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Original Article

The Relationship between Intellectual Capital and Quality of Work life

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ABSTRACT

Nowadays, development of intellectual capital is one of the key factors in improvement of business processes and organization's success. The reason is that creating processes for acquiring value through knowledge is one of the most important functions of intellectual capital management. This is why that the present study was aimed to study the relationship between intellectual capital and quality of work life. This study is a descriptive-correlation research. The statistical population of this study includes employees of a hospital in the city of Zahedan. A sample of 132 employees was selected randomly from this population. In order to collect the research data, a self-administrated questionnaire was used that includes three parts. The first part of this questionnaire includes the demographic characteristics of respondents. The second part refers to intellectual capital and the second one includes questions of quality of work life. Reliability of the questionnaire has been examined through Cronbachs' Alpha coefficient. Also the questionnaire was reviewed and modified by academic experts and professors for ensuring its validity. The main statistical methods that have been used for analyzing the research data and testing the hypotheses were correlation coefficient and multiple-regression analysis. The results of this study revealed that there is a significant positive relationship between intellectual capital (human, structural, and customer capitals) and quality of work life. The results also revealed that 36% of the variations of quality of work life can be explained by intellectual capital and its components. Finally, it is should be noted that employees' dissatisfaction from quality of work life is a problem that destroys the organization and its employees. It is possible to prevent such problems through improving intellectual capital.

Keywords: Intellectual Capital, Human Capital, Structural Capital, Customer Capital, Quality of Work Life.

Introduction

In the industrial period, price of the raw materials, machines and equipment, and facilities is considered in very organization as an efficient component. Whilst, it is the efficient use of intellectual capital that determines success or failure of the organization. Despite the importance of tangible assets in producing goods and services in new economy, but economic value and wealth derives from creating and applying intellectual capital not through managing tangible assets. The importance of this issue is so much that it is proved that 50-90% of the created value by companies in today's economy derives from intellectual capital management. Therefore, it can be said that it is necessary to develop and improve research and development and new technologies departments for being success in the technology-based economy (Sonnier et al., 2007). In other words, it can be said that intellectual capitals management help the organization and institutes in achieving more successes in long-term. Nowadays, intellectual capital is considered as a main motivator of sustainable reliability of any system (Nazem and Matlabi, 2011). On the other hand, it is should be noted that survive of any organization depends on human. It is the manpower that administrates the organization and manages it. Not only organizations cannot survive without manpower, but also they cannot be administrated without it. Although technology has a very important role in today's organization, but the critical and strategic role of manpower in organizations' survive is inevitable. This is why that human resource is the most valuable resource in any organization. It is the manpower that shapes the organizational decisions, finds solution of the problems, solves the problems, and improves the quality, efficiency, and effectiveness (Mehdizade Ashrafi and Ilika, 2009). On the other hand, Irannejhad et al. (2000) pointed out that quality of work life is one of the main issues in human resource management in any organization. This concept not only is considered as an important concept, but also influences work environment conditions, management conditions, and compensation services (Sayadi Toranlo et al., 2009). Also Mortazavi et al. (2012) indicated that employees with higher levels of quality of work life have more job satisfaction and job performance and less job turnover and alienation (Mortazavi et al., 2012). Berin and Morman (2007) pointed out that supporting quality of work life helps the organizations in developing an intellectual capital station that can increase price of companies' equity. Such efforts also result in more motivation among employees and increase the companies' value through increasing its productivity. This is why that on the one hand evaluation and management of intellectual capital in important, on the other hand it can paves the grounds for organizations' entering, surviving, and growing in the knowledge-based and competitive environment. This is why that the present study was aimed to study the relationship between intellectual capital and its components with quality of work life.

Literature review

Improvement of market value of the knowledge-based organizations in 1990s increased interests toward intellectual capital. This is why that many authors seek to define and measure intellectual capital. The primary applications of intellectual capital concept start from 1990s. Galbrith (1969) is the first one who differentiated

between book value and market value of the organizations. It is should be remembered that Peter Dracker is first one who apply this concept before Galbrith (Chen et al., 2004).

