



Examine the Relationship between Formality, Centralization and Complexity with Entrepreneurship (Case study)

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ABSTRACT: This study investigates the relationship between the dimensions of organizational structure (complexity, Formality and centralization) and the entrepreneurship. Organizational structure is where in which happened organizational communication and organizational measures. Organizational factors are including complexity, Formality and centralization. Organizational entrepreneurship is a process that the organization follows to enable all employees to act in the role of entrepreneurship and all of individual and collective entrepreneurial activities conclude continually, rapid and comfortable in the central organization or covered autonomous corporate. In the research, organizational entrepreneurship is including entrepreneurship orientation and entrepreneurship management. Research is descriptive and correlational. The population of the research is the education official staff of Khuzestan province cities. The research instrument is consisted of Robbins organizational structure questionnaires on and Fox entrepreneurship questionnaire. Data analysis was performed by SPSS software. Results showed that there was no significant relationship between the formal and institutional entrepreneurship. There is no significant relationship between concentration and entrepreneurship. But there is a significant and positive relationship between complexity and entrepreneurship.

Keywords: Organization, Organizational Structure, Entrepreneurship, Organizational Entrepreneurship, Education

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INTRODUCTION

In recent decades, we have seen the emergence of a new approach in public management. In other words, a new approach formed for dealing with complicated and contemporaneously problems. This new approach is called with different names; the management-oriented, new public management and the entrepreneurial state. Process of change in human life have been affected by the changes from the cave to now. Among these change factors is attended to the human factor, especially. Top entrepreneurs play and prominent role in the human factor and have a great place (Ahmadpoor Dariani, 2008).

Entrepreneurship is a long term education process that requires planning in the education and research system and the performances of programs is from family and school level that continues to university and organization level and is developed (Barati Marnani et al., 2006). Rapid environmental changes have created new requirements for education. Meet these requirements are the need to develop entrepreneurial skills in country in order to create new businesses, using unused capacity, the capacity development and solve social problems. In response to these challenges, new missions of education are entrepreneurial capabilities creation in students. For this reason, education should be to prepare itself for this role (Yadollahi Farsi et al., 2007).

Now organizational communities are called modern societies, because in the societies, human can live anywhere and do anything, connected with various organizations and organizations make up a part of the daily life of all the people that (Feizi, 2012). Organizational structure makes it clear how tasks are

allocated, who reports to whom, and what formal coordination mechanisms and organizational interaction patterns that must be adhered to? (Robbins, 2009).

Organizational dimensions are classified into two groups of structural and content (Daft, 2008). Study of the structural and content dimensions show that the content dimensions are influenced on the structural dimensions. Chart 1 shows the structural and content dimensions interaction (Daft, 2008).

Figure 1 show the organizational structure of organization framework. As humans have a skeleton that can determine their form, the organizations have structure that determines their status, too (Feizi, 2012). The organizational structure is one of the core concepts in shaping the organization. Definitions scope expansive and effectiveness of structure also emphasis on its importance, especially since any organizational change is related to the organization structure. Organizational structure is texture and mapping of communications and interactions between parts and components of an organization. The organizational structure consists of activities such as task allocation, coordination and supervision that are towards achieving organizational goals. In this research, Robbins research in regard to aspects of structure (complexity, Formality and centralization) is criteria for the study of organizational structure due to the backed and a history of high scientific. The complexity refers to existence separate level in the organization. Complexity is including the geographic vertical and horizontal complexity (Robbins, 2009). Formality refers to the amount or extent that the

organizational jobs are standard (The same). Centralization attends to degree of job autonomy in decision-making and choosing. Anything that lead to increase the importance of subordinates' role is called decentralization and anything that lead to reduce it is

called system centralized (Shefritz and Ott, 2000). In other words, centralization issue looking for the answer to this question, where organization decisions are made (Robbins, 2009).



