees has been selected from this population through stratified sampling method. The sample size was defined based on Morgan sampling table. A self-administrated questionnaire was used for collecting the research data. The reliability and validity of the questionnaire were measured and confirmed through content validity and Cronbach's Alpha Coefficient relatively. The coefficients confirmed its validity and reliability. In order to analyze the research data and test the hypotheses, SMART-PLS was used. The findings revealed that human resource management influences intellectual capital significantly. Based on another part of our findings, human resource management and intellectual capital influences organizational performance significantly. Finally, the mediating role of human resource management in the relationship between intellectual capital and organizational performance was significant.

**Keywords:** Human Resource Management, Intellectual Capital, Organizational Performance, Physical Education Organization

**Introduction**

During recent years, human resource management departments have been considered as an important organizational department in the organizations because of its effects on the organizational success. Indeed, pressure of global competition and social changes have resulted in a revolution in human resource management. It influences any organization. Generally, human resource management refers to the efforts of employing, maintaining, and training qualified employees in organizations. Human resource management implies managers' responsibility in providing organizations with qualified employees and securing their competency. Indeed, manpower is the most valuable asset in any organization for exploiting competencies and achieving higher levels of performance continuously. The main prerequisite of human resource success in organizations is that employees are the main resource in organizations and also organizational performance depends on their performance. If good policies and process could be developed in terms of human resource, it will result in considerable and fundamental improvements in organizational performance (Armstrong, 2009). The results of recent studies have revealed that human resource management issues are important in sport and physical education areas (Chelladurai, 2006). Undoubtedly, manpower, success athletics, coaches, and technical experts are considered as the main assets and competitive advantage in any organization. In this regard, it is inevitable to consider overall sport policies and strategies in an adaptive manner for developing the most appropriate sport strategies. On the other hand, we are entering knowledge-based economy in which intellectual capital and especially human capital are the most important organizational assets. Indeed, success of intellectual capital and human capital depend on the intellectual capabilities. In such an era, organizations' intangible assets have more important role in achieving and maintaining sustainable competitive advantage. This is why that intellectual capital such as land, manpower, and financial capital is considered as the main resource of economic development in comparison to the traditional ones. In such conditions, intellectual capital is considered as a most strategic asset in organizational performance (Sohrabi and Derami, 2010: 126). According to Potei (1994), human resource management plays a critical role in facilitating employees' participation in the highly competitive environments. Many authors have reported that human resource managers can be considered as managers of human capital assets and potential source of competitive advantage (Schuler and Jackson, 2005). As a result, human resource management systems such as manpower employing, selecting, maintaining, preserving, and transmitting are the main steps in creating, collecting, and providing human capital. Indeed, this study has been done based on the human capital theory and objective-based theory. Human resource theory adopts a cost-benefit perspective in order to investigate human resource management (Tsang et al., 1991). It is developed based on three principles. The first principle is that when investment in developing manpower skills and knowledge is persuadable that the future productivity will be more than present costs. The second one implies that investment in necessary professional skills should be done by organization. Based on this principle, investment in the employees' general skills should be done by themselves. Finally, the third principle implies that organizations have to maintain and preserve their human resource. The theory describes the relationship between human resource management and intellectual capital. On the other hand, resources-based theory implies that every organization is a unique institute in combining its resources and capabilities. Such a characteristic results in different levels of performance and also differentiates success organizations from unsuccessful ones. So the main method of maximizing performance results is that organizations utilize their

existing resources and capabilities in an optimum manner and also develop their basic resources for surviving in the competitive conditions. As a result, the competitors will understand that imitating such unique and valuable resources is somewhat difficult. Adler and Kwon (2002) point out that intangible asset are considered in intellectual capital and combination of both tangible and intangible assets result in many effective outcomes in organizations. The theory also supports this claim that higher levels of intellectual capital results in better performance. Based on the literature review and importance of human resource management and intellectual capital in productivity and creating competitive advantage in organizations and their potential role in promoting organizational performance, it is necessary to analyze their effects on each other. This is why that the present study was aimed to analyze the effect of human resources management and intellectual capital on the organizational performance in the physical education organization in the city of Kermanshah. In the remaining sections of the paper, literature review, conceptual model development, and findings are presented.

### **Review of literature**

Review of literature is divided into three sections including human resource management, intellectual capital, and organizational performance. These are presented and discussed in the following section.

