

### Attributes of Job-Creativity in Female Students

Rezazadeh, Shekofeh-al-Sadaat, Master in Curriculum, School of Educational sciences and psychology, University of Isfahan, Isfahan, Iran. Email: [r\\_shekofe@gmail.com](mailto:r_shekofe@gmail.com)

Tabatabaeijebeli, Foruzan-Sadaat, Master of Science. Department of Industrial on System Management and Productivity, Faculty of Engineering, Islamic Azad University, Najafabad Branch, Isfahan, Iran. Email: [f\\_tabal361@yahoo.com](mailto:f_tabal361@yahoo.com)

Arbabisarjou, Azizollah( Corresponding author), Assistant professor, Faculty member, Zahedan University of Medical Sciences, Zahedan, Iran. Email: [derranneh2005@yahoo.com](mailto:derranneh2005@yahoo.com)

#### Abstract

The purpose of the present study was to investigate the attributes of job-creativity in female students in Isfahan University. It was a kind of survey research in which the descriptive method was used. In order to gather the data a researcher-made questionnaire was applied according to the aims of the study. The questionnaire's validity was assigned through the experts' point of views. Reliability coefficient of the questionnaire was also at 85%. The statistical samples included 154 female students of Isfahan University in 2010-11 who were chosen through clustered random sampling. In order to analyze the data, the descriptive-inferential method was applied. The data were analyzed through SPSS software; moreover, to test the questions the T-test and ANOVA was applied accordingly. Findings showed that the attributes of job-creativity in female students in case of risk-taking, searching for independence, creativity and success inclination were above the average level. However, the scores gotten from internal control was lower than the average standard criterion score. Furthermore, the average scores of female students in engineering group was above the average level in all the mentioned elements comparing to humanities, science and economy groups.

[Rezazadeh, Shekofeh-al-Sadaat, Tabatabaeijebeli, Foruzan-Sadaat, Arbabisarjou, Azizollah. **Attributes of Job-Creativity in Female Students.** *Life Sci J* 2013;10(7s): 436-442] (ISSN:1097-8135). <http://www.lifesciencesite.com>.

**Keywords:** students' job creativity, job creativity attributes, higher level education, students

#### Introduction

Today, in the third millennium, national and international levels as well as increased communication in a fast-paced change and rising, increasing competition in the world and therefore the need to adapt to constant changes in technology, different countries of the world have to immediately to update their knowledge on various aspects of their action and Following these changes the Promotion of Community Development and back efforts to close it, why invent, innovate and produce new products, new processes and methods is much more important. At this time it shows the importance of labor creative, innovative and entrepreneurial way is outstanding because other communities not currently served by relying on previous methods, made their goals and overcome their rivals. So today one of the most challenging topics in the social entrepreneurship over the past few decades become a necessity in most developed countries has been introduced. Entrepreneurship term first became popular in the French language. "Enterprendre" French word meaning of the word "committed" and is equivalent to undertake the English in 1848 by John Stow entrepreneurial approach to the English translation(Khnyfr, 2006).

Although entrepreneurship is a concept that was first introduced in economics and science to sixth decade of the twentieth century, most of it discuss by the scholars. But all they could not to provide detailed definition of entrepreneurship. So gradually its role in economic theories faded and highlighting the role of entrepreneurs in economic development of communities, psychologists began to investigate the characteristics of entrepreneurs.

Many definitions of entrepreneurship are based on different perspectives.

Schumpeter (1948) is in fact the father of the German economic school of entrepreneurship is based on the belief that entrepreneurship is the driving (movement) force of the economy. Entrepreneurship includes activities, tasks and operational understanding create the opportunities and the opportunity to pursue and realize it is associated. Sherman (2004) also says that the definition of entrepreneurship, entrepreneurship is the process of creating something new and different that is from the time and effort and rewards associated with a satisfactory. Somebody considered this issue equivalent to the "value creation" in the Persian language (Ahmadpour, 2000). While no theory has yet to fully explain entrepreneurial behavior and it

offers a clear definition of the unit, but some scholars to investigate the psychological characteristics of entrepreneurs and entrepreneurs from non-entrepreneurs recognize they have these characteristics can be distinctive. McClelland (1960) was the first theorist to pay for this feature. He believed contrast to popular people, entrepreneurs' needs greatly are gain success (Sabbaghian et al, 2004). They are inclined to improve their performance, they like through their individual efforts to conclude, they want to risk and they want autonomy in their life (Samadaggaei, 1999).

