

## Entrepreneurial Personality Traits of Agricultural Students

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The purpose of study was to identify entrepreneurial personality traits of agricultural students who were studying at Bu-Ali Sina University in 2013 academic year. The study has used a surveying methodology. The study's samples were 150 agricultural students both senior undergraduates and graduates which were selected by a randomized sampling method. Data collection tool was a structured questionnaire which its validity was verified by a group of extension and education professors and experts. The reliability of the questions were tested during a pre-test process using a Cronbach's alpha test and it was 0.85 ( $\alpha=0.85$ ). According to the results the trait "internal control" was the most important entrepreneurial characteristic of the agricultural students. The results showed a significant difference between entrepreneurial personality traits of both senior agricultural students in third and fourth year of their education. However, the results showed no significant difference between the agricultural students in the graduated and undergraduates levels in terms of their entrepreneurial personality traits. The results also showed a strong difference between the agricultural students at different agricultural fields of education according to their entrepreneurial personality traits. [Movahedi, R., Jalilian, S and Armand, S. **Entrepreneurial Personality Traits of Agricultural Students. International Journal of Agricultural Science, Research and Technology in Extension and Education Systems, 2013; 3(1):7-12**].

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### 1. Introduction

Entrepreneurship as a valuable and costless resource plays an important role in all human societies. It not only can be a source of creativity but also an endless resource. Entrepreneurship has been recognized as an important element in the dynamics of modern economies. Entrepreneur is the process of creating something valuable and different, through the allocation of sufficient time and effort associated with financial risk, psychological, social and financial rewards in order to get satisfactory results (Akbari, 2008).

Entrepreneurship which can be understood as "the mindset and process to create and develop economic activity" has significantly raised interest among practitioners, scientists and politicians over the last decades (Davey et al., 2009). This impressive and rapid growth of entrepreneurship is attributed to the power of education in promoting social, economic, political, and spiritual well-being of an individual and social development. Many definitions can be found in the literature, however, a generally accepted and popular definition for entrepreneurship is that "entrepreneurship is process that involves the discovery, evaluation, and exploitation of opportunities to introduce new

products, services, processes, ways of organizing, or markets" (Shane and Venkataraman, 2000).

Fostering entrepreneurial traits during university programs among students has become an important topic in universities and governments' as well as in research. The positive role of universities in developing entrepreneurial intention and to explore the factors influencing entrepreneurial behavior of students are confirmed by a number of studies (Fayolle et al. 2005; Gibb, 1994; Hannan et al. 2004; Hannon, 2005) that help to explain the emergence of entrepreneurial intention among target groups. The introduction of entrepreneurship programs to the college students would enhance students' attributes and further develop awareness of entrepreneurial opportunities and skills to form entrepreneurial activities. The impact of entrepreneurship education has been recognized as one of the crucial factors that help youths understand and foster an entrepreneurial attitude (Gorman et al., 1997; Kourilsky and Walstad, 1998).

Higher education institutions play an important role in the generation of high tech entrepreneurial capacity. This is the creation of skills, incentives and a cultural environment favorable to the provision of instruments for the economic growth



Abstract

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(Teixeira and Davey, 2008). Few empirical studies have examined the entrepreneurial propensity of university students as a source of future entrepreneurs. Their attitude and knowledge of entrepreneurship are likely to shape their inclination to start their own businesses in the future.

The characteristics of entrepreneurs can be divided into five main categories: personal characteristics, motivations, demographic factors, lifestyle behaviors and skills divide (Pourrajab and Mohammadi, 2011). Expression of the characteristics of entrepreneurs that are the subjects of some character the identification of these features provide the necessary support and develop entrepreneurship among the general population. Some of these features include: risk tolerance (Shahrokny, 2005), Opportunity-oriented, dedication, desire and seeking progress and success, outside control, motivation, determination, confidence, creativity, and independence (Mafakheri, 2007), risk, internal control, creativity and independence.

