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EVALUATE THE EFFECT OF INTELLECTUAL CAPITAL IN THE PRISONS AND MAINTAIN ITS RELATIONSHIP WITH THE PERFORMANCE OF MANPOWER (CASE STUDY: THE PRISONS AND ACTS OF SUPPLY AND EDUCATIONAL IN WEST AZERBAIJAN PROVINCE)

Salar Mohammadi Gourk and *Mehran Molavi

Department of Public Administration, Mahabad Branch, Islamic Azad University, Mahabad, Iran

**Author for Correspondence*

ABSTRACT

The propose of this research was to relationship between intellectual capital and human resources function In the Prisons Organization and Security and Training Proceedings in West Azerbaijan Province. Type of research is practical and in terms of Method is Descriptive-survey and correlation. The statistical population of the present study includes the number of prisons organization employees in West Azerbaijan Province that by using the Cochran formula, the sample size was determined many of people and was selected by using the stratified random sampling method. Data collection tool includes two standard questionnaires: Bonito's Intellectual Capital and Hersey and Goldsmith's Human resources performance that Cronbach's Alpha value was estimated respectively equal to 0.811 and 0.932. To analyze the findings was used Descriptive statistical methods In terms of frequency and percentage of frequency and Inferential statistics methods: Kolmogorov-Smirnov test, multiple regression analysis, Pearson correlation coefficient and Friedman test.

Research findings indicated that the between intellectual capital and its components with the human resource function there was a significant and positive relationship In the Prisons Organization and Security and Training Proceedings in West Azerbaijan Province.

Keywords: *Intellectual Capital, Customer Capital, Human Capital, Structural Capital, Human Resources Function*

INTRODUCTION

Intellectual capital is a series of Knowledge, information, intellectual property, experiment, competition and organizational learning that can be used to create wealth. Indeed, intellectual capital, organizational knowledge and ability of employee use to create value added on make continuous competitive advantage.

In knowledge- based economy, intellectual capital is used in order to create value, intellectual capital is one of the most important investments that can play a significant role in organizational excellence.

Intellectual capital is one of the implications in the knowledge - based economy era is used for attention to the unknown and non - financial resources. Maar and Chatzel mention that: "there are many definitions of intellectual capital in the theoretical literature."

The interdisciplinary nature is one of the causes of the agreement on the exact definition of intellectual capital that mainly is rooted in the fields of economy, accounting, management and wage. For example, economic perspective, intellectual capital is such as economic value, liquidity, the potential for money - making and investment (Al- Ali, 2004).

According to economic perspective, intellectual capital is sum of human capital and knowledge structure form practical experience, organizational technology, relations and specialized skills that bring the protection in the market by creating a competitive advantage (Unson and Malon, 1997). Finally, Brooking knows that the perspective of accounting is the difference between the value of the market and the companies of intellectual capital (Brooking, 1997).

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- Ahmadian and Qurbani (2013), in their research, as “investigate the relationship between the intellectual capital and organizational performance in the study of the Ministry of Finance and Economic Affairs” with structural equation model help, showed that there is significance of the relationship between the intellectual capital component (human capital, structural capital and relational capital) with organizational performance at the Ministry of Finance and Economic Affairs exists.
- Azar and Hosein (2011), did a research as “examine the relationship between intellectual and social capital with the organizational performance of managers and employees” in the Export Development Bank of Iran and the results of this study using Friedman Test and wilcoxon showed that communication and human, respectively (intellectual capital) and then communication and cognitive social capital) have most effects on the performance.
- Mojtahed *et al.*, (2010), in a research as “relationship between intellectual capital (human, customer and structural) and performance of the perspective of the insurance industry executives, showed that intellectual capital, (human, customer and structural) and structural, in a separate investigation and independent from each other are significant relationship. While checking at the same time, in only structural and human capital have relationship with significant performance.
- Shojaei and Baghbanian (2009) had a research as “examine the relationship of intellectual property and organizational performance of the banking industry: Case Study of Iran Kurdistan province”. And the results of this research have showed with using structural equation modeling and using the Laser Software that the final estimated model represents a positive influence of each components of intellectual capital on organizational performance of the banking industry, that respectively, human capital, structural capital and investment has the highest rate of the effectiveness of the customer.
- Shin and Tongchen (2008), in their research as “the new model-based intellectual capital measurement linguistic a new model for evaluating the performance of intellectual capital by fuzzy approach 2 - topple techniques method presented the Multivariate decision” that was tested for firms with advanced technology in Taiwan, that the research results indicate significant relationship between components of intellectual capital with the performance.
- Huang and Hsueh (2007) investigated the relationship of intellectual property and performance in Taiwan engineering consulting companies. The results showed there is a positive correlation between three intellectual capital and business performance. The highest correlation related to human capital, and after that related to customer capital (relationship). And there is a positive correlation between three intellectual capitals (human, structural, Costumer).

