THE DESCRIPTION OF ORGANIZATIONAL ENTREPRENEURSHIP INDEXES IN EXECUTIVE BODIES OF KERMAN PROVINCES

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ABSTRACT

This study attempts to describe the educational methods that help students to have interaction with organizational entrepreneurship indexes in the executive bodies of Kerman province. In this vein some students have been considered as case studies. The statistical population of this research comprises of two categories in the process of developing a model of experts who are aware of the subject: the first category refers to the experts in the field of management and official affairs and the second category are the officials of the executive bodies of Kerman province. In the case of sampling, we used the most knowledgeable people in this area where 30 people were chosen using random sampling method among all students and for the second category, considering that structural equations modeling approach and confirmatory factor analysis were used. The sample size was considered to be 5 to 10 times the number of the questions in the questionnaire. The validity of the questionnaire was assessed on the basis of the factor validity analysis. We used statistical software like AMOS and SPSS to analyze the data. On the basis of the results from the factor analysis, a total of 20 people was summarized under the dimension (index) related to the organizational entrepreneurship in the four factors of individual characteristics, strategic variables, organizational features and external variables.

Keywords:
Organizational entrepreneurship, reactive educational system, Strategic variables index, Organizational features index, External variables index.

RESUMEN

Este estudio intenta describir los métodos educativos que ayudan a los estudiantes a interactuar con los índices de emprendimiento organizacional en los organismos ejecutivos de la provincia de Kerman. En este sentido, algunos estudiantes han sido considerados estudios de caso. La población estadística de esta investigación consta de dos categorías en el proceso de desarrollo de un modelo de expertos que conocen el tema: la primera categoría se refiere a los expertos en el campo de la gestión y los asuntos oficiales y la segunda categoría son los funcionarios del organismos ejecutivos de la provincia de Kerman. En el caso del muestreo, utilizamos a las personas con más conocimientos en esta área, donde se eligió a 30 personas mediante el método de muestreo aleatorio entre todos los estudiantes y para la segunda categoría, considerando que se utilizó el enfoque de modelado de ecuaciones estructurales y el análisis factorial confirmatorio, el tamaño de la muestra fue se considera que es de 5 a 10 veces el número de preguntas en el cuestionario. Utilizamos los softwares estadísticos como AMOS y SPSS para analizar los datos. Sobre la base de los resultados del análisis factorial, se resumió un total de 20 personas bajo la dimensión (índice) relacionada con el emprendimiento organizacional en los cuatro factores de características individuales, variables estratégicas, características organizacionales y variables externas..

Palabras clave:
Emprendimiento organizacional, sistema educativo reactivo, índice de variables estratégicas, índice de características organizacionales, índice de variables externas.
INTRODUCTION

Bearing in mind the competitive occupations in all areas and in a wide range of markets and given the increasing competition among competitive groups working in the same division, great responsibilities in this area fall to the directors and officials of the institutions to achieve the determined success and possible advantage to ensure flexibility against other institutions and also to achieve competitive advantage among them.

In the current competitive environment in the global level, many firms regard management as a major strategic object causing competitive advantage. The organizations differ from one another in terms of continuous supply management plans and in terms of management structures with different dimensions in the global level. The supplier managers in cooperation with business agents make an attempt to analyze the supply market to collect the market information, to identify opportunities to merge the suppliers with domestic demands and to present the added value required to create value. Most of these features are those of an entrepreneur (Handfield & Petersen, 2009). The senior organizational executives need to deliver attention to the concept of entrepreneurship in general and organizational entrepreneurship in particular and they should consider it as one of the main factors for the survival and development of the organization in the tense and competitive situations of this world (Gurbuz & Aykol, 2009).

The organizational entrepreneurship is not in a desirable condition and has no development especially in developing countries like Iran where there is traditional and resource-based economy. Organizational entrepreneurship orientation or corporate reported that the index level of organizational entrepreneurship in Iran is the same as that of countries like Bangladesh, Pakistan and Jamaica and is less than %1. However, the value of this index ranges from 6 to 14 for developed countries like Sweden, Denmark, Belgium, Finland and US (Kelley, Singer & Herrington, 2012). Developing structures and organizational systems that are in favor of organizational entrepreneurship, the provision of required resources like human resources and technology for identifying opportunities and employing them and developing entrepreneurial culture in the organization, are among the most important set of measures that should be used to empower the organization for organizational entrepreneurship. Preparing the way for optimizing entrepreneurship in agencies and normally, executing the dimensions of organizational entrepreneurship through organizational agents helps create flexibility to react to the drastic and rapid environmental changes and also enables institutions to have favorable conditions in any circumstances. Actually, many scholars seek to clear the way for executing the dimensions of organizational entrepreneurship. When an organization smooth the way for optimizing entrepreneurship within themselves, they bring about the execution of the dimensions of organizational entrepreneurship (Demir, 2011).

