



# An Investigation of the Factors Influencing Entrepreneurial Intention of Senior Agricultural Students at Shiraz University, Iran

Ehsan Masoomi <sup>1\*</sup>, Naser Zamani <sup>2</sup>, Khadijeh Bazrafkan <sup>3</sup> and Mohammadreza Akbari <sup>4</sup>

Received: 14 May 2015,  
Accepted: 02 January 2016

## Abstract

The increasing number of students graduating in agricultural majors and the limited employment opportunities supplied by the government suggest the importance of developing students' entrepreneurship competencies and improving their entrepreneurial intentions. Therefore, it is necessary to identify factors influencing students' entrepreneurial intentions. The purpose of this survey was to determine the extent of entrepreneurial intention among senior agricultural students and to identify the main factors influencing their intentions. Research population comprised all senior agricultural students who were studying at Shiraz University, Shiraz, Iran. A sample of 196 students was selected through stratified random sampling. A questionnaire was developed to gather data. Face validity was verified by agricultural extension and education experts. Cronbach's alphas ranged from 0.66 to 0.87 indicating good reliability. SPSSwin19 was employed to analyze the data. Results revealed that subjective norms, perceived behavioral control, and attitude toward entrepreneurship strongly correlated with students' entrepreneurial intentions. Regression results indicated that students' attitude toward entrepreneurship could explain 40 percent of changes in their entrepreneurial intentions. In the end, suggestions and possible solutions were provided based on the research findings.

**Keywords:**  
*agricultural students, attitude toward entrepreneurship, entrepreneurial intention*

<sup>1</sup> Ph.D. Candidate, Department of Agricultural Extension and Education, Faculty of Agriculture, Shiraz University, Shiraz, Iran

<sup>2</sup> Associate Professor, Department of Agricultural Extension and Education, Faculty of Agriculture, Shiraz University, Shiraz, Iran

<sup>3</sup> Ph.D. Candidate, Department of Agricultural Extension and Education, Faculty of Agriculture, Shiraz University, Shiraz, Iran

<sup>4</sup> Ph.D. Candidate, Department of Agricultural Extension and Education, College of Agriculture, University of Tehran, Tehran, Iran

\* Corresponding author's email: [ehsan.masoomi@shirazu.ac.ir](mailto:ehsan.masoomi@shirazu.ac.ir)

## INTRODUCTION

It is necessary for every country in the world to solve the problem of unemployment particularly among youth generation. Many scholars and policymakers consider entrepreneurship development in academic environments as one of the main solutions for unemployment problem (Rahmanian Koushkaki et al., 2011). According to Clark (1998), entrepreneurship is a behavior which can be taught to others. It should be emphasized that only developing a particular skill through training is not enough to start a business, but improvement of entrepreneurial intention is likewise of great importance. Accordingly, determinants of entrepreneurial intentions among students should be explored (Barani et al., 2009). Although, previous research has investigated the factors influencing entrepreneurial intention, knowledge about its determinants needs to be improved as well. The main goal of this research was to identify determinants of entrepreneurial intention among agricultural students of Shiraz University, Shiraz, Iran.

Intention is an indication of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior. Entrepreneurial intention is considered as a prerequisite for starting an entrepreneurial business.

Entrepreneurship is a planned behavior (Bird, 1988; Kats & Gartner, 1988), and the Theory of Planned Behavior (TPB) is one of the main

models for predicting intentions (Ajzen, 1991). According to the theory of planned behavior (as shown in Figure 1 below) intention is determined by attitude (the individual's positive or negative evaluation of the behavior), subjective norms (perceived social pressure to perform or not perform a behavior), and perceived behavioral control (perceived ease or difficulty of performing a behavior).

Many researchers have investigated the determinants of entrepreneurial intention. Franke and Luthje (2004) investigated entrepreneurial intention of students and found that personality characteristics have an indirect effect on entrepreneurial intention. Their results showed that there was a significant relationship between students' entrepreneurial attitudes and their entrepreneurial intentions. Barani et al. (2009) found a positive and significant relationship between attitude toward entrepreneurship and self-efficacy with entrepreneurial intentions. The results of Rahmanian Koushkaki et al. (2011) showed that there was a positive and significant relationship between self-efficacy, attitude toward entrepreneurship, family support, and subjective norms with entrepreneurial intention. According to Fitzsimmons and Douglas (2005), people with more favorable attitudes and more developed skills have higher entrepreneurial intentions. Ali et al. (2011) concluded in their research that students with higher income levels had lower

