Reviewing the relationship of social and intellectual capitals dimensions on the performance of Abadan and Khoramshahr universities staff

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Abstract

In the contemporary competitive world, in which productivity is increased in every field, only organizations, which have used their resources in the best ways and enjoyed the highest level of their productivity, could survive. This paper investigates the relationship of the dimensions of social and intellectual capital of the performance of Abadan and Khoramshahr universities staff. Its statistical population is the university staff. Using Kokran formula, 200 are selected and data are collected by questionnaires then, analyzed by SPSS software. Eventually, there was relationship between social and intellectual capital and staff performance and also between intellectual capital indices and staff performance. From social capital point of view, there is relationship between cognitive capital and staff performance. Also there is no relationship between communicative and structural indices and staff performance.

Keywords: Intellectual Capital, Social Capital, Staff Performance.
Research Problematic

The intellectual capital of an organization is the intellectual assets and intangible resources which the organization creates and transforms into new processes of goods and services. As the intellectual capital is intangible and dynamic, the meaning of this word is difficult to grasp. Mostly, it has been applied as the synonym of expressions such as intellectual assets, intangible assets and knowledge assets. Today, in competitive environment, the organizations could continue to survive when they have enjoyed professional and efficient human capital and could apply their physical and fiscal capital effectively. Draker believed that, today, organizations are based on intellectual power rather manpower. According to him, the nations that expect the development and advancement are those that master knowledge not just natural resources (Alvani, 2006).

On the other hand, the emergence of information and knowledge-base economy era, has led the organizations to focus on monetary and financial benefits and on intangible assets. To succeed in the competitive world, they should concentrate on science and knowledge. Nowadays, what is mostly creating value in organizations is related to their intangible capitals, including intellectual capital, which is indeed a kind of competence. Through this capital, cases such as the credit of organization, personnel competence, and customer loyalty will be achieved. According to Bontis, intellectual capital is divided into three components: human capital, structural capital and communicational capital (Bontis, 1998).

Intellectual capital includes different organizational features and different elements that can affect its strength and weaken. So, the most crucial specificity of every successful organization is to make its knowledge base storage compatible with changing environmental situations. This can be attained by replacing its rigid position with agile and flexible different capacities.

Naturally, human beings satisfy their needs and live in interference and interaction with others. Omitting the effects of such actions and interferences and their roles makes life impossible. Scientists identify these actions and find out series of elements which are called Social Capacity. The concept of social capital includes meanings such as trust, cooperation and coordinating among the members of a group or a society which are formed to achieve valuable goals. Therefore, recognizing the social capital could help the nation to develop the dimensions of social capital and cause the increasing of social and economical performance of people in society.

Although social capital is a new and modern concept among social literature, it is rooted in relationship of human kind. Nowadays, it is true that achieving development, civil society, global values for social life are the outcome of the existence social capital. Social capital is formed through media flows such as job training, exchanging the beliefs, exchanging the normative information about transactions in social networks, people participation, self helping.
groups, the spirit of collectivism against individualism and philanthropy. Social capital is observed among friendship groups, neighbors, co-religious, school-mates, and the members of sport clubs. Generally, the social capital could be considered as infrastructure and the main foundation of modernization. So, to achieve evolution, comprehensive planning and stable development, it is necessary to recognize the amount and kind of social capital and apply the factors which increase such a social variable.

Performance management as one of the new phenomena is in the field of strategic management of human resources and performance. Competence measuring is accounted as one of its items and components. The management of human resources is part of strategic management of organization. Its process includes: selecting and recruitment, performance management and apprising system, training and improvement, P.M. and desirable usage of human resources. Performance management is a new attitude in strategic management of human resources. It contains sequential systems which follow the objects of organization in form of personal performance through human resources. It tries to create a safe connection between management and staff. The meaning of performance apprising is the process by which, the personnel are measured officially during certain spaces. Identifying strong employees and giving bonus to them and creating motivation to improve their performance are the main causes of performance apprising. Meanwhile, in this investigation, we are going to define the concepts of social capital and intellectual capital, to make the dimensions and theoretical spirit and their relation with employee performance clearer. Then, according to the different dimensions and levels of social capital, we will present the indices of this variable. Furthermore, presenting different indices of social capital, is preparing actual understanding of this variable and also the basis of its utility in measurable investigation. Presenting the indices of every variable indicates its complete cognizance in actual or social behavior field.