Organizational entrepreneurship could be a suitable device by which state organizations can facilitate and foster the satisfaction of the needs in areas that are under their cover. Thus, entrepreneurship in public organizations is used to refer to re-building organizational structure and culture that paves the way for discovering management opportunities, creativities and innovations using modern management practices. In this positioning, prioritizing customer and client orientation strengthens the durability and consistency of government agencies (Zimmer, 2006). Also, the entrepreneurial orientation of people in each organization, is one of the essential and substantive features for the better performance of agencies because orientation towards entrepreneurship contributes to linking entrepreneurship process to the organizations’ strategies (Moghadam & Hejazi, 2014; Talebi & Nejad, 2019).

In their seminal paper entitled The Effect of Entrepreneurial Orientation on the Performance of the Company Considering the Mediating Role of Total Quality Management (Case Study of Karafarin Bank), Vafarird & Ehsani (2018), found that entrepreneurship orientation and total quality management have a favorable impact on the performance by means of entrepreneurial orientation. In his seminal text, The Analysis of the Generation and Implementation of Managerial Innovations in the Efficiency of the Factors Realizing the Goals of Organizational Entrepreneurship in Government Agencies on the Basis of Four-Factor Model of Javier Mendoza (2007) (Case Study of Government Agencies of Mazandaran Province), Halajian (2016), found that the generation of managerial innovations in government agencies is significant and this innovations are responsible for the efficiency of the factors realizing the goals of organizational entrepreneurship in government agencies and they include the effectiveness of the officials’ performance, equalization of the officials’ rewards and benefits, empowerment of officials and equalization of the authority and latitude of officials. In their seminal text, The Factors Affecting the Organizational Entrepreneurship (Case Study of the Food Industry), Alvani, et al. (2016), found that the four organizational, individual, strategic and environmental factors have positive influence on the organizational entrepreneurship in entrepreneurial companies in the food industry. Moreover, organizational factors are of great importance in this regard.
Bologna (2014), found that increasing economic freedom in one region leads to increasing entrepreneurial activities in the neighboring areas. In addition, the total effects (direct and indirect) of increasing economic freedom regarding positive entrepreneurship are significant indicating that there is a total positive game.

Organizational entrepreneurship has come to be used to refer to a range in which new products or markets can be developed. On this basis, the entrepreneurial organization is the one which is involved in creating new products and markets before other organizations. In organizational entrepreneurship, achieving the above performance is possible using innovative capacities within the organization. This is possible by supplying new products, introducing new methods of production, identifying new markets, finding new resources, improvement and development of the performance of available products and improvement of organization and management (Talebi, 2010).

Among the effective factors in productivity, the role of entrepreneurship is of broader significance. Entrepreneurship is the process of identifying economic opportunities, creating new business and innovation for taking identified opportunities.

In this study, the author has constructed indexes including individual characteristics, strategic variables, organizational features and external variables using various models and patterns; comprehensive entrepreneurial model (Karacaoglu, Bayrakdaroglu & San, 2012) concerning organizational entrepreneurship and exploring issues related to this variable.

Individual characteristics: individual characteristics have a strong supportive effect on the factors advancing entrepreneurship. There are personality traits and entrepreneurial activities that differentiate individual inclination to entrepreneurship from non-entrepreneurial predispositions (Khuong & Huu An, 2016). In this study, several major characteristics have been chosen that were of great significance in previous researches such as risk-taking, the need for success, goal orientation, internal control center, entrepreneurial orientation and pragmatism.

Strategic variables: strategic orientation helps organizations create appropriate measures and behaviors required to attain and maintain better performance. This is the main factor of the technological innovations of the organization and leads up to competitive advantage and better performance of the business. Strategic orientations affect the innovation and organizational entrepreneurship. Strategic variables discussed in this research include strategic modernization, self-renewal, pioneering, and business practices.

Organizational features: The internal characteristics and texture of the organization play a critical role in furthering organizational entrepreneurship (Azami, Yaghubifarani & Mousav, 2012). The internal characteristics of the organizations such as organizational acts, organizational flexibility, entrepreneurial leadership, entrepreneurial culture, organizational performance and organizational boundaries are measured in this study.

External variables: general environment is a set of economic, technological, socio-cultural, demographic, political or legal procedures and global forces that have an impact on the organization, while the organization setting is a subcategory of general environment and includes parts that are the company’s ability to carry on its business like industry, market, competitors, material supply and production techniques. Socio-cultural factors can enter the formation of entrepreneurial events and directly affect the formation of individual values. In a social system that stresses the importance of the role of entrepreneurship, more people choose a path for turning into entrepreneurs. Further innovations increase risk-taking and independence in entrepreneurial activities (Khuong & Huu An, 2016).

