Analysis of the Relationship Between Social Capital and Organizational Entrepreneurship (Case Study: Iranian Steel Industry)

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Abstract: From social scientists' point of view, entrepreneurship is a process placed in a variable network of social relations which can limit or facilitate entrepreneur's relation to resources and opportunities. Most of the previous research on organizational entrepreneurship has been determining personality characteristics of entrepreneurs and has been criticized for not considering network of social relations or social capital. Moreover, nowadays industrial organizations and factories in Iran, especially steel industry as the major factor in industrialization of our country, don't have a serious outlook towards entrepreneurship and this can have different reasons including ignoring the social relations. The research method used is of correlation type and 162 managers from Iranian steel industry were selected as the sample using stratified random sampling method. Data was collected using questionnaire and the results were analyzed through stepwise regression analysis and Pearson Correlation Coefficient. SPSS was used for testing hypotheses and the results show that the primary hypothesis and two secondary hypotheses are confirmed, i.e. there is a significant relationship between social capital (structural and quality dimensions of social capital) and organizational entrepreneurship.

Key words: Social capital · Organizational entrepreneurship · Quality and structural dimension of social capital · Iranian Steel Industry

INTRODUCTION

Nowadays development of entrepreneurship is one of the essential economical, social and political needs of every country; especially our country which has many problems such as economical dependence on oil per capita, a need to invest in various sectors, a tendency to lay off workers in governmental organizations, unemployment, a need for employment, economical sanctions laid down by super powers. Therefore, considering development, promotion and instruction of entrepreneurship has become an inevitable necessity [1].

Generally, entrepreneurship has three important advantages: firstly it causes welfare and wealth in society; secondly it leads to effective innovation in economic and social fields; and finally it leads to useful and productive constant employment [2].

Wiklen believes that non-economic factors, such as network of social relations, can affect the entrepreneurship phenomenon, as can economic factors, like market advantages and capital [3].

Social relations inside the social capital in the world's great industries lead to emergence of creativity, facilitation of innovative and risk taking behavior and industrial growth which are the indicators of organizational entrepreneurship [4].

Stone divides the social capital into two dimensions: structural and quality. The structural dimension of the social capital is the dimension which is in relation with the managerial structures and processes like accountability of managers and leaders based on their performance, clarity in decision making, the level of decision making and acting based on teamwork and considers the overall pattern of relations found in organizations. This means that this dimension covers the amount of communication people have in organizations. In the qualitative dimension the relation is with phenomena like values, attitudes, commitments, cooperation and trust existing in the system and it covers the nature of relationships in an organization. In other words, while the structural dimension focuses on whether the employees are in relation with each other or not, the quality dimension concentrates on the nature and quality of these relations [5].

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The aims of this research are divided into two forms of main and special aims. The main aim of this research is "Analysis of the relationship between social capital and organizational entrepreneurship in Iranian Steel Industry". There are also two special aims:

- Analysis of the relationship between structural dimension of social capital and organizational entrepreneurship in Iranian Steel Industry.
- Analysis of the relationship between quality dimension of social capital and organizational entrepreneurship in Iranian Steel Industry.

Review of Literature: The social capital theory is naturally very simple. The central idea can be summarized in the word "relations". The members of society can cooperate through contacting each other and so they can achieve things that otherwise they either couldn't be able to or would achieve with so much difficulty [6].

In this article, social capital's condition has been dealt with in one of Iran's great industries. In general, industries and organizations, by realizing and identifying the dimensions of their social capital, can have a better understanding of individual and group interactions pattern. And they can also lead their organizational systems like organizational entrepreneurship more effectively using social capital [7].

Therefore, in the present article Stone's model is used to evaluate social capital. This model has determined networks, trust and reciprocity as the key dimensions and shows previous studies on network coordinates which are probably effective on the nature and size of social capital in the network.

According to a complete analysis and study on different models presented by social capital theoreticians, this model was chosen as the most complete and specialized model in 2004 [3].

Moreover, the organizational entrepreneurship concept and model used in this article is based on the model presented by [8]. Carland measured the dimensions of different existing models and finally choosing variables designed his own model; his coworkers reviewed this model in 2007. Thus, Carland's model is used to measure entrepreneurship variable in this research. According to what was said above the theoretical model of the research is designed in Figure 1.