The Conceptual Model

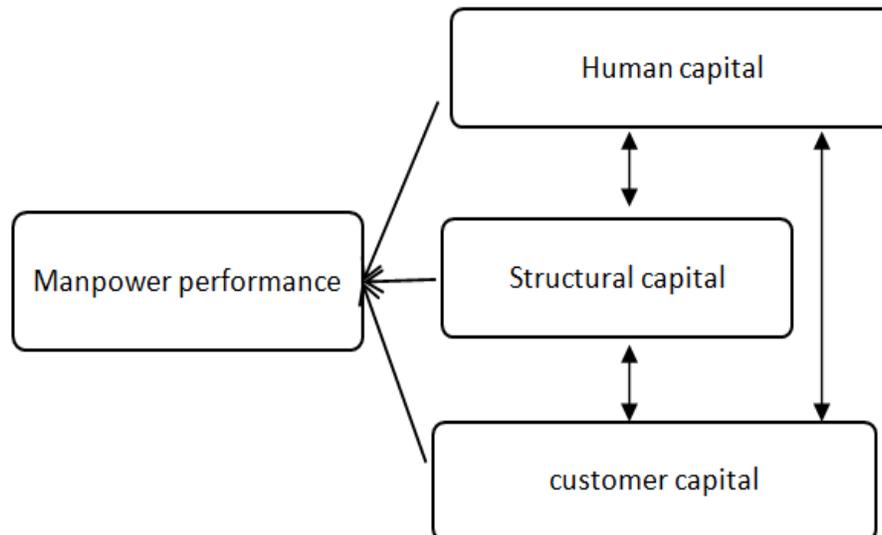


Figure 1: The conceptual model

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This is certainly that applied research, are circuit, meaning that the whole process of research should be on one or more of the problem or the problems, from the first steps to see the final stage of inference. Thus, one of the most important steps in research is explanation of the problem or the issue in a scientific research and application. If the issue explains clearly or not, all the later stages of the process of research, such as intelligence gathering and conclusions, or a conclusion difficulties and will be deficient that it is not stages, but due to the absence of clear and is wrong. So maybe not exaggeration that some researchers believe that right make clear, equal to half of research activities.

MATERIALS AND METHODS

Methods

The present study is descriptive research and since the questionnaire survey has been used, so it must be said that the research is considered form and in terms of the use, is considered the applied research. The population of research is people of employees of the prisons and acts of supply and educational West Azerbaijan province. In order to determine the volume of the sample study, the Cochran’s formula has been used that is the most common way to find the size of the sample survey in the demographic research that according to the sample volume formula, many people is obtained.

To collect information in the field of theoretical foundations and literature issue the library resources, articles, and required books and the global information network has been used. Also, in the present study to collect data two questionnaire was used. Bontis standard questionnaires of intellectual property, that is including 33 questions. The questionnaire consisting of two sections. In the first part of the questions there are some questions about education, age and years of service. And the second sector includes 33 components of the question: Human capital -structural capital and customer capital. It is to be mentioned that the composition of the questions in Table 2 - 3 is shown to measure the performance manpower, “Achieve” heresy and Goldsmith manpower performance questionnaire has been used that it has been 42 elements and Seven of the components assessment.

To test the reliability of questionnaire, Cronbach's Alpha was used. According to this way, with a preliminary study on the 30 people of the population and the use of statistical SPSS software, its value for the questionnaire intellectual capital 0.811 and for the questionnaire manpower performance against 0.932 was calculated. These values are sign of the desirability of the questionnaires questions (table 1).