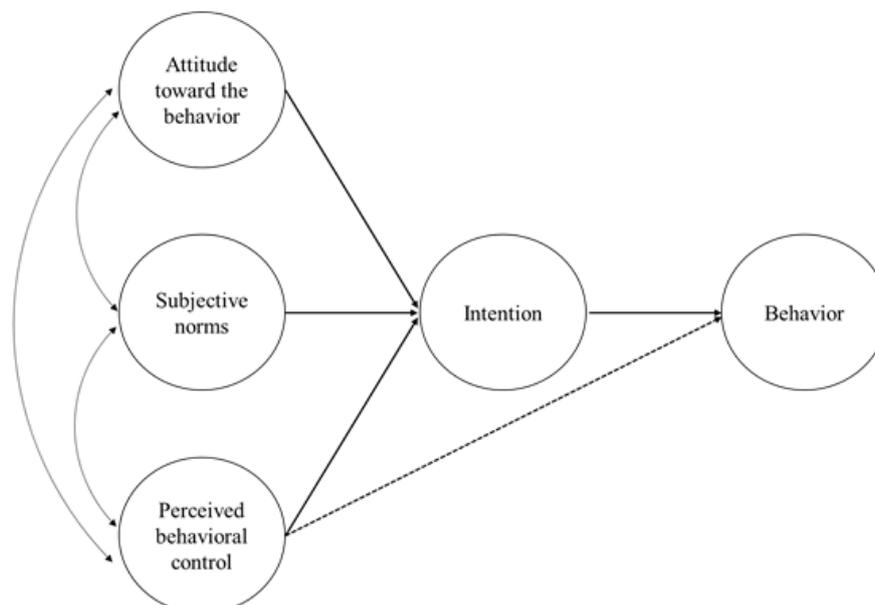


Figure 1. Theory of planned behavior (adapted from Ajzen, 1991, p. 182)

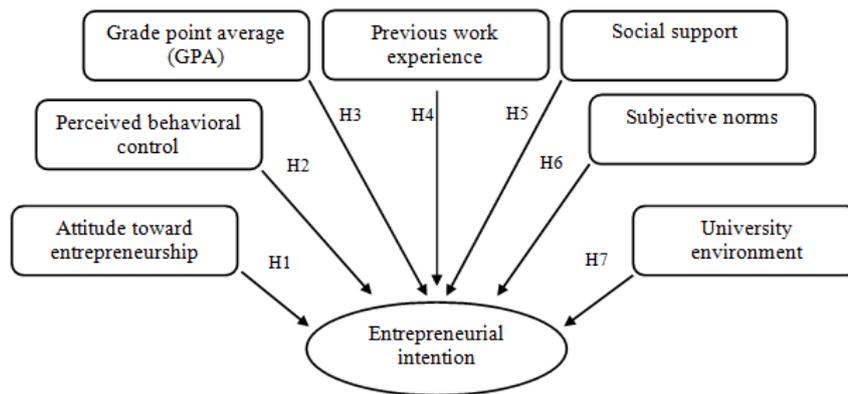


Figure 2. Research model

entrepreneurship intentions compared to those with lower income levels. Rural students tended to have higher entrepreneurship intentions than urban students. Males had higher entrepreneurial intentions than females. According to Movahedi et al. (2013), entrepreneurial intentions of agricultural students could be predicted by their ability to be self-employed, the current semester of their education, their grade point average (GPA), their entrepreneurship competencies, students' interest in working in agriculture, and their interest in agriculture as an area of study. Stewart and Roth (2007) found a significant difference between entrepreneurs and non-entrepreneurs in terms of their individual characteristics. For example, entrepreneurs had higher tendency to take risk. Zhao et al. (2010) found that individual characteristics had a significant relationship with entrepreneurial intention.