### **Human resource management**

Nowadays, the concepts of human resource management and personnel management are used by many people interchangeably. Indeed, both human resource management and personnel management refer to the processes which are used by managers in their organizations. In other words, human resource management refers to the philosophy, methods, procedures, and efforts of manpower management in organizations. The concept of employee management, which is used by some authors rather than human resource management, refers to similar definition. On the other hand, different titles and positions may be used for human resource managers in different organizations and institutes. All in all, human resource management is a comprehensive approach to strategic management of human resource. It not only is a profit-based approach toward manpower, but it is an especial approach to employees' relations with focus on commitment and mutuality of relations in organizations (Armstrong, 1993: 37). Armstrong (2000) refers to human resource management as strategic management of employees which focuses on the acquisition, organizing, and motivation of human resource. Indeed, human resource management can be considered in different forms such as traditional manpower management, a combination of personnel management and industrial relations, resource-based employment relations, and a part of strategic management performance. It also refers to management of relations of employees and their relations with organization (Svetlik and Stavrou-Costea, 2007: 197). On the other hand, human resources management consists of policies, efforts, and systems which influence employees' behavior, thoughts, and performance (Know et al., 2000: 4). In addition, it consists of four steps including employing, developing, motivating, and maintaining human resource (DeCenzo and Robbins, 1988: 4). It also refers to the policies and efforts which are necessary as a part of management functions such as hiring, educating, evaluating, and rewarding human resource (Desler, 2002: 2).

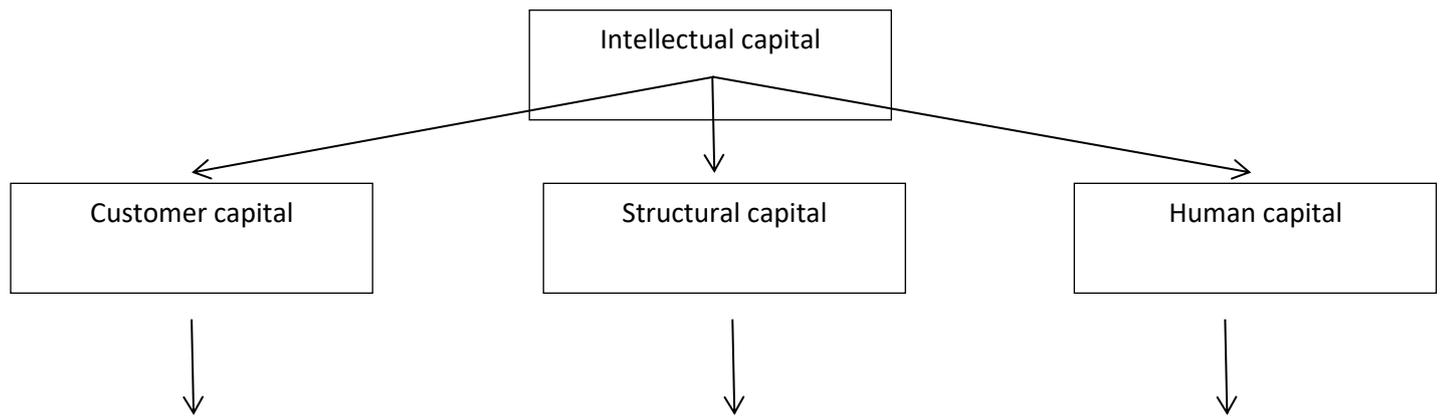
### Intellectual capital

Intellectual capital of an organization refers to its intangible assets and resources which result in many successes and values for organization through creating new goods and services processes. Indeed, intellectual capital was introduced by Galbraith (1969) for first time. Because of intangible and dynamic identity of intellectual capital, it is very difficult for defining it correctly. All in all, intellectual capital is considered as intangible assets and knowledge resources of an organization. On the other hand, intellectual capital is known as patent and information which can be used for creating capital in organizations. It also is defined as knowledge-based assets such as technical knowledge, customer information, brand name, and organizational culture which cannot be measured based on competition potential. According to Bontis (2000), intellectual capital is individual and organizational knowledge which helps in achieving sustainable competitive advantage. Based on another definition, effective factors on the organizational success are known as intellectual capital such as employees and their abilities (Pulic, 2001). All in all, intellectual capital is similar to human body and if it is not used, it will be destroyed. Many efforts have been done for measuring value of knowledge in achieving organizations' actual value. For this purpose, it is supposed that increase in knowledge and better use of it has a significant effect on the organizational performance. Organizational performance refers to the organization's success in terms of sales, assets, profit, market value, and book value. It should be noted that a large part of discussions are focused on both market value, and book value. In the traditional accounting principles, book value can be measured through balance sheet. Indeed, book value refers to difference between all of the company's assets and debates. In traditional accounting, measurement of assets shows financial and physical capitals. In many cases, intellectual capital is not considered as asset. Because of intangibility of intellectual capital, it can be controlled and owed by company. An employees' knowledge is a good example of such situation in which company cannot consider it and asset. This is why that intellectual capital is not considered as an asset. But its costs are considered in the organization's costs (Shojaei, 2009).

