Entrepreneurial Intention of Agricultural Students: Effects of Role Model, Social Support, Social Norms and Perceived Desirability

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ABSTRACT

Increasing unemployment among the educated groups, especially graduates of agricultural higher education system in Iran has become a big socio-economic problem. Thus, considering the context of entrepreneurship in higher education is necessary. In this regard, the overall purpose of this research is study of the environmental factors that affecting entrepreneurial intentions of agriculture students in Ilam University. The Statistical population of this research was all of agricultural fourth-year undergraduate students in University of Ilam. The number of 100 persons of them was selected for study with proportionate stratified random sampling method. The main instrument of study was a questionnaire that confirmed validity by a panel of experts and its reliability tested by Cronbach’s Alpha coefficient. Data analysis was performed by the SPSS software. Correlation analysis showed a significant positive relationship between the variables of role model, social support and perceived desirability with entrepreneurial intentions of students. Result of Path analysis showed that the perceived desirability variable has the most impact with the ensemble of 72.5% and changing social norms with the ensemble of 12% had the less impact on students’ entrepreneurial intentions. The results of this study can help planners of agricultural higher education system that enhance students’ entrepreneurial intentions and improve their Entrepreneurial behavior.

Keywords: Entrepreneurial Intention, Environmental Factors, Perceived Desirability, Iran.

INTRODUCTION

The unemployment crisis in many countries, even in advanced industrial countries as a major problem is considered. To solve this problem, policymakers in most countries are faced with great challenges. So that it can be said: the government's stability and decline is in solving of the unemployment crisis [1]. This problem in third world countries, especially in our country is faced with severe conditions. Entering annually eight hundred thousand jobseekers in the labor market will be one of the main challenges in social – economic development in Iran [2]. In fact, unemployment crisis is a threat to all of society, especially unemployment of university graduates will have the non-compensation consequences in social, economic, and political dimensions [3]. According to statistics, every year 270 thousand university graduates enter the job market, but the market capacity doesn't meet the job needs of them [4]. Accordingly, dramatic increase in unemployment among the educated groups, especially graduates of agricultural higher education system has become one of the problems of society today [5]. So this issue is a socioeconomic problem and to overcome it there is a need for proper and consistent planning [6]. Attention to the issue of entrepreneurship will have some consequences such as increased employment opportunities, competition, improving productivity and increasing economic and social welfare. During the past decade, because of the positive effects of entrepreneurship many developing countries including Iran have had serious attention to entrepreneurship as a potential solution to various problems Such as lack of efficiency in economy, rising unemployment, increased university graduates and the inability of private sector and government to create jobs for them [7]. Entrepreneurship is a process that creates opportunities for educated people in order to achieve financial independence through...
increased innovation and new business opportunities [8]. Since, the entrepreneurial behavior is a result of intentions and desires of the people [9], and based on this fact that, intention is prior to behavior [10]; in this study, entrepreneurial intentions are considered as the main variable. Entrepreneurial intention is a state of mind that guides individual actions in order to create and develop a new business or entrepreneurial activity [9]. Entrepreneurial intention is a valid tool for forecasting individual entrepreneurial conducts and activities [11]. Entrepreneurial intention could be considered as intent of individual to performing a risky behavior [12]. [9], believes when we develop a new business or entrepreneurial activity that we think and action accurately. Thus, entrepreneurship is an example of a planned behavior that infected by several factors. [12], believes that various environmental factors affect individuals in some dimensions on entrepreneurial activities. Environmental factors refer to environmental features that where a person live and Influence on individual behavior [12]. According to [13], environmental factors can facilitate or hinder entrepreneurial activity. Therefore, Environmental factors play an important role in weakening or strengthening the intentions of people to create a new business. Because the people, influenced by beliefs, values and beliefs, their social environment [12]. It seems that environmental factors play an important role in the individual's decision to be self-employed persons (entrepreneurs). Various Studies show environmental factors that influencing entrepreneurial intentions of students including: (1) role models, (2) social support, and (3) social norms. Role models are defined as entrepreneurs who are familiar to the person or the person is in contact with them, which may affect the individual's entrepreneurial intentions [12]. [14], study showed that more than 50% of business owners had self-employed family members. [15-16], studies showed that the role model has meaningful relationship with individual's entrepreneurial intentions, especially when these people (models) have family relations. [17], study showed that when family members are working in entrepreneurial activity or self-employed business, symmetry models of entrepreneurial activities will develop in person and probably more stable and stronger entrepreneurial intentions will develop to create entrepreneurial activities. In addition, other studies suggest that model have a significant impact on entrepreneurial intentions, among them such studies cited [18-19-20]. In addition the models roles, people's perception of community support for entrepreneurship could play an effective role in analysing or promoting of entrepreneurial intentions. Accordingly, if people believe that the social environment (family, relatives, friends, university, community, etc) also economic and political conditions of society support entrepreneurial activities; there is more likelihood that they will attempt to create a new business. On the other hand, when students are considered unfavorable social environment for entrepreneurship, they will have a less intention to create a new business despite their positive attitude to entrepreneurship [21-22-23-24]. Accordingly, the results of many studies suggest that students’ perceptions of social support have a significant relationship with their entrepreneurial intentions that such studies [25-26], can be cited. Also, [27-21-28], studies showed that the people's perceptions of social support have significant impact on entrepreneurial intentions. The third environmental variable that impact on entrepreneurial intentions of students is social norms, it reflects the social pressure that person feel to do a particular behavior; it means the person considers his behavior in reference group and tries to adjust his behavior to their needs [29].

