

## The analyze of systemic approach in case of personality traits which are effective on students entrepreneurship

Navid Reza Boroomand Alipoor<sup>1</sup>, Hamid Erfanian Khanzadeh<sup>2</sup>, Prof. Dr. Norihan Abu Hassan<sup>3</sup>, Dr. Akbarian Mohd. Mahdzir<sup>4</sup>

<sup>1</sup>PhD candidate, University Teknologi Malaysia (UTM)

<sup>2</sup>Department of Public Administration University of Azad Islamic Mashhad (IRAN)

<sup>3</sup>Assistant professor in Perdana School of science, Technology and innovation policy  
University Teknologi Malaysia (UTM)

<sup>4</sup> Senior Lecturer in Perdana School of science, Technology and innovation policy  
University Teknologi Malaysia (UTM)

[Boromand3565@yahoo.com](mailto:Boromand3565@yahoo.com)

**ABSTRACT:** Undoubtedly, investigation of each phenomenon and social behavior in a systematic approach reflects its scientific nature. In the process of rapid change that has taken place on the context of the knowledge-based economy, due to nature of the systematic approach, creativity and entrepreneurship have been founded as two really valuable powers. The Iranian government has designed programs, in order to increase the level of student's entrepreneurship ability; unfortunately the programs were not successful due to lack of consideration about the Iran's cultural environment and obviously because of the absence of systematic approach. Entrepreneurship culture can be investigated in both the personality and social environment. This articles aim is to examine the influence of personality traits on entrepreneurship level of the society. The current research has been performed based on 4 major hypothesizes "correlation between personal compatibility circumstances and success, systemic approach, the control locus and risk taking ability". The research method is descriptive and in order to examine the researches hypothesis, 477 of self-employed students from 3 university units, have been selected according to the stratified random sampling method, to fill up the questioners.

[Navid Reza Boroomand Alipoor, Hamid Erfanian Khanzadeh, Norihan Abu Hassan, Akbarian Mohd Mahdzir. **The analyze of systemic approach in case of personality traits which are effective on students entrepreneurship.** *Life Sci J* 2013;10(6s):695-700] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 109

**KEYWORDS:** Systemic approach, creativity, innovation, entrepreneurship, personality

### Introduction:

Social structures inherently are planned systems and the people of the society create the complex behavioral pattern which so called social structure. Social systems are proved by the number of major elements like culture or so called social attitudes, thoughts, beliefs, motivations and people's habits and expectations. Then if decision is to establish a pattern of a new behavior in a social structure, like a university, the culture must be strongly admitted as an influencing environmental factor on pattern acceptance. It's exactly considering the systemic thought in developing a program(Zabihi et al., 2012).

Cast of Iran in to entrepreneurship somehow perfect yet. Some people claim that the lack of systemic view in programs declarations is the cause of failure and some people's idea is that Iranians people's personality attributes is the cause of failure. The features like conservatism, extraversion and locus of control consideration(Karimi et al., 2012, Rahmati et al., 2010). In addition it's possible to name some other items like lack of government support, unstable condition of economy and cultural

characteristics as the major elements which cause the slow growth of entrepreneurship in Iran. It is really interesting that in recent years, very rare subjects have attracted the Iranian politicians, economists and successful organizations as much as entrepreneurship (Rahmati et al., 2011, Karimi et al., 2010). The major question which has been repeated several times in recent years is weather the personality characteristics (related to culture of society) have any impact on entrepreneurship? In This article the goal has been to firstly, define the concepts related to entrepreneurship and systemic approach and secondly investigating the personality characteristics of the entrepreneur students in 3 university units in order to find personality characteristics which has caused distinction between them and the other students and then in order to promote the entrepreneurship programs in Iran, strategies will be presented and then as the final step, previously posed question will be examined.

