

## The Influence of Gender on Students' Entrepreneurial Approach

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### Abstract

The aim of this study was to explore the role of gender in entrepreneurial approaches taken by students. The research method was descriptive-survey. To this end, a sample of 580 students (295 females and 285 males) was selected through multi-stage cluster sampling from students at Islamic Azad University in Fars province, Iran. The data were collected through Personality Traits Questionnaire from Kordanech, Zali, Homan, and Shams (2007). After determining the reliability and validity of the questionnaire, it was administered to the respondents and the collected data were analyzed using t-test and Friedman test. The results showed male and female respondents' total scores and its component scores for their entrepreneurial approach was higher than average except for ambiguity tolerance. In addition, the results of t-test indicated that there is a significant difference between male and female respondents in their entrepreneurial approach and components such as risk taking and activism, as male respondents scored higher on risk-taking and female respondents scored higher than their male counterparts on activism. However, there were no significant differences between the two groups in terms of other six components, i.e. internal locus of control, need to succeed, clearness of thought, ambiguity tolerance, dreaming, and need for challenge.

**Keywords:** Entrepreneurship, Entrepreneurial Approach, Entrepreneurial personality, Gender, Student.

### Introduction

In today's world the mission of universities has changed to suit the new needs and accordingly new missions have been assigned to the institutions of higher education. Although traditionally the role of universities was limited to educational activities, research-based higher education institutions came into existence very quickly and research along with education became the central focus of activities performed by universities, so that today higher education organizations are facing new missions, one of the most

important of them being entrepreneurship. Accordingly, universities are expected to provide a suitable context for their students so that they can turn into entrepreneurs. As entrepreneurship began to gain significance since the mid-twentieth century it paved the way for universities to get involved in entrepreneurial issues in such a way that the end of the twentieth century, many universities entered this field. At present most universities have incorporated entrepreneurship training in their curricula and one of the goals of

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education is also to influence the thoughts and actions of entrepreneurship and prepare

Entrepreneurial studies at the outset focused on economic issues, but as entrepreneurship covers a large number of aspects, it went beyond economics scientists in different fields such as sociology, psychology, and management are also interested in exploring it. As such, numerous theories and views were proposed to explain it. In addition, some scholars have focused on personality traits of entrepreneurs, while others have stressed the role of environmental and behavioral factors such as personal experience and background (Ahmadpur Dariani, & Rezaeian, 1998).

Based on what was mentioned, one may argue that entrepreneurship is an interdisciplinary field that is studied based on four psychological, sociocultural, economic aspects and communication networks. The psychological approach focuses on personality traits of entrepreneurs and the cultural approach considers the social impact of the social environment. Entrepreneurship approach can be used to measure individuals' or institutions' readiness to act as entrepreneurs (Kordaneech, Zali, Homan, & Shams, 2007).

According to the psychological approach, entrepreneurship studies are directed toward personality traits of entrepreneurs and identifying those traits that separate entrepreneurs from non-

students for a given entrepreneurial situation (Bilić, Prka, & Vidović, 2011).

entrepreneurs. Ahmadpur Dariani (2003) considers characteristics such as innovation, creativity, and risk-taking as the basic characteristics of entrepreneurs that in addition to personal skills are necessary to become entrepreneurs. According to Abedi (2002) some entrepreneurial characteristics are the need for achievement, internal locus of control, moderate risk-taking, independence and autonomy, self-esteem, and ability to tolerate ambiguity.

Nemati (2013) identifies five main personality traits of entrepreneurs including locus of control, creativity, ambiguity tolerance, risk-taking and seeking achievement. Locus of control means how a person attributes the positive and negative results of their work to others. Creativity is a process in which an individual can orient their thinking in different directions. The ambiguity tolerance is also of high significance in entrepreneurship in the sense that one can accept uncertainty live with it. Risk-taking also means accepting risk in one's activities and the seeking achievement means to what extent a person desires for progress and success.

Kordaneech, Zali, Homan, and Shams (2007) considers eight components of locus of control, tolerance for ambiguity, functionalism, risk-taking, seeking achievement, clearness of thought, daydreaming, and need for challenge as the main traits of an

entrepreneurial personality and accordingly they constructed a questionnaire to identify Iranian entrepreneurs. According to Drucker, one of the preconditions for entrepreneurial behavior is to have a tendency to entrepreneurship and entrepreneurial tendency shapes people's willingness to set up businesses in the future (Ahmadi, Shafei, & Mafakheri Nia, 2012).

It seems that like other aspects of the personality, entrepreneurial personality is shaped since childhood and is influenced by many factors. According to Kanyari and Namusonge (2013), independent and flexible nature of entrepreneurship is shaped from the very early ages. Entrepreneur parents often try to foster a sense of independence, success, and responsibility in their children.