There is not any agreement about components of intellectual capital and so many definitions have been presented for this concept by different authors. Some of these definitions have been indicated in the following section.

Broking defines intellectual capital as a combination of intangible assets that help the organizations to be responsible (Mojtahedzade et al., 2010).

From Zerenler perspective, intellectual capital is a concept that intangible assets create more values for organization than tangible ones. Therefore, the organizations can create more value through developing and improving employees' relations, creativity, and innovation. Bose and Thomas pointed out that intellectual capital is the ability of organizational knowledge for creating assets that can be profitable. Obviously, profitable intellectual profits cannot be created unless the organization has skills, knowledge, and managerial capability (Jafarnejhad and Ghasemi, 2008).

Chen, Zhu, and Xie (2004) use strategic approach of intellectual capital for creating and increasing organizational value. They also pointed out that success depends on intellectual capital and managerial ability. From another approach, evaluation of intellectual capital concentrates on an effective evaluation model that combines both financial and non-financial assets (Ramezan, 2011).

All in all, intellectual capital refers to the ability, capability, knowledge, culture, strategy, process, intellectual assets, and communicational networks that create value and competitive advantage for organization and also help the organizations to achieve its goal (Hsu et al., 2009).

According to Bart (2001), although any comprehensive definition has not been presented for intellectual capital, but most of the intellectual capital authors and researchers define intellectual capital through its components (Mirkamali and Parvande, 2008). Most of the studies that have been done in terms of intellectual capital used suggested framework of Roos et al. (1998), Botins (1998), Johanson (1999), and Bozra (2004). Generally, intellectual capital consists of three main components including human, structural, and customer capitals (Hsu et al., 2009), (Marr, 2005). These three components that have been considered as the main components of intellectual capital are defined and described in the following section.

Human capital

Bontis (2000) believes that human capital refers to the employees' knowledge (Ghlichli and Moshabaki, 2006). There are different categorizations for human capital components. These include human capital as a basis of intellectual capital that refers to the employees' knowledge, skills, capabilities, attitudes (Chen et al., 2004). Martin and Saez indicate that human capital includes values, capabilities, and experiences (Ramezan, 2011). Johanson (1999) pointed out that human capital is an idea-based capital (employees' power, ability, and attitudes) and leadership capital (experts and managers' characteristics) (Woo et al., 2012). Human capital results in improved performance and also attracts the customers and increase profit. If the thoughtful employees cannot be selected appropriately, it is not possible to use knowledge and skills (Chen et al., 2004). Human capital is so important that it is considered as the main basis of

innovation and strategy in the organizations. Therefore, any organization can create value in the knowledge-based economy (Ramezan, 2011).

Structural capital

According to Stuart (1997), structural capital refers to the use of effective methods for collecting, testing, and integrating the existing knowledge in order to eliminate inappropriate knowledge, and maintain appropriate one, and distribute it (Woo et al., 2012). According to Botis, human capital is a collect of employees' knowledge, abilities, and experiences in any organization. On the other hand, structural capital refers to the knowledge and ability in the organization that can be controlled by organization and belong to it. This type of capital can be generated and shared by organization (Botis, 2000). Structural capital includes the processes and procedures of job, especial methods, business development plans, information technology systems, cooperation culture, and research and development costs (Hsu et al., 2009). In other words, structural capital refers to the organizational culture, organizational structure, organizational learning, operational processes, and information systems (Ramezan, 2011). The organization that has good structural capital creates good conditions for using human capital and also allows the human resource to perceive their actual potentials and then strive in increasing innovation capital and relational capital (Ramezan, 2011).

Customer capital

The relational capital refers to the knowledge that is resulted from relationship between an organization and its environment such as customers, suppliers, scientific centers, and others. According to Chen, the customer is the main component of relational capital. The reason is that success of every organization depends on its customers (Rashid et al., 2010). On the other hand, the customer is able to create a value of relations that the company has with external factors and seeks to preserve it (Ramezan, 2011).

