The investigation of the impact of positive psychological capital and social capital on intellectual capital (Case Study: Esfahan Municipality)

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ABSTRACT

Objective: The present research was aimed to investigate the impact of positive psychological capital and social capital on intellectual capital. **Methodology:** The statistical population of research are the employees of financial affairs of Esfahan municipality and 475 employees were selected as the sample size and considering that all employees of financial affairs of different areas of Esfahan municipalities are studied and largeness of population, Cochran's formula which had specific population size was used and 214 employees were eventually analyzed as statistical sample and for data collection in this research, standard questionnaires were used. The hypotheses were tested using regression and SPSS software. **Results:** The present research had 9 hypotheses confirmed after testing them and doing statistical analyses which the results of data analysis showed that the dimensions of positive psychological capital (optimism, hopefulness, resilience and self-efficacy) have positive and significant impact on intellectual capital and the positive and significant impact of the dimensions of psychological capital on social capital were also confirmed. **Conclusion:** Finally, by devising some measures, the psychological capital of employees should be improved and trained and the organization should have more intellectual capital by these measures.

1. Introduction

The recent global financial crisis, reaffirmed the importance of   debt's time structure of the corporations for financial stability and remind the   rules and standards providers that at the present there is no   suitable framework for time

In today's competitive market, financial capital is not only enough to remain in the competitive environment. To meet the need, positive psychological capital, social capital and intellectual capital were created to play the role of definitional capital (Tamer et al., 2014). Positive psychological capital covers positive outcomes at the organizational and personal level (Luthans et al., 2010). This form of capital is constituted from four dimensions: self-efficacy, optimism, hopefulness and resilience. As a new approach in psychology, positive psychology focuses on understanding and description of happiness and subjective feeling of well-being as well as a detailed forecast of factors effective on them. From the perspective of positive psychology, the absence of signs of mental illness is not health indicator. But compatibility, happiness and self-confidence and positive characteristics of this kind indicate health and the main purpose of people in life is flourishing of their capabilities, therefore, the positive psychologists emphasize on the existence of positive characteristics and growth of individual abilities and consider the positive mental aspects of individuals(Ryan and Deci, 2001).Positive psychology is an aspect of psychology studying the conditions and processes contributing the success of individuals, groups and organizations and the positive principles state that tolerated and rapid change requires positive emotion and social bonds (Fredrickson, 2001).Psychological capital is an growing positive psychological state specified by these features: 1) Having the required self-confidence and endeavor for success in the challenging tasks(self-efficacy) 2)Positive attributive creation about success now and in the future (optimism) 3)Persistence in achieving goals and changing routes to achieve the objectives when it is necessary(hopefulness) 4) When faced with difficulties and hardships, tolerance and return to the first place to achieve

success(resilience) (Luthans et al., 2007).

On the other hand, an organization is a social group characterized by speed and efficiency in the creation and transfer of knowledge .It is a relatively new and important attitude about organization theory currently offered by several other experts. The authors mainly argue that organizations have certain capabilities to create and share knowledge which a clear advantage is made for them as compared with other organizations. Ghoshal and Nahapiet (1998) define social capital as the sum of available actual and potential resources within or accessible through or resulted from the network of relationships of an individual or a social unit.

Social capital reflects the resources of social relationships, norms and values directing it. In this study, structural and relational dimensions of social capital are examined. According to Badrinarayanan et al. (2011), the self-efficacy part of psychological capital and social capital affect intellectual capital, so this statement has led the researcher to investigate the relationship between all aspects of positive psychological capital and social capital with intellectual capital. Today, in addition to tangible assets, intangible assets have key importance for more success of organizations because the small resources are considered as endless resources and key elements of the success of any organization.

Intellectual capital is considered as one of the most important intangible assets of the organization and they know it as a valuable tool for the development of key assets of organization. Intellectual capital is the result of science and knowledge and it can play an important role in the continued success of the organization. With the arrival of the knowledge-based economy, the knowledge of organizations is more preferable in comparison to other factors of production such as capital land and machinery and so on. As knowledge is considered as the most important factor of production and it will be mentioned as the most important competitive advantage of organizations (Seetharaman et al., 2002).

Intellectual capital is a part of knowledge management and it is the sum of knowledge of employees in an organization. In general, researchers and those involved in the field of intellectual capital have agreed on its three elements: human capital, structural capital and relational capital. Human capital is composed of four elements: genetic inheritance, education, experience and attitude about life and business. Intellectual capital is comprised of experience and talent of employee, customer relationships, technical competence and organizational knowledge and culture ensuring the success of the company.

- In addition to study the previous researches and data collection from the reliable sources, the researcher aimed to investigate the impact of components of positive psychological capital and social capital on intellectual capital in Esfahan municipality and he was going to answer the important question: what impact the positive psychological capital and social capital have on intellectual capital?