McClelland's permanent efforts in the field of entrepreneurship competencies the personality led entrepreneurs as permanent features of the field of entrepreneurship research is important so that later they "Comprehensive Model of Entrepreneurship" Entrepreneurship Development Institute of India is proposed to be raised by them.

According to the model, entrepreneurs are five characteristics that can be said almost these features are the consensus of scholars. These features include Achievement (progress), risk taking, independence, creativity, determination or internal control (Malik Pur, quotes Zali et al.). "Seeking success" in general is willing to do the work based on high standards of success situations (McClelland, 1962). Risk: to accept the possibility of defeat (Dearkin, 2002). Independence, entrepreneurs like to do things their own way, according to their plans decides and to be your own boss (Ahmadpourdaaryani, 2000: 87). Creativity is defined as creating new ideas that may lead to new products or services (Edwar, 2000). Determination or control of internal: the person believes that he is in control of events in internal or external, meaning locus of control. Entrepreneurs that have internal control believe those life events and actions of the programs themselves and their actions as a result of luck, fate, and so they do not compare (Hisrich et al, 2002).

Today, the idea that entrepreneurial traits are inherent not only accepted but also features training and research in the last two decades, entrepreneurship has been called the golden decades, more than before taken into consideration and even in developing countries has been an imperative. Because of the important role entrepreneurs play in promoting employment and improving the economic status of communities, entrepreneurship education, entrepreneurial activity can increase the driving force for the development of communities is considered appropriate. And increasing income, and improving people's lives to be together. Hence the economic and social planners to hold entrepreneurship in different countries with educational systems, especially in the higher education community to promote and expand.

Drucker believes that in this case, since the entrepreneur entrepreneurship can be taught and learned so everyone (Drucker, 1985: 49).

So today's excellent education institutions are attempting to maximize the utilization of the facilities and research achievements, the more number of people are the characteristics of entrepreneurship can be identified and Training in entrepreneurship and entrepreneurial activities and to encourage and guide. In this regard, much work is being done in the field of entrepreneurship in universities around the world; it seems that the U.S., Britain and Germany are the pioneers in this field. The first policies, is the policies of these people support. Therefore, the first school was established to train these people in these years in Germany. Department of Education in 1998, a plan to promote a culture of entrepreneurship in Japan as "Japan's economic sacrifice soldiers" ran (Imani, 2004). The Institute of Labor and Social Security, education and research organizations to stay and Social Affairs first "entrepreneurship education" was introduced in April 1988. In this regard, the Supreme Council of Education in 1989 for self-employment projects, entrepreneurship courses in some disciplines was anticipated. By the beginning of the Third Five Year Plan (2000) Different designs and diverse country in order to promote entrepreneurship development has been carried out. Comprehensive plan for the development of entrepreneurship in several ministries, including the Ministry of Science, Research and Technology was started. Of the Entrepreneurship Development (karad) directed the Secretariat of the universities in the country and assess the state of education in the twenty-five universities running. In the future we will witness the commissioning of the facilities of all universities in the country (Badri et al, 2006).

Addition to the studies mentioned above are particularly significant in the context of entrepreneurship, entrepreneurship in higher education took place. For instance, Rezaei and Rahsepar (2009) to examine how entrepreneurship students of Islamic Azad University, Fars, this study has shown that increased education will lead to increased entrepreneurial spirit. Further research titled "Factors affecting the development of entrepreneurship and entrepreneurial management from the perspective of students of Tehran University in Tehran in order to provide a suitable model curriculum education educational planning and management approach" by Auladian (2010) was conducted. That results of principal components, which can be effective in the training of graduates in the fields of education, creativity, attention to the source of control, risk taking, achievement motivation, tolerance for ambiguity and the

importance of educational assessment. SharifZadeh (2003) Research in the College of Agriculture, Shiraz University students to examine four characteristics, the need for achievement, need for power, competition and risk taking payments. The results showed no significant differences between students of various disciplines.

Shirzadi Esfahani (2006) Research on the relationship between organizational climate in public schools paid for with an entrepreneurial spirit, entrepreneurial spirit that indicators such as achievement motivation, self-esteem, creativity, locus of control, and risk appetite prospective students was higher than average.