Generally, intellectual capital can be defined as value-creation process by human's intelligence and mind. Because of development of intellectual capital in many areas, some authors have suggested different categorization for it. The first categorization has been presented by Osoybi (19797). Based on this categorization, intellectual capital consists of three parts including:

- Human capital such as individual competency
- Structural capital such as internal structure
- Customer capital such as external structure

The above-mentioned categorization has already been reviewed by Bontis (1998). He has replaced customer capital with communicational capital and also investigate its from four perspectives. The categorization is presented in figure 2.



Identity	Human intelligence	Organizational policy	Market relations
Area of action	External relations	Intra-organizational relations	Employees' thought
Measurement parameters	Sustainable amount	Access to efficiency	Appropriate amount
Difficulty	Very high	Moderate	High

**Fig. 2: intellectual capital elements from Bontis (1998) perspective**

Human capital refers to organizational knowledge which is created by employees. Roos et al. point out that creation of intellectual capital can be created by employees' competency and intelligence. Competency includes employees' skills and education which secure their appropriate behavior. Bontis (2002) describes human capital as the overall capabilities of organization in exploiting the best methods of knowledge creation. Indeed, structural capital refers to the organizational structures and mechanisms which can be helpful in achieving improvement in the organizational performance. An organization with powerful structural capital will has supportive culture in which employees are allowed to learn many things through test and error processes. On the other hand, it is not possible to develop intellectual capital without structural capital. It includes different elements such as efficiency, operation times, innovation process, and valuable information (Afjeh and Ghaderpor, 2010). On the other hand, customer capital consists of both existing value and relationship with customers and its future value. This is why that customer capital is located as an intangible knowledge in the marketing channels and customer relations. It also includes main valuable intangible assets such as market share, brand name, customer information, customer relationship, and commercial contacts (Bontis, 2000).

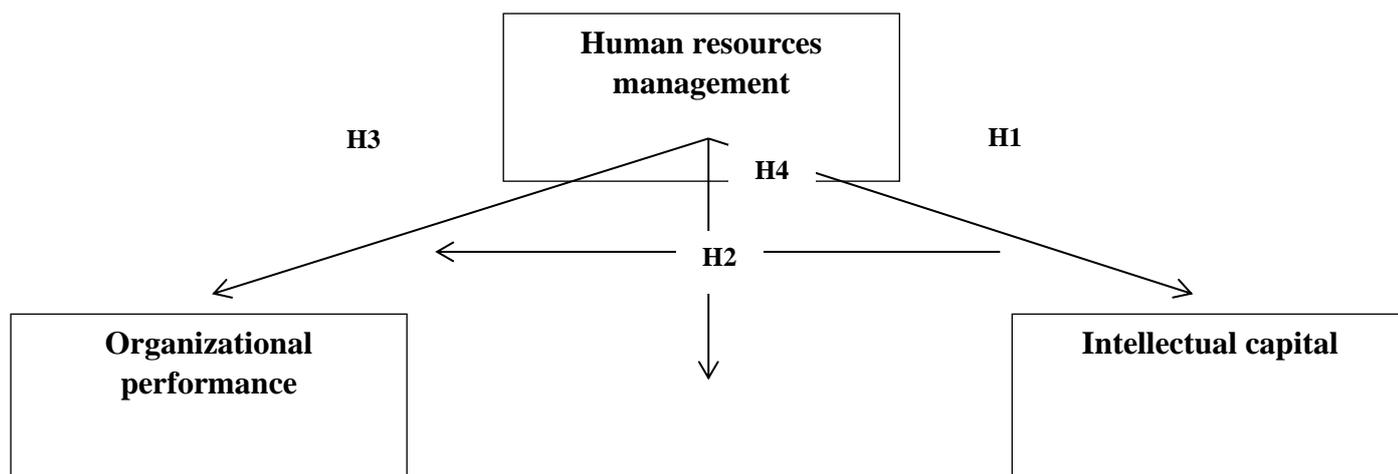
**Organizational performance**

Organizational performance is an overall construct which refers to the organization's performance in a given period. Indeed, organizational performance is an indicator which measuring organization's effort in achieving its goals (Ho, 2008). The most-known definition of organizational performance has been suggested by Neely (2005). Based on this definition, performance is the process of explaining efficiency and effectiveness of the past efforts. Accordingly, performance can be divided into two parts. The first part shows that how organization utilizes its resources in producing goods and delivering services. This refers to the relationship between present and favorable combination of processes for producing outcomes. On the other hand, the second refers to effectiveness in which degree of achieved