### **The relationship between entrepreneurship, creativity and innovation**

Maybe if just one characteristics of entrepreneurship considered undoubtedly the best one

is creativity and innovation which is so called the heart of this process (Amabile, 1996). "Schumpeter" also believes that the creativity is the spirit which is blown to the entrepreneurship (Pardakhtci and Heydari Mohammad, 2008). And also "Peter Drucker" idea which says the existence of innovation in entrepreneurship is essential so that it can be argued that entrepreneurship cannot exist without innovation (Moghimi and Ahmadpour, 2008, de Noronha Vaz and Nijkamp, 2009). In "estein" idea creativity is a process which its result in a new framework will be considered satisfactory and useful by a group of people (Saeedikiya, 2009). Additionally, the concept of creativity and innovation must be distinguished (Mirshamsi et al., 2011). Innovation commonly used in case of applying new ideas resulted from the creativity, in the other words executing the creativity called innovation (Erfanian Khanzadeh and Boroomand Alipoor, 2009). Entrepreneurship is a multidisciplinary topic in which different fields of knowledge such as economics, psychology, sociology, and management have had a role in its development (Moghimi, 2001b). In "Schumpeter's" point of view entrepreneur is somebody that is willing to risk in order to produce a new, product, method, service, or market (Dubrin and Ireland, 1993). "Richard Cantillon" also know somebody as entrepreneur that offers means of production in order to integrate them to produce marketable products (Palmer, 1971). Regarding the extent of entrepreneurship 3 types of entrepreneurship, individual, institutional and international considered by experts. Individual entrepreneur is a condition in which a person creates an independent business. In this case the guy lonely is responsible for collecting needed resources to begin the business (Shahhosseini et al., 2010). Institutional entrepreneurship has been defined as the process of creating the opportunities with the aim of making innovational values without considering the other resources or entrepreneurial position in existing organizations (Churchill, 1992). In the early 1990s, the international entrepreneurship term have been entered into the entrepreneurship literature and refers to the process of guiding economic activity beyond national borders (Sætre, 2001).

#### **Entrepreneur's characteristics:**

Despite there has not been consensus in case of personality characteristics of entrepreneurs between the experts but most of them are agreed upon some characters (Frank et al., 2007). Here the realized model in the plan will be introduced meanwhile introducing the characteristics.

1-positive mental states: humans have states which are energy provider such as trust, love, faith and... And states that are crippling like confusion,

depression, sadness and helplessness. Having positive mental states is result of being a practical man and leading the own performance toward the growth (Robbins, 1990).

- A) Locus of control: Some people believe that they are governor of their own destiny. And some think their faith runs them. The first category is called the introvert. In other words they have an internal control center (Robbins, 1990, Ahmadpour, 2007). It means successful entrepreneurs believe them and do not refer the success or failure to the luck or faith.
- B) Risk taking ability: one of the major characteristics of entrepreneurs is risk taking ability. The danger which can be financial, psychological and social. Of course the entrepreneur does not do gambling but decides based on the amount of risk evaluation. "Hiner" in 1990 demonstrated that "Managers often try to build a house on hold it. While entrepreneurs are always looking to build new houses and prefer to take risk (Shahhosseini et al., 2010, Aghajani and Abbasgholipour, 2012).
- C) Compatibility with situation: the objective is the person's ability to align his behavior with external and situational objects. People with this trait can show different behaviors in different situations. In the other words they are flexible (Stokes and Wilson, 2010).
- D) Systemic approach: scattered theories in the field of human behavior, summarize, the social environment and its method in a framework. In which dominating on it is easy and of course their details are not being overlooked (Stonecash, 1980). In other words this approach can analyze each problem according to relationships within technical and social variables in the system. And gives the ability about the consideration of important variables and their communication and interaction barriers (Dye, 1980).

#### **Research background:**

Many studies have been carried out by scientists at the characteristics of entrepreneurs. As an example of the studies has been performed, the Lawton studies (2000) can be named. The main premises of his research are, being entrepreneur is not accidental and personality characteristics are effective in entrepreneurship. He examined two variable, success seeking motivations and emphasize on control. In his idea risk taking, innovation, knowledge about the occupation field and marketing, the ability of heating the opportunities and a positive attitude towards business are the specifications of an Entrepreneur (Jahangiri and Kalantari Saghafi, 2010). Some researches have been performed that results of the studies are presented in Table 1.