**Theoretical basis of investigation:**

The intellectual capital is born out of science and knowledge arena. Yet, this word is still novel. Notwithstanding, more systems are using intellectual capital, but many members of organizations and enterprises have no idea of about concept (Zanjirdar et. al, 2008).

Most often, the concept of intellectual capital is discussed, yet it has always been defined incorrectly; a variety of words are used to interpret this concept. People incline to use expressions such as *assets, performance resource or motivation* instead of the word of *capital*. In finance or non-finance knowledge, they replaced the word *intellectual* by words such as *intangible*. Some professions (such as financial accounting, and accounting and) also have presented different definitions, such as non-financial fixed assets\(^1\) which have no objective and physical nature, but

\(^1\) Non-financial fixed assets
they are kept by the organization and could be controlled and recognized through lawful rights (Marr, 2008).

Stewart believed that, intellectual capital is a collection of organizational knowledge, information, intellectual property, experiment, competition and training which can be used to create wealth. Indeed, the intellectual capital of all personnel contains the organizational knowledge and their abilities to create added value. This causes the benefits to continue despite competition (Ghlichli and Moshabaki, 2007).

According to Bonties (1998), intellectual capital can be defined as a series of intangible assets (resources, abilities, competition) which is resulted of organizational performance and it creates value.

Edvinson and Malon (2005) said that intellectual capital is the utilized information and knowledge working to create value (Vasile, 2008).

Sibay (1975) also defined intellectual capital as three components of human capital (a capacity to do the affairs in different situations, to create tangible and intangible assets, structural capital (the right of invention, conceptions, administrative models and computerized systems) and communicational capital (relation with raw material suppliers and customers). Vasil believed that knowledge is an economic value and this value is increasingly enhancing. It is mostly visible in the firms which have less tangible values (Rose & Barrons, 2005).

Boties and Halland (2002) believed that intellectual capital is storage of knowledge that exists in an identified time in an organization or enterprise. In this definition, the relation between intellectual capital and organizational training is considered (Vasil, 2008).

Newly, investigators presented a comprehensive definition of intellectual capital. The necessary circumstances in this definition are provided to identify this asset. Intellectual capital is a kind of asset which measures the ability of enterprise to create wealth. This asset has no physical and objective nature and it is an invisible asset which is obtained through usage of connected assets to human resource, organizational performance and the outside relationship of enterprise. All of these specifications create value inside the organization. As the obtained value is completely inside the organization, so, it can’t be exchanged (Rose & Barrons, 2005).

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2 Marr
3 Intellectual property
4 Bonties
5 Edvinson and Malon
6 Vasile
7 Sibay
8 Rose & Barrons
9 Invisible asset
The elements of Intellectual Capital

Generally, investigators and users of intellectual capital course, have consensus that this capital consists of three capitals as follows: human capital, structural capital and communicational capital, which are expressed as follows:

A) Human Capital: Rose et al (1997) believed that, employees create intellectual capital through their competence, attitude and intellectual agility. The most important elements which formed the human capital of an enterprise are series of workforce skills, deepness and vastness of their experiences. The human resource could be the spirit and the thought of intellectual capital resources. This capital is going out of organization by employee at night, but, structural capital and communicational one remain unchanged even by leaving the organization at night. Human capital includes: a) workforce skills and competence; b) their knowledge in the fields which is important and necessary for the success of the enterprise; and c) their talents, ethics and behaviors (Marr, 2008).

B) Communicational Capital: communicational capital includes the whole relationship between enterprises and the other person or enterprise. These communications include: costumers, dealers, employee, raw material suppliers, lawful authorities, thrusters and investors. The mentioned relationship is divided into two main groups: the first group includes those that are formalized through contract with costumers and raw material suppliers or the main partners. The second one mostly includes the informal relationship. Communicational capital is considered as a bridge and organized the operations of intellectual capital and also it is the determinant factor in returning the intellectual capital into market value. This capital consists of stability and customized loyalty and relation with costumer. Customer satisfaction, financial health and price sensitivity are applied as the indices of this kind of capital. Communicational capital of human and structural capital indicated its importance in the value of enterprise. The brands are the reputation and fame of the firm or its goods and services, which reflected their relationship between the firms and costumers (either potentially or actually). They are also in this group of assets (Marr, 2008).