External factors or environmental factors (e.g., family support, government policies, and university environment) have also been found as predictors of entrepreneurial intention. The findings of Sadeghi et al. (2013) indicated that entrepreneurial skills in the community, government policies, as well as financial and nonfinancial supports influence entrepreneurial intentions. Shiri et al. (2012) investigated the effects of social support, social norms, and entrepreneurial role models in the society on entrepreneurial intentions. Their results demonstrated that entrepreneurial role models and social supports had significant relationships with entrepreneurial intentions. Dyer (1994) argued that entrepreneurship courses in universities could enhance students' entrepreneurial intentions and encourage them

to launch a business after passing courses. The study of Souitaris et al. (2007) showed that entrepreneurship training in universities influenced entrepreneurial intentions of students. They argued that inviting successful entrepreneurs to give lectures on related themes at universities as well as visiting a company with a group of entrepreneurs could have a positive effect on students' entrepreneurial intention. Given the findings of the above-mentioned studies, seven hypotheses were formulated to test the research model:

H<sub>1</sub>: Attitude toward entrepreneurship has a significant, positive effect on entrepreneurial intention.

H<sub>2</sub>: Perceived behavioral control has a significant, positive effect on entrepreneurial intention.

H<sub>3</sub>: Grade point average (GPA) has a significant, positive effect on entrepreneurial intention.

H<sub>4</sub>: Previous work experience has a significant, positive effect on entrepreneurial intention.

H<sub>5</sub>: Social support has a significant, positive effect on entrepreneurial intention.

H<sub>6</sub>: Subjective norms have a significant, positive effect on entrepreneurial intention.

H<sub>7</sub>: University environment has a significant, positive effect on entrepreneurial intention.

The current research model was developed based on the same model proposed in previous research (as shown in Figure 2). In addition to the variables of the TPB (Ajzen, 1991), some new variables (university environment, social support, and individual characteristics (past work experience and GPA)) were included in the research model employed in the present study.

## MATERIALS AND METHODS

A survey methodology was employed in this study. Research population comprised all senior students (419 students) who were studying at the Faculty of Agriculture of Shiraz University, Shiraz, Iran. The sample was selected using proportional stratified random sampling. Agricultural majors were considered as strata. The sample size was estimated to include 196 students based on the Morgan's sampling table (Krejcie & Morgan, 1970). A questionnaire was used for data collection, whose validity was established by agricultural extension and education experts. Its reliability was confirmed via a pilot study involving 30 veterinary students at Shiraz University. Cronbach's alphas ranged from 0.66 to 0.87. The items of the questionnaire were developed through the literature review and previous empirical studies (Krueger et al., 2000; Mariano & Gorgeievski, 2007; Sadeghi et al., 2013; Shiri et al., 2012; Souitaris et al., 2007). The questionnaire covered: entrepreneurial intention, attitude toward entrepreneurship, perceived behavioral control, social support, subjective norms, university environment, previous work experience, and GPA. Entrepreneurial intention refers to a conscious state of mind that guides people's attention to a planned entrepreneurial behavior (Krueger et al., 2000). Items were rated on a Likert-type scale with five possible responses. Attitude toward entrepreneurship refers to an individual's positive or negative evaluative affect about performing an entrepreneurial activity. Items were rated on a Likert-type scale with five possible responses. Perceived behavioral control refers to the extent to which a person believes in himself for doing an entrepreneurial activity (Krueger et al., 2000). Items were rated on a Likert-type scale with five possible responses. Social support refers to the positive function and nature of social relationships with various people

(Burke et al., 1996). Items were rated on a Likert-type scale with five possible responses. Subjective norms refer to the social pressures that make an individual perform a particular behavior (Ajzen, 1991). Items were rated on a Likert-type scale with five possible responses. University environment refers to the degree to which the university is perceived as a supporting organization to start a new venture. Items were rated on a Likert-type scale with five possible responses. Previous work experience was measured by a single item asking a respondent to indicate the number of years that he/she has worked full time. SPSSwin19 was employed to analyze the data. Bivariate analysis was applied to determine associations between research constructs. Independent sample t-test was used to compare means between two groups of students with and without work experience. Multiple regression analysis was utilized to examine the factors that best accounted for variance in entrepreneurial intention.

## RESULTS

### Respondents' description

Findings showed that about half of the respondents were men (52%) and most of them (77%) lived in cities. The average age of the participants was 22.68 and about half of them (53.1%) did not have any past work experience. The mean of GPA scores was 15.18. As the findings suggested, 46 percent of the students had decided to work in agriculture sector in the future.