goals is defined. Such goals can be measured through appropriateness, accessibility, and quality. On the other hand, performance measurement is an issue which although is discussed for many times, but it has been defined rarely. Performance measurement system is considered as an instrument in screening and monitoring organizational performance. According to Nani et al. (1990), performance measurement is a process by which managers monitoring strategies direction in achieving organizational goals and purposes. Indeed, continuous improvement of organizational performance results in a considerable amount of synergy by which employees support organization's efforts. It is not possible to implement performance evaluation in action without examining and understanding amount of goals achievement and recognizing organization's challenges and feedback. Achieving all of these purposes is not possible without measurement and evaluation of performance. There are two main approaches in performance evaluation including objective and subjective ones. Both objective and subjective approaches have their own strengths and weaknesses (Allen, 2008). Although objective approaches are more real than subjective one, but they are limited financial data and do not coverage other organizational aspects. On the other hand, there are subjective approaches which are less real and show organizational effectiveness better than former approach. Indeed, such approaches allow us to compare different organizations in different industries. As a result, generalization of subjective approach is more than others. In addition, subjective approaches coverage perceived analytical measures which have a considerable role in social sciences studies (Rahnavard, 2008). Traditionally, financial aspects are used in performance evaluation more than other aspects. Nowadays, such aspects are not beneficial in evaluating organizational performance. The reason is that machinery identity and functionalist philosophy of management has already been changes during past times (Niven, 2002). It has been approved that motivated and satisfied employees utilize their ability, capability, and skills in organization. It can be said that success of every organizations depends on their human resource (Richard, 1999). In addition, Moghimi (1998) points out that loving and valuating job are two main measures in evaluation of employees' satisfaction which are considered in the present study. Which companies and organizations can be successful that achieve and improve customers' satisfaction. The reason is that survive of organization depends on its customers. In other words, it is the customer satisfaction that determines organizational success or failure. As a result, recognizing customers' actual needs, responding needs and wants in the best manners, communicating customers, and improving their satisfaction are the main measures in evaluating customer satisfaction (Heinonen and Korvela, 2003). Bierly and Daly (2007) have considered sales amount and profitability along with financial performance in measuring and evaluating organizational performance.

### **Conceptual model and hypotheses development**

Based on the literature review, the following conceptual model was developed. In order to test the model, five hypotheses were developed which are presented in the following section.



**H1:** human resource management influences intellectual capital significantly.

**H2:** intellectual capital influences organizational performance significantly.

**H3:** human resource management influences organizational performance significantly.

**H4:** human resource management influences the relationship between organizational performance and intellectual capital significantly.

### Research methodology

As indicated across the paper, the purpose of this study is to analyze the effect of human resources management and intellectual capital on the organizational performance. The present study is a practical research from purpose view and is a descriptive-survey one from research methodology perspective. The statistical population includes 220 employees of physical education organization in the city of Kermanshah. A sample of 140 employees has been selected from this population through stratified sampling method. The sample size was defined based on Morgan sampling table. A self-administrated questionnaire was used for collecting research data. In order to measure human resource management, the questionnaire of Yang and Lin (2009) was used which has been developed by in 14 items. Also Bontis questionnaire of intellectual capital was used for collecting research data in terms of intellectual capital. The questionnaire consists of 20 items. Finally, a researcher-developed questionnaire was employed for measuring organizational performance. The questionnaire consists of 29 items. Three questionnaires were finalized in Likert five-point scale. In order to measure and evaluate reliability of the questionnaire, three types of reliability-measurement constructs were used including content validity, convergent validity, and divergent validity. On the other hand, validity of the questionnaire was measured and confirmed through Cronbach's Alpha Coefficient relatively. The coefficients confirmed its validity. The results of questionnaire reliability and validity are presented in table 1 and 2. In order to analyze the research data and test the hypotheses, SMART-PLS was employed.

Table 1:

*The Results of Questionnaire Reliability*

Research variables	AVE	Factor loading	CR	Cronbach's Alpha Coefficient
<b>Human resource management</b>	0.69	-	0.76	0.77
Education and development	-	0.63	-	-
Performance evaluation	-	0.58	-	-
Compensation	-	0.76	-	-
Relation with employees	-	0.72	-	-
Health and safety	-	0.52	-	-
Employment	-	0.54	-	-
<b>Intellectual capital</b>	0.54	-	0.80	0.82
Human capital	-	0.69	-	-
Structural capital	-	0.77	-	-
Customer capital	-	0.56	-	-
<b>Organizational performance</b>	0.63	-	0.75	0.79
Employee satisfaction	-	0.69	-	-
Customer satisfaction	-	0.52	-	-
Organizational performance	-	0.71	-	-

Table 2:

## The Results of Validity

Research variables	Human resource management	Intellectual capital	Organizational performance	AVE
<b>Human resource management</b>	1			0.83
<b>Intellectual capital</b>	0.72	1		0.73
<b>Organizational performance</b>	0.69	0.61	1	0.79

## Findings

The findings of this study were presented in this part of paper. The coefficients of path model and the results of t-test were presented in figures 4 and 5. It should be noted that t-value refers to the significance of variable effects. In this regard, if t is more than +1.96, it can be said that there is a significant positive relationship between variables. On the other hand, if t is less than -1.96, it can be said that the relationship is negative. Finally, if t is between +1.96 and -1.96, it can be concluded that there is not any significant relationship between variables (Chin, 2003). The summary of hypotheses test was presented in table 2.