Table 1: Cronbach's coefficient for the questionnaire survey

Cronbach Alpha	the number of element	Questionnaire survey
0.811	33	intellectual capital
0.932	42	Manpower performance

In the present study, depend on the objectives of the research questions, to analyze the data the different approaches is used. Generally, at the level of descriptive statistics of indicators such as frequency distribution tables, mean and standard deviation, and at the level of inference statistics from the Kolmogorov- Smirnov Test, a multiple regression analysis, the Pearson Correlation coefficient and testing Friedman is used.

RESULTS AND DISCUSSION

Results

Main Hypothesis

There is a significant relationship between intellectual capital and manpower performance in the prisons and acts of supply and educational West Azerbaijan province.

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Table 2: Multiple coefficients of correlation (R) and the main research Hypothesis determining factor of Main hypothesis

Durbin Watson index	The standard error	Adjusted determining factor	Determining factor	R
2.095	16.56	0.518	0.527	0.726

According to determining factor R^2 that is the described changes that has been described by variable x total changes, 0.527, it might be mentioned that about 52.7 percent changes manpower performance by changes in the independent variable intellectual capital (human capital, structural capital and customer) state capital. Index values the camera - Watson tied with 2.095. Because this amount is between 1.5 and 2.5 is scheduled to conclude that errors are independent of one another, and there is no autocorrelation.

Table 3: The analysis of variance relating to the regression model of the independent variables intellectual capital (human capital, structural capital and investment) with the dependent variable (performance manpower)

p-value	F	the mean square	Degrees of freedom	Sum of squares	Source changes
.000	61.958	169.68	3	5099.3	Regression
		274.28	167	458.65	rest
			170	967.68	total

Table 4: Related to T – test and coefficients in regression model

Multiple co alignment index	(p-value)	t - test	The standardized coefficients	non - standardized coefficients	regression model		
Varian ce inflati on	tolera nce		the weight of the β	standa rd error	regression coefficients B		
	.000	3.703		8.308	30.767	Source of width (0 β)	
2.207	.453	.000	5.703	0.451	1.304	Human capital	
2.635	.379	0.041	2.055	0.178	0.407	Structural capital	
2.557	.391	0.046	2.008	0.171	0.379	0.762	relational capital (customer)

The findings of the regression analysis (tables 3 to 4) about the main hypotheses research shows that human capital as a positive and significant form, can predict ($r= 0.451$, $p<0.05$) manpower performance in the prisons and acts of supply and educational West Azerbaijan province.

Sub – hypothesis 1

There is significant relationship in human capital with capital of the customer in the prisons and acts of supply and educational West Azerbaijan province.

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Table 5: The results of the Pearson correlation coefficient between human capital and customer capital

Customer capital		
0.685	Pearson correlation coefficient	Human capital
.000	significant level	
171	figure	

According to the results of table (5), the value of the Pearson correlation with 0.685 with a significant level is obtained .000, and suggests that human capital with customer capital among employee's prisons and acts of supply and educational West Azerbaijan province is significant and positive relationship.

Sub – hypothesis 2

There is significant relationship in human capital with structural capital in the prisons and acts of supply and educational West Azerbaijan province.

Table 6: The results of the Pearson correlation coefficient between human capital and structural capital

Customer capital		
0.696	Pearson correlation coefficient	Human capital
.000	significant level	
171	figure	

According to the results Table (6), the value of the Pearson correlation is equal to 0.696 with a significant level is obtained .000, and suggests that there is significant and positive relationship in human capital with structural changes in the capital between employees prisons and acts of supply and educational West Azerbaijan province. Radiation pattern below represent the correlation between human capital and structural capital is clearly.

Sub – hypothesis 3

There is significant relationship in structural capital with investments of communication (customer) in the prisons and acts of supply and educational West Azerbaijan province.

Table 7: Results of Pearson correlation coefficient between structural capital and relational capital (customer)

Relational (customer)	capital	
0.745	Pearson correlation coefficient	Structural capital
.000	significant level	
171	figure	

According to the results of table (7), the amount of Pearson correlation coefficient against 0.745 with a significant level is obtained .000, and suggests that there is significant and positive relationship in structural capital with investments of communication (customer) among employee's prisons and acts of supply and educational West Azerbaijan province.

Table 8: Results of the Pearson correlation coefficient between maintaining human capital and the performance of manpower performance

Performance of manpower		
0.692	Pearson correlation coefficient	significant level
.000	significant level	
171	figure	

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Sub – hypothesis 4

There is a significant relationship between maintaining human capital and manpower performance in the prisons and acts of supply and educational West Azerbaijan province.

