Investigating the Relationship between Social Capital and Intellectual Capital with Employee Productivity in Small and Medium Companies of Sirjan (Case Study: Special Economic Zone in Sirjan)

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Abstract

The purpose of this study was to the study of investigating the relationship between social capital and intellectual capital with employee productivity in small and medium companies of Sirjan. A descriptive, quantitative, co relational design was used. Statistic population of research concludes all employees of small and medium companies in special economic zone in Sirjan. The populations consist of 251 employees. A data collection instrument is included demographic questionnaire, questionnaire of social capital, intellectual capital and employee productivity. Data analysis included descriptive statistics, pearson's r and spearman's correlations, regression analysis, ANOVA analyses and SPSS software (package of Spss / pc + + ver21). The results of this study show the there is a significant relationship between social capital and intellectual capital with employee productivity. According the results, there is a significant relationship between organizational capital and cognitive capital with employee productivity.

Keywords: *Social Capital, Intellectual Capital, Employee Productivity,Sirjan*

1. Introduction

In the knowledge-based economy, products and organizations live and die based on knowledge. The most successful organizations were the intangible asset somehow use better and faster, regarding to strategic perspective, the intellectual capital were used to create and enhance enterprise value and the success of any organization depends on the management of scarce resources (Cheng et al, 2010). Stewart was believed intellectual capital was a set of knowledge, information, intellectual property, experience; competition and organizational learning that it can be used to produce wealth. In fact, the intellectual capitals of all staff cover organizational knowledge and abilities to create added value and lead to sustainable competition resources (Ghelichli & Moshabaki, 2006). There were many benefits to the organization's intellectual capital such as, profitability for the company, improve the company's strategic position, increase market share, innovation and unique technology, standards for company, introducing brand, enhance corporate reputation, reducing the company's costs, increase customer loyalty and improve productivity (Harrison & Sullivan, 2000). Social capital was another type of capital. Even though social capital was new somewhat and it had recently been entered into economic science literature, it played an important part in determining the issues of business development. The application of this concept gradually increased from 1990 in academic papers and articles on the work of people such as James Coleman, Robert Putnam, Francis Fukuyama and Pierre Bordieu. It should be noted that physical capital and social capital were importable and include bilateral relations emerge interaction and networks that among human groups (Asadi, 2008). On the other hand, in order to succeed, organizations are forced to improve productivity. In fact, organizations that do not improve their productivity were doomed to failure. The failure of organizations led to the failure of industries; the failure of industries causes collapse of economic structure. Today, it is well-known that productivity is as an intellectual perspective and smart work and action. In addition, productivity entitles a kind of thinking to continue of progress and improve of everything. Productivity was to ensure the ability to do today things better than yesterday continuously. Productivity was called continuous effort to deploy new technologies and techniques and modern methods. Productivity was skills in development and improvement of human resources (Hajkarimi and Pirayesh, 2006).

2. Principal Hypotheses

1. There is a significant relationship between social capital and employee productivity in small and medium companies of Sirjan.
2. There is a significant relationship between intellectual capital and employee productivity in small and medium companies of Sirjan.

3. Secondary Hypotheses

1. There is a significant relationship between organizational capital and employee productivity in small and medium companies of Sirjan.
2. There is a significant relationship between customer capital and employee productivity in small and medium companies of Sirjan.
3. There is a significant relationship between human capital and employee productivity in small and medium companies of Sirjan.
4. There is a significant relationship between structural capital and employee productivity in small and medium companies of Sirjan.
5. There is a significant relationship between relational capital and employee productivity in small and medium companies of Sirjan.
6. There is a significant relationship between cognitive capital and employee productivity in small and medium companies of Sirjan.

4. Research Methods

A descriptive, quantitative, co relational design was used. Statistic population of research concludes all employees of small and medium companies in special economic zone of Sirjan. The population consist of 251 employees. A data collection instrument is included demographic questionnaire, questionnaire of social capital, intellectual capital and employee productivity.

The employees answered the same questionnaire including social capital (including 15 questions), intellectual capital (including 17 questions) and employee productivity (including 32 questions). The cronbach's Alpha that obtained from the pilot data was 0.88 for social capital, 0. 86 for intellectual capital and 0.93 for employee productivity. Data analysis included descriptive statistics, pearson's r and spearman's correlations, regression analysis, ANOVA analyses and SPSS software (package of Spss / pc + + ver21).

5. Demographics Results

Of the 251 subjects enrolled in the study, 91.38 % were male and 8.42% were female. Among respondents aged 40 to 50 years were the most frequent and least frequent in the age group 20 to 30 years.