C) Structural Capital: Rose et al (2005) believed that structural capital includes some non-humanistic stock of knowledge, such as database, organizational charts, instructions of performing the process, strategies and executive programs. Structural capital covers the vast area of necessary elements. The most important of them are: 1) important executive process of enterprise; 2) the way of their configurations; 3) policies, informational flows and the elements of database; 4) leadership and the management style; 5) organizational culture; and 6) employee bonus subjects.
Methodology:

The methodology of this paper is applied; it is a measurable investigation which describes the specifications of sample and generalizes them to the statistical population. The statistical population in this investigation consists of masters and staff of Abadan and Khoramshahr universities. The volume of sample by using of Kokran formula is 200. In order to collect data, there are several methods for obtaining the information in an investigation. More than one method is applied. In this investigation, data collection is conducted by fieldwork method. To collect data and reach the objects, a standard questionnaire is used. The questionnaire is set, based on ordinal sale\(^{10}\) and seven-point Likert scale\(^{11}\) which includes 5 scales from strongly opposed by number 1, strongly agreed by number 5. It is categorized and designed based on the subjects of investigation hypothesis. In order to assure admissibility of content, this questionnaire is distributed among a few of masters, who are skilful in field of the topic of this investigation. Their views indicated the admissibility of the questionnaire. To determine the credit of investigation instruments, the questionnaire is distributed among 30 people of sample population which is 0/85. The use of SPSS software and the coefficient of Kronbakh indicated the high level of questionnaire credit. In order to analyze the statistical data and generalize the results into statistical population, inference statistics (Pearson correlation coefficient) is used to review variables.

In order to review the hypothesis, the questionnaire follows the Likert plan. Regression modeling is used and the results are obtained as follows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation Coefficient</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital and Intellectual Capital of employee performance</td>
<td>0/578</td>
<td>0/01</td>
<td>200</td>
</tr>
</tbody>
</table>

**Main Hypothesis:** social capital and intellectual capital have relation to employee performance.

**Result:** by taking the above table into account, the null hypothesis about lack of relationship between intellectual capital and social capital with employee performance is rejected, because the significant level is less than 0/05. On the other hand, there is relation between these two variables.

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\(^{10}\) Ordinal scale  
\(^{11}\) Seven point Likert scale
Table 2: The inference statistic of intellectual capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Capital employee performance</td>
<td>0.742</td>
<td>0.00</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 1: There is relation between intellectual capital and employee performance.
Result: by taking the above table into account, the null hypothesis about lack of relationship between intellectual capitals with employee performance is rejected because the significant level is less than 0.05. On the other hand, there is relation between these two variables.

Table 3: The inference statistic of human capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human capital employee performance</td>
<td>0.642</td>
<td>0.00</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2: There is relation between human capital and employee performance.
Result: by taking the above table into account, the null hypothesis about lack of relationship between human capitals with employee performance is rejected because the significant level is less than 0.05. On the other hand, there is relation between these two variables.

Table 4: The inference statistic of structural capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural capital employee performance</td>
<td>0.820</td>
<td>0.00</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 3: There is relation between structural capital and employee performance.
Result: by taking the above table into account, the null hypothesis about lack of relationship between structural capitals with employee performance is rejected because the significant level is less than 0.05. On the other hand, there is relation between these two variables.
Table 5: The inference statistic of communicational capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>communicational capital</td>
<td>0.513</td>
<td>0.00</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>employee performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 4: There is a relation between communicational capital and employee performance.

Result: By taking the above table into account, the null hypothesis about lack of relationship between communicational capital and employee performance is rejected, as the significant level is less than 0.05, on the other hand, there is a relation between these two variables.