Results Dean Harvey (Harvydean, 2000) showed that the content of training programs and entrepreneurial spirit of the students is a meaningful relationship. In another study, titled "Entrepreneurial characteristics amongst university students in Turkey and Nora by Yoanka (Yonca G. & Nuray, 2000) were performed. The results indicated that students tend to be independent of the characteristics of entrepreneurs are in business at all Except for ambiguity tolerance and confidence gained high scores. Moreover, Rogoff et al.( 1996) in their research found that the number of family members and there is no significant relationship between students' entrepreneurial spirit. Most experts agree that based on what was said in the context of the new millennium, an era called the information society and global uproar, business training and entrepreneurial culture, entrepreneurship development centers, research and development, digital entrepreneurship workshops, businesses, policies and educational programs and research, all can provide valuable guidelines for the employment and entrepreneurial thinking in university students and a parallel improvement in unemployment in the society (Hosseini & Larigani, 2008). In this regard, recent studies have shown the important role women play in promoting employment and improving the economic condition of communities. Rapidly developing countries found that in areas of the world today, girls and women as creative and innovative entrepreneurs in the community can be a source of great transformation. Therefore, in order to make optimal use of the capabilities of women and the achievement of economic growth and development. Scholars seek to provide entrepreneurial role models that girls and women in developing countries to enable comprehensive. Therefore, higher education, especially universities, should develop policies and policies to be followed up with practical solutions, identify their talents, to develop and flourish.

### Goals of Research.

The main objective of this study was to evaluate each of the five characteristics of entrepreneurship (creativity, achievement seeking, risk taking, independence and internal control) of the university students.

According to the above objectives, the following research questions:

- 1- To what extent are the female students' creativity features at Isfahan University?
- 2- How much risk are features of female students?
- 3 - To what extent are the female students at Isfahan University features independence?
- 4 - To what extent are the female students seeking successful at Isfahan University features?
- 5 - To what extent are the female students at Isfahan University features independence?
- 6- To what extent the female students of the departments (humanities, basic sciences, engineering sciences), there are differences in the characteristics of entrepreneurship?

### METHODES

The study is applicable research due to the nature and objectives of the research study "descriptive survey" are used. The study included all female at University of Isfahan students who were studying in 2009-2010. Since the study was done in the present study was to determine the population variance is to estimate the variance of the first sample of a group of 30 students was randomly selected from each the questionnaire was distributed among them through variance. Based on variance and sample size estimation, sample size was estimated at 154 men. Since one of the purposes of the present study was to compare students in different schools together, the stratified random sampling method was used.

#### Measuring Tools

In this study, the researcher made questionnaire including 30 closed questions to answer multiple-choice Likert scale was used. Due to the characteristics of the entrepreneurial characteristics of independence, risk-taking, creativity, success-seeking and internal control, questionnaire designed that any one of these five features six questions used to determine the overall score of the questionnaire indicate that entrepreneurial spirit.

#### Validity and reliability

The validity of the questionnaire face and content validity were used. The initial questionnaire with the research objectives, a number of experts were asked to send them Questionnaire survey and evaluation forms were sent to express their opinions. Peer assessment score in 17 quarters (in the five-value Likert scale) indicating the validity of the desired tool. The analytical data obtained for the

single-sample t tests and factor analysis (ANOVA), was used.

### Results

This section presents findings from a research tool are discussed.

Table 1. Univariate t-test, comparing the mean imaginary components of risk taking (3)

Supposed mean	Average	Standard deviation (SD)	T	Significance level
3	3.43	0.78	7.02	0.000

In order to evaluate analytical significance level for univariate t-test was performed using the average results (3.43) is larger than the mean assumption (3)

And also the extent of the critical value of the larger table. Therefore concluded that the mean risk-taking traits of female students is higher than average.

Table 2. Univariate t-test, comparing the mean imaginary components of creativity (3)

Supposed mean	Average	Standard deviation (SD)	T	Significance level
3	3.42	0.44	12.18	0.000

In order to evaluate analytical significance level for univariate t-test was performed using the average results (3.42) is larger than the mean assumption (3) And also obtained at  $t = 0.05$  is larger than the critical

value table, Therefore concluded that the average university students' creativity component is higher than average.

Table 3. Univariate t-test, comparing the mean imaginary components of internal control (3)

Significance level	t	Standard deviation (SD)	Average	Supposed mean
000	-1.89	0.60	2.90	3

In order to evaluate analytical significance level for univariate t-test was performed using the average results (2.90) is smaller than the mean assumption (3) And also obtained at  $t = 0.05$  critical Azmqdar

smaller table, Therefore concluded that the mean components of internal control of female students is lower than average.

Table 4. Univariate t-test, comparing the mean imaginary components seeking success (3).