As Botis (1998) pointed out, if an organization has poor job systems and procedures, its intellectual capital cannot actualize its potentials. An organization with powerful structural capital has a supportive culture that allows the employees to be creative and innovative. The structural and human capital helps the organization to shape the customer culture and then can develop and use it in action (Chen et al., 2004).

According to Ramezan (2011), customer capital is more important than other components of capital. The reason is that customer capital is more effective than human and structural capital on the companies and can be a critical factor (Ramezan, 2011).

As indicated in past section, each dimension of intellectual capital has its own importance, but it is should be noted that the combination of these components has a synergic effect on the organizational efforts.

Quality of work life

Although the personal life was concentrated in the past times, but nowadays quality of work life is an important social issue in management science (Mirkamali and Narenkisani, 2008). Ballon and Goodwin (2007) indelicate that quality of work life includes all of the effective factors on employees such as salaries, development capabilities, capacities actualization, communications and interactions, balance between

individual and career life, job and professional security, and professional values and norms (Norshahi and Samei, 2011).

Reviewing the literature in terms of quality of work life revealed that there is not any comprehensive and acceptable definition for this concept and there are several factors that influence employees' attitude toward quality of work life such as organizational policy, leadership styles, methods, and operations (Lewis et al., 2007). Robbins defines quality of work life as a process that the organization responds the employees' needs through developing a mechanism so exactly that allows them to participate in the organizational decisions that influence their work life. Also Seraji (2006) believes that quality of work life is a full and comprehensive plan that results in employees' satisfaction and also increases their learning from environment and managing changes (Mirkamali and Narenji Sani, 2011). Newstrom and Keith (2002) believe that quality of work life refers to the desirability or undesirability of work life from employees' perspective. Sirgay et al. (2001) defined quality of work life as the employees' satisfaction from different needs that derive from different resources, activities, and results in the work environment (Mortazavi et al., 2012).

Several models have been developed and presented for quality of work life that reveals multi-dimensionality of this concept. Timusi et al. (2008) pointed out that the model of Walton (1975) is the best model in terms of quality of work life, there are eight components for quality of work life that include equal and sufficient payment, secured and healthy work life, development of human capabilities, social integration in the organization, opportunity of continuous development and growth, social correlation in work life, overall climate of life, and rule-orientation in the organization (Mirkamali and Narenji Sani, 2011).

The employees' dissatisfaction from quality of work life is a problem that destroys all of the employees (Mirkamali and Narenji Sani, 2011). This is why that the effective factors on quality of work life.

Intellectual capital in the non-profit organizations

The main focus of intellectual capital was placed on trade for the first time. But, this concept is becoming popular and important in the non-profit organizations. Unlike concepts such as industrial organization, resource-based approach, and knowledge-based approaches, the concept of intellectual capital can be used as a reliable strategic management framework and a competitive instrument in the non-profit organizations. Intellectual capital gives the managers of non-profit organization a better understanding of internal and external issues (Babaei Nioloyi et al., (2011). This is why that the present study was aimed to study the relationship between intellectual capital and quality of work life in a hospital in the city of Zahedan.

Conceptual model questions of study

The authors of this article used Boits model for intellectual capital and Walton model for quality of work life. As indicated across the study, the purpose of this study is to examine the relationship between intellectual capital and quality of work life. For this purpose, intellectual capital is considered as independent variable and quality of work life as dependent one. The conceptual model of this study has been showed in figure 1.