According to research, develop entrepreneurial characteristics are listed in strengthening their capabilities. Some research suggests that there is potential in developing these capabilities cause them to be entrepreneurial. Research in entrepreneurship capabilities (independence, achievement motivation, risk taking, self-control, self-esteem high-creativity) showed that there is direct relationship between these capabilities and the students' success (Howard, 2004).

In Iran, researches that conducted in this regard show that entrepreneurial activities can also play an important role in employment rates of university graduates. It therefore needs to be supported and improved at all educational levels. For example, Zamani and Azizi (2006) revealed that because of a reduction in governmental services that help employ university graduates, learning entrepreneurship skills can be useful to agricultural students in finding employment. Entrepreneurship skills were also identified as the most important in preparing agricultural students for the labor market (Movahedi, 2009).

Because the higher education system of Iran is highly centralized, the graduates are looking for paid employment rather than seeking entrepreneurial opportunities which would contribute to national development (Bazargan, 2000).

Entrepreneurs are people who have a common look and overall features are distinct from the others. For this reason, one of the first and most important studies of entrepreneurial attitudes, personality characteristics of the approach. Including

these features: willingness to risk, having an internal control center, need for achievement, and challenge's will. These four traits are the most important personality traits for becoming an entrepreneur. Therefore, in this research these four entrepreneurial traits have been investigated in depth. Also, with regard to the importance of entrepreneurship role in preparing the agricultural graduates as the potential entrepreneurs, the question is what characteristics and traits can promote entrepreneurial activities among the agricultural students? Also, which entrepreneurial features are the most important for the agricultural students? Therefore the main aim of the research was to respond the mentioned.

The main aim of this study was to identify the entrepreneurial personality traits among the agricultural students in Bu-Ali Sina University. Other important objectives were:

- 1 – Comparing the entrepreneurial personality traits among different groups of the agricultural students of Bu-Ali Sina University.
- 2 – Finding relationships among different variables in terms of the entrepreneurial personality traits.

## 2. Materials and methods

The purpose of this study was identifying entrepreneurial personality traits of agricultural students who were studying at Bu-Ali Sina University in 2013 academic year. The study has used a surveying method. The study's samples were 150 agricultural students both senior undergraduates and graduates which were randomly selected among 270 agricultural students by using Krejcie and Morgan sampling size table. Data collection tool was a structured questionnaire which its validity was verified by a group of extension and education professors and experts. The reliability of the questions were tested during a pre-test process using a Cronbach's alpha test and it was 0.85 ( $\alpha=0.85$ ).

The questionnaire was structured around two parts. The first part was related to personal characteristics such as age, gender, educational level, and academic field of study. The second part was consisted of the entrepreneurial personality traits. Data processing and outputs analyzing was done by SPSS software. Data analysis was done by two parts of descriptive and analytical methods. In descriptive section statistics such as mean, percent, variance, and standard deviation were used. In analytic section Spearman correlation coefficient, Mann-Whitney and Kruskal-wallis were employed.

### 3. Results and discussion

#### 3.1. Personal Characteristics

Data in table 1 showed that 70.7 percent of respondents were female. Other findings have been illustrated into table 1.

Table 1. Distribution of students according to personal characteristics.

Variable	items	Frequency	Valid Percent
Gender	Female	92	70.7
	Male	82	29.3
	Total	174	100
Educational level	Bachelor	116	77.3
	MS	34	22.7
	Total	150	100
Academic field & education	Extension	25	16.7
	Plant	25	16.7
	Protection	25	16.7
	Gardening	25	16.7
	Horticulture	25	16.7
	Animal	25	16.7
	Science	25	16.7
	Soil	25	16.7
	Science	25	16.7
	Total	150	100

#### 3.2. Entrepreneurial personality traits of the agricultural students

In terms of the student personality traits affecting entrepreneurship, the findings as shown in table 2, presented in terms of the mean, standard deviation and coefficient of variation. As can be seen in the table the traits internal control center, need for achievement, challenge's will and willingness to risk were ranked by the students as the traits that have impact on entrepreneurship respectively.

