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Research Article

Investigating the Relationship between Social Capital and Intellectual Capital with Staff Productivity (Case Study: Kerman University of Medical Sciences)

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ABSTRACT

Objective: Decrease in the staff Productivity in some of the enterprises is one of the problems that the managers have to encounter. The purpose of this study was to the study of investigating the relationship between social capital and intellectual capital with staff productivity in Kerman University of Medical Sciences. **Methods:** A descriptive, quantitative, co relational design was used. The population comprises all the staffs of the above organization, the number of them added up to 1034 individuals in 2017. The sample includes 280 subjects based upon Krejcie & Morgan Table (1970) which appointed in proportionate stratified random sampling. A data collection instrument is included demographic questionnaire, questionnaire of social capital, intellectual capital and staff 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). **Results:** The results of this study show the there is a significant relationship between social capital and intellectual capital with staff productivity. According the results, there is a significant relationship between organizational capital and cognitive capital with staff productivity.

Introduction

One of the most important sources of each organization is its human resources, and the factors that make up these resources are people with many needs that, if they meet their needs and have sufficient motivation, will use their talents and skills at the service of the organization. Today productivity and efficiency are considered as a culture and perspective in all areas of human life and work and the source of economic development and development. Productivity is a comprehensive and general concept that is considered necessary for the improvement of the standard of living and welfare of human beings.The promoting of productivity has always been welfare of public, the efficient use of resources, the improvement of quality of goods and services, and in other words, path to excellence of development and economic development of society (Azarbaijani and Rafat, 2005).

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

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improvement of human resources (Hajkarimi and Pirayesh, 2006).

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). Intellectual capital is as the organization's unique resources and capabilities to create added value and maintain market position (Wójcik, 2015).

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 Sciences 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). Social capital is defined as the characteristics of a social organization, such as trust, norms, and networks, which helps to coordinate program performance and improve productivity (Myung et al, 2016). Therefore researcher aim to study of investigating the relationship between social capital and intellectual capital with staff productivity in Kerman University of Medical Sciences. The following assumptions were considered as a means to achieve the goals of the research.

Principal Hypotheses

(1): There is a significant relationship between social capital and staff productivity in Kerman University of Medical Sciences.

(2): There is a significant relationship between intellectual capital and staff productivity in Kerman University of Medical Sciences.

Secondary Hypotheses

(1): There is a significant relationship between organizational capital and staff productivity in Kerman University of Medical Sciences.

(2): There is a significant relationship between customer capital and staff productivity in Kerman University of Medical Sciences.

(3): There is a significant relationship between human capital and staff productivity in Kerman University of Medical Sciences.

(4): There is a significant relationship between structural capital and staff productivity in Kerman University of Medical Sciences.

(5): There is a significant relationship between relational capital and staff productivity in Kerman University of Medical Sciences.

(6): There is a significant relationship between cognitive capital and staff productivity in Kerman University of Medical Sciences.

Research Methods

A descriptive, quantitative, co relational design was used. Statistic population of research concludes all staffs of Kerman University of Medical Sciences. The population consist of 261 staffs. A data collection instrument is included demographic questionnaire, questionnaire of social capital, intellectual capital and staff productivity.

The staffs answered the same questionnaire including social capital (including 15 questions), intellectual capital (including 17 questions) and staff productivity (including 32 questions). The cronbach's Alpha that obtained from the pilot data was 0.92 for social capital, 0. 88 for intellectual capital and 0.95for staff 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).

Demographics Results

Of the 261 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.

Results and Discussion

Principal Hypotheses

(1) There is a significant relationship between social capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between social capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between social capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between social capital and staff 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 staff productivity.

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

Variable	staff productivity						Direct	Type of relationship
Social capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.552	0.00	261	**0.554	0.00	261		

Table 2: The result of regression model

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

(2) There is a significant relationship between intellectual capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between intellectual capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between intellectual capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between intellectual capital and staff 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 staff productivity.