![Figure 1- The research theoretical framework](image)

The social norms are placed in framework of culture; also dominant culture of society affects entrepreneurship. In the communities where the entrepreneurship has social legitimacy, there are more attention to entrepreneurship in the education system and consider it as a desirable issue in society. For example, more financial incentives are considered for entrepreneurial businesses [29]. [30], study showed that social norms have significant and positive
impact on entrepreneurial intentions of individuals. In addition, more studies confirm the positive relationship between social norms and entrepreneurial intentions, for example some studies, [31-32-33-34-16], are cited. Based on empirical evidences [16], showed that environmental factors influence of entrepreneurial intentions through another factor that named it perceived desirability. Perceived desirability is a degree of attraction to start a new business; and in fact reflects a individual's feeling to the business usefulness [35]. Therefore, based on a theoretical perspective, entrepreneurial intentions influenced by perceived desirability and the perceived desirability are influenced by environmental factors. According to the literature, theoretical framework for research is done as follows (Figure 1).

Given that, intent is the best predictor to behavior, especially when observation of the behavior is difficult, and be associated with long and unpredictable changes. Students' entrepreneurial behavior is the behavior that observation of it is not possible in present, and is associated with time changes [9]. Therefore, it is necessary to study entrepreneurial intentions of students in order to predict entrepreneurial behavior, up to prepare actions and programs to promote intentions which lead to students show entrepreneurial behavior in higher education system. Also, the review of research literature, implies high unemployment among agriculture graduates more than other disciplines in higher education system in Iran. Therefore there is need for research in agricultural higher education system to improve entrepreneurial intentions and behavior of students in agricultural have a priority. In this regard, the overall purpose of this study is to identify the environmental factors that influence entrepreneurial intentions of agricultural students in Ilam University. The objectives for this study are to:

1- Describe the demographic profile of agricultural students in the study;
2- Determine relationship between the study variables with students entrepreneurial intentions; and
3- Determine contribution of variables in the entrepreneurial intentions of students.

MATERIALS AND METHODS

The design of the study was a descriptive survey that done by single cross-sectional study. The population for study was all fourth year undergraduate students of agricultural disciplines in University of Ilam (N=160). By Using Cochran's formula, Sample size was calculated 71. To increase the credibility of findings, the sample size was increased to 100 and proportionate stratified random sampling method used for study. The instrument used for the study was a questionnaire designed by the researchers and it was consist of five parts: the individual characteristics of respondents, social norms, role models, social support, perceived desirability and entrepreneurial intentions. The environmental factors (social norms, role models, social support) and perceived desirability (mediator variable) considered as independent variables and entrepreneurial intentions considered as a dependent variable. Expert panel that was included both of experts in fields of management and agricultural extension & education in Tehran University were used to determine the validity of research tools. In order to estimate the reliability, Cronbach's Alpha coefficient test was used (Table1). Cronbach's Alpha coefficients for each parts of questionnaire were above 0.70 therefore questionnaire had acceptable reliability. Statistical data were coded and analyzed by using the Statistical Package for the Social Sciences (SPSS_win16) for Windows. Descriptive statistics (frequencies, means, and standard deviations) and inferential statistics (Pearson correlation and Path analyze) were used to analyze data.

