

Analysis of the Relationship Between Social Capital and Organizational Entrepreneurship in Javad Al A'emeh Engineering Institute

¹Mohammad Ali Dadashi and ²Mohammad Hadi Asgari

¹Faculty Member of Agriculture and Natural Resources Research Center of Guilan, Iran

²Faculty Member of Management Department, Islamic Azad University, Tonekabon Branch, Iran

Abstract: The main purpose of this research was to study and analyze the relationship between social capital and organizational entrepreneurship in Javad Al A'emeh Engineering Institute. The research method was descriptive-correlational. The population consisted of all managers, directors and officials of the engineering institute with total number of 128 individuals, out of which 97 were selected as the sample using stratified random method. The means of data collection were two researcher-made questionnaires: 1. Social capital questionnaire including 20 five-point Likert scale questions and 2. Organizational entrepreneurship questionnaire including 20 five-point Likert scale questions. The collected data was analyzed using multivariate regression analysis and Pearson correlation coefficient. The research results showed that there's a significant relationship between social capital variables (structural and quality dimensions) and organizational entrepreneurship.

Key words: Social capital • Structural dimension of social capital • Quality dimension of social capital • Organizational entrepreneurship

INTRODUCTION

Considering entrepreneurship in the frame of social structures levels the way for a broad outlook towards it, so that the attention gets attracted to the less dealt and ambiguous points, i.e. the social dimension of entrepreneurship phenomena. Recently social capital has triggered some theories which are bases for other studies in the field of management. This capital is a new concept which plays a more important role than physical and human capital in organizations and societies and nowadays is being used widely in sociology and economy and more recently in management and organization and refers to the relationships between the members of a network as a valuable resource. In the absence of social capital, other capital loses its effectiveness and paving the way for cultural and economic development and evolution gets difficult.

Social capital is mainly based on social and cultural factors and identifying it as a capital, whether at the micromanagement level or the management of organizations and agencies level, can create a new

knowledge of economic-social systems and help the managers direct the system in a better way. This kind of capital has an important role in entrepreneurial activities, because entrepreneurship is an economic-social phenomena and so dependent on social condition and context in two ways. Firstly, entrepreneurs are people who are themselves the product of the social environment. Secondly, entrepreneurship is a social activity and as a result existence of social connections and relationships affects the nature of business. Today, the economic, industrial, social and cultural conditions of our country are in a way that solving problems requires new and different solutions. The young population of the country, the necessity of creating job opportunities and the fluctuation of oil price are the 3 main factors that lead policy and decision makers to think of an easily accessible source of income other than oil, which is undoubtedly creativity and innovation. Entrepreneurship is a concept that has been analyzed from different perspectives and it is believed that entrepreneurship is the driving force for economic development of developed and developing countries [1].

Seemingly industrial organizations of our country don't support entrepreneurship sufficiently and are not serious about it. This lack of attention originates from poor planning, insufficient support of entrepreneurial activities in organizations, the absence of an appropriate reward system to motivate creative and innovative individuals and the traditional methods of management which is mainly related to personality characteristics of entrepreneurs. Moreover, lack of attention to social relationships and connections and poor communication between members leads to poor entrepreneurship in organizations. Most of the studies carried out about entrepreneurship have focused on personality characteristics of entrepreneurs and have been criticized for the lack of attention to the network of social relationships (social capital), i.e. non-economic factors [2]. This is when Wiklen refers to these four set of factors for the emergence of entrepreneurship [3].

- Economic factors: such as market advantages and capital provision
- Non-economic factors: such as acceptability of entrepreneurship (cultural), social movements, security and factors like social class, control power
- Psychological factors: such as the need for success, motives and risk taking
- The combination of the factors of production: in order to modify the production and services

Furthermore, from the perspective of social scientists, entrepreneurship is a process occurring in an uncertain network of social relations which can limit or facilitate the relation of entrepreneur with resources and opportunities [4].

In other words, organizations can have a better understanding of the pattern of interaction between individuals and groups by knowing and identifying the dimensions of their social capital and using the social capital they can direct the organizational systems, including organizational entrepreneurship, better [5].

- Hous [2] believes that entrepreneurs who pay more attention to the social capital are more successful.
- Landy *et al.* [6] concluded that all kinds of social capital have a positive effect on innovation.
- Anderson and Miller [5] concluded that social and human capital plays an important role in the process of entrepreneurship and entrepreneurs from higher social-economical classes have ore human capitals.

- Landy *et al.* [6] too, thought of entrepreneurship as one of the main requirements of success in business.
- Declevcq *et al.* [7] concluded that communication skills and individuals' social capital has a positive relationship with the possibility of starting a new business.
- Lin *et al.* [8] found that social capital mitigates the effect of entrepreneurial strategies on performance; and successful entrepreneurs are those who adjust entrepreneurial strategies according to social capital.
- Ulhoi *et al.* [reported by 4] concluded that entrepreneurs can overcome the hurdles by relying on social networks.
- Cheng Nan-Chen [reported by 6] showed that there's a significant relationship between social capital, entrepreneurial orientation and organizational resources.
- Ahmadi [reported by 4] has explained and described social capital indicators.
- Shirvani [reported by 4] concluded that social capital has a relationship with the amount of participation-seeking activities, in accordance with the training and empowerment of employees, flexible and non-bureaucratic structure, social responsibility and response capability.
- Rezazadeh [reported by 6] found out that formality, complexity and concentration have a negative relationship with organizational entrepreneurship.
- Ashena [reported by 9] found out that social capital and its variables have a direct relationship with entrepreneurship.