Table 2. The entrepreneurial personality traits ranked by the coefficient of variation

Variable	M	SD	CV
Internal control center	3.91	1.13	0.28
Challenge's will	3.73	3.75	1.005
Need for achievement	3.80	7.86	2.07
Willingness to risk	3.34	7.79	2.33

#### 3.3. Analytical finding

To investigate the differences between the level of entrepreneurship trait based on gender, level of education, field of education and educational year, Mann-Whitney and Kruskal-Wallis tests were used. Results have been shown in table 3.

Table 3. Comparing the variables in terms of entrepreneurial traits at the 5% level

independent variable	dependent variable	test	Significant
Gender (f/m)	Entrepreneurs	Man	0.50
	hip trait	Whitney	
Degree (BA / MS)		Man	0.91
		Whitney	
Field of study		Kruskal-Wallis	0.005*
Education year (third/fourth)		Man	0.48
		Whitney	

The results in Table 3 show that differences between the level of entrepreneurship trait based on academic levels (undergraduate and graduate), there is no significant difference. Between entrepreneurial trait of the agricultural students and field of study, there is a significant difference in the level of 5%. Results also show no significant difference between the education year of the students based on entrepreneurial trait.

To investigate the relationship between the independent variables and the dependent variables both Spearman and Pearson correlation coefficients were used. As shown in table 4, there is a significant relationship between entrepreneurial trait and the different field of study. But, there are no significant relationships between other variables.

Table 4. The relationship between the variables

Independent variable	Correlation coefficient (r)	probability value (p)
Age	-0.043	0.60
Gender	-0.110	0.17
Degree (BA / MS)	0.009	0.91
Field of study	0.190	0.02
Grade per Average	-0.08	0.45

#### 3.4. Ranking the different variables of entrepreneurial personality traits

In order to rank the four entrepreneurial personality traits which were lately mentioned in introduction sector the different questions were structured and then the students were asked to rank these variables. Table 5 shows 13 variables which ranked by the students.

According to table 5, the two variables include introducing the risks by the results and ready for risk at work were ranked by the agricultural students as the most important traits in regarding to willingness to risk. But decision-making with incomplete information and ready for risk despite the failure were ranked the lowest.

Table 5. Ranking the variables about willingness to risk

Variable	Mean	Standard deviation	CV
Introducing the risks by the results	4.41	0.878	0.199
Ready for risk at work	4.02	0.908	0.225
Willing to risk to achieve better results	3.99	0.905	0.226
Willing to more valuable risks	3.65	1.004	0.275
Ready for risk to start a new job	3.61	1.092	0.302
Ready for a profitable risk	3.67	1.139	0.310
Willing to take risks	3.71	1.178	0.317
Willing to risk despite the disagreement of others	3.45	1.240	0.359
Be reasonable for risk	2.92	1.190	0.407
Release the job for a good idea	3.03	1.282	0.423
Interest to vague risks	2.27	1.208	0.532
Decision-making with incomplete information	1.183	1.008	0.550
Ready for risk despite the failure	2.87	3.454	1.203

Table 6. Ranking the variables about internal control center

Variable	Mean	Standard deviation	CV
Be effective for success	4.17	0.878	0.210
Doing work successful with effort	3.95	0.873	0.221
Believe on own power	4.15	0.923	0.222
Most attempt changes the status	4.19	0.939	0.224
Continuing work to achieve success	4.05	0.936	0.231
Effort leads to success	4.05	0.968	0.239
Continue to achieve success	4.01	0.973	0.242
Continuing work despite many barriers	3.90	0.947	0.242
Having perseverance to success	3.97	0.976	0.245
Achieve anything with hard work	4.09	1.049	0.256
Having his faith in hand	3.85	1.002	0.260
Pursuing the goal after fail	3.85	1.013	0.263
Obtaining anything with hard work	3.79	1.046	0.275
Being success is a result of hard working	3.97	1.172	0.295
Success is not an accident	3.69	1.152	0.312
Achieve the goals by competent people	3.54	1.304	0.369
Inattention to have a chance in life	3.31	1.274	0.382

