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A Study on the Organizational Entrepreneurship: A Case Study in Ahvaz University of Medical Sciences, IR Iran

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Background: Organizational entrepreneurship focuses on proactive actions, which may lead to the new productions, new services and/or new processes. Implementation of organizational entrepreneurship plans has many benefits including organizational cost reduction and the increase of organizational capital assets.

Objectives: This study aimed to investigate the organizational entrepreneurship status in view of the managers of Ahvaz University of Medical Sciences.

Materials and Methods: This cross-sectional study was performed on 67 of the managers of Ahvaz University of Medical Sciences. Data were gathered by a 30-item standard questionnaire. Reliability efficient of the questionnaire was 0.77. Ten dimensions of organizational entrepreneurship including innovation, conditions for demonstration of entrepreneurial behavior, detection and discovery of opportunities, level of flexibility, decision-making system, organizational learning, organizational culture, staff training, reward and incentive system and managerial support system for innovative ideas were studied. Finally, the data were analyzed by using the SPSS version 18. Data analyzing was performed by one-way ANOVA and χ^2 tests.

Results: Among the 10 dimensions studies in this study, innovation (with mean score 11.47 ± 2.56) and decision making system (with mean score 11.47 ± 2.65 score) had the highest rank. The dimension of managerial support system for innovative ideas and organizational culture had the lowest ranks, respectively. Overall status of organizational entrepreneurship was desirable (with mean score 104.9 ± 24.4). In addition, the results showed that there was not a significant relationship between organizational entrepreneurship status and demographic and job characteristics of the managers, except educational level ($P > 0.05$).

Conclusions: The status of the organizational entrepreneurship was assessed in view of managers in Ahvaz University of Medical Sciences. The overall evaluation resulted in a desirable scores; however, some dimensions of organizational entrepreneurship such as innovation and decision-making system had better status than other parameters.

Keywords: Entrepreneurship; Academic Medical Centers; Administrative Personnel

1. Background

Nowadays, environmental changes are among major challenges facing the organizations and companies. Thus, organizations that are proactive towards this change can gain more advantage margin than their competitors (1). Increase of competition, technology transition, risk and uncertainty and globalization are the most important environmental changes for many organizations. Development of entrepreneurial potential, improvement of competitiveness, effective redistribution of resources and improve the flow of information are some of the strategies that can be used to manage these change (2). There are different definitions of entrepreneurship. Quartco and Hajets believe entrepreneurship is a process leading to satisfaction (3). Peter Drucker had states that "entrepreneurship is a behavior and an approach for application of managerial techniques. Entrepreneurship can be lead to improve quality of life and innovation" (4). As entrepreneurship is able to create innovation, entrepreneurial organizations are seeking for creativity proactive and entrepreneurial behavior (5). Entrepreneurship leads to market orientation, flexibility and finally, job satisfaction. Studies show that there is a positive relationship between organizational flexibility and organizational entrepreneurship (6), which of course, has a positive impact on the efficiency of the organization (7). The literature review shows that the entrepreneurship has three types: personal entrepreneurship, intra-organizational entrepreneurship and organizational entrepreneurship (8). Organizational entrepreneur-