It is obvious that personality is shaped by different factors and it develops during the lifetime. Besides, the personality of males and females is influenced by gender and differences between the two groups, and the expectations from each group. Therefore, it is interesting to find out how such differences are in terms of those personality traits that are considered as entrepreneurial characteristics. In other words, to what extent entrepreneurial characteristics are present among men and women and are any differences between the two groups in this regard? The study also seeks to find out whether entrepreneurial characteristics among males and

females are at a desirable level and if gender plays a role in this regard.

### Literature Review

Ghavami and Lotfi Poor (2008) in their study found that entrepreneurial willingness among graduate students at Ferdowsi University compared to wage employment in the public and private sectors is positively correlated with age, income, and education of their parents, in the favor of men than women. Siadat, Reza Zadeh, and Babri (2012) in their study at Isfahan University of Medical Sciences concluded that the spirit of entrepreneurship among students in general and in terms of its components such as internal locus of control, independence, and creativity is higher than average, except for risk-taking that was lower than average.

Arasteh, Enayati, Zamani, and Khademloo (2012) studied entrepreneurship characteristics among students at Islamic Azad University of Sari and concluded that entrepreneurship characteristics among students were higher than average, except for tolerance for ambiguity. Besides, clearness of thought was higher among female students compared with male students, while male students were more involved in dreaming than females. Zeffane (2015) in a study in the UAE concluded that women are less risk-taking and are less willing to be entrepreneurs than men. Boz and Ergeneli (2014) in their study in Turkey found some personality

differences between male and female entrepreneurs. In another study by Okafor and Mordi (2010) in Nigeria, it was found that environmental factors play an important role in women's entrepreneurship.

Feiz (2009) studied the effect of gender on entrepreneurial characteristics among students at Semnan University in Iran and concluded that in general there is no difference between male and female entrepreneurs. However, there were some differences between the two groups in terms of seeking achievement and ambiguity tolerance as was the case between functionalism and dreaming between male and female students. Akbarzadeh, Halimi, and Khazayi (2012) in their study found that entrepreneurial characteristics such as risk-taking and need for challenge are different in terms of gender. In another study by Ahmadi et al. (2012) at Kurdistan University it was found that need to succeed and creativity are higher among male students than female students.

According to a study done by Sharif Zadeh and Zamani (2006), students scored lower on risk-taking, clearness of thought and need for challenge, but their scored higher on locus of control, need to succeed, activism, and dreaming. Besides, there were significant differences between male and female students in terms of risk-taking, dreaming, need for challenge and generally in terms of entrepreneurial spirit. Ghasemnezhad Moghadam (2010)

studied entrepreneurship among students at Islamic Azad University of Tabriz, and concluded that the creativity among students of engineering and basic sciences is higher than that of students of humanities. It was also found that male students were more risk-taking, pro-independence, and creative than female students.

The results of a study conducted by Allahyari, Keshavarz, and Chizari (2009) showed that there was no significant difference in students' attitudes towards entrepreneurship in terms of gender, education, and household income. In a study done by Ahmadi, Shafei, and Mafakheri Nia (2012), it was found that male students at University of Kurdistan have a higher sense of achievement, independence, and creativity than female students. Besides, a study by Diaz-Garcia and Jimenez-Moreno (2010) showed that men are more thinking about setting up a business than women do. According to the findings of other researchers, the aim of the present study is show how gender can affect students' entrepreneurial approach.

### Methodology

The present study aimed to explore student entrepreneurship in terms of their gender. To this end, a descriptive-survey method was used. The research population included all students in the associate, bachelor, and master levels at Islamic Azad University including 106,000 students who

had enrolled in 24 university branches in the academic year 2014-2015 in Fars province, Iran. A sample of 580 students (295 females and 285 males) was selected through multistage cluster sampling. In the first stage, of 24 universities, 7 university branches of Darab, Fasa, Firozabad, Jahrom, Lamerd, Marvdasht and Shiraz were selected through simple random sampling. Then, a total of 26 classes were randomly selected in all branches. Finally, 563 questionnaires (276 males and 287 females) were answered and returned.