Figure 1. The interaction of organization structural and content dimensions

In general, human societies have gone three developmental stages that are:

- Traditional society
- Industrial society
- Ultra Industrial or information society

In traditional society, human supplies primarily needs through hunting and farming and anyone was no thinking about changing, and people's ability to supply the needs depended on the arm and the hand work. With the advent of the industrial revolution, businesses started growing and intellectual labor was introduced as a handmade complementary. In this period that is called industrial society, human desire for innovation and creativity increased. In the present era which has called post-industrial or information society, the speed of change is such that is known as the rate and the change wonders. In this period, the importance of handwork declined and instead it, qualitative workforce that has creativity and innovation ability or applying ideas, has become important (Ahmadpoor Dariani and Moghimi, 2012).

There are many definitions of entrepreneur and entrepreneurship. Some of these definitions are: Piter Drucker believes that entrepreneur is someone who starts new small economic with his capital (Saeedi Kia,

2012; Azma and Aghaei, 2009). An entrepreneur is some one who is committed to accept organizing and managing a new business that is associated with risks, (Kuratko and Hajts, 2010).

Ahmadpoor and Moghimi: an entrepreneur is someone who has a new idea and with mobilize resources through the process of creating a business (E- Business, Home Business, Family Business, small and medium Business) that is combined with the financial and social and prestige risk, market the new products and services (Ahmadpoor Dariani and Moghimi, 2012). Entrepreneurship involves the search and discovery of new opportunities, such as new products and processes, new organizational structure design and acquisition of new markets. This means periodic revision on the structure and strategy, innovation, business creation and renewal strategies. The entrepreneurial is process of converting new ideas into an enterprise on the logic in order to increase the value (Blake and others, 2011). Entrepreneurship has been as the most influential economic power in the global economy and social history (Kuratko, quotes yildirim and Askun, 2012). Overall, the entrepreneurship literature suggests that entrepreneurship in three below fields forms: in the

form of non-organization and free individuals, in form of organization staff and in form of the organization (Samad Aghaei, 1999).

Fry (1993) about definition of organizational entrepreneurship stated that: "as the entrepreneurship is a process. The process that if will be survived should be encouraged, be praised and be supported and be recognized. The organizational entrepreneurship is the process through induction of an entrepreneurial culture in an organization provides a product and process innovation. Organizational entrepreneurship is a strategy to survive companies which in a highly competitive business environment exploit very well. Organizational entrepreneurship is a special offer for established companies which are facing with downward business performance and to restore to previous situation. It is a command to regain the competitive advantage that the company to revive their basic needs to organizational entrepreneurship strategy. The organization entrepreneurship is a process that at it organization tries until all staff play their entrepreneurial roles all individual and group entrepreneurial activities continuously, rapidly and comfortably at central organization or under cover company reach to goals (Ahmadpoor Dariani and Azizi, 2005).

Hypothesis

According to that the researcher in this study were followed to achieve these goals: **A**-Definition and identification of entrepreneurship issue and its kind and with more emphasis on its organizational type; **B**-Definition and identification of organizational structure and its variants and to identify aspects of organizational structure that have related to entrepreneurship. For this reason this hypothesis is proposed:

1 - There is a significant relationship between the Formality and organizational entrepreneurship.

2 - There is a significant relationship between the centralization and organizational entrepreneurship.

3 - There is a significant relationship between the complexity and organizational entrepreneurship.

Background research:

Reza Zadeh in the study examined the relationship between organizational structure and organizational entrepreneurship in Tehran Social Security and achieved the following results: the relationship between complexity, Formality and centralization of the organizational entrepreneurship is the inverse relationship.

Another study has been done by Khanifar and Vakili to examine the relationship between organizational - economic structure and organizational entrepreneurship in small and medium enterprises in

Qom 2008. The results showed that there is a significant relationship between the kind of the organizational structure and organizational - economic entrepreneurship in small and medium enterprises. At the research that has been done by Mehrzad Alimardani et al.(2009) to examine the relationship between organizational structure and organizational entrepreneurship at university Shahid Beheshti, researchers concluded that there is a reverse relationship between organizational structure components (Formality, complexity and centralization) and organizational entrepreneurship.