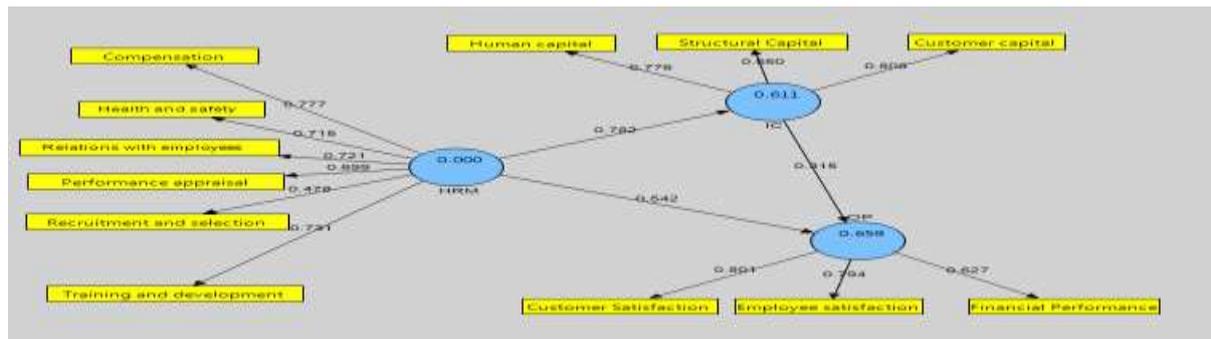


Fig. 4: the coefficients of path model

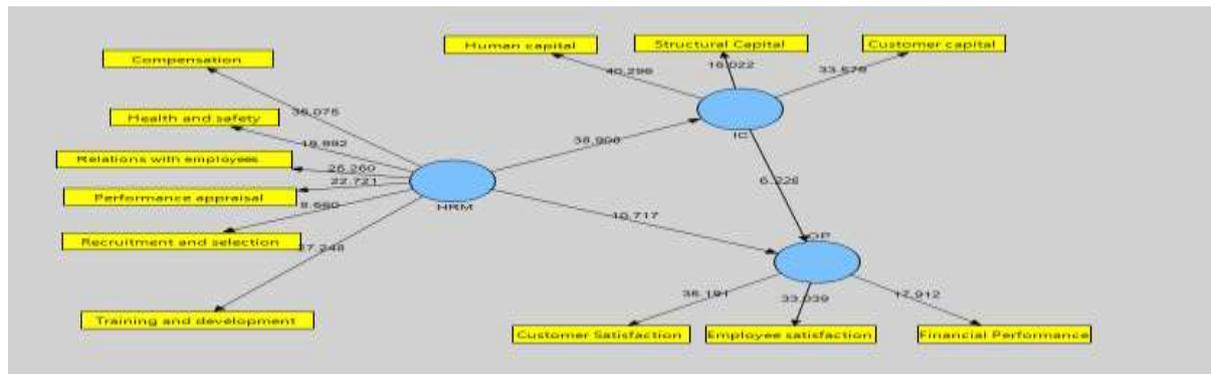


Fig. 5: the results of t-test

Table 2:  
 Summary of Hypotheses

Research hypotheses	Path coefficient	t-value	Sig	Degree of effect
H1: human resource management influences intellectual capital significantly.	0.872	38.908	Significant	Strong
H2: intellectual capital influences organizational performance significantly.	0.315	6.228	Significant	Moderate
H3: human resource management influences organizational performance significantly.	0.542	10.707	Significant	Moderate

The results of table 2 revealed that path coefficient of the first hypothesis is 0.782 and its t-value is 38.908. Based on the results, the hypothesis is supported and it can be said that human resource management influences intellectual capital significantly. On the other hand, results of table 2 revealed that path coefficient of the second hypothesis is 0.315 and its t-value is 6.228. Based on the results, the hypothesis is supported and it can be said that intellectual capital influences organizational performance significantly. Finally, the results of the third hypothesis revealed that path coefficient of the third hypothesis is 0.542 and its t-value is 10.717. Based on the results, the hypothesis is supported and it can be said that human resource management influences organizational performance significantly.

In order to test the fourth hypothesis, mediating role of human resource management in the relationship between organizational performance and intellectual capital was measured. The results of this hypothesis were presented in figures 6 and 7.