**Hypotheses**

**Primary Hypothesis:** There's a significant relationship between social capital and organizational entrepreneurship.

**Secondary Hypotheses:**

- 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 is functional in terms of objective and descriptive-correlational in terms of method. The research population is 282 managers of Steel Industry and engineering companies active in steel production and development in Iran.

![Fig. 1: The conceptual analysis research model](image-url)
Table 1: The literature of foreign research

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Title</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Lin et al. [10]</td>
<td>Effect of social capital and entrepreneurs' ability on the performance of new businesses</td>
<td>Social capital smoothes out the effect of Entrepreneurship strategies on performance and successful entrepreneurs will be those who adjust the strategies according to social capital.</td>
</tr>
<tr>
<td>2004</td>
<td>Ulhoi et al. [11]</td>
<td>The social dimensions of entrepreneurship</td>
<td>Entrepreneurs can overcome the obstacles ahead relying on social networks.</td>
</tr>
<tr>
<td>2007</td>
<td>Cheng Nan-Chen [12]</td>
<td>Relationship between social capital and organizational social</td>
<td>There's a significant relationship between capital, entrepreneurship orientation, resources and entrepreneurial performance and organizational resources.</td>
</tr>
<tr>
<td>2007</td>
<td>M. Saeed Taslimi According to [4]</td>
<td>Study of the relationship between organizational intrapreneurship and social</td>
<td>There's a positive relationship between social capital (and its dimensions i.e. cognitive and capital within an industrial company structural) and organizational intrapreneurship.</td>
</tr>
<tr>
<td>2009</td>
<td>Vahid Jafarian [3]</td>
<td>Study of the relationship between social capital and organizational entrepreneurship in Sadid Industrial Group structural) and organizational intrapreneurship.</td>
<td>There's a positive relationship between social capital (and its dimensions i.e. cognitive and organizational entrepreneurship).</td>
</tr>
</tbody>
</table>

Companies and organizations active in steel production and development in Iran chosen for this population include: Asin Steel Engineering Company, Mines and Metals Technology Engineering (MMTE), Yazd Rolling Mill Complex, Gol Gohar Sirjan Company, Ferro Guilan Complex, Tabarestan Steel Complex, Bita Innovative Design Engineering Co, Hormozgan Steel Consultants Group, Esfahan's Mobarakhe Steel Company, Esfahan Steel Company, Boyer Ahmad Steel Complex (Boyer Sanat).

To determine the sample size Kerjesy and Morgan table is used. The sample consists of 162 individuals who were selected using stratified random sampling method.

The data was collected through distributing questionnaires among samples. The set of answers to all of dependent and independent variables contained in the questionnaire is according to the five-point Likert scale. The questionnaire has the required validity, as it is confirmed by experts. The reliability is also measured using the latest version of SPSS and Cronbach's Alpha Coefficient and is 0.836 which shows proper reliability of the questionnaire.

**DISCUSSION**

The present article was up to analyze the relationship between social capital and organizational entrepreneurship, so one primary and two secondary hypotheses were considered. In inferential statistics used for testing the primary hypothesis, stepwise multiple regression has been used. And Pearson correlation test has been used for secondary hypotheses analysis. In order to analyze data the latest version of SPSS software was used. The results show that all hypotheses were confirmed.

In the primary hypothesis, it was alleged that "there's a significant relationship between social capital and organizational entrepreneurship".

The results of Pearson correlation test between the two variables, i.e. social capital and organizational entrepreneurship, are presented in Table 2.

According to the data in Table 2, we can analyze the hypotheses.