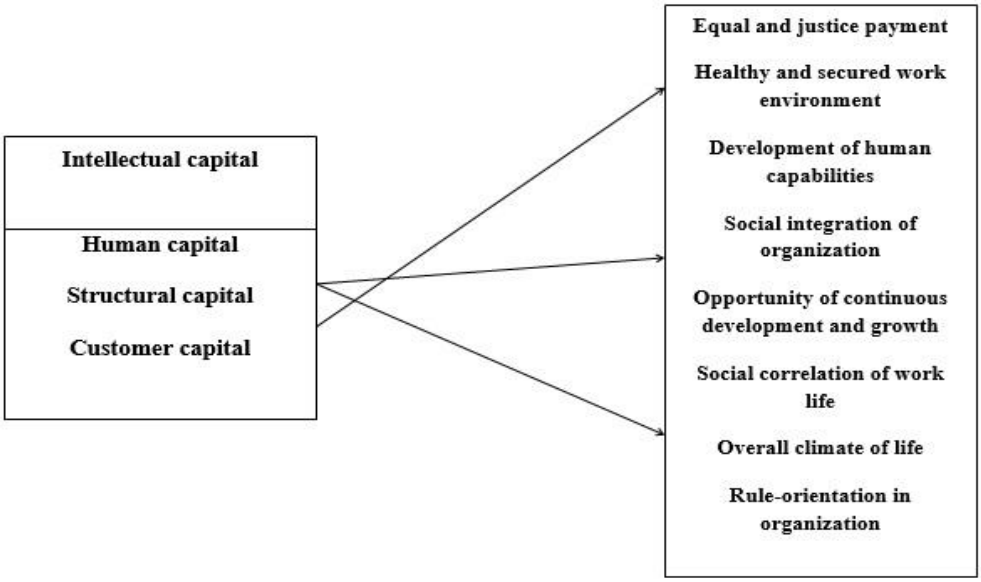

Figure 1. Conceptual model of study

In order achieve the research purposes; the following questions have been developed.

Is there any relationship between intellectual capital and quality of work life?

Is there any relationship between human capital and quality of work life?

Is there any relationship between structural capital and quality of work life?

Is there any relationship between customer capital and quality of work life?

Are the components of intellectual capital predicting the quality of life?

Research methodology

This study is a practical research from purpose view and a descriptive-correlation research from data-collection and methodological perspective. A survey method has been employed for collecting research data. The statistical population of this study includes nurses of a hospital in the city of Zahedan. This population consists of 190 members. A sample 127 employees has been randomly from this population. The sample size has been determined based on sampling table that has been developed by Cohen (1969) and Morgan and Krejcie (1970) (Danaeifard et al., 2009). Although size of this sample was 127, but 150 questionnaires were distributed among respondents for more assurance.

In order to collect the research data, a questionnaire with three parts has been employed. The first part of this questionnaire refers to demographic variables including gender, age, job experience, educational level, and marital status. Second part of this questionnaire includes intellectual capital questions. This part has been extracted from questionnaire that has been developed by Bontis (2001) and Pike et al. (2002). This part consists of 25 questions. The third part of the questionnaire includes quality of work life questions that have been developed by Walton (1973). This part consists of 29 questions. This questionnaire has been developed in Liker five-point scale. Cronbachs' Alpha coefficient has been used for examining reliability of the questionnaire. This coefficient was 0.862 for quality of work life, 0.893 for intellectual capital, and 0.946 for overall questionnaire. With

regard to these coefficients, it can be said that the questionnaire of this study is a reliable data-collection instrument. In order to examine validity of the questionnaire, face validity of the questionnaire has been examined. In order to this, the questionnaire has been reviewed and modified by academic professors and experts. Final version of the questionnaire has been developed after reviewing and modifying it. In order to analyze the research data and test the hypotheses and questions, correlation coefficient and multiple regression tests have been employed in the SPSS.

The findings

The findings of this study in terms of demographic characteristics revealed that 59.1% of the respondents were female respondents. Also 34.1% of the respondents had 31-35 years old. 82.6% of the respondents were married. Finally, the findings revealed that 60.6% of the respondents had M.Sc. and 62.1% of them had 10 years job experiences.

In order to answer the first question, Pearson correlation test has been used. Significance level of this test is 0.099. The results of this test have been indicated in table 1.