In recent decades, much research has been conducted to identify the characteristics of entrepreneurs, but the results are different about personality traits. Also, all of them confirmed that personality traits have main effect on decision to create a new business and successful

In case of Iran the current research points to result of a research performed by entrepreneurship global watch organization. Iranian Students News Agency (ISNA) referred to the result of the research performed by entrepreneurship global watch organization and said: According to the report, which was conducted in 2008 the rate of fixed entrepreneurship in Iran is 4.24. In the case of those are below the diploma degree is 8.24 and for those with university degree is 4.23.

#### Research objectives:

- 1- Identify the factors that are affective on student's entrepreneurship, In order to provide trick for the student's entrepreneurship promotion, with the systemic approach.
- 2- Identifying the rate of personality characteristics in self-employed students comprising
  - A) Compatibility with the situation B) systemic approach C) risk taking D) Internal locus of control
- 3- Providing practical solutions regarding to the research outcomes in order to improve entrepreneurship programs in Iran universities.

#### Research's Hypotheses:

- 1-the compatibility with success specification has influence of entrepreneurship
- 2-having systemic approach trait is effective on entrepreneurship
- 3-having internal locus of control trait is effective on entrepreneurship
- 4-risk taking trait is effective on entrepreneurship

#### Research Tools

This study is an exploratory one which is entitled "investigating the effective factors in entrepreneurship with the help of personal characteristics among freelance students in associate degree in Islamic Azad University of Mashhad, Golbahar, and Iran management association center in 2011-2012". The questionnaire is designed in three sections; they are *personal information*, *entrepreneurship*, and *personal characteristics*.

**Section one:** it explores the *age*, *gender*, and *income* variables.

**Section two:** it is the *entrepreneurship questionnaire*. It is considered as a tool that verifies the degree that the subject increases entrepreneurship. It contains fifteen questions and each of which has three options. The subject chooses the option which describes his/her condition in the best way. Then the amount of subject's entrepreneurship is calculated(Shahhosseini et al., 2010).

**Section three:** This section contains four questionnaires which explore the personal characteristics.

#### Measures of Locus of Control Questionnaire:

It is designed by Julian Rotter. It is a tool to determine one's characteristics with regard to his/her notions of predominance of environment or defeated by environment. The questions are classified into two groups of "A" and "B" so that each group contains ten options. The subject will choose the option which suits him/her fine(Moghimi, 2001a).

#### Risk-taking Questionnaire:

It is designed by Coggan & Wallach. It includes four long questions and examines the person's risk-taking level(Rabinz, 2008).

#### Organizational Attitude Questionnaire:

It is derived from R. Lussier's questionnaire. It is related to the domain of organizational approach and a tool to evaluate people's organizational attitude. It contains twelve questions each of which has five alternatives(Lussier, 1993).

#### The Questionnaire of Compatibility with Situation:

It is designed by Lenox and Wolfe. It is a tool to examine the person's compatibility with situation. It contains thirteen questions and each question includes five options. Each subject will choose the alternative which suits him/her in the best way(Rabinz, 2008).

#### Methodology

The current study is a survey. The methodology which research has been performed based on it is causal survey methodology (reasoned-comparative) (Delaware, 2000).

$$\alpha = \frac{k}{k-1} \times \left[ 1 - \frac{1}{s_t^2} \times \sum_{i=1}^k s_i^2 \right]$$

$\alpha$  = Cronbach's alpha coefficient

$\sum_{i=1}^k s_i^2$  = Total variance in each one of the questions

The result of table no2 shows the high reliability of the final questioner.