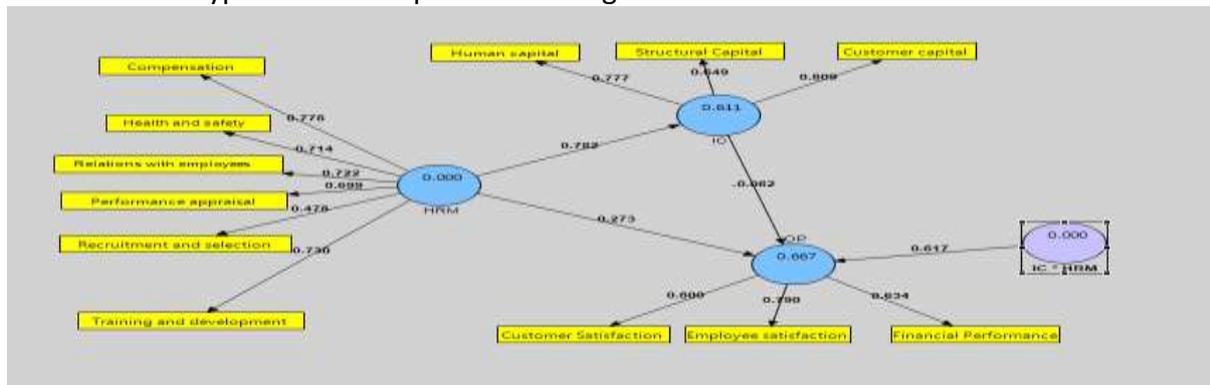


Fig. 6: the path coefficient of fourth hypothesis

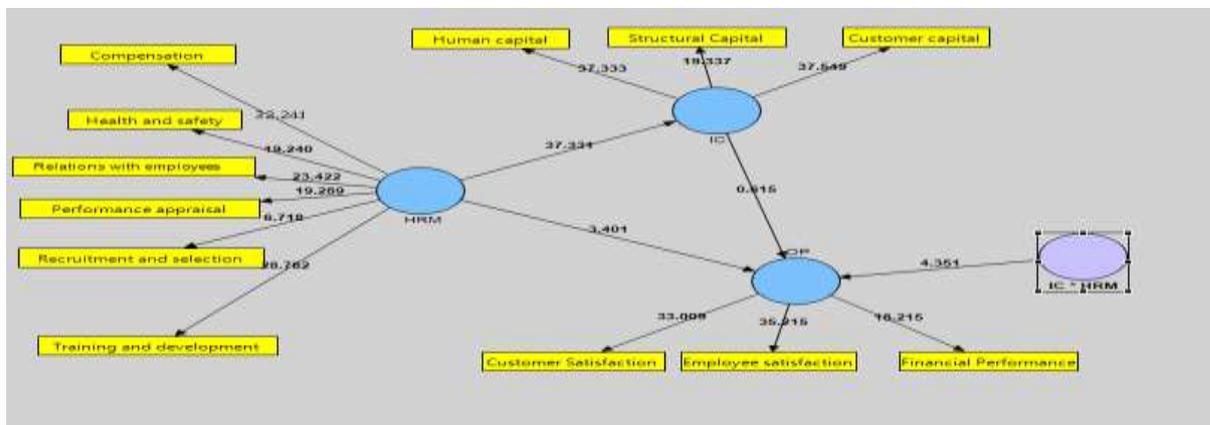


Fig. 7: the t-value of fourth hypothesis

The t-value of this hypothesis is 4.361 and path coefficient is 0.617. Based on the results, the hypothesis is supported. It can be said that human resource management influences the relationship between organizational performance and intellectual capital significantly.

### Conclusion and empirical suggestions

This study was aimed to analyze the effect of human resources management and intellectual capital on the organizational performance. The statistical population includes 220 employees of physical education organization in the city of Kermanshah. A sample of 140 employees has been selected from this population through stratified sampling method. The sample size was defined based on Morgan sampling table. A self-administrated questionnaire was used for collecting research data. The findings revealed that path coefficient of the first hypothesis is 0.782 and its t-value is 38.908. Based on the results, the hypothesis is supported and it can be said that human resource management influences intellectual capital significantly. On the other hand, results of table 2 revealed that path coefficient of the second hypothesis is 0.315 and its t-value is 6.228. Based on the results, the hypothesis is supported and it can be said that intellectual capital influences organizational performance significantly. Finally, the results of the third hypothesis revealed that path coefficient of the third hypothesis is 0.542 and its t-value is 10.717. Based on the results, the hypothesis is supported and it can be said that human resource management influences organizational performance significantly. The t-value of this hypothesis is 4.361 and path coefficient is 0.617. Based on the results, the