In 2009 and in agricultural Jihad organization of north khorasan province, a research was performed by Freydoun Azma and Javad Aghaei that its aims was to determine and identify aspects of organizational structure that can be have a relationship with entrepreneurship, the results showed that the Formality, centralization and complexity have an inverse (negative) relationship with organizational entrepreneurship and within three variables, centralization and complexity have maximum and minimum relationship with organizational entrepreneurship, respectively.

The results of Ooshaksaraie and et al. research that conducted with title "the relationship between organizational structure and organizational entrepreneurship in manufacturing companies in the south of Mazandaran province, is as follows: there is a significant relationship between organizational structure and organizational entrepreneurship, between organic organizational structure and organizational entrepreneurship and between mechanical structure and organizational entrepreneurship. Abbasi performed a research with title "a review of the relationship between organizational structure and employee creativity", the results suggested that there was an inverse relationship between organizational structure and creativity of the staff. A research had done by Albert Caruana, Michel H mirris and Anthony J vella in 1998, entitled "the impact of Formality and centralization on the entrepreneurship in the export companies". The research concluded that the total correlation indexes lead to a significant direct relationship between entrepreneurial behavior and each of centralization and Formality structures of entrepreneurship and has high-level positive relationship Formality with organizational entrepreneurship. There is a positive impact on innovation through information exchange among organization members at high levels of trust. On this basis, trust develops when the data channel is opened. The study of Marshall has supported their hypotheses in regard to organizational structure and a sense of justice. In this study, the relationship between the dimensions of organizational structure (complexity, Formality and centralization) and their

measure and a sense of justice was examined. They had assumed that the impact of organizational structure on the people with low organizational scale is stronger than those who the impact of organizational structure with high organizational scale. Research results generally confirmed their hypothesis. Particularly, dimensions of the organizational structure had important influence on the procedural, distributional and interaction a sense. Willem in the research entitled "organizational structure impact on nurses' job satisfaction" achieve these results.

Formality does not reject nurses' role in decision-making. Well as, the importance of decentralization are supported to create employee and nurses' satisfaction. The salary is the most important aspect of job satisfaction of nurses but this aspect has a minimal impact on organizational structure.

A Conceptual Model

Conceptual model of research after the studies in is shown at Figure 2.

