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Factors Affecting Entrepreneurial Motivation of Agricultural Students at Razi University

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Abstract

The main purpose of this study was to investigate factors affecting entrepreneurial motivations of agricultural students at Razi University. Statistical population of this study consisted of all agricultural undergraduate students (senior) (N=186), that 164 of them were selected as research sample using proportionate stratified sampling method. The main instrument in this study was questionnaire which its validity was confirmed by the panel of experts and its reliability was established by Cronbach's alpha coefficient. Data was analyzed by SPSS_{Win20} software. Findings revealed that agricultural students at Razi University have the entrepreneurial motivations at moderate to high level. In addition, multiple regression analysis showed that three variables including the attitude toward entrepreneurship, the role model, and the courses of entrepreneurship education can be explaining 35.5 percent of variances of the student's entrepreneurial motivations. Results of this study have applications for planners of higher agricultural education system in order to improving the agricultural student's entrepreneurial motivations.

Keywords:

Entrepreneurship, Entrepreneurial Motivation, Agricultural education, Iran

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INTRODUCTION

Iran's Center for Statistics reports unemployment rate of the youngs as 21.8 percent that almost is twice of average unemployment rate in the world. As same as most of the developing countries, higher education of manpower in Iran quantitatively have considerably has developed. For instance, approximately 890 thousand of graduates in 2004-2005 until 2009-2010 were graduated in agricultural sector of government and Islamic Azad University (Jamshidifar *et al.*, 2010). According to formal statistics of Agricultural and Natural Resource Engineering System Organization, approximately 57 thousand of agricultural graduates are looking for job (Nasrollahi, 2009).

In such circumstances, higher education ought to adopt an approach to institutionalize entrepreneurship in agricultural students through offering new knowledge (Hosseini *et al.*, 2010). Agricultural colleges can play an important role to dissolve this complexity by education of educated entrepreneurs (Hooshmandan Moghaddam Fard *et al.*, 2012). Proper chosen technique in this field is developing of entrepreneurship among students of agricultural higher education system in Iran and one of its results is employment opportunities (GEM, 2002).

So, alteration of universities approach toward training of entrepreneurship students has competitive advantage that students are seeking to entrepreneurship instead of job seeking (Talebi and Zare Yekta, 2008). For this purpose, one of the subsequent challenges in different societies is graduates that don't have individual capabilities and necessary skills to commence a business. This issue makes essential, preparation of university graduates via developing entrepreneurship culture. Certainly, this preparation shouldn't be after graduation, achieving this purpose is necessary during process and educating in order to provide essential preliminaries and to resolve obstacles and limitations (Amiri and Moradi, 2008). One of the most important steps is creation entrepreneurial motivations in students. Motivation is a very powerful motive in entrepreneurship that to direct human behavior for reaching to aim and tendencies (Locke and Baum, 2007).

Different studies showed that, entrepreneurship education have effective role in increasing knowledge in relation to nature and importance of entrepreneurship (Hill and Cinneide, 2001), attitude alteration and entrepreneurial motivations (Mcvie, 2001; Rasheed, 2000) and business skills (Leitch and Hisrich, 2001). Also, in this field, various studies to confirm significant influence of gender on entrepreneurial activities that can refer to Delmar and Davidson (2000), Matthews and Moser (1995), Scherer *et al.* (1989), Georgellis (2005) and Allen *et al.* (2008) researches. Results showed that more than 50 percent of business owners have self-employment family member (Fairlie, 2004). We can refer to Shiri *et al.* (2012) and Diaz-Casero *et al.* (2009) studies that confirm significant influence of entrepreneurship model on entrepreneurial motivation of individuals. Moreover, different studies results confirms effect of social norms (Barani *et al.*, 2010; Nasordin *et al.*, 2009; Linan, 2005), effect of entrepreneurship self-efficacy (Shiri *et al.*, 2012; Barani *et al.*, 2010; Barani and Zarafshani, 2009; Nasordin *et al.*, 2009; Linan, 2005) and effect of attitude toward entrepreneurship (Barani *et al.*, 2010; Barani and Zarafshani, 2009; Kolverid and Isaksen, 2006; Linan, 2005; Kruger *et al.*, 2002) on interests and entrepreneurial motivations of students.