hypothesis is supported. It can be said that human resource management influences the relationship between organizational performance and intellectual capital significantly. Based on the results of hypothesis 4, it can be said that emergent of human resource management can be effective on the relationship between intellectual capital and organizational performance. Studying intellectual capital in development of human resource allows us to shift focus of human resource management from knowledge-based approach to the approach which is concentrated on the intangible assets (Davis, 2006). The results of this study can be helpful in measuring the effects of human resource management on organizational performance. This shows that emergent of human resource management can be effective on the relationship between intellectual capital and organizational performance. It is necessary that organizations focus on their key elements in human resource management for paving the ground for achieving organizational goals in the best manners. As a result, human resource management is a facilitator in achieving organizational goals. In today's competitive advantage, long-term success of organizations not only depends on their financial performance and innovation in products, but also it is the human resource that plays an important role in this area. Indeed, any managerial problems should be solved by suitable manpower in the best place and time. It is considered as an effective factor on the economic growth of a company (Neghandi, 1987). Human resource management plays an important role in motivating employees' participation in different organizational sections for maximizing competitive advantage. Especially, it can be helpful in organizations through making competition as a hard phenomenon for competitors. In other words, human resource management promotes intangible assets such as intellectual capital and thereby it will be possible to achieve sustainable competitive advantage. As indicated previously, the present study was done in physical education organization in the city of Kermanshah. So some empirical suggestions are presented for managers and officers of this organization in improving its intellectual capital and organizational performance. It is suggested that the managers and officers attempt to recognize strategic jobs, measure employees' competency continuously, utilize improvement plans, design and develop a system for measuring job satisfaction, develop operational plans and goals in systematic approach, measure employees' performance in the predetermined time period consciously, analyze data of performance measurement and compare it with performance standards, develop and implement corrective efforts, develop career and succession tables for jobs, utilize performance data of employees in their promotion, secure employees in the importance of every strategy and operational goals, offer different education, consulting, and organizational opportunities in improving employees' future performance. Since appropriate and valuable customer services can be effective on different parts of the organization such as sport, capital, and happiness of employees and customers, it is suggested to implement different strategies for this purpose (Habibi et al., 2012). In order to reinforce customer capital of human resource management, the following efforts can be effective: educating customer-oriented behaviors for services employee, recognizing target markets, recognizing customer needs, distributing customer feedback across the organization, motivating employees' participation in services marketing process, considering customers' viewpoints in product design and development, reinforcing customer-oriented attitude among organizational members, motivating and empowering employees in delivering customer services, screening and monitoring customers' expectations and complaints. Finally, the following suggestions can be effective in terms of structural capital. It is necessary to develop a structure in which intellectual capital is undated continuously. On the other hand, it is necessary to develop measures and

indicators which are related to the organizational strategy. Such measures and indicators should include traditional success criteria and intangible ones such intellectual measures. The use of suggestion systems can be effective in finding employees and customers' viewpoints and complaints. Finally, participating employees in decision making sessions can be effective in their motivation.

## References

- Armstrong, M., 1993. A handbook of personnel management practice. 4th ed. London: Kogan Page 37.
- Armstrong, M., 2009, human resource management, translated to Persian by Pahlavanian et al., Yazd, Niko Ravesh Press, first edition.
- Armstrong, M., 2002, strategic human resource management, translated to Persian by Erabi and Izadi, Tehran, Iran.
- Adler, P.S., and Kwon, S. (2002), 'Social Capital: Prospects for a New Concept,' *Academy of Management Review*, 27, 17–40.
- Allen, R. S., Dawson, G., Wheatley K. and White C.S. (2008) "Perceived Diversity and Organizational Performance", *Employee Relations*, Vol. 30 No. 1, pp. 20-33.
- Abdullah, D., Sofian, S. (2012). The Relationship between Intellectual Capital and Corporate Performance. *Procardia - Social and Behavioral Sciences* 40 (2012) 537 – 541.
- Afjeh, Sayyed Ali Akbar, Ghaderpor, Hana, 2010, examining the effect of intellectual capital management on the organizational performance, *Journal of public management*, third volume.
- Bontis, N., Keow, W.C. and Richardson, S. 2000. Intellectual Capital and Business Performance in Malaysian Industries", *Journal of Intellectual Capital*, Vol. 1, No. 1, pp. 85-100.
- Bontis, N 1998. Intellectual Capital: An Exploratory Study that Develops Measures and Model. *Management Decision*. Vol. 36, No. 2, pp.63-76.
- Bontis, N. (2002), "Managing Organizational Knowledge by Diagnosing Intellectual Capital: Framing and Advancing the State of the Field", *International Journal of Technology Management*, Vol. 18, No. 5/6/7/8, pp.
- Bierly, P. E. III & Daly, P. S. (2007). "Alternative Knowledge Strategies, Competitive Environment, and Organizational Performance in Small Manufacturing Firms ". *Entrepreneurship: Theory and Practice*, 31(4), pp. 493–516.
- Chelladurai, p.(2006). *Human Resource Management in Sport and Recreation-2nd Edition*.
- Chin W.W. (2003). "Issues and Opinions on Structural Equation Modeling. *MIS Quarterly*". Vol. 22 No.1, pp. 7-16.
- Davis, P. (2006), 'Beyond Human Resource Management in Co-operatives,' *Cross Cultural Management*, 13, 1, 69–95.
- Desler, Gree, (2002), *fundamentals of human resource management*, second edition, translated to Persian by Erabi and Parsayian, Tehran, Iran.
- DeCenzo, D.A., and Robbins, S. P. 1988. *Personnel/ Human Resource Management*. 3 rd. ed. London: Printice-Hall.
- Esposito Vinzi, V. (2010). "PLS Path Modeling: From Foundations to Recent Developments and Open Issues for Model Assessment and Improvement". In V. Esposito.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Ho, L. (2008). "What affects organizational performance?" *Industrial Management & Data System*, pp. 108-118.

