ABSTRACT

One of the factors that play a strategic role in helping organizations achieve their predetermined objectives is efficient and motivated human resources who are experts in a variety of ranks and positions. First, adjusting and adapting to changes and second, controlling, proactiveness, futurism are the major concerns for organizations and managers today. These guarantee the success, survival and growth of organizations, as well as the activities carried out by managers. The purpose of this research is to identify the barriers to organizational entrepreneurship in the Office for Administrative and Financial Affairs of the University of Tehran. The present research is an applied research type which uses a qualitative study approach and the interview instrument with 43 persons in deputies of Administrative and Financial Affairs at University of Tehran branches and experts to collect the data. The results of the study indicate that three major variables as highlighted by the interviewees include organizational strategy, organizational structure, and the payroll system which comprise the structural barriers.

Keywords: Organizational entrepreneurship; organizational entrepreneurship barriers; structural; environmental; behavioral barriers.

1. INTRODUCTION

One of the most important issues in the academic research in the field of education management is entrepreneurial universities. In entrepreneurial universities, the organizational structure and culture are the fundamental requirements for the organization's success. Therefore, major organizations like the University of Tehran need to investigate and integrate various structural factors including organizational structure and culture (each with specific features) [1].

In stable organizations, organizational entrepreneurship is achieved through running entrepreneurship projects which are the potential roots of progress and lead to the development of new products, markets, technologies and businesses. Organizational entrepreneurship refers to adopting
entrepreneurial behaviors in stable organizations. In these organizations, all the members are committed to organizational objectives and use all their talent and capabilities to develop and maintain the organization. The staffs in entrepreneurial organizations are highly committed to their activities. Organizational structure is the core to these organizations and proves highly influential in nourishing this atmosphere. Therefore, the identification of the effects of organizational culture on creating an entrepreneurial atmosphere is highly important and needs to be studied if proper organizational entrepreneurship contexts in different institutions and organizations including the University of Tehran are expected. Therefore, the present research aims at studying and identifying the behavioral, structural and environmental barriers to organizational entrepreneurship and developing a conceptual model for the barriers to organizational entrepreneurship in the Administrative and Financial Affair Offices in The University of Tehran.

2. LITERATURE REVIEW/ THEORETICAL BACKGROUND

Universities are the major roots of change in societies. Therefore, change in society presents new objectives for universities which, in turn, leads to the formulation of a third generation entrepreneurship-oriented higher education (the first generation was education-oriented and the second was research-oriented education). Entrepreneurship-oriented education brings about a more rational society. Globalization, the formation of numerous unions between communities and the development of national markets as the engine for competition has posed challenges of customers, trade and market orientation to universities [2]. This new trend is reinforced with a decrease in government’s financial supports to universities [3].

2.1 Organizational Entrepreneurship

As a phenomenon, organizational entrepreneurship at the firm level is composed of innovation, strategic change and management [4]. It is a procedure in which new products or processes are created through inspiration, whereby entrepreneurial culture is developed in organizations. In other words, organizational entrepreneurship refers to those activities carried out in organizations to obtain innovative results [5]. Organizational entrepreneurship involves formal or informal purposeful activities that lead to new venture development through product and process innovation, and market development. It includes three dimensions: Innovation, investment and strategic renewal activities [6,7]. Antoncic and Prodan (2008) argue that organizational entrepreneurship is the risk-taking process in organizations in which an entrepreneur or a group of entrepreneurs establish and manage a company based on R&D, innovation and technology [8]. Organizational entrepreneurship is also defined as a technique for developing new ventures in an organization, exploiting new opportunities, and creating value [9,10,11]. According to Schaper and Volery, there are several reasons for the development of entrepreneurship in organizations: (a) Developing a business [12]. In their research, Kearney et al. (2008) found that organizational variables that affect the ability of an organization in engaging in entrepreneurial activities include structure/formal, decision-making/control, incentives/motivation, culture, risk-taking and proactiveness in the market; and the external environment factors include policy, complexity, generosity and change. Their findings show that organizational entrepreneurship requires commitment and top management support, organic structure, less formality, flexible and decentralized decision-making, less formal control systems, more positive incentives, higher motivation and flexible supportive atmosphere [13].

2.2 Academic Entrepreneurship

Scholars have provided a range of definitions for academic entrepreneurship each focusing on a different aspect of the concept. While some definitions highlight all commercialization activities apart from normal educational tasks [14], other definitions focus more on emerging activities in the academia, particularly spin-offs. An example is the definition proposed by Etzkowitz (2003) who introduces entrepreneurial universities as centers for growth which possess supportive and intellectual structures or a combination of the two. The students and faculty could use these structures to establish new companies [15]. Wright (2012) define academic entrepreneurship as developing commercialization, going beyond traditional emphasis on conferring intellectual assets, and establishing spin-offs based on technologies and the knowledge developed in universities [16]. Some scholars define academic entrepreneurship as an area of entrepreneurship in which innovations and new products are developed through the university intellectual properties [17]. As a classification of science, academic entrepreneurship involves transferring technology between universities [18].