### Relationship between independent variables and entrepreneurial intention

As shown by the results, from among independent variables, subjective norms, perceived behavioral control, and attitude toward entrepreneurship, had a positive and significant relationship

Table 1  
*Correlation between Independent Variables and Entrepreneurial Intention*

Variable	Correlation coefficient	p-value
Subjective norms	0.23	0.001
Received behavioral control	0.28	0.0001
Attitude toward entrepreneurship	0.64	0.0001
GPA	0.22	0.005

with entrepreneurial intention. GPA had a negative and significant relationship with entrepreneurial intention (see Table 1).

**Entrepreneurial intention among students with and without work experience**

As shown in Table 2, the result of the t-test indicated that there was a significant difference in the mean scores of entrepreneurial intentions for students with past work experience and those without past work experience; students with past work experience had higher entrepreneurial intentions compared to those without work experience.

**Determinants of entrepreneurial intention**

Multiple regression analysis was used to estimate the caliber of independent variables in predicting entrepreneurial intention. Independent variables including social support, university environment, subjective norms, perceived behavioral control, and attitude toward entrepreneurship, GPA, and past work experience were entered into the regression analysis. From among all variables, attitude toward entrepreneurship predicted 40 percent of the changes in entrepreneurial intention (see Table 3); hence, hypotheses H2, H3, H4, H5, H6, and H7 were rejected and H1 was confirmed.

**DISCUSSION**

Entrepreneurial intention is the first step and an important part of entrepreneurial process (Sadeghi & Malekinia, 2011). The purpose of this research was to identify the factors influencing entrepreneurial intention among senior agricultural students at Shiraz University. The results showed that subjective norms had a positive and significant relationship with entrepreneurial intention. This finding is consistent with the results of Barani et al. (2009), and Rahmanian Koushkaki et al. (2011). Subjective norms reflect social pressure that a person feels for a specific behavior. In other words, a person considers a reference group and adjusts his behavior with their requirements (Fayolle et al., 2006). A positive and significant relationship was also found between perceived behavioral control and students' entrepreneurial intentions that is consistent with the results of Barani et al.'s (2009) and Rahmanian koushkaki et al.'s (2011) studies. The results of this study also showed a negative and significant relationship between GPA and entrepreneurial intention, suggesting that students with higher entrepreneurial intention had lower GPA. Talented students show greater interest in entrepreneurship in countries with favorable conditions for entrepreneurship. However, in the countries without a supportive environment

Table 2  
*Comparison of Entrepreneurial Intentions According To Students' Work Experience*

Previous work experience	Entrepreneurial intention		t	p-value
	Mean*	SD		
Yes	3.88	0.59	2.39	0.01
No	3.67	0.57		

\* Scale: Ranged from strongly disagree =1 to strongly agree =5

Table 3  
*Results of Multiple Regression Analysis*

Variable	B	β	t	p-value
Attitude toward entrepreneurship	0.68	0.63	5.33	0.0001
<b>Sig F = 0.0001</b>		<b>F = 11.85</b>		<b>constant = 1.33</b>
Variable	R	R <sup>2</sup>	Adjust R <sup>2</sup>	Change R <sup>2</sup>
Attitude toward entrepreneurship	0.63	0.405	0.401	0.405

for entrepreneurship, students try to find a secure job in the government.

The findings of the present research revealed that students' attitude toward entrepreneurship predicted 40 percent of the changes in their entrepreneurial intention. This result is in line with the results of studies by Barani et al. (2009), Fitzsimmons and Douglas (2005), Franke and Luthje (2004), and Rahmanian Koushkaki et al. (2011). As suggested by the findings, students' attitude toward entrepreneurship was the most important factor influencing their entrepreneurial intentions. Therefore, it is suggested to improve students' attitude toward entrepreneurship through enhancing their knowledge about entrepreneurship, and through other interventions focusing on improving students' attitude.

The findings revealed that students with past work experience had higher entrepreneurial intentions. Accordingly, providing opportunities for performing practical activities in universities is essential. Entrepreneurship supervised agricultural experiences (SAEs) should become one of the integral components of the agricultural education programs. Entrepreneurship supervised agricultural experiences consist of a student creating a new small agricultural business. Students must create or raise a product or service that can be marketed and sold. Since subjective norms had a positive and significant relationship with entrepreneurial intention, it is important to promote entrepreneurial culture in the society. This may be due to the perception and strong influence of government in business undertakings in the country. Upon realizing the central role of entrepreneurship education in developing the entrepreneurial attitudes of both potential and nascent entrepreneurs, it is imperative to devote more resources to accelerate their growth.