Table 3: The correlation coefficient between intellectual capital and staff

Variable	staff productivity						Direct	Type of relationship
Intellectual capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.711	0.00	261	**0.699	0.00	261		

Table 4: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.711	0.508	0.517	0.12432

Secondary Hypotheses

(1) There is a significant relationship between organizational capital and staff productivity in Kerman University of Medical Sciences**.**

H0: There is not a significant relationship between organizational capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between organizational capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between organizational capital and staff 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 staff productivity.

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

Variable	staff productivity						Direct	Type of relationship
Organizational capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.452	0.00	261	**0.459	0.00	261		

Table 6: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.452	0.215	0.219	0.34561

(2) There is a significant relationship between customer capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between customer capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between customer capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between customer capital and staff 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 staff productivity

Variable	staff 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		
	**0.532	0.00	261	**0.527	0.00	261		

Table 8: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.532	0.294	0.304	0.34142

(3) There is a significant relationship between human capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between human capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between human capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between human capital and staff 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 staff productivity

Variable	staff productivity						Direct	Type of relationship
Human capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.558	0.00	261	**0.576	0.00	261		

Table 10: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.588	0.345	0.363	0.31765

(4) There is a significant relationship between structural capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between structural capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between structural capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is not a significant relationship between structural capital and staff 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 staff productivity

Variable	staff productivity						Direct	Type of relationship
Structural capital	Pearson correlation coefficient			Spearman correlation coefficients			Not	----
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.391	0.088	261	**0.398	0.110	261		

(5) There is a significant relationship between relational capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between relational capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between relational capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between relational capital and staff 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 staff productivity

Variable	**staff productivity**						Direct	Type of relationship
Relational capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.601	0.00	261	**0.559	0.00	261		

Table 13: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.601	0.361	0.363	0.22432

(6) There is a significant relationship between cognitive capital and staff productivity in Kerman University of Medical Sciences.

H0: There is not a significant relationship between cognitive capital and staff productivity in Kerman University of Medical Sciences.

H1: There is a significant relationship between cognitive capital and staff productivity in Kerman University of Medical Sciences.

The results of this study show the there is a significant relationship between cognitive capital and staff 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 staff productivity.

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

Variable	staff productivity						Direct	Type of relationship
Cognitive capital	Pearson correlation coefficient			Spearman correlation coefficients			Yes	Direct
	Correlation coefficient	Significance level	Number	Correlation coefficient	Significance level	Number		
	**0.573	0.00	261	**0.523	0.00	261		

Table 15: The result of regression model

Model	R	r 2	Modified r2	Standard error
1	0.573	0.328	0.331	0.32451

Discussion and Conclusion

The purpose of this study was to the study of investigating the relationship between social capital and intellectual capital with staff productivity in Kerman University of Medical Sciences. The results of the research showed that social capital and intellectual capital have a significant effect on employee productivity. Intangible assets include intellectual capital and social capital. These findings suggest that intellectual capital and social capital can improve productivity. Today, due to widespread changes in organizational operations, traditional forms of capital, such as buildings, equipment and financial resources, have changed and new capital has been raised. Today, due to widespread changes in organizational operations, traditional forms of capital have changed and new capital has been raised. These intangible assets play a major role in the development and growth of the organization. Social capital is a concept that goes far beyond the assets that a person possesses. One of the effects of social capital is increasing the productivity of organizations. Productivity is a major concern of today's organizations. Social capital affects the productivity of human resources of organizations (Amini et al, 2011). Lower exchange rates, lower rates of people's displacement, knowledge sharing and innovation, risk taking and product

quality improvement are among the ways social capital influences productivity. The findings of this study showed that intellectual capital has a positive effect on human resource productivity in Kerman University of Medical Sciences. These results are in compliant with result Mohammadi et al (2011), Nazem and Sadeghi (2012) and Ecoi (2013). Therefore, human resource productivity will improve if organizations value their intellectual capital and create value from intangible assets.

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