Supposed mean	Average	Standard deviation (SD)	T	Significance level
3	3.77	0.56	17.33	0.000

In order to evaluate analytical significance level for univariate t-test was performed using the average results (3.77) is larger than the mean assumption (3) Obtained and the 05.0 = the critical value of the

larger table, Therefore concluded that the mean components of internal control is higher than university students.

Table 5. Univariate t-test, comparing the mean imaginary components Independence (3)

Significance level	t	Standard deviation (SD)	Average	Supposed mean
000	14.66	0.64	3.74	3

In order to evaluate analytical significance level for univariate t-test was performed using the average results (3.74) is larger the mean assumption (3) Obtained and the 05.0 = a critical value of the larger

table. Therefore concluded that the mean independence components of female students is higher than average.

Question 6: Among the students of the departments of entrepreneurial characteristics are different?

Table 6. The mean and standard deviation of each feature by the Department of Entrepreneurship

Features	need for independent		risk-taking		Internal Control		Creativity	
	s	x	s	x	s	x	S	X
Human Sciences	0.89	2.75	0.80	3.28	0.47	3.02	0.83	3.54
Basic Sciences	0.89	2.95	1.05	3.44	0.75	3.55	1.07	3.77
General Departments, Technical and Engineering	0.90	2.99	0.91	3.50	0.46	3.50	0.76	3.78

Means that the components of creativity, internal control the need for achievement, risk-taking and need for independent engineering group, is larger.

Table 7. Analysis of variance (ANOVA) mean different departments of the three components of creativity

Sources of change	Ss	d.f	MS	F	Sig
Between-group	1.725	4	0.431	2.23	0.068
Intraclass	29.89	155	0.193		
Total	31.615	159			

Table 7 and the results of ANOVA analysis shows that there are significant differences between educational groups in the areas of creativity.

Table 8. Variance between departments, between the three components of risk

Sources of change	Ss	Df	MS	F	Sig
Between-group	289.19	4	96.40	5.23	0.001
Intraclass	42.89	155	31.136		
Total	341.08	159			

As shown in Table 8 is a significant difference between the mean of the departments. Tukey test showed that the engineering group, with a mean (3.50), so there is higher than average.

Table 9. Analysis of variance mean different departments of the three components

Sources of change	ss	Df	MS	F	Sig
Between-group	425.46	4	128.89	14.83	0.001
Intragroup	342.89	155	31.136		
Total	768.35	159			

Independence: Based on the results of the ANOVA analysis shows that the differences between the four groups of components is significant need for independence. The Tukey test showed that the differences between engineering and other groups.

Table 10. Analysis of variance between departments, between the three components of success in seeking

Sig	F	MS	df	Ss	Sources of change
0.001	14.32	148.34	4	208.60	Between-group
		241.136	155	89.345	Intraclass
			159	554.49	Total

As can be seen in Table 10, there are significant differences between the component seeking success. Tukey test of the difference between engineering

groups and other groups show, if no significant difference in the other groups.

Table 11. Analysis of variance mean different departments of the three components of internal control

Sources of change	ss	df	MS	F	Sig
Between-group	60.326	4	134.34	9.32	0.001
Intragroup	354.89	155	12.136		
Total	681.49	159			

Observed Table 10 and the ANOVA analysis showed significant differences between educational groups are the components of internal control. Tukey test showed that the difference between human science and engineering, respectively, between groups (3.2) and (3.50), respectively. There were no significant differences between the other groups.

### Discussion and Conclusion

Nowadays incremental changes resulting from globalization and Development of advanced technologies in the fields of national and international communities, students need to be able to continually update their information, Services and new products to offer to society and thereby raise the general level of prosperity and dignity is felt more than ever, Therefore, higher education universities and educational centers in different countries to educate and train creative and innovative set in their development priorities. And try to maximize the utilization of the facilities and research achievements, Greater number of people who are entrepreneurial characteristics identified and appropriate to provide education and encourage their entrepreneurial activities.

In this regard, recent studies have shown, women also play an important role in promoting

employment and improving the economic status of communities and play. Therefore, higher education universities and educational centers are looking to use patterns and policies, women's and girls' abilities to identify, nurture and to flourish And thereby strengthen their role in the development of comprehensive community formation.

The results of this study showed that in areas of entrepreneurship, characteristics of independence, internal control, Seeking success and creativity of the students are above average. But risk taking scores of students score below the standard that would be due to lack of risk culture, divergent thinking, and too much attention to the security of a university education was inadequate. The results of research is aimed in the Badri and colleagues (2006).