Table 1: Cranach's alpha coefficient

Questioner	Cranach's alpha coefficient
Entrepreneurship	%81
Locus of control	%85
Risk taking	%95
Compatibility with situation	%83
Systemic approach	%91

$$A) n_o = \left[ \frac{z \cdot S}{r \cdot \bar{Y}_N} \right]^2$$

B)  $n = \frac{n_o}{1 + \frac{n_o}{N}}$  In these relationships r is the high limit of comparative error which is predetermined. N is the number of people in the society  $S$  and  $\bar{Y}_N$  Standard deviation parameters and is the average of the society. And Z the length of the point corresponding to normal cumulative contingency

$1 - \frac{\alpha}{2}$  is standard. In order to substitute  $S$  and  $\bar{Y}_N$  in the above relations Due to the uncertain scale deviation values and society people entrepreneurship average score. The preliminary sample will be use. At this stage the regarding to a preliminary sample  $\hat{\bar{Y}}_N = 12710$  and  $\hat{S} = 9330$  was with 12 members estimated and with considering volume of the society, comprising 537 members of self-employed students with 95 percent confidence coefficient, ( $Z_{0,975} = 1,96$ ) with utilization and inserting in the relations (1-3) and (2-3) the volume of 447 sample will be acquired. Finally, the volume of selected sample for each one of rows determined and reported in Table 3.

Table number2: table of determining the samples volume in each one of academic units

Final sample volume	Sample volume	Allocation coefficient	Self-employed student	Academic unit	Number
147	146/71	0/32	177	Islamic azad university golbahar branch	1
150	149/8	0/34	180	Islamic azad university mashhad branch	2
150	149/8	0/34	180	Iran board of management	3
447	446/31	1/00	537	Total	

**Research findings:**

Before analyzing the charts, must be noted that In assessing the impact of different levels of one variable on another variable with analyze of variance the averages of independent variable will be compared with dependent variable in different levels of dependent variable and if the averages be different in this levels Null hypothesis will be rejected and vice versa if the averages be statistically identical and have no difference the zero hypothesis will be accepted. .

**Table 3: reports the results of a research hypothesis**

Compatibility with situation	quantity	Entrepreneurship average	Entrepreneurship standard deviation	The test statistic	P-value
The low level of compatibility with the situation	24	36/2	28/50	0/214	0/808
The mid level of compatibility with the situation	198	35/0	28/45		
The high level of compatibility with the situation	225	37/0	29/63		

Anyways regarding to the probability of test meaningfulness amount reported in table number4 and compares it with the critical region of the ( $P-value = 0/808 > 0/05 = \alpha$ ) test Null statistical hypothesis was accepted and so the first hypothesis of the

research is rejected In other words, with the 95% confidence level Can be said that the compatibility feature with students situation has no impact on entrepreneurship.

Table4 reports the results of two research hypotheses

Systemic approach	quantity	Entrepreneurship average	Entrepreneurship standard deviation	The test statistic	-value
Low level of systemic approach	51	79/4	54/10	4/474	0//11
Mid level of systemic approach	171	88/1	49/57		
High level of systemic approach	42	118/9	65/42		

Table 6. Reports the results of research hypotheses of 3 researches

the internal locus of control	quantity	entrepreneurship average	entrepreneurship standard division	test statistic	<i>P-value</i>
low level of locus of control	39	32/8	30/44	3/395	0/036
mid level of locus of control	157	36/7	30/73		
high level of locus of control	231	41/8	32/18		

What can be seen from table number 5 is the value of the test statistic reported is large and the amount of its probability of meaningfulness is small  $P - value = 0/011 < 0/05 = \alpha$  so that it's smaller than the test critical region so it is concluded that average of entrepreneurship in the different levels of systematic approach are not identical and are different. In simpler words it can be said that systemic approach has direct impact on student's entrepreneurship.

The third hypothesis is confirmed and internal locus of control is effective in student's entrepreneurship. This result deduced from the results of table when the probability of test meaningfulness is smaller than its critical region ( $P - value = 0/036 < 0/05 = \alpha$ )

- Therefore, by rejecting the null hypothesis and accepting one hypothesis it can be said that the amount of students entrepreneurship in different levels of internal locus of control are not identical and posing internal personality type is effective in entrepreneurship.