1.1 Research literature
1.1.1 Investigation of thematic concepts of research
1.1.2 Positive Psychological capital

Today, organizations have increasingly understood the importance of being positive and they have focused on developing employees' strengths rather than their weaknesses. Positive psychology is an aspect of psychology addressing to study the conditions and processes helping to the success of individuals, groups and organizations (Schaufeli and Salanova, 2007).

As a new approach in psychology, positive psychology focuses on understanding and description of happiness and subjective feeling of well-being as well as detailed forecast of factors affecting them. One of the indicators of positive psychology is psychological capital defined as people believes to their abilities for achievement to success, perseverance in the pursuit of goals, make positive attributions about themselves and endurance of problems (Bahadori Khosroshahi et al., 2012).

1.1.3 Social capital

The World Bank knows the social capital as a phenomenon resulted from the impact of social institutions, relationships and norms on quality and quantity of social interactions and the organization's experience has shown that this phenomenon has a significant impact on the economy and development of various countries. Unlike other capitals, there is not any social capital physically but it is the result of group and social interactions and norms and on the other hand its increase may seriously reduce the level of costs, management of society as well as operating costs of the organizations (World Bank, 1999).The Organization for Economic Cooperation and Development (OECD) defined social capital as follows: Regulations, relationships, attitudes and values shaping the interaction between people and help economic and social development.

1.1.4 Intellectual capital

With the arrival of knowledge-based economy, knowledge is more preferable in comparison with other factors such as land, capital and machinery as in this economy, knowledge is considered as the most important factor and it is mentioned as the most important competitive advantage of organizations (Seetharaman et al., 2002).One of the features of knowledge is that it is intangible, that is, it is untouchable and non-tangible and it is very difficult to value and measure it while in the past, organizations were able to completely calculate the value and size of their production factors using accounting methods, however, these accounting methods have no longer necessary efficiency nowadays. Intellectual capital is a wide organizational knowledge unique for any firm allowing the firm to adapt it continuously.

1.2 Literature review

Ina research entitled" Assessment of the amount of importance of the dimensions of intellectual capital in the selected hospitals of Esfahan' 'Yadegari et al. (2011), concluded that the dimensions of intellectual capital in the hospitals have not the same importance and value; therefore, the hospital administrators should provide the conditions of using and exploiting all intangible capitals and produce science, wealth and innovation.

In a research entitled" The investigation of relationship of intellectual and social capital with organizational performance"; Hossein Pour and Azar (2011), concluded that communicative and human dimension (intellectual capital) and communicative and cognitive dimension (social capital) had the most impacts on performance respectively.

Domenico and Fabrizio (2014), investigated the impact of intellectual capital on the performance of accepted firms in Italian stock exchange. Their studied sample includes 123 firms during the period 2007-2011.The research results showed that there is a significant relationship between values added intellectual coefficient and profitability, productivity and return on equity, but there is no relationship with market value. In the best situation, they found out that there is a strong relationship between intellectual capital and profitability performance.

In a study, Romero et al. (2008), suggested that in the imposed social networks, temporary social capital is formed and it may have positive impact on psychological capital in the short-run and in the form of a position. While in the selected and created social networks, social capital is flexibly developed and it is led to emergence of profound and sustainable psychology. In these situations, adaptive and compatible skills of people are also increased.

1.3 Research hypotheses

H1: Social capital has positive impact on intellectual capital.
H2: Optimism of employees has positive impact on intellectual capital.
H3: Hopefulness of employees has positive impact on intellectual capital.
H4: Resilience of employees has positive impact on intellectual capital.
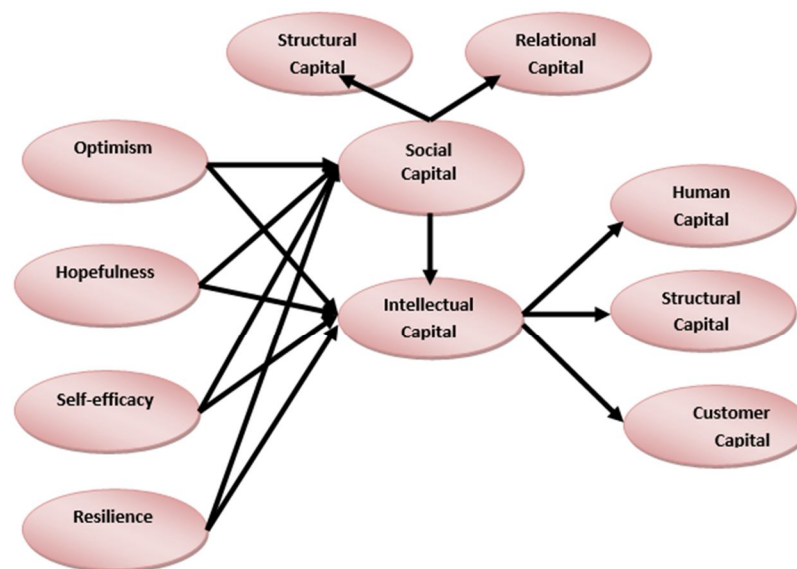H5: Self-efficacy has positive impact on intellectual capital.
H6: Optimism of employees has positive impact on social capital.
H7: Hopefulness has positive impact on social capital.
H8: Resilience has positive impact on social capital.
H9: Self-efficacy has positive impact on social capital.