This research was carried out only among senior agricultural students of Shiraz University. Results of a similar study conducted with a wider population of individuals, or between students in different universities or even different countries can be more robust and generalizable. From among all the independent variables in this research, only attitude toward entrepreneurship predicted entrepreneurial intention. Therefore,

some other factors should be investigated for a better, more accurate prediction of the dependent variable. Only quantitative data were used in this study. Future research could yield more dependable results by using a mix of quantitative and qualitative data.

#### ACKNOWLEDGEMENT

Authors acknowledge Shiraz University students who participated in this research.

#### REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ali, A., Topping, K.J., & Tariq, R.H. (2011). Entrepreneurial attitudes among potential entrepreneurs. *Pakistan Journal of Commerce and Social Sciences*, 5(1), 12-46.
- Barani, Sh., Zarafshani, K., Delangizan, S., & Hosseini Lorgani, M. (2009). Effect of entrepreneurship training on entrepreneurial behavior among Payamenoor University's students in Kermanshah. *Journal of Research and Planning in Education*, 57, 1-85.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442-453.
- Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress, and Coping*, 9(3), 261-275.
- Clark, B. R. (1998). The entrepreneurship university demand and response: Theory and practice. *Tertiary Education Management*, 4(1), 5-16.
- Dyer Jr, W. G. (1994). Toward a theory of entrepreneurial careers. *Entrepreneurship: Theory and Practice*, 19(2), 7-22.
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmers: A new methodology. *Journal of European Industrial Training*, 30(9), 701-720.
- Fitzsimmons, J.R., & Douglas, E.J. (June 2005). *Entrepreneurial attitudes and entrepreneurial intentions: A Cross-Cultural study of potential entrepreneurs in India*. Presented at China,

- Thailand and Australia. Babson-Kauffman Entrepreneurial Research Conference, Wellesley, MA.
- Franke, N., & Luthje, C. (2004). Entrepreneurial intentions of business student: A benchmarking study. *International Journal of Innovation and Technology Management*, 1(3), 269-288.
- Katz, J., & Gartner, W. B. (1988). Properties of emerging organizations. *Academy of management review*, 13(3), 429-441.
- Krueger, N., Reilly, M., & Carsrud, A. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Movahedi, R., Latifi, S., & Zolikhahi Sayyar, L. (2013). The factors affecting agricultural students' attitude towards self-employment and entrepreneurship. *International Journal of Agricultural and Crop Sciences*, 5(16), 1813-1819.
- Rahmanian Koushkaki, M., Chizari, M., & Havaei, A. (2011). Investigation of factors influencing entrepreneurial intention of agricultural students in Iylam Islamic Azad University. *Journal of Entrepreneurship Development*, 4(15), 125-144.
- Sadeghi, M., & Malekinia, A. (2011). Students' evaluation of entrepreneurial environments and investigating its relationship with entrepreneurial intention. *Journal of Research and Planning in Education*, 59: 68-89.
- Sadeghi, M., Mohammadi, M., Nosrati, M., & Maledian, k. (2013). The role of entrepreneurial environments in university student's entrepreneurial intention. *Journal of World Applied Programming* 3(8), 361-366
- Shiri, N., Mohammadi, D., & Hosseini. S. M. (2012). Entrepreneurial intention of agricultural students: effects of role model, social support, and perceived esirability. *Journal of Archives of Applied Science Research*, 4(2), 892-897
- Souitaris, V., zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmers raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 3(12), 25-37.
- Stewart, W. H., & Roth, P. L. (2007). A meta-analysis of achievement motivation differences between entrepreneurs and managers. *Journal of Small Business Management*, 45, 401-421.
- Zhao, H., Seibert, S., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 5(9), 18-29.

**How to cite this article:**

Masoomi, E., Zamani, N., Bazrafkan, K. & Akbari, M. (2016). An investigation of the factors influencing entrepreneurial intention of senior agricultural students at Shiraz University. *International Journal of Agricultural Management and Development*, 6(4), 431-437.

URL: [http://ijamad.iaurasht.ac.ir/article\\_526335\\_e72fd5712d292b15bf432561b12117d7.pdf](http://ijamad.iaurasht.ac.ir/article_526335_e72fd5712d292b15bf432561b12117d7.pdf)