METHODOLOGY

This study is, in the end, developmental; is quantitative in terms of research approach; is descriptive in terms of research strategy and is descriptive research of the correlation, case survey kind in terms of research method. The statistical population of this research in the process of developing a model of experts who are aware of the subject comprises of two categories in the process of designing a model of experts who are aware of the subject: the first category refers to the experts in the field of management and official affairs and the second category are the officials of the executive bodies of Kerman province. In the case of sampling, for the first category, we used the most knowledgeable people in this area where 30 people were chosen using random sampling method and for the second category, considering that structural equations modeling approach and confirmatory factor analysis were used, the sample size was considered to be 5 to 10 times the number of the questions in the questionnaire (Westlan, 2010). So, the statistical population of the research contains 30 experts and 524 officials.

In this current study, in order to collect the required data, we used both library research method (referring to the written evidence such as books, magazines…) and field study (conducting interview with experts and sending out questionnaire). Two questionnaires were used to gather information from the statistical population of experts and three questionnaires to gather information from the
statistical population of officials. Validation questionnaire was used for final confirmation of the proposed model of research. Questionnaire validity was assessed on the basis of factor validity analysis. In this regard, to identify the organizational entrepreneurial dimensions and to respond to this hypothesis, exploratory factor analysis through division into the main dimensions and varimax rotation (Table 1).

### Table 1. Sampling validity test.

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistics</th>
<th>Degree of Freedom</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin</td>
<td>0.921</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>5487.219</td>
<td>190</td>
<td>0.001</td>
</tr>
</tbody>
</table>

To ensure the validity of the data and exploring sampling accuracy before factor analysis, the Kaiser-Meyer-Olkin Test was used. On the basis of results coming from the factor analysis, a total of 20 people was summarized below the dimension (index) related to the organizational entrepreneurship in four factors. On the basis of the findings, the value of KMO was 0.921 regarding the sampling quality which is an acceptable value. Cronbach alpha was used to estimate the questionnaire reliability. The value of Cronbach’s alpha in the questionnaire of organizational entrepreneurship equals 0.921. To analyze data, the statistical software of AMOS and SPSS were used (Table 2, Figure 1).

### Table 2. Special value of each factor and cumulative frequency of variance percentage (after rotation).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Special value</th>
<th>Variance Percentage</th>
<th>Cumulative Frequency of Variance Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.499</td>
<td>32.496</td>
<td>32.496</td>
</tr>
<tr>
<td>2</td>
<td>2.547</td>
<td>12.735</td>
<td>45.230</td>
</tr>
<tr>
<td>3</td>
<td>2.046</td>
<td>10.228</td>
<td>55.459</td>
</tr>
<tr>
<td>4</td>
<td>1.521</td>
<td>7.605</td>
<td>63.063</td>
</tr>
</tbody>
</table>

### Table 3. Scoring scale of Abbas Bazargan et al. for organizational entrepreneurship.

<table>
<thead>
<tr>
<th>Very strong</th>
<th>Strong</th>
<th>Good</th>
<th>More than satisfactory</th>
<th>Satisfactory</th>
<th>Boundary</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4 - 51.99</td>
<td>4.4 - 01.49</td>
<td>3 - 0.99</td>
<td>3.3 - 01.59</td>
<td>2.2 - 51.99</td>
<td>2 - 0.49</td>
<td>Less than 2.00</td>
</tr>
</tbody>
</table>

**FINDINGS**

In this part, using the structural equation modeling approach based on path analysis, we have dealt with measuring the proposed model of research. We used library research (referring to the written documents such as books, magazines, etc.) for developing the organizational entrepreneurship dimensions. Expertise interview with concerned experts like professors and those aware of the subject of human resource management, was carried out as the dimensions and indexes for each of the variables were identified. Expertise interview was mainly of semi-structured interview type. In these interviews, the interviewer gains different facts from the interviewee during the interview. Hence, to finalize the list of dimensions and indexes, the Delphi method was used to do a survey of experts including university professors and experts in the field of human resource management. To make a survey of experts, a special kind of questionnaire was used including open-ended and close-ended questions (Table 3, Figure 2).
Figure 2. Boxplot of the variable of organizational entrepreneurship among subjects.

Table 4. Scoring scale of Abbas Bazargan et al. for organizational entrepreneurship.