ship has three dimensions: Risk taking, Pro-activeness and Innovativeness (9). Organizational entrepreneurship focuses on proactive actions, which may lead to the new productions, new services and/or new processes. Implementation of organizational entrepreneurship plans has many benefits including organizational cost reduction and the increase of organizational capital assets (10). Zahra et al. argued that the organizational entrepreneurship has a positive impact on fiscal measures of enterprise performance (11). Organizational entrepreneurship is one of the most efficient approaches of operational change and managerial style that moves the organization toward entrepreneurial status. In Iranian organization - especially universities - entrepreneurship process has not yet been well developed; because these organizations involve in bureaucratic processes. A study showed that bureaucracy is a problem for entrepreneurship and governments in many countries are decreasing the bureaucratic burden on the entrepreneurs (12). The role of entrepreneurship has been proved in economic level. Study of the factors affecting entrepreneurship is important for social sciences studies (13). Entrepreneurship has not too much been taken into account in health service system. Probably, because there is structural and cultural barriers to apply entrepreneurship issue in health care services. Removal of such barriers would lead to the development of entrepreneurship for innovation and definition of new financial resources (14). In Iranian medical university, despite the existence of considerable number of potential resources for the development of entrepreneurship in health sectors, the necessity of entrepreneurship is felt in the delivering of health care services. There is a big gap for research plans toward the increase of knowledge, motivation and induction of entrepreneurial behaviors. The diversity and numerous activities in health care sectors have been created an indispensible and various sources for the employees to commence entrepreneurship. By identifying and utilizing these resources, organizations can create opportunities for the efficacy and cost-effectiveness and improve the quality of their products (15, 16). Health care services are affected by factors such as service costs increase, competition, expensive technology, aging of the population and high cultural diversity. Having being encountered with such problems, health care organizations try to find ways towards sustainable survival. Achieving these goals is possible solely by changing the previous approaches and attitudes. This intention makes the situation ready for innovation and entrepreneurship (17).

2. Objectives

The aim of this study was to investigate the organizational entrepreneurship application in view of managers of Ahvaz Jundishapur University of Medical Sciences.

3. Materials and Methods

This cross-sectional study was implemented in Ahvaz Jundishapur University of Medical Sciences (AJUMS) in Iran. This university has been composed of seven major deputies including deputy of research, deputy of education, deputy of student affairs, deputy of curative care, deputy of health service, deputy of food and drugs, and deputy of logestic in three levels of the organization. In this study, hospital managers, middle manager of faculties and other subunit's managers were excluded. The research population was 97 managers of the campus of seven deputies of university. However, only 67 people participated in this study. Data were collected by questionnaires and face-to-face interviews. The standard questionnaire was consisted of 30 items, related to the organizational entrepreneurship (18). All items of the questionnaire were developed on 10 dimensions of organizational entrepreneurship including innovation, conditions for demonstration of entrepreneurial behavior, detection and discovery of opportunities, level of flexibility, decision-making system, organizational learning, organizational culture, staff training, reward, incentive system and managerial support system for innovative ideas. We used the five point Likert scale (five for strongly agree, four for agree, three for average, two for disagree 2 and one for strongly disagree) for measurement of responses. Three items were designated for each dimension. Therefore, the scores of all dimensions ranged between 3 and 150 and of course, the highest score for the whole questionnaire was 150. For better interpretation of the results, entrepreneurial status was divided into 4 categories (poor 30-60, medium 61-90, good 91-120 and excellent 121-150). The content validity of the questionnaire was obtained based on expert opinions and literature (18-20).the questionnaire was valid and reliable (Cronbach's correlation coefficient of 0.77). Furthermore, to find any association between demographic and occupational characteristics and the dependent variables, one-way ANOVA and χ^2analysis were used. In our study, P-values less than 0.05 were considered as significant. Data were analyzed using SPSS version 18. The most important limitation of this study was that the questionnaires filled in by the managers (when face-to-face interview was not possible) potentially had the problem of self-report bias and conflict of interest, ie, the answers might probably be affected by personal and occupational factors.

4. Results

In this study, 67 (74.4 %) of the questionnaires were completed. To determine the normality of the data, equating test scores was implemented. As the result, the equating test scores were confirmed in all of the descriptive variations. The results of current study showed that 71.6 % of the subjects were men and 89.6 % of the subjects were married. The mean age of the subjects was 42.1±7.4 years. Most of managers (28.4 %) were more than 45 years of age. The educational level of the subjects was as follow:

Table 1. Relation Between Demographic and Job Characteristics and Dependent Variable (n=67) [a]