- The fourth hypothesis which examines the impact of risk-taking has been approved and so the risk-taking also is effective in amount of entrepreneurship. In entrepreneurship reported averages in different levels of risk-taking relatively large differences can be seen in them. So by perusing the results of test and the reported amount and meaningfulness probability in the table it will be determined that  $P - value = 0/020 < 0/05 = \alpha$

- It means regarding to the fact that the amount of test meaningfulness probability is smaller than the critical region the null statistic hypothesis is rejected and the hypothesis number one will be accepted. So the general result of this test is expressed somehow in which posing the risk-taking personality is effective in amount of student's entrepreneurship.

#### Discussion and Conclusion:

- Schumpeter says that the entrepreneurship is the engine of economic development in societies but unfortunately this engine has no fuel yet in case of Iran. However, positive actions have been performed in order

to setting up and developing this powerful economic Stimulus. Teaching the entrepreneurship subjects in universities either as an independent field of study or just as a textbook subject it will turn green shoots. Of course the entrepreneurship's damage in Iran is due to absence of attention to the education and training environment, political environment, economic environment and cultural environment. Her there is a misconception which says in order to improve the entrepreneurship, developing the entrepreneurship programs just can be successful in universities. And relevance and effectiveness of the other elements in systems has been neglected. For example, reducing regulatory barriers to job creation in juridical and Political Environment. Production of television programs in the field of entrepreneurship, in cultural environment holding the celebration in order to appreciate and support the top entrepreneurs in the social environment. Developing entrepreneurship, courses in educational environments. These suggestions are a part of interviews which have been taken from the current researches entrepreneur students. It proves the attention to the environment approach and the impact of components on each other, in the system.

#### Suggestions:

Culture making, and promoting the spirit of entrepreneurship in universities; this goal is mainly achievable by incentive-promoting and educational programs in universities. Of course desired culture-making can be appeared in the context of cooperation between government, families and organizations. Moreover the role of TV in this category is quite remarkable.

- Considering the entrepreneurship in universities 1404 outlook. With regard to the issue that most of the universities in the country have a strategic plan it's needed to define the student's entrepreneurship in their Strategic goals and operational objectives. Financial support of entrepreneur students and educational entrepreneurial projects. Inaugurating the entrepreneurship consulting offices in financial, technical, juridical areas. However today's teacher extremely feed the students with the words like creation, research, systemic approach and creative approach?



These nice words will be reflected in the action and have the ability to influence the student's behavior when the teachers be entrepreneur as well as students and in their behavior have systemic approach and be aware of the value of these words.