<table>
<thead>
<tr>
<th>Score Level</th>
<th>Very strong</th>
<th>Strong</th>
<th>Good</th>
<th>More than satisfactory</th>
<th>Satisfactory</th>
<th>Boundary</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.4 - 51.99</td>
<td>4.4 - 01.49</td>
<td>3.3</td>
<td>3.61</td>
<td>2.2 - 51.99</td>
<td>2 - 0.49</td>
<td>Less than 2.00</td>
</tr>
</tbody>
</table>

Figure 3. Boxplot of the indexes of entrepreneurship variable among the subjects.
Considering the fact that Likert scale (Table 4, Figure 3) was used to measure the suitability of the introduced indexes, the number 3.00 that shows the average level of the case to be measured, was used to confirm the indexes. The mean of the views of experts participating in Delphi method about the effective indexes, was compared with the theoretical value of 3.00 through the t-test. Of 51 proposed indexes in this section, 20 indexes were confirmed by the experts (experts’ view mean > 3) and 31 indexes has been rejected (experts’ view mean < 3).

Table 5. The fit indexes of organizational entrepreneurship model.

<table>
<thead>
<tr>
<th>Index</th>
<th>Acceptable limit</th>
<th>Reported value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>Equal to or smaller than 0.08</td>
<td>0.073</td>
</tr>
<tr>
<td>Chi-Square Mean / Degree of Freedom (CMIN.DF)</td>
<td>Equal to or smaller than 3</td>
<td>2.824</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.905</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit Index (AGFI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.865</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.922</td>
</tr>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.898</td>
</tr>
<tr>
<td>Tucker Lewis Index (TLI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.900</td>
</tr>
<tr>
<td>Incremental Fit Index (IFI)</td>
<td>Equal to or greater than 0.9</td>
<td>0.923</td>
</tr>
</tbody>
</table>

Table 6. Standardized factor loadings and t value.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Questions in questionnaire</th>
<th>Standardized Factor Loadings</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Characteristics</td>
<td>Question 1</td>
<td>0.455</td>
<td>7.634</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 2</td>
<td>0.814</td>
<td>8.009</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 3</td>
<td>0.808</td>
<td>7.822</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 4</td>
<td>0.686</td>
<td>4.697</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 5</td>
<td>0.319</td>
<td>3.464</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 6</td>
<td>0.381</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Strategic Variables</td>
<td>Question 7</td>
<td>0.703</td>
<td>16.203</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 8</td>
<td>0.819</td>
<td>29.798</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 9</td>
<td>0.782</td>
<td>20.581</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 10</td>
<td>0.848</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Organizational Features</td>
<td>Question 11</td>
<td>0.782</td>
<td>1.608</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 12</td>
<td>0.785</td>
<td>16.856</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 13</td>
<td>0.722</td>
<td>16.188</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 14</td>
<td>0.788</td>
<td>17.785</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 15</td>
<td>0.551</td>
<td>12.957</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Question 16</td>
<td>0.734</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

CONCLUSIONS

Given the results of factor analysis (Table 5, Table 6, Figure 4) with regard to the entrepreneurship variables, of 51 proposed indexes, 20 indexes were supported by the experts in the format of four dimensions of individual characteristics including components of risk-taking, the need for success, goal orientation, internal control center, entrepreneurial orientation and pragmatism; strategic variables including the components of strategic modernization, self-renewal, pioneering, business practices; organizational features including components of organizational acts, organizational flexibility, entrepreneurial leadership, entrepreneurial culture, organizational performance and organizational boundaries, and external variables including components of social factors, political factors, lifecycle changes and environmental opportunities. According to the analysis and the result of the factor analysis test, all of the above four dimensions fall within the ‘more than satisfactory’ level.

The analysis of the mean of organizational entrepreneurship indexes from the viewpoint of the experts indicates that the component of pragmatism takes first priority in the dimension of individual characteristics. In the dimension of strategic variables, the components of business practices and strategic modernization have a high priority. In the dimension of organizational features, the component
of entrepreneurial leadership takes main priority and in the
dimension of external variables, the components of envi-
ronmental opportunities get number-one priority. These find-
ings are supported by Fahraj, Nasiripour & Raisi (2011); and Boukamcha (2019). It is the pragmatic leadership that
can exercise influence over organizational entrepreneurship, innovation and entrepreneurial acts on the basis cog-
nitive incentive, ideal effects, inspirational motivation and care for others. If juniors are inclined towards innovation and modernization, entrepreneurial leaders can motivate this proclivity and bring about changes. Karacaoglu, et al. (2012), found that strategic modernization is a behavior than can prepare the way for competition as an instru-
ment in the hand of entrepreneurs in the organizations. Environmental opportunities with a high risk, monopoliza-
tion, intense competition, and also the ample opportuni-
ties in the environment, are driving forces that lead the organization to use entrepreneurial strategies to compete with environmental changes. Entrepreneurship activities are responsible for improving the business measures through improving current processes or are responsible for creating new business through developing new pro-
ces and this new managerial instrument causes incre-
asing competitive advantages.

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