	Results	P Value
Age		0.571
25-35	11 (16.4)	
36-45	36 (53.7)	
> 45	20 (29.9)	
Gender		0.962
Male	50 (74.6)	
Female	17 (25.4)	
Marital status		0.581
Married	63 (94)	
Single	4 (6)	
Level of education		0.105
Associate degree	5 (7.5)	
Bachelor of Science	36 (53.7)	
Master of science	8 (11.9)	
General Practitioner	12 (17.9)	
PhD	6 (9)	
Organizational tenure		0.184
1-5	7 (10.4)	
6-10	9 (13.4)	
11-15	17 (25.4)	
> 15	34 (50.7)	
Managerial tenure		0.539
newcomers	24 (35.8)	
< 1	2 (3)	
1-3	9 (13.4)	
3-5	7 (10.4)	
> 5	25 (37.3)	
The number of prior managerial positions		0.56
No assigned position	25 (37.3)	
1	21 (31.3)	
2	8 (11.9)	
≥ 3	13 (19.5)	
Domain of activity		0.414
Deputy of education	6 (9)	
Deputy of research	4 (6)	
Deputy of health	10 (14.9)	
Deputy of food and drug	4 (6)	
Deputy of Logistics	22 (32.8)	
Deputy of curative care	12 (17.9)	
Deputy of student affair's	9 (13.4)	

[a] Data are presented as No. (%).

7.5 % associate degree, 46.3 % Bachelor of scientist, 11.9 % masters of science, 17.9% general practitioners and 9% specialists. Mean of organizational tenure was 16.7 ± 7.7 years and mean of managerial tenure was 6.5 years. The majority of managers worked in logistic deputy and treatment deputy (22.8% and 17.9%, respectively). According to the results of ANOVA test, significant difference was seen only between educational levels of managers with innovation, flexibility, and organizational learning dimensions of organizational entrepreneurship status ($P < 0.05$), i.e., managers with higher level of education were assessed to have better scores in case of entrepreneurship status. Overall status score of organizational entrepreneurship did not have any significant relationship with educational levels. On the basis of the χ^2test, other nominal variables such as sex and marital status did not have any significant relationship with entrepreneurship status in view of managers. Furthermore, correlation coefficient test did not show significant correlation between total score of organizational entrepreneurship with age, organizational tenure, managerial tenure and the number of managerial positions (Table 1).

Also, several deputies of university had been compared on the basis of entrepreneurial organization application in the view of their managers (Figure 1).

To compare the rate of changes and the ranking of items, coefficient of variation (CV) index was used, which showed that the entrepreneurial status was not identical in all dimensions. Among the 10 dimensions, innovation with the CV of 22.4% (with mean score 11.47 ± 2.56) and decision making system with the CV of 23.1% (with mean score 11.47 ± 2.65) had the highest rank. The dimension of managerial support system for innovative ideas and organizational culture had the lowest rank (32.7% and 29.8%. respectively). The coefficient of variation index showed that AJUMS had a good degree of innovation and decision-making dimensions in view of its managers. Overall status of organizational entrepreneurship had good status (with mean score 104.9 ± 24.4) (Table 2).

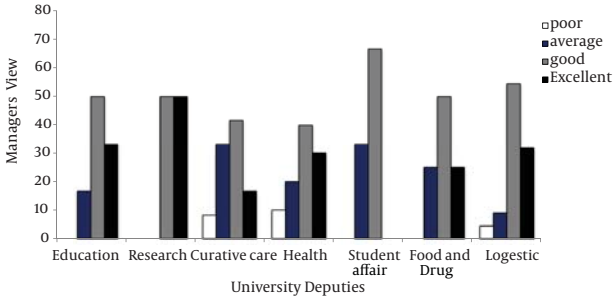

Figure 1. Organizational Entrepreneurship in View of Managers in Several Deputies of University

Table 2. Managers' viewpoint Scores about the 10 Dimensions of Organizational Entrepreneurship [a,b]