6. Results and Discussion

6.1 Principal Hypotheses

6.1.1 There is a significant relationship between social capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between social capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between social capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between social capital and employee productivity and this relationship is the direct (Table 1). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.318 (Table 2). These results are in compliant with result Asadi (2008) and Pooya (2008) reports there is a significant relationship between social capital and employee

productivity.

Table 1: The correlation coefficient between social capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
	Pearson correlation coefficient			Spearman correlation coefficients				
Social capital	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number	Yes	Direct
	0.563**	0.000	239	0.554**	0.000	239		

Table 2: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.563	0.316	0.318	0.31347

6.1.2 There is a significant relationship between intellectual capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between intellectual capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between intellectual capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between intellectual capital and employee productivity and this relationship is the direct (Table 3). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.54 (Table 4). These results are in compliant with result Asadi (2008) and Pooya (2008) reports there is a significant relationship between intellectual capital and employee productivity.

Table 3: The correlation coefficient between intellectual capital and employee

Variable	Employee productivity						Direct	Type of relationship
	Pearson correlation coefficient			Spearman correlation coefficients				
Intellectual capital	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number	Yes	Direct
	0.720**	0.000	239	0.713**	0.000	239		

Table 4: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.720	0.518	0.524	0.14323

6.2 Secondary Hypotheses

6.2.1 There is a significant relationship between organizational capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between organizational capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between organizational capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between organizational capital and employee productivity and this relationship is the direct (Table 5). Thus H_0 is rejected and research hypotheses is approved.

According the results of analysis, the modified r^2 between two variables is 0.219 (Table 6). These results are in compliant with result Reed (2000) reports there is a significant relationship between organizational capital and employee productivity.

Table 5: The correlation coefficient between organizational capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
Organizational capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Sig	N	Correlation coefficient	Sig	N		
	0.464**	0.000	239	0.459**	0.000	239		

Table 6: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.564	0.215	0.219	0.34561

6.2.2 There is a significant relationship between customer capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between customer capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between customer capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between customer capital and employee productivity and this relationship is the direct (Table 7). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.301 (Table 8).

Table 7: The correlation coefficient between customer capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
Customer capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.543	0.00	239	**0.538	0.00	239		

Table 8: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.543	0.294	0.301	0.34142

6.2.3 There is a significant relationship between human capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between human capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between human capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between human capital and employee productivity and this relationship is the direct (Table 9). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.363 (Table 10).

Table 9: The correlation coefficient between human capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
Human capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Sig	N	Correlation coefficien	Sig	N		
	0.558**	0.000	239	0.576**	0.000	239		

Table 10: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.558	0.345	0.363	0.3176

6.2.4 There is a significant relationship between structural capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between structural capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between structural capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is not a significant relationship between structural capital and employee productivity and this relationship is the direct (Table 11). Thus H_0 is approved and research hypotheses is rejected.

Table 11: The correlation coefficient between structural capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
Structural capital	Pearson correlation coefficient			Spearman correlation coefficients			Not	----
	Correlation coefficient	Sig	N	Correlation coefficient	Sig	N		
	0.391**	0.088	239	0.398**	0.110	239		

6.2.5 There is a significant relationship between relational capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between relational capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between relational capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between relational capital and employee productivity and this relationship is the direct (Table 12). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.363 (Table 13).

Table 12: The correlation coefficient between relational capital and employee productivity

Variable	**Employee productivity**						Direct	Type of relationship
Relational capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Sig	N	Correlation coefficient	Sig	N		
	0.601**	0.000	239	0.559**	0.000	239		

Table 13: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.601	0.361	0.363	0.2243

6.2.6 There is a significant relationship between cognitive capital and employee productivity in small and medium companies of Sirjan.

H0: There is not a significant relationship between cognitive capital and employee productivity in small and medium companies of Sirjan.

H1: There is a significant relationship between cognitive capital and employee productivity in small and medium companies of Sirjan.

The results of this study show the there is a significant relationship between cognitive capital and employee productivity and this relationship is the direct (Table 14). Thus H_0 is rejected and research hypotheses is approved. According the results of analysis, the modified r^2 between two variables is 0.331 (Table 15). These results are in compliant with result Asadi (2008) reports there is a significant relationship between cognitive capital and employee productivity.

Table 14: The correlation coefficient between cognitive capital and employee productivity

Variable	Employee productivity						Direct	Type of relationship
Cognitive capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Sig	N	Correlation coefficient	Sig	N		
	0.573**	0.000	239	0.523**	0.000	239		

Table 15: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.573	0.328	0.331	0.3245

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