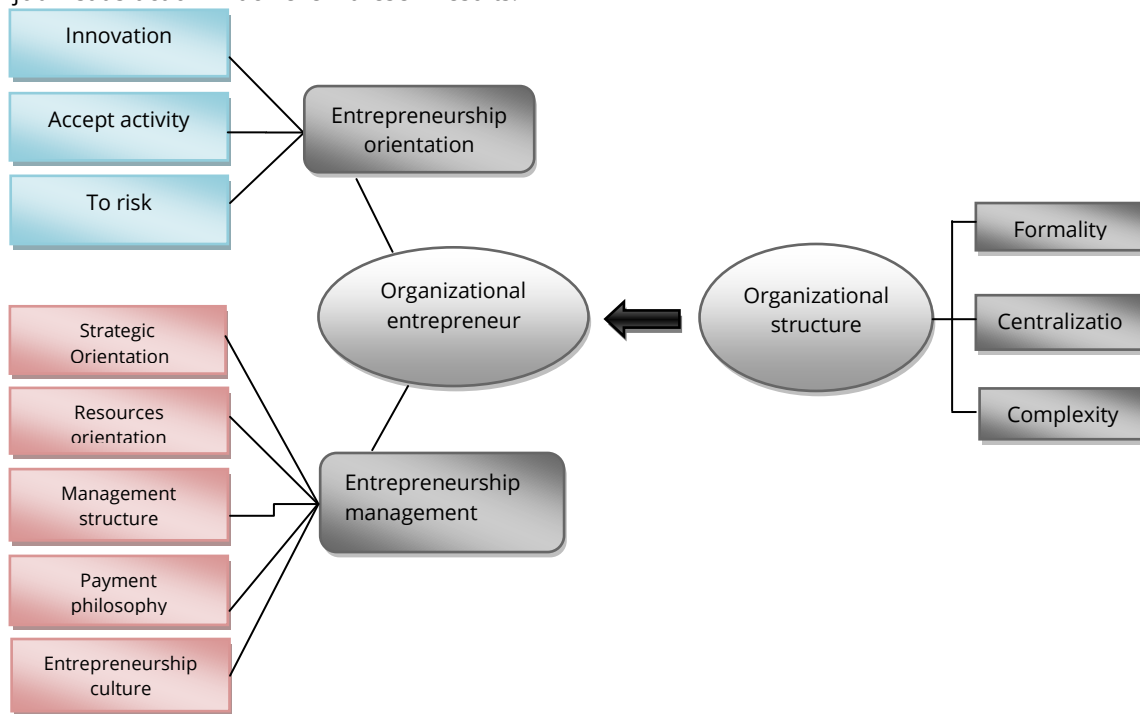


Figure 2.Conceptual model of research derived from the relationship patterns of Robbins organizational structure and organizational entrepreneurship (Fox, 2008).

MATERIAL AND METHODS

The research is practical and is descriptive - survey in view of the nature and method and is of correlation type. Thematic scope of the research was formed by issues related to organizational structure aspects (Formality, centralization and complexity) and organizational entrepreneurship, its time territory was composed of from early January 2012 until July 2013, and the area scope were the education departments of the city of Khuzestan province. A library study method was used to collect information and questionnaire was applied as initial data. Robbins Standardized organizational structure questionnaire assesses (1993) Formality, centralization and complexity of the organizational structure (Alvani, 2010). Fox organizational entrepreneurship questionnaire was used (2008) with a change (according to the organization under the study). The content validity determination of measuring tools

(validity) was approved by expertise and to determine the reliability of measurement instruments, Cronbach's alpha coefficient was used. Therefore a prototype composed of the 25 questionnaire of pre-test were used and then using the data obtained from the questionnaires and with the statistical software SPSS, the confidence coefficient 0.893 were obtained, and given that the coefficient is higher than 0.7, so the questionnaire has good reliability. Population of the research was all the Office staff of education of Khuzestan province that had degrees from diploma to PhD. Sample was selected 320 employees of offices to help Morgan randomly.

Data obtained from sample analyzed and techniques of descriptive statistics: frequency, percentage of frequency and inferential statistics, Kolmogorov - Smirnov test was used to assess data normality and Pearson correlation test applied to evaluate the research hypotheses.

RESULTS

Table1 show statistical data of recognition demographic description for 320 staff administrative personnel in the Khuzestan province. Statistical indicators of the independent variables showed that the administration has low complexity and high Formality and high centralization.

Table 2 shows that the average of complex variable is equal to 2.86 ± 0.03 which has positive skewness and elongation. This indicates that the office has lower complexity. The average of formality variable is equal to 3.41 ± 0.3 , which has a negative skewness and elongation. This indicates that the office has a high formality. The average of centralization variable is equal to 3.01 ± 0.03 , which has a positive skewness and elongation. The average shows that the office has a high centralization.

Findings related to the first hypothesis: the data in Table 3 show that there is no significant relationship between the formality and organizational entrepreneurship in Khuzestan province education offices. Findings related to the second hypothesis: Data of Tables 4 show that there is no significant relationship between organizational entrepreneurship and centralization in Khuzestan province education offices. Findings related to the second hypothesis: Data of Tables 5 show that there is no significant relationship between organizational entrepreneurship and complexity in Khuzestan province education offices. Findings related to the second hypothesis: Data of Tables 4 show that there a positive significant relationship between organizational entrepreneurship and centralization in Khuzestan province education offices.