3. METHODS

Numerous scholars have proposed practical frameworks for developing organizational
entrepreneurship. Through the identification of why, what and how organizational entrepreneurship is shaped, the present research uses the related literature to propose a model for the factors affecting organizational entrepreneurship. Therefore, the research pursues three objectives:

- Identifying and describing the factors and indices affecting organizational entrepreneurship in the Administrative and Financial Affairs Offices based on the literature and consultation with the experts.
- Proposing a conceptual model based on the indices above which determines the relationship between the variables.
- Testing the model in the area of the Administrative and Financial Affairs Offices for the purpose of localizing the model.

Based on the review of the exploratory literature, the study of the models on organizational entrepreneurship, and consultation with experts, the most appropriate theoretical framework for the study of organizational entrepreneurship variables in the area of Administrative and Financial Affairs Offices is the tripartite model proposed by Mirzaei Ahranjani.

The present study is an applied research which uses a qualitative method and standard interviews. In-depth semi-structured interviews were conducted with 43 officials in the University of Tehran who had minimum 20 years employment experience with both sex of male & female. Their academic rank was assistant, associated & full professor respectively as in Table 1.

<table>
<thead>
<tr>
<th>Items</th>
<th>Variables</th>
<th>Total number of the identified factors (indices)</th>
<th>The average number of the variables selected by an interviewee</th>
<th>The attention given by interviewees to the variable (average number of the factors to the total number of the variables)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural barriers</strong></td>
<td>Organizational structure</td>
<td>17</td>
<td>14.92</td>
<td>88.8%</td>
</tr>
<tr>
<td></td>
<td>Organizational strategy</td>
<td>8</td>
<td>7.23</td>
<td>90.4%</td>
</tr>
<tr>
<td></td>
<td>Performance measurement system</td>
<td>31</td>
<td>24.15</td>
<td>77.9%</td>
</tr>
<tr>
<td></td>
<td>Budget and financial management system</td>
<td>9</td>
<td>6.61</td>
<td>73.5%</td>
</tr>
<tr>
<td></td>
<td>Research and development system (R &amp; D)</td>
<td>19</td>
<td>11.92</td>
<td>62.7%</td>
</tr>
<tr>
<td></td>
<td>Payroll system</td>
<td>7</td>
<td>5.76</td>
<td>82.4%</td>
</tr>
<tr>
<td><strong>Behavioral barriers</strong></td>
<td>Organizational conflict</td>
<td>5</td>
<td>2.92</td>
<td>58.4%</td>
</tr>
<tr>
<td></td>
<td>Leadership style</td>
<td>7</td>
<td>3.61</td>
<td>51.6%</td>
</tr>
<tr>
<td></td>
<td>Organizational culture</td>
<td>11</td>
<td>7.53</td>
<td>68.5%</td>
</tr>
<tr>
<td></td>
<td>Features of the staff</td>
<td>5</td>
<td>3.31</td>
<td>66.1%</td>
</tr>
<tr>
<td></td>
<td>Features of the managers</td>
<td>11</td>
<td>7.61</td>
<td>69.2%</td>
</tr>
<tr>
<td><strong>Contextual barriers</strong></td>
<td>Relationship with government</td>
<td>5</td>
<td>3.54</td>
<td>70.7%</td>
</tr>
<tr>
<td></td>
<td>Relationship with clients</td>
<td>3</td>
<td>0.77</td>
<td>25.6%</td>
</tr>
<tr>
<td></td>
<td>Relationship with the environment</td>
<td>6</td>
<td>4.53</td>
<td>75.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>144</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. The percentage of attention to the main variables by the interviewees
4. CONCLUSION

Before the interviews, three major barriers to organizational entrepreneurship are identified and selected for study. Among the three categories, 14 variables which were predicted to have negative effects on organizational entrepreneurship were selected. Each category consisted of 6, 5, and 3 variables respectively. Through the interviews, the factors affecting these 14 variables were studied and examined. The result included 144 factors (indices) affecting the research variables. To determine the efficiency of each of the 14 variables, the average number of the factors proposed by an interviewee was divided by the total factors identified for a variable. The percentage for the attention given by an interviewee to each of the 14 main variables was calculated as shown in the above. The three major variables highlighted by the interviewees include organizational strategy, organizational structure, and payroll system which are among the structural barriers. At the bottom of the table, leadership style (as a behavioral barrier), and relationship with clients (as a contextual barrier), are the least significant variables affecting organizational entrepreneurship. Leadership style and relationship with clients as the least significant variables among the 14 variable were omitted. Therefore, the structural barriers comprise the most important barriers to organizational entrepreneurship. The contextual barriers showed less efficiency in comparison with behavioral barriers. However, with the relationship with clients omitted, its efficiency is more than behavioral barriers.