In addition, the results indicated that the mean scores in all areas of engineering science group mean scores than groups Sciences, Humanities and the economy is higher, The university can develop the capabilities of entrepreneurship education policies, the creation of growth centers, educational programs and curriculum revision in order to strengthen and develop these qualities in students from other departments to take action.

### References

Ahmadpourdaaryani, Mahmoud. (2000).

Entrepreneurship. Tehran: Pardiss Company Publication.

Auladian, Massoumah et al. (2010). Survey of affecting factors on development of graduated entrepreneurship at University of Tehran and Entrepreneur managers of Tehran to prepare an appropriate curriculum for Educational Administration Students, Quarterly of New thoughts in Educational Sciences, The Fifth year, No. 2.

Badri, Ehsan et al. (2006). The survey of entrepreneurship competencies in Students of University of Isfahan, Quarterly of Research and planning in the Higher Education, No.12, No. 2.

Bygrave, W. (1994). The portable MBA in intreprenurship. New York: John wiley & sons Inc .

Casson, M. (1982). THE Entrepreneur: An economic theory. New Jersey: Barnes and Nobell.

Dearkins, David and freel, Mark. E. (2002). Intreprenurship and small firms, 3d Education, London: Mc Graw-hill.

Drucker, P. F. (1985). Innovation and Entrepreneurship: practice and principles, London: Butterworth .

Edward P. L. (2003). Entrepreneurship . Hoover Enstitution and Graduate school of Business, Stanford University .

Harvydean, R. (2000) training Entrepreneurship Education: Alternative Models and Current Trends .

- Hisrich, Robert D. & Peters, Michael & Shepherd. (2002). *Entrepreneurship, 6<sup>th</sup> Education*. Boston: Mc Graw-Hill.
- Hosseini, Larigani, M. Mirarab Razi. (2008). *entrepreneurship Education in the New Millennium: A substructure for the Employment of Higher Education Graduates, Quarterly Research and Planning in the higher Education Vol 50,pp. 119-137 (in Persian)*.
- Hosseini, Larigani, M. Mirarab Razi. (2008). *entrepreneurship Education in the New Millennium: A substructure for the Employment of Higher Education Graduates, Quarterly Research and Planning in the higher Education Vol 50,pp. 119-137 (in Persian)*.
- Imani, Mohammadnaghi(2004). *Entrepreneurship teaching at universities, Quarterly of Educational administration researches, No. 1*.
- Khnyfr, Hossein.(2007). *Entrepreneurship in Evaluated System, Vol. 1, The center of Entrepreneurship in Qom*.
- Mc Clelland, D. (1962). *Business drive and national achievement. Harvard Business Review, 40, 99-110*.
- Rezaei, Mohammadhassan, Rahsepar, Tayyebbeh.(2009). *Survey of Entrepreneurship characteristics' in students of Azad Islamic University of Bonab Branch, Quartely of Scientific- research in Educational Administration, The second year, No.4*.
- Rogoff, E. (1996) *Research on Education For entrepreneurship, in D. Sexton, C. kent, K. Vasper (edu). Encyclopedia of entrepreneurship, N. J: Drentice-Hall, Inc .*
- Sabbaghiyan, Zahra, Ahmadpoor, Mahmoud, Azizi, Mohammad.(2004). *Survey of Students Entrepreneurship, Management Message, No. 13 and 14, PP:163-190*.
- Samadaaggaei, Jalil.(1999). *Entrepreneurship Organizations, Tehran: The center of Governmental Management*.
- Schumpeter, J. (1934). *The theory of Economic Development, Cambridge: Harvard .*
- SharifZadeh, M.( 2003). *Review the training needs of agricultural students strengthen entrepreneurial spirit. Master's thesis, Shiraz University.. (in persian)*.
- Sherman, P. S. (2004). *The impact of realistic entrepreneurship preview on entrepreneurial Biases, risk perception and opportunity evaluation of Nebraska-Lincoln .*
- ShiraziIsfahani, H.( . 2006). *The relationship between organizational climate of public school students with entrepreneurial spirits. Master's thesis, alzahra University. (in persian)*.
- ShiraziIsfahani, H.( . 2003). *The relationship between organizational climate of public school students with entrepreneurial spirits. Master's thesis, alzahra University. (in persian)*.
- Yonca, G. & Nuray, A. (2000). *Entrepreneurship college student's profils sampling comparative analysis Education & traning V. 48p 25-38*.
- Zali,Mohammadreza, Madhoushi, Mehrdad, Kordnaeij, Assadollah.(2007). *Evaluation of Entrepreneurship characteristics' in students( Case study in Mazandaran), Quarterly of Human sciences*.