Table 1. Statistical data of recognition demographic description for statistical samples members

Gender	Quantity	Man	Woman				Sum
	Abundance	259	61				320
	Percent	80.9 %	19.1 %				100 %
Marital Status	Quantity	Married	Single				Sum
	Abundance	289	31				320
	Percent	90.3 %	9.7 %				100 %
Age (years)	Quantity	Less than 25	25 to 35	35 to 45	45 to 55	More than 55	Sum
	Abundance	15	118	123	62	2	320
	Percent	4.7 %	36.9 %	38.4 %	19.4 %	0.6 %	100 %
Experience (years)	Quantity	Less than 5	5 to 10	10 to 15	15 to 20	More than 20	Sum
	Abundance	51	61	47	37	124	320
	Percent	15.9%	19.1%	14.7%	11.6%	38.8%	100%
Education	Quantity	Diploma	Diploma	Bachelor	MA	PhD	Sum
	Abundance	23	62	203	31	1	320
	Percent	7.2%	19.4%	63.4%	9.7%	0.3%	100%

Table 2. Table of descriptive indicators of the main variables

Statistical indicators	Complexity	Formality	Centralization
Number	320	320	320
Average	2.8558	3.4080	3.0134
The maximum error (SE)	0.02956	0.04177	0.03482
Median	2.8571	3.4286	2.9500
Fashion	3	3.14	2.80
Standard deviation	0.52881	74722.0	0.62285
Coefficient of skewness	0.096	-0.224	0.347
Elongation factor	0.185	-0.437	0.536

Table 3. Results of the correlation coefficient test of first hypothesis

Components	Statistics	Formality
Organizational entrepreneurship	The correlation coefficient	0.091
	P-value	0.105
	Number	320

Table 4. Results of the correlation coefficient test of second hypothesis

Components	Statistics	Centralization
Organizational entrepreneurship	The correlation coefficient	0.105
	P-value	0.061
	Number	320

Table 5. Results of the correlation coefficient test of third hypothesis

Organizational entrepreneurship	Statistics	Complexity
	The correlation coefficient	0.169
	P-value	0.002
	Number	320

DISCUSSION AND CONCLUSION

The results of the study include the following:

1 - Considering that the organization has high formality but hasn't significant relationship with the organizational entrepreneurship according to the first hypothesis, the lack of formality in office lead to increase the Informal communication between employees and officials of the organization that this provide the access possibility to information and free circulation and healthy, and among this process, interaction and exchange of the information and ideas and more entrepreneurial, creative and untapped ideas will be appear. Also, reduces the rate informality of the unwarranted instructions, letters, policies, rules and regulations and for this reason be given possibility of the ability to employees. So, it is appropriate the organization goes towards informality. And the results of research conducted by Khnifar and Vakili (2008), Azma and Aghaei (2009) and Alimardani et al (2009) are in agreement with the current findings.

2 - Given that the organization has a high centralization, but has not significant relationship with the organizational entrepreneurship according to the second hypothesis, so the lack of centralization in the organization leads to reinforce the feedback and suggestions and attend to the thoughts and opinions of staff. Also, cause to trust to staff in carry out their expertise and professional activities, delegating beyond increase, to exist the information from the management levels and collaborative management system implementation. So, it is essential the organizations that are looking to create a favorable environment for entrepreneurship do more efforts for decentralization of the organization. And the findings of Khnifar and Vakili (2008), Azma and Aghaei (2009) and Alimardani et al (2009) are in agreement with the current results.

3 - According to the data, the organization has lower complexity and with regard to the third hypothesis is that significant and positive relationship between complexity and entrepreneurship there. Means the greater complexity leads to more entrepreneurship. According to lack of a significant relationship between centralization and organizational entrepreneurship (based on first and second hypothesis) it is suggested that with increase activities and responsibility of staff in organization and with lack of centralization and informality can be increased entrepreneurship mentality. In the research of Azma and Aghaei (2009), three components of the complex

has the lowest correlation with organizational entrepreneurship.

Since that the organization is a service organization, not a business type, so, more responsibility for staff leads to increase mentality among staff and search more creativity ways for carry out the affairs, because they related better to high level managers with lack of centralization and lack of formality in organization and more cooperative teams active in organization that they communicate them, easily.