Organizational entrepreneurship plays a crucial role in the organization's activities. Given the strong and widespread presence of the governments and governmental organizations in all economic, social and cultural fields in the third world countries, moving from traditional and bureaucratic organizational structure to entrepreneurial ones is considered highly important. Therefore, as the three variables are among the structural factors, and as structural barriers are among the most influential organizational entrepreneurship barriers, we can conclude that the most effective barriers to organizational entrepreneurship in the field of Administrative and Financial Affairs in the University of Tehran are structural barriers.

The second most important barrier is organizational structure the indices of which include: Organic, horizontal and flexible structures, less hierarchy, informal relationships, less formality and concentration. The interviewees believe that the organizational structure is not kept up-to-date, procedures are inflexible and lengthy, the university structure is rigidly hierarchical, and excessive bureaucracy is seen in the organizational structure of the university. Changes occur unplanned; and work principles and job descriptions are not clearly defined. There are no appropriate positions for the employees and the officials of the Administrative and Financial Affairs Offices. Moreover, no growth mechanism has been considered for the employees.

The third most important barrier is the payroll system. The variables of the payroll system are as follows: offering rewards proportionate to the performed activities, timely payment of wages and benefits, knowledge level, experience and skills. In this regard, the interviewees argue that there is no plan to encourage or penalize the employees effectively. In addition, ideas and new products are not supported and encouraged by the employees.

Another factor which is deemed central by all of the employees is that they feel equal salaries is paid to efficient and inefficient employees. As highlighted by a variety of studies, rewarding employees without considering their creativity and innovation would discourage employees and reduce their productivity [19]. With regard to the factors affecting the improvement of compliant individuals, Sykes and Block (1989) argue that traditional management approaches lead to discouragement and lower creativity in organizations [20].

4.1 What are the behavioral barriers to organizational entrepreneurship in the area of administrative and financial affairs in the University of Tehran?

The most important variables in the behavioral factors that affect organizational entrepreneurship include, respectively: characteristics of the managers, organizational culture, and characteristics of the employees. The variables related to organizational conflict and leadership style were also identified. However, their efficiency was not significant.

The tendencies towards multiple skills of the employees, sustainable organizational improvement are among the behavioral drivers which affect organizational entrepreneurship. Strict and formal control by managers, functional management culture, and tendency of the organization toward specialization
are among the inhibiting behavioral factors to organizational entrepreneurship. In their organizational entrepreneurship model, Antoncic and Hisrich (2004) view formal control as an organizational barrier which affects organizational entrepreneurship [21]. Although moving the organizational culture towards the entrepreneurial environment is time-consuming, should the senior management is really motivated toward creating an entrepreneurial organization, it needs to support the related initiatives [22]. The present study is in line with the findings by Lewis (2001), Morris and Kuratko (2002), Kuratko and Goldsby (2006) and Fox (2005) on organizational culture [23,24,25,26,27]. In their research, they focus on the significant role played by organizational culture in organizational entrepreneurship. Moreover, the organizations have realized the need for entrepreneurship and the entrepreneurial thoughts have penetrated in the administrative structures, because the growth, dynamics and survival of the modern organizations depends on the implementation of organizational entrepreneurship [28].

The research findings are also consistent with the results of the study by Zali on the factors affecting organizational entrepreneurship [29].

4.2 What are the structural barriers to organizational entrepreneurship in the Administration and Finance Affairs Offices of the University of Tehran?

The most important structural barriers include organizational strategy, organizational structure and the payroll system. In the same order of importance, they also comprise the most important barriers to organizational entrepreneurship. According to Russell (2002), the pursuit of an entrepreneurial strategy provides a decision-making policy which seeks to achieve competitive advantage through innovation. The development of organizational strategies require, among other things, a useful enterprise content design that facilitates entrepreneurial innovations (i.e. structures and cultures that encourage entrepreneurial behavior) and an overall attitude toward innovative initiatives through adopting entrepreneurial perspectives and ensuring that the decided innovations would have the required resources. Based on the results, none of the strategy development steps go through evaluation and examination in the present paper’s case study.

The results from some studies are not consistent with the present paper’s results. This is because the organizational structure in the Administration and Finance Affairs Department is the only instrument for the achievement of goals based on organizational positions, while the organizational structure is considered as one of the effective factors for organizational entrepreneurship.