## References

1. AGHAJANI, H. & ABBASGHOLIPOUR, M. 2012. Explanation of Relationships between Biographical Characteristics and Entrepreneurship Spirit of Students. *Iranian Journal Management Studies*, 5, 63-78.
2. AHMADPOUR, D. 2007. Entrepreneurship, Definition, Theories and Models. *Pardis publication. Tehran, Iran.*
3. AMABILE, T. M. 1996. *Creativity and innovation in organizations*, Harvard Business School.
4. BUCHANAN, D. A. & HUCZYNSKI, A. 2004. *Organizational behaviour: an introductory text*, Prentice Hall Harlow.
5. CHURCHILL, N. C. 1992. Research issues in entrepreneurship. *The state of the art of entrepreneurship*, 579-596.
6. DE NORONHA VAZ, T. & NIJKAMP, P. 2009. Knowledge and innovation: The strings between global and local dimensions of sustainable growth. *Entrepreneurship and Regional Development*, 21, 441-455.
7. DELAVAR, A. 2010. Theoretical and experimental principle of research in human sciences. *Tehran: Roshd Publication.*
8. DELAWARE, A. 2000. Theoretical and practical research in the humanities and social sciences, Tehran. Roshd Publications.
9. DUBRIN, A. J. & IRELAND, R. D. 1993. *Management & organization*, College Division, South-Western Publishing Company.
10. DYE, T. R. 1980. : Understanding Public Policy. *Englewood Cliffs, NJ*, p.39.
11. ERFANIAN KHANZADEH, H. & BOROOMAND ALIPOOR, N. 2009. *Mystery beans (management of short stories)* Mshhad, Selselatozzahab of publications.
12. FRANK, H., LUEGER, M. & KORUNKA, C. 2007. The significance of personality in business start-up intentions, start-up realization and business success. *Entrepreneurship & Regional Development*, 19, 227-251.
13. GRIFFIN, R. W. & MOORHEAD, G. 2011. *Organizational behavior: Managing people and organizations*, South-Western Pub.
14. JAHANGIRI, A. & KALANTARI SAGHAFI, R. 2010. "Sensing characteristics of entrepreneurial managers. *Journal of Research, development, entrepreneurship*, pp. 87-110
15. KARIMI, S., BIEMANS, H., LANS, T., MULDER, M. & CHIZARI, M. 2012. The Role of Entrepreneurship Education in Developing Students' Entrepreneurial Intentions. *Available at SSRN 2152944.*
16. KARIMI, S., CHIZARI, M., BIEMANS, H. & MULDER, M. 2010. Entrepreneurship education in iranian higher education: The current state and challenges. *Eur. J. Sci. Res*, 48, 35-50.
17. LUSSIER, R. N. 1993. *Human relations in organizations: A Skill-building approach*, Irwin.
18. MIRSHAMSI, F., KORD, B., KAMALIAN, A. R. & YAGHOUBI, N. M. 2011. Identification and Prioritization of factors Affecting Digital Entrepreneurship Development (Case Study at Mashhad City-Iran). *European Journal of Social Sciences*, 26, 370-388.
19. MOGHIMI, S. & AHMADPOUR, D. M. 2008. Entrepreneurship Education in iran smes iran:Smes Iran: Needs and alternative *Journal of Entrepreneurship development*, 1, 205-243.
20. MOGHIMI, S. M. 2001a. Entrepreneurship is an interdisciplinary subject. *Journal of Marketing. IRAN: TEHRAN.*
21. MOGHIMI, S. M. 2001b. Organization and management research approach. *Term Publication, 2th ed, Tehran.*
22. PALMER, M. 1971. The application of psychological testing to entrepreneurial potential. *California management review*, 13, 32-39.
23. PARDAKHTCI, M. & HEYDARI MOHAMMAD, S. H. 2008. Study of the effectiveness of the management in development and expreeing entrepreneurship. *Managment Perspective*, 8, 71-100.
24. RABINZ, S. 2008. Basis of Organization behavior. *Trans. Arabi SM, Parsayean A. 20th ed. Tehran: Cultural Studies Office.*
25. RAHMATI, M. H., KHANIFAR, H. & MOGHIMI, S. M. 2011. Identifying the challenges related to policymaking institutions for entrepreneurship formal education in Iran. *Afr. J. Bus. Manage*, 5, 7674-7682.
26. RAHMATI, M. H., MOGHIMI, S. M., ALVANI, S. M. & AZAR, A. 2010. Policymaking for University Entrepreneurship Education in nce, 7, p106.
27. SHAHHOSSEINI, A., KAVOUSY, E. & TOHIDY ARDAHAHEY, F. 2010. Entrepreneur University. *Available at SSRN 1589370.*
28. STOKES, D. & WILSON, N. 2010. *Small business management and entrepreneurship*, Cengage Learning EMEA.
29. STONECASH, J. 1980. Politics, Wealth, and Public Policy: The Significance of Political Systems. *Dye and Gray, Determinants of Public Policy*, 21-37.
30. ZABIHI, M., KHANZADEH, H. E., ALIPOOR, N. R. B. & MALEK, M. 2012. Job Characteristics Model of Hackman and Oldham in Public and Private Sector in Iran (Modified Model Approach). *International Journal of Innovative Ideas*, 12.

4/13/2013