According to the results of table (8), the amount of Pearson correlation coefficient against 0.692 with a significant level is obtained .000, and show that there is significant and positive relationship in keeping with the performance of human capital manpower among employee’s prisons and acts of supply and educational West Azerbaijan province.

Sub – hypothesis 5

There is a significant relationship between investment protection and manpower structural performance in the prisons and acts of supply and educational West Azerbaijan province.

Table 9: Results of the Pearson correlation coefficient between maintain structural capital and manpower performance

Manpower performance		
0.619	Pearson correlation coefficient	maintain structural capital
.000	significant level	
171	figure	

According to the results of table (9), the value of the Pearson correlation with 0.619 with a significant level is obtained .000, and suggests that there is significant and positive relationship in maintain structural capital with the performance of manpower among employees prisons and acts of supply and educational West Azerbaijan province.

Sub – hypothesis 6

There is a significant relationship between investment protection of relational (costumer), and the performance of manpower in the prisons and acts of supply and educational West Azerbaijan province.

Table 10: Results of the Pearson autocorrelation coefficient between maintaining the relational capital (costumer) and the performance of manpower

Manpower performance		
0.612	Pearson correlation coefficient	maintain communication capital (customer)
.000	significant level	
171	figure	

According to the results Table (10), the value of the Pearson correlation with 0.612 with a significant level is obtained .000, and suggests that there is significant and positive relationship in the retention of equity relational (customer) with the performance of manpower among employee prisons and acts of supply and educational West Azerbaijan province.

Main Hypothesis 2

Dimensions of connection in intellectual capital with the manpower performance in the prisons and acts of supply and educational West Azerbaijan province are different.

Friedman Test results in comparison to the average multi – dependent, Table 4 - 15 is shown.

Table 11: Results of the analysis of Friedman variance for the variables investigated

Rating average	Dimension
2.93	Human capital
1.10	Structural capital
1.97	relational capital (customer)

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Discussion and Conclusion

Multiple regression analysis results regarding the hypothesis showed that these three variables, human capital, structural capital and relational capital (customer), a total of 52.7 percent of the variance in the performance of the workforce are explanation. In other words, whatever indicators of intellectual capital more attention, the importance of manpower performance in the prisons and acts of supply and educational Azerbaijan province in western effectively will increase.

Therefore, the results of the study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2011), Shahani and Khaef (2009), Bethaei (2009), Shen and Tongchen (2008), Huang and Hiue (2007), Twstica and Talogorwa (2007) researches and partly matches with the findings of researchers like Mojtahedzade *et al.*, (2010), Namazi and Ebrahimi (2009), Madhoushi and Asghar (1999), Helnaz and Tanjamihalic (2007), Coen (2007), and Bo and Silverman (2004).

All mentioned researches have positive effect of intellectual capital on the performance of manpower and organization financial performance.

Determining factor obtained against 0.469 showed that about 47 percent of the changes in customer capital explain by independent variable human capital. In other words, human capital played a decisive role in customer capital and this means that every human capital is much more the amount of relational capital (in the)effectively will increase. The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2011), Shen and Tongchen (2008), Huang and Hiue (2007), Buntis (1998), and Buntis (2000) research.

Buntis believes to the mutual relations between the components of intellectual capital, so that even if an organization has a good human capital and not suitable structural capital, is not able to use the people knowledge and consequently can't respond to the capital of their customers (Ahmadian and Qurbani, 2013).

Determining factor obtained that is equal to 0.484 showed that about 47 percent of the changes in structural capital, explain by independent variable human capital. In other words, human capital played a decisive role in structural capital and this means that every human capital is much more the amount of structural capital effectively will increase. Also, The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shen and Tongchen (2008), Huang and Hiue (2007), Buntis (1998), and Buntis (2000) research. Determining factor obtained that is equal to 0.555 showed that about 55.5 percent of the changes in relational capital (customer), explain by independent variable structural capital. In other words, structural capital played a decisive role in relational capital (customer) and this means that every structural capital is much more the amount of relational capital (customer) effectively will increase. And this means that each the size of the structural capital is greater than the amount of relational capital (in the) effectively will increase. Also, The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2000), Shen and Tongchen (2008), Huang and Hiue (2007), Buntis (1998), and Buntis (2000) research. Determining factor obtained that is equal to 0.479 showed that about 48 percent of the changes in performance manpower, explain by independent variable human capital. In other words, variable human capital played a decisive role in performance manpower and this means that every variable human capital is much more the amount of performance manpower effectively will increase. Also, The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shahani and Khaef (1999), Shen and Tongchen (2008), Huang and Hiue (2007), Young *et al.*, (2006), Twstica and Talogorwa (2007) researches. Determining factor obtained that is equal to 0.383 showed that about 38 percent of the changes in performance manpower, explain by independent variable structural capital. In other words, variable structural capital played a decisive role in performance manpower and this means that every variable structural capital is much more the amount of performance manpower effectively will increase. Also, The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shahani and Khaef (2009), Shen and Tongchen (2008), Huang and Hiue (2007), Young *et al.*, (2006), Twstica and Talogorwa (2007) researches.