1.4 Research model

Source: Conceptual model (Tamer et al., 2014)

2. Materials and methods

2.1 Research method

In terms of nature, the research is correlational and descriptive and in terms of data collection, it is measurable; Measurement is a research method going beyond a particular technique in data collection and its purpose is exploration, description or explanation of phenomena although it is primarily used from the questionnaire.

2.2 Statistical population and statistical sample

Statistical population is defined as' 'a number of intended desirable elements having at least one characterized attribute' 'and according to the stated definition, statistical population in the research includes employees of financial affairs of Esfahan municipality with the sample size of 475 people. Since the employees of municipalities of various areas of are studied and given the largeness of statistical population, there is no possibility of numerating all numbers in the present research and we were forced to determine the sample size through the most suitable sampling method and to generalize the research results in the present sample to the population. Considering these explanations and the population with the sample size of 475 people, we were forced to use Cochran's formula with clear population size to determine the required the sample size.

2.3 Instrument of data collection

In this research ,it was used from the instrument of measuring questionnaire for data collection that it was used from Luthans et al., (2007) standard questionnaire for measuring the dimensions of positive psychological capital in the form of 6-point Likert scale from totally disagreeable to totally agreeable, Nahapiet and Ghoshal's (1998) standard questionnaire for measuring social capital in the form of 5-point Likert scale from very low to very high and Bontis's (1998) standard questionnaire for measuring intellectual capital in the form of 5-point Likert scale from totally disagreeable totally agreeable.

2.4 Research validity and reliability

In this research, it was used from standard questionnaires used by other researchers in researches having similar areas so it can be said that the used research questionnaire has enough formal and content validity. In this research, to calculate the reliability, it was used from the coefficient of Cronbach's alpha in the23th version of SPSS software and according to the results, the coefficient of Cronbach's alpha is as follows; therefore, the used research questionnaire has enough reliability and it can be trusted its results and if the questionnaire is used with the maintenance of conditions again, the same results are achieved.

Table1. The investigation of the method of distribution of questions and Cronbach's alpha

Indicators	Number of items	Questions	Alpha value
Self-efficacy	6	1 to 6	0.75
Hopefulness	6	7 to 12	0.78
Resilience	6	13 to 18	0.72
Optimism	6	19 to 24	0.87

2.5 Data analysis method

This research consists of two parts: descriptive statistics and inferential statistics that regarding all questions of questionnaire, it was also used from inferential statistics for investigating the research questions such as correlation coefficient and regression in addition to extraction of frequency and percent of responses and providing the frequency and percent table. To analyze, interpret and generalize the results in the method of inferential statistics, it was used from calculative regression methods and in this research, 23th version of SPSS software was used.

3. Discussion and results

3.1 The findings of analysis of the research hypotheses

The first hypothesis test: social capital has positive impact on intellectual capital.

The significance level of testing hypothesis of ineffectiveness of social capital on intellectual capital equals to zero and it is less than 1% error, in other words, in addition to significance confirmation of regression model, social capital has significant impact on intellectual capital and the positive mark of standard coefficient suggests the direct relationship of social capital with criterion variable(intellectual capital),in other words, in the event of increasing social capital, intellectual capital is increased 0.43.

The second hypothesis test: optimism of employees has positive impact on intellectual capital.

The significance level of testing hypothesis of ineffectiveness of optimism of employees on intellectual capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, optimism of employees has significant impact on intellectual capital and the positive mark of standard coefficient suggests the direct relationship of optimism of employees with criterion variable(intellectual capital), in other words, in the event of increasing optimism of employees, intellectual capital is increased 0.337.

The third hypothesis test: Hopefulness of employees has positive impact on intellectual capital.

The significance level of testing hypothesis of ineffectiveness of hopefulness of employees on intellectual capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, hopefulness of employees has significant impact on intellectual capital and the positive mark of standard coefficient suggests the direct relationship of hopefulness of employees with criterion variable(intellectual capital), in other words, in the event of increasing hopefulness of employees, intellectual capital is increased 0.297.

The fourth hypothesis test: Resilience of employees has positive impact on intellectual capital.