Considering the importance of this subject, relying on previous research findings about social capital and entrepreneurship, through continuing the direction of this research and discovery of new findings and considering the importance of social capital in development of entrepreneurship, the present study aims to analyze the relationship between social capital (and its dimensions) and organizational entrepreneurship in Javad Al A'emeh Engineering Institute.

Therefore, in order to realize this goal, the following hypotheses have been posed and assessed.

- There's a significant relationship between social capital and organizational entrepreneurship.
- There's a significant relationship between structural dimension of social capital and organizational entrepreneurship.

- There's a significant relationship between quality dimension of social capital and organizational entrepreneurship.

Methodology: the present research method is descriptive-correlational. The population consists of 128 individuals who are managers, directors and officials of Javad Al A'emeh engineering institute. The sample size has been determined using Cochran formula to be 97 which were selected using stratified random method. The means of data collection used in this research include two researcher-made scales: A- Social capital scale: this scale is designed according to the two dimensions of structure and quality and based on the Stone's model. This questionnaire consists of 20 questions set according to Likert range. This scale is used to analyze and determine social capital and its dimensions. B- Organizational entrepreneurship scale: the scale used in this study to assess organizational entrepreneurship is based on the most important organizational entrepreneurship indicators presented by pundits and experts in this field. This scale is created according to the Antoncic and Hisrich model and includes 20 questions. The content validity of the questionnaires was reached after the necessary modifications were made by the experts. The reliability of the questionnaires was determined using Cronbach's alpha, the amount of which was 0.89 for social capital questionnaire and 0.85 for the other one. Data was analyzed using multivariate regression analysis and Pearson correlation coefficient.

Findings

- There's a significant relationship between social capital and organizational entrepreneurship.

In order to assess the first hypothesis and determine the relationship between social capital and organizational entrepreneurship, first of all the Pearson correlation coefficient test was used, the results of which showed that there's a positive significant relationship between the dimensions of social capital and organizational entrepreneurship at 0.01 and 0.05 level of significance. The results are shown in table 1.

Based on the correlation coefficients obtained, there's a positive significant relationship between social capital (structural and quality dimensions) and organizational entrepreneurship. In other words, social capital and its dimensions (structural and quality) are effective in the level of organizational entrepreneurship.

Table 1: The results of Pearson correlation coefficient between dimensions of social capital (structural and quality) and organizational entrepreneurship

Social capital	organizational entrepreneurship
Structural dimension of social capital	0.200*
Quality dimension of social capital	0.315**

**indicates that correlation coefficient is significant at the 0.01 level.

*indicates that correlation coefficient is significant at the 0.05 level.

Table 2: indicators and statistics of regression analysis for the first hypothesis

R correlation coefficient	coefficient of determination (R ²)	adjusted R ²	standard error
0.315	0.099	0.090	2.196

Continuing to explore this hypothesis and in order to analyze the relationship between the dimensions of social capital and organizational entrepreneurship and determining which one of the dimensions is a stronger predictor for organizational entrepreneurship, we made use of multivariate regression analysis which led to the following results.

The results indicate that the dimensions of social capital (structural and quality dimensions) explain only 9.9% of the variance of organizational entrepreneurship.

As it is seen the quality dimension of social capital is effective on the level of organizational entrepreneurship. Therefore, the table above indicates that there's a significant relationship between social capital and organizational entrepreneurship. The relationship is statistically significant at the 0.05 level.

This table indicates the fact that the quality dimension of social capital affects the level of organizational entrepreneurship. Moreover the amount of this effect can be predicted using the amounts of quality dimension in table 4.

In stepwise regression analysis the structural dimension of social capital was not included in the multiple regression equation, because it made no significant contribution to the power of multiple regression models.

According to the calculated t (2.231) and considering the fact that level of significance is less than P<0.0005, the relationship between predictor variable (quality of social capital) and organizational entrepreneurship is significant and as a result this variable (quality of social capital) can be the best predictor of the level of organizational entrepreneurship.