So, some variables have influence on entrepreneurial motivation of students like gender, participating in courses of entrepreneurship education, having entrepreneurship model, self-efficacy of entrepreneurship, social norms and attitude toward entrepreneurship. Therefore, on the other hand, entrepreneurial motivations are indicative of aims and individual tendencies for establishment of a business. Detection of factors affecting appearing of entrepreneurship motivations in students of higher education systems can help to planners and managers of higher education systems, until to attempt for compose of coherent programs towards increasing of entrepreneurial motivations of students for exiting of unemployment crisis and to perform their real duty that is preparing of graduates for self-employment. Besides, unemployment rate of the educated persons in agricultural field is

more than other fields, so necessity of this research among agricultural students of Iran have high importance for constructing a program for tendency promotion and entrepreneurial motivations.

Hence, current study was designed by main purpose of investigate factors affecting entrepreneurial motivation of agricultural students at Razi University and its special objectives consisted of:

- 1- Study of personal and professional characteristics of students;
- 2- Evaluation of the student's entrepreneurial motivation;
- 3- Determine the factors affecting student's entrepreneurial motivation.

MATERIALS AND METHODS

The study was conducted using a descriptive-correlational design. Statistical population of this study consisted of all agricultural fourth-year undergraduate students at Razi University of Kermanshah Province in Iran (N=186), that 164 of them were selected as research sample using proportionate stratified sampling method. In order to gather data, comprehensive literature review conducted, and one structured questionnaire designed and developed. Questionnaire included two parts of the personal and professional characteristics of students and 21 statements used to measure the student's entrepreneurial motivations. Using comments and suggestions of faculty members and Ph.D. students in the Department of Agricultural Extension and Education at Razi University, validity of questionnaire obtained after revision. Cronbach's alpha coefficient was used for the reliability measurement of questionnaire. Cronbach's alpha coefficient value was 0.82 that indicating the high reliability of the questionnaire. In this study, categorizing of student's entrepreneurial motivation was based on the interval of standard deviation from the mean (ISDM) (Gangadharappa *et al.*, 2007) as follows: $A < \text{mean} - 1/2 \text{ SD}$:(Negative), $\text{mean} - 1/2 \text{ SD} < B < \text{mean} + 1/2 \text{ SD}$: (Moderate) and $C > \text{mean} + 1/2 \text{ SD}$ (Positive).

It should be noted that in the above formula, SD imply the standard deviation from the mean.

In order to analyze data, SPSS_{Win20} was used. Descriptive statistics included frequency, percentage, mean and standard deviation and inferential statistics regression analysis was used for data analysis.

RESULTS AND DISCUSSION

Personal and professional characteristics of students:

Results showed the mean age of students was 22.32 years with a standard deviation of 1.05 in the range of 21-25 years. Based on result among respondents, 65 (39.6 %) were males and 99 (60.4 %) female. Therefore, 42 (25.6 %) of respondents had participated in courses of entrepreneurship education and 122 (74.4 %) of them had not participated in courses of entrepreneurship education. Also, 46 (28%) of respondents had role model and 118 (72%) of them had not role model. Results of other personal and professional characteristics of students showed in Table 1.

- Evaluation of the student's entrepreneurial motivation:

Students' answers grouped according to their entrepreneurial motivations with applying interval of standard deviation from the mean (ISDM) method. These results showed in Table 2.

As showed in table 2, 58 students (35.4%) have a positive entrepreneurial motivation, while 50 (30.5%) of them have moderate motivation and 56 (34.1%) of them has a negative entre-

Table 1: Some of personal and professional characteristics of the respondents

Variable	Mean*	SD
Attitude	2.11	0.61
Self-efficacy	1.59	0.52
Social Norm	2.39	0.68

* Scale: 1-Little, 2- Moderate, 3- High

Table 2: Grouping the student's entrepreneurial motivations

motivation levels	Frequency	Percent	Cumulative percent
- Negative	56	34.1	34.1
- moderate	50	30.5	64.6
- Positive	58	35.4	100

Mean: 3.42, Standard deviation: 0.65

Table 3: Factors affecting students' entrepreneurial motivation

Step	Variables	R	R ²	F	Sig.
1	Attitude	0.521	0.272	60.423	0.000
2	Model (dummy)	0.577	0.333	40.199	0.000
3	Education(dummy)	0.596	0.355	29.359	0.000

Source: Field Survey, 2010

Note: *RTEP: Root and Tuber Expansion Programme

Table 4: Effect of variables influencing students' entrepreneurial motivation

Variables	Unstandardized coefficient(B)	Standardized coefficient(β)	t	Sig
- Constant coefficient	1.778	-	9.842	0.000
- Attitude (X ₁)	0.374	0.391	5.436	0.000
- Model (X ₂)	0.333	0.228	3.438	0.001
- Education (X ₃)	0.254	0.169	2.338	0.021

Source: Field Survey, 2010

Note: *RTEP: Root and Tuber Expansion Programme

preneurial motivation. Therefore, it can be stated that the majority of students have favorable entrepreneurial motivation, because the entrepreneurial motivation of 56 (65.9%) of them were positive and moderate levels.