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Determining factor obtained that is equal to 0.374 showed that about 37.4 percent of the changes in performance manpower, explain by independent variable relational capital (costumer). In other words, variable relational capital (costumer) played a decisive role in performance manpower and this means that every variable relational capital (costumer) is much more the amount of performance manpower effectively will increase. Also, The result of this part of the present study, matches with the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shahani and Khaef (2009), Shen and Tongchen (2008), Huang and Hiue (2007), Young *et al.*, (2006), Twstica and Talogorwa (2007) researches.

According to the results of the Friedman Test, that is done on the basis of Kai squire significant level Friedman test with degrees of freedom 2 is equal to .000, who has been smaller than the minimum level. So there is a significant difference in relationship between the performance of the dimensions of intellectual capital and performance manpower in the prisons and acts of supply and educational West Azerbaijan province. The result of this part of the present study, matches with the findings of Huang and Hiue (2007) researches, but there is contradiction with the research of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shahani and Khaef (2009), Helnaz and Tanjamihalic (2007), Tovestiga and Tulugurova (2007). For the findings of Ahmadian and Qurbani (2013), Azar and Hosein (2001), Shahani and Khaef (2009), Helnaz and Tanjamihalic (2007), Tovestiga and Tulugurova (2007) researches, relational capital, is the first priority, and in Tovestiga and Tulugurova (2007) research, structural capital is the first priority: while in the present study as noted above human capital has the highest priority.

Practical Suggestions

- This study showed that human capital, structural and customer, respectively, are in the most relevant performance for re - election if performance manpower. Therefore, it is essential that managers and the authorities to these components, laying the groundwork for improving these factor to organizational performance more staff.
- Have been proposed the leaders of the proposed with regard to strengthening the dimensions of relational capital (customer) to the people who are the direct contact with the petitioners, behaviors, a tribute to the client.
- Have been proposed to receive feedback from clients and distribution throughout the organization.
- Have been proposed to identify the needs of the costumers.
- Have been proposed to create the free telephone lines for being raised complaints of costumers.
- Continuous communication with clients and knowledge of their satisfaction through the creation of a system for monitoring and measurement of the client's satisfaction.
- Have been proposed to strengthen each of the components of the structural capital, to strengthen the team.
- Also proposed to education at all levels of an organization working team and its techniques.
- Appreciate of teamwork.
- Have been proposed in the recruitment and selection for the people, those who lack the technical skills and team, are to be rejected.
- Have been proposed to identify those key processes, which have the highest value for the organization and satisfaction.
- Have been proposed to increase organizational culture and climate protection in organization.
- Have been proposed to allocate more budget and time to the research and development and cooperation and close interaction with the authorities and the scientific circles and the use of top experience similar organizations.
- With regard to strengthening in each of the components of the human capital, it is recommended the talented individuals and capable and consistent with the mission and objectives recruiting.
- Have been proposed to training and staff development and strengthening the merits of employees more than before.
- Presentation of training, and organizational opportunities to help improve future state of employees who have good performance.
- proposed to the managers of the organization to support teamwork and culture pluralism

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In the following proposals offer on improving the performance of employees:

- the formulation of the program and performance goals through, based on the purpose of management between supervisors and staff to identify the performance standards
- continuous employee performance measurement in periods of time
- analyze information obtained from the employee performance measurement
- continuously measured the level of staff competency and use of staff plans to improve
- Have been proposed for employees, training programs and workshops for promoting scientific level with their knowledge and intellectual capital and manpower performance by the university professors.

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