According to that the entrepreneurship is a new issue in our country but public organizations have not the same attend to the issue against private organizations, that is due to be competitive of private organizations. Therefore, the public organizations also have an especial attention to the issue. Since this research implementation in the education office has carried out low according to entrepreneurship issue is new, so, the organization according to active researches manpower, it can explain various issues that are related to entrepreneurship together pecuniary and kind encouragement in order to develop the entrepreneurship culture in community.

REFERENCES

- Ahmadpoor Dariani, M. & Azizi, M. (2005). Entrepreneurship, work and science Branch, Qom, cultural and publishing institutions of Mehrab.
- Ahmadpoor Dariani, M. & Moghimi, S.M. (2012). Foundations of entrepreneurship, thirteenth edition, Tehran: Farandish.
- AhmadpoorDariani, M. (2008). Entrepreneurship; models theories definitions, Tehran, Press Jajarmi (From Site Management System of Iran, www.iransama.org).
- Alimardani, M., Ghahremani, M. & Abolghasemi, M. (2009). Investigate the relationship between organizational structure and organizational entrepreneurship", Journal of Educational Management, a new approach in the educational management, pp. 131-144.
- Azma, F. & Aghaei, J. (2009). Relationship between organizational structure and organizational entrepreneurship in Agricultural Organization of South Khorasan," Educational Journal, 24: 25-1.
- BaratiMarnani, A., Turani, S. & Zahiri, M. (2006). Designing the organizational structure of the entrepreneurship centers in the medical

- university," *Quarterly Journal of Health Management*, Volume 9, Number 23. Page 41-50
- Daft, Richard. L. (2008), *Theory and Design of Organization*, Volume I, Ninth Edition, translated by Ali Pasaeian and Muhammad Arabi, Tehran: Office of Cultural researches.
- Feizi, T. (2012). *Principles of Organization and Management*, nineteenth edition, Tehran: Payam Noor University.
- Fox, J.M. (2008). *Organizational Entrepreneurship and the Organizational Performance Linkage in University Extension*. The OSU South Centers. USASBE 2008 Proceedings - Page 0429-0459.
- Fry, F. (1993). "Entrepreneurship: A Planning Approach". West publishing company.
- Hosseinzadeh, T. (2008). *The relationship between organizational culture and organizational entrepreneurship of Shahid Beheshti University*, Faculty of psychology and educational sciences.
- Khanifar, H and Vakili, F. (2008). *Relationship between type of organizational structure and organizational and economic entrepreneurship in small and medium enterprises economic*, *Entrepreneurship development*, First year, Issue 2, Page 35-55.
- Kuratko, D.F and Hajts, R.M. (2010). *Contemporary perspective on entrepreneurship*, Volume I, third edition, translated by Ebrahim Amel Mehrabi and Mohsen Tabraei, Mashhad: Ferdowsi University of Mashhad.
- Robbins, S. (2009). *Organization theory (structure and organizational design)*, translated by Seyed Mehdi Alvani, Hasan Danaei Fard, thirtieth edition, Tehran: publication of Safar - Eshraghi.
- Saedikia, M. (2012). *Fundamentals of entrepreneurship*, 21th printing, Tehran: publication of Kia.
- SamadAghaei, J. (1999). *entrepreneurs' organizations*, first edition, Tehran: Learning Center of Public Management.
- Shefritz, G.M., & Ott, J.S. (2000). *Theories of Organization: myths*, the first volume, the first printing, translated by Ali Parsaeian, Tehran: publication of KetabeFarzane.
- Yadollahi Farsi, J. et al. (2009). *Investigate the relationship between organizational entrepreneurship and structure, a case study, Private Banks of Tehran*, *Journal of Entrepreneurship Development*, 5: 80-55.
- Nihan, Y & Olcaybige, A. (2012). *Entrepreneurship intentions of public universities in turkey: Going beyond education and Research?*, *Procedia- Social and behavioral sciences* 58: 953-963.