Table 1. The results of Pearson correlation coefficient

Components	Intellectual capital	Human capital	Structural capital	Customer capital	Quality of work life
Quality of work life	0.605	0.514	0.510	0.553	1

Table 2. The results of regression test

Independent variables	Dependent variable	F	p-value	R	R^2	Beta	t-value	ρ
Human capital						0.229	2.387	0.018
Structural capital	**Quality of work life**	24.549	0.000	0.604	0.365	0.206	2.076	0.040
Customer capital						0.258	2.315	0.022

As indicated in table 1, there is a significant positive relationship between intellectual capital and its components (human, structural, and customer capitals) with quality of work life. Therefore, it can be said that there is a significant positive relationship between intellectual capital and its components with quality of work life.

In order to answer the fifth question of this study, multiple regress test has been used. The results of this test have been indicated in the following table.

As the results of table 2 revealed, F-value of this test is 24.549. Therefore, it can be said that there is a linear relationship between research variables.

Multiple correlations are 0.604 that revealed there is a significant positive relationship between intellectual capital and quality of work life. R^2 of this test is 0.36. This reveals that 36% of variations of quality of work life can be explained by intellectual capital. Therefore, the following model can be presented for explaining the relationship between intellectual capital and quality of work life.

Y= 2/040 + 0/159 X1 + 0/132 X2 + 0/211 X3

In this model, Y refers to quality of work life, X1 refers to human capital, X2 is representative of structural capital, and X3 refers to the customer capital.

Conclusion

The present study was aimed to study the relationship between intellectual capital and quality of work life. This study is a descriptive-correlation research. The statistical population of this study includes employees of a hospital in the city of Zahedan. A sample of 132 employees was selected randomly. In order to collect the research data, a self-administrated questionnaire was used that includes two parts. The first part of this questionnaire was intellectual capital and the second one is quality of work life. Reliability of the questionnaire has been examined through Cronbachs' Alpha coefficient. Also the questionnaire was reviewed and modified by academic experts and professors for ensuring its validity. The main statistical methods that have been used for analyzing the research data and testing the hypotheses were correlation coefficient, multiple-regression analysis, and structural equation modeling. The results of this study revealed that there is a significant positive relationship between intellectual capital and its components with quality of work life. These results are consistent with findings of Hsu et al. (2009). Therefore, it can be suggested that human resource managers of organizations especially non-profit organizations seek to improve intellectual capital and its components among employees for improving quality of work life.

References

Alavi, S., Ghoreyshi, R., (2007), the measurement model of intellectual capital in Iranian organizations, Journal of management thought, Vol. 2, pp. 127-150.

Ballou, B; Godwin, N. H. (2007). Quality of 'Work Life', Strategic Finance, v89 n4 p. 40.

Babaei Nioloei, Fahime, Rahimi, Gholamreza, Bohloli Zeynab, Nader, (2011), the comparative examination of intellectual capital in universities, journal of creativity and initiation in human sciences, Vol. 3, pp. 53-69.

Bontis, N. (2000), "Assessing Knowledge Assets: A Review of the Models Used to Measure Intellectual Capital", European Management Journal Vol.6, No.3.

Chen, J,zhu. , Z. and Xie, H. Y. (2004),"Measuring Intellectual Capital: A new model and empirical study", Journal of Intellectual Capital, 5(1), 195-212.

Danaeifard, Hasan, Alvani, Sayyed Mahdi, Azar, Adel, (1388), qualitative research methodology: a comprehensive approach, Saffar Publications, Tehran.

Ghlichli, B., Moshabaki, A., (2006), the role of social capital in creating intellectual capital in the organization, Journal of management knowledge, Vol. 57, pp. 125-147.

Hsu, Ya-Hui,. Fang, Wenchang. (2009). "Intellectual capital and new product development performance: The mediating role of organizational learning capability". Technological Forecasting & Social Change 76, 664–677.

Jafarnejhad, A., Ghasemi, A., (2008), developing a model for knowledge acquisition with regard to the intellectual capital strategy: the case of companies listed in Tehran park of science and

technology, Journal of information technology management, Vol. 1, pp. 19-36.