The data were collected through Personality Traits Questionnaire (Kordaneech et al., 2007), which was introduced as an instrument to identify Iranian entrepreneurs. The questionnaire contains 95 items and eight components including the need to succeed, internal locus of control, risk-taking, ambiguity tolerance, clearness of thought, daydreaming, functionalism, and need for challenge. The validity of

the questionnaire was confirmed using confirmatory factor analysis, and the reliability of each component was reported in a range of 0.66 to 0.92. In addition, in this study the validity of the questionnaire was confirmed by experts in the field and its reliability was assessed using Cronbach's alpha. the alpha values for the entire questionnaire was 0.95 and the corresponding values for its components, i.e. need to succeed (0.88), internal locus of control (0.89), risk-taking (0.86), ambiguity tolerance (0.84), clearness of thought (0.92), dreaming (0.75), activism (0.86), and need for challenge (0.81) were estimated.

### Results

Kolmogorov-Smirnov was used to assess the normality of the data and the Levene's test was run to confirm the equality of variances. The results showed that parametric tests can be used. Besides, t-test was used to analyze the data.

**Table 1. The results of Kolmogorov-Smirnov test for entrepreneurial approach.**

Components	K-S Value	Sig.	Components	K-S Value	Sig.
Risk-taking	0.870	0.436	Activism	1.238	0.065
Locus of control	1.286	0.073	Ambiguity tolerance	1.165	0.132
Need to succeed	1.112	0.168	Dreaming	1.625	0.071
Clearness of thought	1.648	0.090	Need for challenge	1.394	0.065
Total	1.017	0.252			

**Table 2. Results of Levene test for components of entrepreneurial approach.**

Components	F	DOF 1	DOF 2	Sig.
Risk-taking	1.198	1	561	0.274
Locus of control	0.883	1	561	0.348
Need to succeed	0.109	1	561	0.741
Clearness of thought	1.262	1	560	0.262
Activism	0.219	1	561	0.640
Ambiguity tolerance	1.716	1	560	0.191
Dreaming	0.047	1	560	0.828
Need for challenge	0.051	1	560	0.822
Total	0.040	1	559	0.841

As it can be seen in tables 1 and 2, the Kolmogorov-Smirnov and Levene values are not significant for each of variables. Therefore, it is possible to run parametric tests.

**Question 1:** Which entrepreneurial approach was taken by male students?

In order to determine what entrepreneurial approach was taken

by male students, one-sample t-test was used. As can be seen in Table 3, the scores of male students for all entrepreneurship components except for ambiguity tolerance are higher than average. In addition, the scores of male students for entrepreneurial characteristics in general is higher than average.

**Table 3. The results of one-sample t-test for male students' scores.**

Factors	N	SD	M	t	Sig	
Risk-taking	276	3.39	0.66	3	9.78	0.000
Locus of control	276	3.93	0.61	3	25.23	0.000
Need to succeed	276	3.84	0.56	3	24.64	0.000
Clearness of thought	276	3.50	0.66	3	12.61	0.000
Activism	276	4.08	0.62	3	29.08	0.000
Ambiguity tolerance	276	2.38	0.66	3	15.22	0.000
Dreaming	276	3.79	0.67	3	19.50	0.000
Need for challenge	276	3.76	0.73	3	17.34	0.000
Total	276	3.61	0.38	3	26.60	0.000

**Question 2:** Which entrepreneurial approach was taken by female students?

In order to determine what entrepreneurial approach was taken by female students, one-sample t-test was used. As can be seen in Table 4, the scores of female

students for all entrepreneurship components except for ambiguity tolerance are higher than average. In addition, the scores of female students for entrepreneurial characteristics in general is higher than average.

**Table 4. The results of one-sample t-test for female students' scores.**

Factors	N	SD	M	t	Sig	
Risk-taking	287	3.21	0.627	3	5.82	0.000
Locus of control	287	3.98	0.564	3	29.66	0.000
Need to succeed	287	3.83	0.570	3	24.65	0.000
Clearness of thought	287	3.47	0.635	3	12.62	0.000
Activism	287	4.20	0.624	3	32.54	0.000
Ambiguity tolerance	287	2.46	0.690	3	13.18	0.000
Dreaming	287	3.76	0.634	3	20.52	0.000
Need for challenge	287	3.71	0.696	3	17.28	0.000
Total	287	3.55	0.370	3	25.36	0.000

**Question 3:** How each entrepreneurial characteristic is rated for male and female students?

As it can be seen in Table 5, activism is rated highest, followed

by the locus of control, need to succeed, need for challenge, dreaming, clearness of thought, and risk-taking. In addition, ambiguity tolerance is rated lowest.

**Table 5. Ratings entrepreneurial characteristics among male students by Friedman test.**

Factors	N		SD	Rank	Chi	Sig
Risk-taking	276	3.39	0.66	3.62		
Locus of control	276	3.93	0.61	5.56		
Need to succeed	276	3.84	0.56	5.18	719.661	0.000
Clearness of thought	276	3.50	0.66	3.81		
Activism	276	4.08	0.62	6.14		
Ambiguity tolerance	276	2.38	0.66	1.63		
Dreaming	276	3.79	0.67	5.00		
Need for challenge	276	3.76	0.73	5.07		
Total	276	3.61	0.38	4.83		

As it can be seen in Table 6, activism is rated highest, followed by the locus of control, need to succeed, dreaming, need for

challenge, clearness of thought, and risk-taking, while ambiguity tolerance is rated lowest.