The significance level of testing hypothesis of ineffectiveness of resilience of employees on intellectual capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, resilience of employees has significant impact on intellectual capital and the positive mark of standard coefficient suggests the direct relationship of resilience of employees with criterion variable(intellectual capital), in other words, in the event of increasing resilience of employees, intellectual capital is increased 0.34.

The fifth hypothesis test: Self-efficacy has positive impact on intellectual capital.

The significance level of testing hypothesis of ineffectiveness of self-efficacy of employees on intellectual capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, self-efficacy of employees has significant impact on intellectual capital and the positive mark of standard coefficient suggests the direct relationship of self-efficacy of employees with criterion variable(intellectual capital), in other words, in the event of increasing self-efficacy of employees, intellectual capital is increased 0.34.

The sixth hypothesis test: Optimism of employees has positive impact on social capital.

The significance level of testing hypothesis of ineffectiveness of optimism of employees on social capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, optimism of employees has significant impact on social capital and the positive mark of standard coefficient suggests the direct relationship of optimism of employees with criterion variable(social capital), in other words, in the event of increasing optimism of employees, social capital is increased 0.66.

The seventh hypothesis test: Hopefulness has positive impact on social capital.

The significance level of testing hypothesis of ineffectiveness of hopefulness on social capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, hopefulness has significant impact on social capital and the positive mark of standard coefficient suggests the direct relationship of hopefulness with criterion variable (social capital), in other words, in the event of increasing hopefulness, social capital is increased 0.68.

The eighth hypothesis test: Resilience has positive impact on social capital.

The significance level of testing hypothesis of ineffectiveness of resilience on social capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, resilience has significant impact on social capital and the positive mark of standard coefficient suggests the direct relationship of resilience with criterion variable (social capital), in other words, in the event of increasing resilience, social capital is increased 0.606.

The ninth hypothesis test: Self-efficacy has positive impact on social capital.

The significance level of testing hypothesis of ineffectiveness of self-efficacy on social capital equals to zero and it is less than 1% error in other words, in addition to significance confirmation of regression model, self-efficacy has significant impact on social capital and the positive mark of standard coefficient suggests the direct relationship of self-efficacy with criterion variable (social capital), in other words, in the event of increasing self-efficacy, social capital is increased 0.606.

The summary of results obtained from testing hypotheses is observed in table 3.

Table3. Calculation of t statistic value and standard coefficients

Hypothesis	Correlation coefficient	Determination coefficient	Result
1	0/62	0/39	Confirmed
2	0/56	0/316	Confirmed
3	0/48	0/231	Confirmed
4	0/63	0/407	Confirmed
5	0/605	0/366	Confirmed
6	0/775	0/601	Confirmed
7	0/773	0/598	Confirmed
8	0/78	0/623	Confirmed
9	0/52	0/27	Confirmed

The results showed that all hypotheses were confirmed.

4. Conclusion

4.1 Discussion and conclusions

As it was previously mentioned, the purpose of this study is the investigation of the impact of dimensions of positive psychological capital and social capital on intellectual capital. To investigate the accuracy of research hypotheses, the research conceptual model in Esfahan municipality was tested. The research results showed that the dimensions of positive psychological capital (Resilience, self-efficacy, optimism and hopefulness) and social capital have the positive and significant impact on intellectual capital. The theoretical background presented in the research will be useful and effective for the understanding and cognition of the relationships between intangible assets of organization including psychological capital, social capital and intellectual capital. According to the analysis of research hypotheses and acceptance of positive and direct impact of positive psychological capital (optimism, hopefulness, resilience and self-efficacy) and social capital on intellectual capital and considering that having psychological capital enables the people to have clear attitude about themselves in addition to the fact that they should develop and promote their knowledge in the organization and they should offer their skills, experiences and knowledge to the organization. Similarly, the improvement of intellectual capital of administers and authorities of Esfahan municipality, it is suggested that:

- By devising some measures, the psychological capital of employees should be improved and trained and the organization should have more intellectual capital by these measures.
- As a prerequisite for employment, it should be employed the people having more psychological capital. The processes of in-serving training and socialization of employees should go beyond the mere provision of information and learning and it should be turned into an approach for improvement of psychological capital of employees
- Creating strong and active counseling centers in the organization to improve the mental-spiritual conditions of employees
- Suggesting sense of usefulness and efficiency to the employees by supporting their more participation in the organizational decision-making
- Holding counseling and educational classes for the employees by the organization's counseling center for discovering the reasons of lack of self-confidence of employees and offering solutions such as suggesting the positive attitude of employees to themselves, suggesting optimism for individual and collective abilities in order to be improved the self-confidence of employees
- Encouragement of employees to join in formal social network and group associations
- Providing conditions for the acquisition of special skills of employees and the required abilities to participate in social groups

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