Table 3: analysis of variance test to check the significance of the model

Source of changes	sum of squares (s.s.)	degree of freedom (d.f.)	mean squares (m.s.)	F-ratio	significance level
The regression effect	5.358	1	20.358		
Remaining	458.282	95	4.824	10.439	0.002
Total	508.639	96			

Table 4: the variables which are included in the regression equation using the stepwise model

Indicators	Source of changes	B coefficient	Standard error	Standardized	B coefficient	t-test significance	level of significance
Quality		0.529	0.183	0.315	2.231	0.002	

Table 5: standardized regression coefficient (B) for the existing variable in the model (quality of social capital)

Predictor variable	B	SEB	B	t	Sig
Quality of social capital	0.592	0.183	0.315**	2.231	0.002

**P<0.0005

Table 6: distribution of the correlation coefficient between structural dimension of social capital and organizational entrepreneurship

Variables	structural dimension of social capital	Organizational entrepreneurship	d.f	Cd	α level	R	level of significance	tr	T
Structural Dimension Of social capital	1	0.200**	95	4	0.05	0.164	0.049	1.99	1.98
Organizational Entrepreneurship	0.200*	1							

*level of significance is 0.05.

Table 7: distribution of the correlation coefficient between quality of social capital and entrepreneurship

Variables	structural dimension of social capital	Organizational entrepreneurship	d.f	Cd	α level	R	level of significance	tr	T
Structural Dimension Of social capital	1	0.351**	95	9.92	0.05	0.164	0.002	3.23	1.98
Organizational Entrepreneurship	0.351**	1							

**level of significance is 0.01.

Therefore, we can conclude that the research hypothesis saying that there's a significant relationship between social capital (structural and quality dimensions) and organizational entrepreneurship is confirmed.

- There's a significant relationship between structural dimension of social capital and organizational entrepreneurship.

The results of the table show that the correlation between structural dimension of social capital and organizational entrepreneurship is (r=0.200) and this relationship is significant at the 0.05 level. This indicates that the more flexibility and richness the structural dimension has, i.e. being organic, its indicators being at a more desirable level, individuals having more social responsibility and there being a good platform for creativity and innovation, the higher organizational entrepreneurship gets. Coefficient of determination shows that the structural dimension of social capital can explain 4% of organizational entrepreneurship. Considering the degree of freedom being 95, since the amount of tr

(tr=1.99) is more than t at the 0.05 level (t=1.98), the research hypothesis saying that, there's a significant relationship between structural dimension of social capital and organizational entrepreneurship, is confirmed with 95% of assurance.

- There's a significant relationship between quality dimension of social capital and organizational entrepreneurship.

The results of the table show that the correlation between quality dimension of social capital and organizational entrepreneurship is (r=0.315) and this correlation coefficient indicate that there's a positive significant relationship between quality of social capital and organizational entrepreneurship. Coefficient of determination indicates the fact that the quality dimension of social capital can explain 9.92% of the level of organizational entrepreneurship. Considering the degree of freedom being 95, since the amount of tr (tr=3.23) is more than t at the 0.05 level (t=1.98), the research hypothesis saying that, there's a significant relationship

between quality dimension of social capital and organizational entrepreneurship, is confirmed with 95% of assurance. This relationship shows that the more the quality dimension, i.e. the trust between employees and interaction between them, increases and improves, the more its positive effect will be on organizational entrepreneurship. Moreover, it contributes to innovation, risk taking, competition and creativity, which would finally lead to entrepreneurship.

DISCUSSION AND CONCLUSION

The results taken from multivariate regression analysis test and Pearson correlation coefficient indicates that there's a positive significant relationship between social capital and organizational entrepreneurship and that social capital can predict organizational entrepreneurship. This correlation implies that those organizations which are rich in their social capital (in both dimensions) their level of entrepreneurship has a growing trend. This research finding is in line with previous studies carried out by Anderson and Miller [5], Haus [2], Declevcq *et al.* [7], who concluded in their research that there's a relationship between social capital and organizational entrepreneurship and that social capital has a positive effect on creativity, innovation and as a result on organizational entrepreneurship. Therefore, according to these findings and evidence, it's suggested that organizations convert their structures to more flexible and organic ones, minimize formality and concentration in their structure, increase cooperative activities of employees, create favorable communication systems, give opportunities for the emergence of creativity and innovation, use these kinds of talents and reinforce unity and mutual trust between employees; because nowadays creativity and innovation are not only required for the survival of organizations in the current volatile environment, but are also required for development of entrepreneurship, entrepreneurial activities and finally development of social capitals.

The results from Pearson correlation coefficient showed that there's a positive significant relationship between structural dimension of social capital and organizational entrepreneurship and the value of 0.200 for this correlation indicates that workplace diversity, organization size, structure of organization relations and the kind of relationship between the employees have a positive effect on organizational entrepreneurship; in a way that optimizing these factors leads to higher entrepreneurship. This finding is in line with the results from previous research carried out Rezazadeh [reported

by 4] who concluded that structural dimension of social capital and structure of organizations is effective on entrepreneurship, that organizational entrepreneurship has a negative relation with formality, complexity and concentration and that flexible, non-bureaucratic structure together with employee participation leads to entrepreneurial activities, i.e. they have a positive significant relationship.

Therefore, according to these findings organizations should have a creative organic structure and respect individuals and their capacities; employees should be encouraged to use learning opportunities; unity, trust and coordination should increase among them; there should be investment of time and resources for listening to opinions, even if they might not come in handy; and managers should try to increase risk taking of their employees.

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