Determine the factors affecting student's entrepreneurial motivation:

Stepwise multiple regressions were used to determine the factors affecting the student's entrepreneurial motivation. The stepwise method of regression analysis is the method in which the most powerful variables enter into the regression equation regression and this continues until the error of significance test reaches 5%. In this study, after entering the variables that correlated significantly with the dependent variable (entrepreneurial motivation), the equation was processed to the three steps. The results in Table 3 show that the first step independent variable entered the equation were the attitude toward entrepreneurship. The multiple correlation coefficient (R) were equal to 0.521 and determination coefficient (R²) was equal to 0.272. In other words, 27.2 percent of changes in the dependent variable (entrepreneurial motivation) can be explained by this variable. In the second step, variable of the role model entered into the equation. This variable increased multiple correlation coefficient (R) to 0.577 and determination coefficient (R²) to 0.333. In other words, 6.1

percent of changes in the dependent variable (entrepreneurial motivation) can be explained by this variable. Then, in the third step, variable of the courses of entrepreneurship education entered into the equation. This variable increased the multiple correlation coefficient (R) to 0.596 and the determination coefficient (R²) to 0.355. Therefore, 2.2 percent of changes in the dependent variable (entrepreneurial motivation) can be explained by this variable. Based on these findings, these three variables could explain 35.5% (R²=0.355) of changes in the dependent variable of student's entrepreneurial motivation and the remaining 64.5 percent is related to other factors that have not been identified by this study. Results of Fairly (2004), Shiri et al., (2012), Barani et al., (2010) and Kolverid and Isaksen (2006) are consistent with this finding.

Given the above results of Table 4, the linear regression equation is shown as follows:

$$Y = 1.778 + 0.374X_1 + 0.333 X_2 + 0.254 X_3$$

Significant results of F and t tests indicate the regression model is valid. But the regression equation does not say anything about the relative importance of independent variables. To determine the relative importance of independent variables, standardized coefficient (β) should be considered. This statistics shows the effect of each independent variable separately from

the effects of other variables on the dependent variable (here, student's entrepreneurial motivation). Accordingly, the most influential independent variable on the dependent variable, was the attitude toward entrepreneurship with $\beta = 0.391$. This means that a unit change of standard deviation of the attitude toward entrepreneurship variable, explain 0.391 of unit change in standard deviation of the dependent variable. Other important variables influenced the dependent variable were: the role model with $\beta = 0.277$ and the courses of entrepreneurship education with $\beta = 0.218$.

CONCLUSION AND RECOMMENDATIONS

This study is carried out by main purpose of investigate factors affecting entrepreneurial motivation of agricultural students at Razi University in Kermanshah Province (Iran). Results showed that attitudes of agricultural students towards entrepreneurship have positive and significant effect on entrepreneurial motivations. So, undoubtedly students have to perceive entrepreneurial activities and have positive attitude to it, perceive it as a possible task and there is more probability that they have powerful motivations to commence a business. Moreover, results showed that entrepreneurship models have positive and significant effect on entrepreneurial motivations of students. Therefore, students that are entrepreneurship models between family and friend have more possibility to commence a business in the future. Finally, results showed that participating in courses of entrepreneurship education have positive and significant effect on entrepreneurial motivation of agricultural students. Therefore, courses of entrepreneurship education, causes promotion of entrepreneurial motivation of agricultural students for commencement a business in the future.

So, it can be declared that planners of higher agricultural education system can be enterprise on agricultural students for capability development and entrepreneurship motivation by reinforce of variables like attitude toward entrepreneurship, role model and courses of entrepreneurship education. Hence, basis on results of this study, following suggestions can be offered to help planners of higher agricultural education

system towards reinforcement of entrepreneurial motivation in agricultural students:

- It's recommended to establish entrepreneurship offices in agricultural higher education centers and invite superior entrepreneurs and entrepreneurship business owners that may be present in offices continuously and have contact and relation with students and use their experiments and guidance;

- It's recommended to create positive attitude for entrepreneurship in students by take into account values and entrepreneurship in society by training and study programs of agricultural higher education system, because training is initial requisite for creation of positive attitude towards a specific topic;

- It's recommended to hold courses of entrepreneurship education in universities and encourage agricultural students to participate in these courses.

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