Lewis David & et al. (2007). "Extrinsic and Intrinsic Determinants of Quality of Work Life". International Journal of Health Care Quality Assurance, Vol.14.

Mahdizade Ashrafi, A., Ilika, Hoseyn Ali, (2009), examining the relationship between quality of work life and performance of employees in Islamic Azad University, Walton model, Journal of management, Vol. 20, pp. 1-8.

Marr, B. M. (2005). "Defining Intellectual Capital: A Three dimensional Approach". Management Decision, 43(9) 65-79.

Mirkamali, Sayyed Mohamad, Zohor Parvande, Vajihe, (2008), intellectual capital management as a necessity for knowledge-based organizations, Journal of management message, Vol. 28, pp. 81-105.

Mirkamali, Sayyed Mohamad, Narenji Sani, F., (2008), examining quality of work life and job satisfaction among faculty members of university of Tehran and Sharif university of technology, Journal of research and planning in higher education, Vol. 48, pp. 71-101.

Mirkamali, S. M and NarenjiThani, F. (2011). "A Study on the Quality of Work Life (QWL) among faculty members of University of Tehran(UT) and Sharif university of Technology (SUT)". International Conference on Education and Educational Psychology (ICEEPSY 2011).

Mortazavi, S,. Shalbaf Yazdi, S. V and Amini, A. (2012). "The Role of the Psychological Capital on Quality of Work Life and organization performance". Interdisciplinary JOURNAL of Contemporary Research in Business, Vol 4, NO 2.

Mojtahedzade, V., Alavi Tabari, S., Mahdizade, M., (2010), the relationship between intellectual capital (human, customer, and structural capitals) in the performance in insurance industry from managers' perspective, Journal of accounting studies and auditing, Vol. 60, pp. 109-119.

Nazem, F., Matlabi, A., (2011), developing a model of intellectual capital structure based on the organizational learning in Shahid Beheshti university, Journal of new approach in educational management, Vol. 2, Issue 2, pp. 29-50.

Newstrom, J. W. and Keith, D. (2002). "Organizational Behavior: Human Behavior at Work". 11th ed. London: McGraw-Hill.

Norshahi, Nasrin, Samei, Hoseyn, (2011), Examining the quality of work life of faculty members of public universities and presenting solutions for improving it, Journal of research and planning in higher education, Vol. 59, pp. 91-114.

Rashidi, M., Jaafari Farsani, J., (2010), the relationship between intellectual capital and organizational learning capabilities in the institute of international energy studies, Journal of management and human resource, Vol. 11, pp. 59-75.

Ramezan, M. (2011). "Intellectual capital and organizational organic structure in knowledge society: How are these concepts related?" International Journal of Information Management, 31, 88-95. www.elsevier.com/locate/ijinfomgt.

Sayyadi Toranlo, Hoseyn, Jamali, Reza, Mansori, Hoseyn, (2009), examining the relationship between quality of work life and organizational commitment), Journal of educational sciences and psychology,

Shahid Chamran University of Ahvaz, Vol. 1, pp. 113-136.

Sonnier, B.M., Carson, D.C. and P.P.Carson. (2007). "Accounting for Intellectual Capital: the Relationship Between profitability and Disclosure, journal of Applied Management and Entrepreneurship, Vol.12, No.2, pp.3-14.

Timossi, L. S; Pedroso, B.; Francisco, A. C.; Pilatti l. A. (2008). "Evaluation of quality of work life: an adaption from the Waltons QWL Model". XIV International Conference on industrial Engineering and Management. Rio de Janeiro, brazil, 13 to 16 October.

Wu, Mei – Fen, Lee, Yu-Je and Wang, Gao-Liang. (2012). "To Verify How Intellectual Capital Affects Organizational Performance in Listed Taiwan IC Design Companies with Considering the moderator of Corporate Governance". The Journal of Global Business Management, Volume 8, N1, P 19- 32.

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