Table 6: The inference statistic of cognitional dimension of social capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitional dimension of social capital</td>
<td>0.142</td>
<td>0.06</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>employee performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 5: There is a relation between cognitional dimension of social capital and employee performance.

Result: By taking the above table into account, the null hypothesis about lack of relationship between cognitional dimension of social capital and employee performance is not rejected because the significant level is more than 0.05. On the other hand, there is no relation between these two variables.

Table 7: The inference statistic of structural dimension of social capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Coefficient</th>
<th>Correlation</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural dimension of social capital</td>
<td>0.654</td>
<td>0.00</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>employee performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 6: There is a relation between structural dimension of social capital and employee performance.

Result: By taking the above table into account, the null hypothesis about lack of relationship between structural dimension of social capital and employee performance is rejected because the significant level is less than 0.05. On the other hand, there is a relation between these two variables.
Table 8: The inference statistic of communicational dimension of social capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation Coefficient</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicational dimension of social capital employee performance</td>
<td>0.234</td>
<td>0.06</td>
<td>200</td>
</tr>
</tbody>
</table>

Hypothesis 7: There is relation between communicational dimension of social capital and employee performance.

Result: by taking the above table into account, the null hypothesis about lack of relationship between communicational dimensions of social capital with employee performance is not rejected because the significant level is more than 0.05. On the other hand, there is no relation between these two variables.

Table 9: The inference statistic of social capital with employee performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation Coefficient</th>
<th>Significance</th>
<th>items</th>
</tr>
</thead>
<tbody>
<tr>
<td>social capital employee performance</td>
<td>0.746</td>
<td>0.00</td>
<td>200</td>
</tr>
</tbody>
</table>

Hypothesis 8: There is relation between social capital and employee performance.

Result: by taking the above table into account, the null hypothesis about lack of relationship between social capitals with employee performance is rejected because the significant level is less than 0.05. On the other hand, there is relation between these two variables.

Conclusion:

Today, everyone knows that Internet and the Web are the messengers of a new era which is called the era of knowledge. In industrial era which began in 1890s, the focus was on production and distribution. But in knowledge era, human knowledge is what causes the success in business and industry. This intangible asset which is known as intellectual capital12 and the development of intellectual capital is the vital area of creating profit (Mojtahedzadeh, 2003, 7).

Investigations identified that there is relation between social capital and organizational performance. Since, social capital has pointed to the connections, the communications among members of a grid as a valuable resource that by creating norms and mutual trust can cause

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12 Intellectual capital
members reach to their objects. Based on the results of this investigation, it is identified that there is positive relation between employee performance and their social capital which means that the more employees have social capital, the better performance they will have.

The presented study is dedicated to reviewing the elements and indices of intellectual and social capitals on employee performance. Eventually, it indicated that there is relation between these two variables with employee performance and also there is relation between the indices of intellectual capital (structural, human and communicational capitals) and employee performance. But there is no relation among social capital (cognitional and communicational dimensions with employee performance) indices and there is only relation between structural dimension and employee performance.

Structural dimension: in this paper, the correlation coefficient between this dimension and employee performance is 0/657 which indicated that there is relation between it and performance. The communication networks create communicational channels and facilitate the group decision making. They also reduce the related time and cost and make the flexible laws. This in turn makes data collection and transfer of knowledge faster which affects performance.

Cognitional dimension: in this study, the correlation coefficient between this dimension and employee performance is 0/014. It is indicated that the level of trust among employee is low because in case of having trust, group cooperation and coordination could transfer their ideas and share their knowledge among themselves much easier. This improves the performance. This index should be strengthened so that, finally it improves the employee performance.

Communicational dimension: in this study, the correlation coefficient of this dimension with performance is 0/234. These hypotheses increase the communication among employee and enhance trust, identity feeling, doing tasks and expectations and following the norms. This increases the performance. This dimension indicated that, employees are proud of their organization and jobs and have taken the pride in their identity feeling. Moreover, employees have commitment in removing their colleague’s difficulties. Also, the trust of employee in each other and in managers is also important. So, the organization should focus on this field and review the reasons of its lowness. According to our investigations the organizations which have enjoyed of more level of social capital are more successful than their competitors.
References