Table 7. Ranking the need for achievement variables

Variable	Mean	Standard deviation	CV
Working with all abilities	4.24	0.925	0.218
Continuing the work despite long time	4.10	0.939	0.229
Attempt to solve the problem	4.09	0.904	0.221
Find constructive solutions to the problems	3.86	0.905	0.234
Hard working	4.09	0.983	0.240
Commitment to work	4.07	0.991	0.243
Doing the works that lead to ability	4.03	0.983	0.243
Choose a different way to solve problems	3.62	1.060	0.292
Grapple with the problem	3.67	1.091	0.297
Prefer the hard goals	3.50	1.067	0.304
Follow-up the goals despite the frequent failures	3.51	1.151	0.327
Sacrifice the comfort to achieve goals	3.35	1.216	0.362
Better playing more important than winning the game	3.27	1.241	0.379

Table 8. Ranking the challenge's will variables

Variable	Mean	Standard deviation	CV
Willingness to intellectual jobs	4.05	1.019	0.251
Propose multiple methods for complex work	3.73	0.940	0.252
Doing the work despite bad work's status	3.62	1.079	0.298
Interest in solving complex problems	3.54	1.133	0.320

Regarding the internal control center as the second entrepreneurial personality trait, 17 variables were asked from the agricultural students. As shown in table 6, be effective for success was the most important item and inattention to have a chance in life was the lowest item.

According to table 7, the item working with all abilities was ranked by the agricultural students as the highest and better playing is more important than winning the game was ranked as the lowest.

According to table 8, the variables willingness to intellectual jobs and propose multiple methods for complex work were ranked by the students as the most important traits regarding the challenge's will.

#### 4. Conclusion and Recommendations

The results showed that among four entrepreneurial personality traits for the agricultural students of Bu-Ali Sina University, the most important one was having an internal control center. Results also revealed the most important entrepreneurship characteristics of the agricultural students include 1) introducing the risks by the results, 2) to be effective for success, 3) working with all abilities, and 4) willingness to intellectual jobs.

The results indicate that the agricultural students in different years of their education had different entrepreneurial personality traits. This result can be confirmed by the research conducted by Shirzadi Samadi (2007). Other important result of this research was that the graduate and undergraduate agricultural students in the University of Bu-Ali Sina had the same entrepreneurial personality traits.

The results of Jennings, 1974 and Finnie, Laporte and Rivard (2001) confirm it. However, research results Anderson (1982), Kediver (1999), Shirzadi Samadi (2007), Azizi (2003) and Sarduy et al (2009) is against it.

The results also showed a strong difference between the agricultural students at different agricultural fields of education according to their entrepreneurial personality traits. The findings of Ahmed (1985) and Rasheed (2000) are confirmed and the research Movahedi et al (2011), Samadi and Shirzadi Esfahani (2010), are challenged this finding.

According to the results, the following recommendations are given:

1. According to research four entrepreneurial personality traits i.e. introducing the risks by the results, be effective for success, working with all abilities, and willingness to intellectual jobs were identified as important characteristics for an entrepreneur. Therefore it is necessary to develop and

foster these qualities in different students of other universities.

2. The universities should provide for the students the environment in which the entrepreneurial personality traits like internal control center need for achievement, willingness to risk, and challenge's will be developed and created.

3. With the help of the entrepreneurs the training courses in the universities are held in order to identify and strengthen the entrepreneurship characteristics.

4. The students should be encouraged with commitment to work and responsibility so that their personal characteristics be strengthened.

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