The data show that there's a linear and significant relationship between predictor variable (social capital) and...
Table 2: mutual correlation between social capital (structure and quality dimensions) and organizational entrepreneurship

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td><strong>0.280</strong></td>
<td><strong>0.355</strong></td>
<td><strong>0.343</strong></td>
</tr>
<tr>
<td>Predictor variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Quality of social capital</td>
<td>-</td>
<td><strong>0.817</strong></td>
<td><strong>0.920</strong></td>
</tr>
<tr>
<td>2. Structure of social capital</td>
<td>-</td>
<td>-</td>
<td><strong>0.977</strong></td>
</tr>
<tr>
<td>3. Social capital</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01

Table 3: the summary of stepwise regression analysis for predicting organizational entrepreneurship based on social capital dimensions

<table>
<thead>
<tr>
<th>Step 1 predictor variable</th>
<th>R</th>
<th>R2</th>
<th>ΔR2 (adjusted R)</th>
<th>SED (standard error of the difference)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.355</td>
<td>0.126</td>
<td>0.121</td>
<td>8.60</td>
</tr>
<tr>
<td>Structure of social capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Stepwise regression analysis coefficients for predicting organizational entrepreneurship based on structural dimension of social capital

<table>
<thead>
<tr>
<th>Model (1) component</th>
<th>Non standardized coefficients</th>
<th>Standardized coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The slope coefficient (B)</td>
<td>Standard error</td>
</tr>
<tr>
<td>Constant</td>
<td>52.525</td>
<td>3.161</td>
</tr>
<tr>
<td>Structure of social capital</td>
<td>0.381</td>
<td>0.079</td>
</tr>
</tbody>
</table>

its dimensions and criterion variable (organizational entrepreneurship). The most amount of positive correlation belongs to structural dimension of social capital and organizational entrepreneurship (r = 0.355) and the least amount of correlation belongs to quality dimension of social capital and entrepreneurship (r = 0.28).

The summary of stepwise regression analysis for predicting organizational entrepreneurship based on social capital dimensions are shown in Table 3.

The table above shows that the model has entered the measurement for structural dimension of social capital in step 1 and this variable has been able to justify about 12 percent of the variance (R² = 0.126), while the F for the analysis of variance is this model is significant at the level of 0.01.

According to the results of the table above and significance of F in the analysis of variance table and significance of t in the above mentioned table, we can write the regression equation for model (1) as:

Y = a + bx

Organizational entrepreneurship = constant + slope (structure of social capital)

According to the amount of slope in the above mentioned formula, the more attention is given to the structural dimension of social capital the more would be the amount of organizational entrepreneurship.

Therefore, we conclude that the higher structural dimension of social capital (which includes variety of social relations, size and capacity of links between members, structure of relations in a network and the amount of relations) gets the higher would be the organizational entrepreneurship; i.e. there's a direct relationship between the two.

CONCLUSION

This article has used Stone's social capital model, with the two dimensions of structure and quality as predictor variables and organizational entrepreneurship as criterion variable. The results indicate that all 3 hypotheses are confirmed, i.e. there's a significant relationship between social capital and its dimensions (structure and quality) and organizational entrepreneurship. From this respect, this study is in line with the results from Vahid Jafarian's article [3] entitled "study of the relationship between social capital and organizational entrepreneurship".

All in all, the results of previous research show that social relations and networks have a positive impact on entrepreneurs whether on individual or organizational level. In other words, the existence of social capital plays an important role in promotion of entrepreneurship.
Suggestions: According to the results and the significance of the relationship between social capital and its dimensions and organizational entrepreneurship, it is felt necessary to make some suggestions in order to reinforce social capital in the population under research:

Trust is one of the variables in quality dimension of social capital and is considered as the main constituent of social capital. It is formed in social relations and predisposes collaboration, cooperation, understanding and a sense of security among the members of organization. So, it seems to be necessary to make an environment of trust and security in the organization through increasing self-managed work teams, creating recreation and sightseeing programs to increase face to face relations, creating a culture of social responsibility by management.

Having a sense of freedom of speech and a power of decision making on the part of employees, requires appropriate relations among staff and managers; thus, the researcher suggests using a more flat organizational structure and a structure which has less formality and complexity, along with a proper information system and establishing work committees to improve relations among units and individuals and holding meetings between managers and subordinates to facilitate decision making within the organization.

In order to increase the spirit of mutual relations in social relations which is subject to certain norms which are themselves subject to network types, researcher suggests giving the spirit of helping others with the managers acting as the exemplar, encouraging and rewarding those who have this spirit, increasing relationship between managers and employees and an effort in developing informal networks.

Another important process for creating social capital in the studied society is educational processes. Public trainings especially particular classes of communication have an important role in creating social capital.

REFERENCES