**Table 6. Ratings entrepreneurial characteristics among female students by Friedman test.**

Factors	N	SD	Rank	Chi	Sig
Risk-taking	287	3.21	0.62	3.11	
Locus of control	287	3.98	0.56	5.81	
Need to succeed	287	3.83	0.57	5.17	868.04 0.000
Clearness of thought	287	3.47	0.63	3.80	
Activism	287	4.20	0.62	6.61	
Ambiguity tolerance	287	2.46	0.69	1.73	
Dreaming	287	3.76	0.63	4.95	
Need for challenge	287	3.71	0.69	4.81	
Total	287	3.55	0.37	4.70	

**Question 4:** Is there any difference between male and female students in terms of their entrepreneurial approach?

In order to answer this question, independent samples t-test was used. As it is shown in Table 7, there are significant differences

between male and female students in terms of entrepreneurship in general and its components including risk-taking and activism. However, there is no significant difference between the two groups concerning other components.

**Table 7. Results of independent samples t-test.**

Factors	Gender	N	Mean	SD	t	Sig
Risk-taking	Male	276	3.39	0.66	3.22	0.001
	Female	287	3.21	0.62		
Locus of control	Male	276	3.93	0.61	1.147-	0.252
	Female	287	3.98	0.56		
Need to succeed	Male	276	3.84	0.56	0.236	0.813
	Female	287	3.83	0.57		
Clearness of thought	Male	276	3.50	0.66	0.630	0.529
	Female	287	3.47	0.63		
Activism	Male	276	4.08	0.62	2.105	0.036
	Female	287	4.20	0.63		
Ambiguity tolerance	Male	276	2.38	0.66	1.315-	0.189
	Female	287	2.46	0.69		
Dreaming	Male	276	3.79	0.67	0.442	0.658
	Female	287	3.76	0.63		
Need for challenge	Male	276	3.76	0.73	0.949	0.343
	Female	287	3.71	0.69		
Total	Male	276	3.61	0.38	2.003	0.046

### Discussion and Conclusion

In total, the results of one-sample t-test showed that the scores of both male and female students on entrepreneurial personality traits are higher than the assumed average. This reflects a high level of entrepreneurial spirit among both male and female students. The only exception in this case was ambiguity tolerance that students had a score lower than hypothetical average for it. This shows that male and female students in sample preferred to have a clear vision in their professional issues. The findings of this study are supported by the previous researches such as: Akbarzadeh, Halimi, & Khazaei, 2012; Arasteh, Enayati, Zamani, & Khademloo, 2012; Feiz, 2009; Siadat, Reza Zadeh, & Babri, 2012. The results of Friedman test in this study show that there is a significant difference in ratings of components. This shows that the respondents did not attach equal weights to all components as activism, internal locus of control, and need to succeed scored higher, respectively. However, the entrepreneurship components were rated similarly by both male and female respondents and the only difference was related to dreaming that was ranked fourth by females but it was ranked fifth by males. In the same way, the need for challenge was ranked fifth by females and fourth by males. As such, it can be argued that the students in this study were more concerned with practical consequences of their activities and

the implementation of their ideas reflect greater while feeling the need to succeed and having control over their own activities.

The findings of this study generally show that entrepreneurial approach among both male and female students is at a desirable level. However, male students scored higher on their entrepreneurial approach and risk-taking. This suggests that the male students were more risk-taking than female students. In contrast, females scored higher on activism, showing that female students were more practical than male students in the sense that they were more attentive to the practical results of their activities and were more willing to put their ideas into practice when making a decision. These findings are consistent with the results of previous studies. (Akbarzadeh et al., 2012; Ghasemnezhad Moghadam, 2010; Feiz, 2009; Zeffane, 2015). However, they were not in line with Akbarzadeh et al. (2012) concerning the difference between the two groups in terms of need for challenge and the results of a study by Feiz (2009) with regard to dreaming among male and female students.

In total, the results of current study showed male and female students' positive attitudes towards their entrepreneurial approach. This can be seen as a prerequisite for turning them into entrepreneurs. In other words, such characteristics do not mean that these students will essentially become entrepreneurs and set up

independent businesses by their own. However, it shows that opportunities must be provided for them so that these personality traits can be turned into entrepreneurial behaviors.

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