- Heinonen, J. & Korvela, K. (2003). "How about measuring Intrapreneurship". Turku School of Economics and Business Administration. Turku, Finland, pp. 1-18.
- Habibi, H., Hormati, Y., Dadkhah, R., Najafizadeh, M., Hosseini, R., Farsani, P. (2012). The Amount of Intellectual Capital at the Departments of Physical Education of Kermanshah. *Advances in Environmental Biology*. 6(5): 1752-1757.
- Fetors, Mohamad Hoseyn, Beygi, Toraj, (2010), a comparative examination of intellectual capital effects on the organizational performance in banking sector of Iran, *Journal of administrative researches*, Vol. 1.
- Katou, A., Budhawar, P. (2010). Causal relationship between HRM policies and organizational performance: Evidence from the Greek manufacturing sector. *European Management Journal* (2010) 28, 25– 39.
- Li, Y., Zhao, Y., liu, Y. (2006). The relationship between HRM, technology innovation and performance in China. *International Journal of Manpower*. Vol. 27 No. 7, pp. 679-697.
- Neely, A.D. (2005) "Defining performance measurement: adding to the debate", *Perspectives on Performance*, Vol. 4 No. 2, pp. 14-15.
- Moghim, Sayyed Mohamad, (1998), *organization and management: a research perspective in behavioral sciences*, Tehran, Iran.
- Mirsepasi, Naser, (1980), *human resource management*, Tehran, Raghsh Jahan press.
- Mohamadi, Abolfazl, Varzeshkar, Ahmad, (2008), developing human resource management research model in a military institute, *Journal of researches in human resource management*, Imam Hoseyn University, Tehran, Iran, Vol. 1, Issue 1.
- Nani, A.J., Dixon, J.R. and Vollmann, T.E. (1990) "Strategic control and performance measurement", *Journal of Cost Management*, summer, pp. 33-42.
- Niven, P. R. (2002). "Balanced Scorecard Step-by-Step: Maximizing Performance and Maintaining Results", New York: John Wiley & Sons, Inc.
- Neghandi, A.R. (1987), *International Management*, Boston, MA: Allyn & Bacon.
- Pulic, A (2001). Value Creation Efficiency Analysis of Croatian Banks 1996-2000. Available online at: [www.vaic-on.net](http://www.vaic-on.net).
- Potei, P., 2009. Intellectual Capital and performance sport of bisbal Italian verona. *Journal of Corporate Finance*, 4(12): 96-115.
- Pratt, D.(2005) "A comment on the debate between Max Moullin and Fabrizio Bocci", *Perspectives on Performance*, Vol. 4 No. 2, p. 12-13.
- Rahnavard, Forjale, (2008), the effective factors on the promotion of organizational performance in public sector of Iran, *Journal of humanity and social sciences*, Vol. 8, Issue 4.
- Richard L.Hughes.RC.Ginnet.GJ.Curfy. (1999). "Leadership enhancing the lesson of experience". 3th edition .Irwin MC Graw Hill .pp.430.
- Schuler, R.S., and Jackson, S.E. (2005), 'A Quarter-century Review of Human Resource Management in the US: The Growth in Importance of the International Perspective, 'Management Revue, 16, 1, 1–25.
- Sohrabi, Babak, Derami, Hadi, (2010), *knowledge management; with focus on MBA*, Tehran, SAMT press, first edition.
- Saadat, Esfandiar, (2001), *human resource management*, Tehran, SAMT press.
- Sinayi, Hoseynali, Hajipor, Bahman, Taheri, Khadije, (2011), examining the relationship between intellectual capital and organizational performance, *Journal of revolution management*, Vol. 5.

- Shojaei, Abdolnaser, (2002), examining the relationship between intellectual capital and organizational performance in banking sector of Iran: Kordestan Province as a Case Study, Snandaj Branch, Islamic Azad University, Iran.
- Svetlik and Eleni Stavrou-Costea.2007. Connecting human resources management and knowledge management.
- Tsang, M.C., Rum Berger, R.W., and Levine, H.M. (1991), "the Impact of Surplus Schooling on Worker Productivity,' *Industrial Relations*, 30, 209–228.
- Vinzi, W. W. Chin, J.Henseler, & H. Wang (Eds.), *Handbook of Partial Least Squares*. Heidelberg: Springer.
- Yang, C., Lin, C. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspective of a healthcare industry in Taiwan. *The International Journal of Human Resource Management*, Vol. 20, No. 9, pp., 1965–1984.