The interviewees expressed different influential factors with regard to the characteristics of managers. First, universities are usually administered by unprofessional managers who are occupied with too many works. The authorities do not perceive the need for entrepreneurship. According to the interviewees, the abuse of authority and administrative laws, conservativeness and everydayness include other aspects that could be seen, at least, in some managers. As regards organizational culture, the interviewees maintained that innovation and creativity are not addressed sufficiently. Concerning the characteristics of employees, the interviewees pointed to the lack of mental dynamism and need for achievement among employees.

4.3 What are the environmental barriers to organizational entrepreneurship in the Administration and Finance Affairs Offices of the University of Tehran?

In order of importance the environmental (contextual) barriers include relationship with the environment and relationship with the government. This is while the relationship with clients was not identified as an influential barrier. Regarding the relationship with the environment which is identified as the most important environmental barrier, the interviewees noted to lack of relationship with the industry and the industry’s distrust of the university as the main environmental barriers.

Since most of the staffs in this department are in a direct relationship with clients where an appropriate attitude, feelings of sympathy, responsibility and accountability could directly influence the clients’ satisfaction, it has always received special attention from managers. Feldman, [30] also believe that a culture that fosters organizational entrepreneurship has certain features such as commitment, conduct, honesty, trust and credibility. And based on Timmons (1999) commitment and accountability include the characteristics of an entrepreneurial organization’s culture [31].
5. RECOMMENDATIONS

Based on the data analysis results and the research results, the following recommendations are outlined according to the results of the interviews. With regard to organizational-structural factors, about 54 recommendations were offered some of which are summarized below:

- The introduction of a structure which is consistent with generative thinking and has the capacity to be updated.
- Fewer decision-making authorities and quicker decision-making processes.
- Valuing and incorporating collective responsibility, collective creativity, and team workshops in the planning structure and even providing collective rewards and fostering teamwork attitude instead of individualism.
- The promotion opportunities should not be shut out to the employees and they should be employed based on their expertise.
- Bureaucracy should be replaced with innovation and creativity in favor of entrepreneurial development.
- Plans should be developed for the Administration and Finance Department of the University of Tehran to foster creativity and mental dynamism among its staff.
- Training programs should have an entrepreneurial spirit or orientations.
- Introduction and prediction of a good performance evaluation and promotion system.
- Training ambitious and risk-taking employees in order to achieve success in organizational entrepreneurship.
- Introduction of required solutions to make use of the experiences of professionals in the university.
- An environment that allows trial and error.
- Allocation of working hours to the faculty, as a work unit, in the field of organizational entrepreneurship.
- Fostering the paradigms of risk-taking, diligence and practicality in the organization.
- Meeting the requirements that allow the autonomy of the university and its divisions as an income generating entity rather than a spending one.
- Team building in the administrative, financial, research and efficient financial and budget system areas for the development of entrepreneurship.
- The need for investment in entrepreneurship and creating a balance between cost and time in light of financial reports.

With regard to the contextual – behavioral factors, about 26 recommendations were offered, some of which are summarized below:
- Refraining from blind imitation of foreign universities without doing prior studies and plans.
- It is essential for the university to support organizational entrepreneurship, commercialization and the industry-related staff.
- Making profits by selling intellectual products and properties and fostering development through selling scientific productions.
- The administrative body of the university should have enough flexibility; and it should not act authoritatively or undertake suppressive policies.
- It is essential to change the mindset of managers to create change.
- Management thinking and the perception of needs among university administrators as the main factor in fostering organizational entrepreneurship and motivation.
- To inform managers of the control system, decision-making, goal setting and planning.
- Creating a feeling of need for organizational entrepreneurship in authorities.

With regard to contextual-environmental factors, about 17 recommendations were offered, some of which are summarized below:

- Manipulating government policies to develop organizational entrepreneurship and commercialization
- Reducing the government’s political influence in the university to reduce its financial dependency.
- Reducing the accentuated political role of the university and paying enough attention to entrepreneurial development.
- If possible, the university should be separated from the Ministry of Science, at least, in the entrepreneurial areas.
- Thwarting the influence of the political difficulties to affect the areas of organizational entrepreneurship and commercialization of political factions.
- Restoring the trust of the industry in the university by predicting the required solutions that foster cooperation between the two.
- Reducing bureaucracy in order to ensure more adaptability with the environment.

**COMPETING INTERESTS**

Authors have declared that no competing interests exist.

**REFERENCES**

5. Samad Aghaii, Jalali, From entrepreneurship to creation of soul, Tadibir magazine. 1998;87-172.