Dimensions	Scores	CV[c], %	Rank
Innovation	11.47 ± 2.56	22.4	1
Decision making system	11.47 ± 2.65	23.1	2
Organizational learning	10.56 ± 2.44	23.1	3
Level of flexibility	10.77 ± 2.69	25	4
Conditions for demonstration of entrepreneurial behaviors	10.67 ± 2.9	27.3	5
Detection and discovery of opportunities	9.91 ± 2.76	27.9	6
Reward and incentive system	10.1 ± 2.81	27.9	7
Staff training	10.04 ± 2.88	28.8	8
Organizational culture	10.05 ± 2.99	29.8	9
Managerial support system for innovative ideas	9.89 ± 3.23	32.7	10
Total mean of organizational entrepreneurship status	105 ± 24.4	-	-

[a] Data are presented as mean ± SD.
[b] Entrepreneurial status was divided into 4 options (poor 30-60, medium 61-90, good 91-120 and excellent 121-150).
[c] The coefficient of variation = SD / mean × 100.

5. Discussion

Organizations with entrepreneurship approaches can strengthen their selves in an uncertain external environment and increase their competitive advantage (21). Entrepreneurial behaviors contribute to integration within the organizations and lead to the performance improvement (22). The result of this study showed that overall status of organizational entrepreneurship was good (104.9 ± 24.4) in AJUMS. Marzban et al. shown that the support of management, freedom of operation and work autonomy, reward and reinforcement, organizational boundaries and time availability have positive impacts on the entrepreneurship development of our university (23). Goudarzvand demonstrated that factors such as skill and ability of managers and employees had high correlation with organizational entrepreneurship levels. Some factors influencing entrepreneurship are classified as follows: entrepreneurial structural factors: including organizational structure, organizational strategy, salary system, financial system, information systems, research and development systems and human resource systems; entrepreneurial behavior factors: including organizational culture, motivation, human resources, leadership, characteristics of employees and managers; and, human resource training and human communication systems (24). According to Salamzadeh et al. external policy factors are the main obstacles in reaching entrepreneurial universities (25). Garcia-Morales et al. developed a model, in which they claimed organizational performance arose from entrepreneurial process. They introduced two dimensions of organizational entrepreneurship, innovation and organizational learning as basic factors of organizational entrepreneurship. Majority of managers have not been successful in the area of organizational innovation and learning, because they have inflexible opinions about their organizations (26). A study showed that organizational entrepreneurship in some governmental organizations in Iran is lower than the average (27). Development of organizational entrepreneurship means to develop behaviors such as minimizing bureaucracy and increasing risk and flexibility in the organization (28). Corporate entrepreneurship should be part of the extensive strategic management process of an organization because of the special influence of entrepreneurship on organizational performance (29).

The research and practice of entrepreneurship in Iran is at the elementary levels and indeed, needs a great lift-up push (30). Furthermore, the result of the study showed that there was not a significant relationship between individual variables and job variables of managers including sex, marital status, age, managerial services and organizational entrepreneurship status. There was a meaningful relationship between level of education and entrepreneurial status. Kordestani reported that there was not a significant relation between age and sex of managers and organizational entrepreneurship status but marital status of managers had significant relationship with organizational entrepreneurship status (30). According to Akbarsadat et al. governmental organizations have more attention to organizational entrepreneurship issues than non-governmental organizations. They reported age, sex and service records of managers did not have significant impact on their view about entrepreneurial organization status (31). The results showed that status of several dimensions of the organizational entrepreneurship was desirable in AJUMS and some dimensions of organizational entrepreneurship such as innovation and decision-making systems had better condition than others in view of the managers. This means that the AJUMS had a good condition in case of innovation and employees' participation in organizational decision-making. To improve the current entrepreneurial status of

the university, we suggest two solutions: first, a research and development center (R&D) can be utilized to monitor and evaluate the entrepreneurial performance of the university; second, manager have to pay more attention to some dimensions of organizational entrepreneurship such as flexibility, organizational learning and supportive culture. Also we suggest a study on the organizational entrepreneurship application in all units and subunits of AJUMS.

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Authors' Contributions

Amin Torabipour, study conception and design; Nayeb Fadai, data gathering; Hammed Nazari, data gathering; Mohmmad Jafar Kandi, drafting the manuscript and critical revision; Kambiz Ahmadi, data analysis.

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