Table 1: the calculated Cronbach's Alpha coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Cronbach's Alpha Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Norm</td>
<td>4</td>
<td>0.83</td>
</tr>
<tr>
<td>Role Model</td>
<td>4</td>
<td>0.82</td>
</tr>
<tr>
<td>Social Support</td>
<td>4</td>
<td>0.88</td>
</tr>
<tr>
<td>Perceived Desirability</td>
<td>4</td>
<td>0.85</td>
</tr>
<tr>
<td>Entrepreneurial Intention</td>
<td>9</td>
<td>0.86</td>
</tr>
</tbody>
</table>

RESULTS

- Individual characteristics of students:
Based on the results of research, 42 (42%) of students were male and 58 (58%) were female. Average age of respondents was 23.28 years with a standard deviation of 1.68 and range of age was 20 to 28 years. Also, 22 (22%) of respondents had participated in entrepreneurship courses and 78 (78%) of them had not participated in such courses. According to table 2, 17% of students have stated that there is little chance that they will attempt to create a new business or entrepreneurship, while 31% said there is a moderate chance and 52 % said they have high chance that they will take action to create a new business or entrepreneurship.
Table 2: Frequency distribution of respondents according to their likelihood of becoming an entrepreneur in the future

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Moderate</td>
<td>31</td>
<td>31</td>
<td>48</td>
</tr>
<tr>
<td>High</td>
<td>52</td>
<td>52</td>
<td>100</td>
</tr>
</tbody>
</table>

- Relationship between the variables of study with entrepreneurial intentions of students

In order to examine the relationship between the variables of study with students’ entrepreneurial intentions the Pearson correlation coefficient was used. The results are presented in Table 3.

Table 3: Mean, standard deviation and coefficient of research variables

<table>
<thead>
<tr>
<th>Variable***</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Social Norm</td>
<td>3.38</td>
<td>1.58</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - Role Model</td>
<td>4.99</td>
<td>1.47</td>
<td>.144</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 - Social Support</td>
<td>4.05</td>
<td>1.54</td>
<td>.344**</td>
<td>.344**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 - Perceived Desirability</td>
<td>5.24</td>
<td>1.55</td>
<td>.322*</td>
<td>.501**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - Entrepreneurial Intention</td>
<td>4.82</td>
<td>1.16</td>
<td>.246*</td>
<td>.448**</td>
<td>.771**</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

*** Variables scale from 1 is not quite right to 7 is quite right.

Table 3, shows there are significant and positive relationship at 1% level between the variables of social support and perceived desirability with entrepreneurial intentions of student's variable. The variable of role model has positive and significant relationship at 5% level with the variable of entrepreneurial intentions of students. Also, there is not statistically significant relationship between social norms of students and entrepreneurial intentions.

- The contribution of variables in the students' entrepreneurial intentions:

In order to determine effect of independent variables on entrepreneurial intentions were used Path analysis techniques. Path analysis is multivariate technique that is used to describe both direct effects and indirect effects of independent variables on the dependent variable [36]. Therefore, in this study, social norms, role models, social support and perceived desirability as independent variables and entrepreneurial intentions as a dependent variable were analyzed. The Path coefficients of the research variables are presented in figure 2. Table 4 shows direct effects, indirect effects and total effects of independent variables on entrepreneurial intentions of students. In table 4 the direct effect equals beta coefficient in multiple regression analysis and it is while change in variable X leads to change in variable Y (X → Y). The indirect effect of each variable equals multiplying path coefficients of all variables in a path leads to dependent variable (X → Z → Y). Total effect is sum of direct and indirect effects of each variable that presented in path analysis diagram in Table 4.

Figure 2 – The Path Analysis of the independent variables impacts on the dependent variable
Based on the analysis of Table 4 and figure 2, among the independent variables perceived desirability has had the most direct and significant effect (72.5%) on student's entrepreneurial intentions. Then, the variables of social support (6.7%) and role model (5.6%) have had the most direct effect on entrepreneurial intentions variable. However, the social norms variable (with direct effect -0.3) has had a very weak and negative effect on entrepreneurial intentions of students. In this model, multiple correlation coefficients (R) amount is 0.776 and coefficient of determination (R2) amount is 0.602. This means that 60.2% of changes in dependent variable namely entrepreneurial intentions of students explain by the independent variables namely perceived desirability, social support, role models and social norms and 39.8% remained are related to other factors are that haven't identified by researchers.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intentions</td>
<td>Perceived Desirability</td>
<td>0.725</td>
<td>-</td>
<td>0.725</td>
</tr>
<tr>
<td></td>
<td>Social Support</td>
<td>0.067</td>
<td>0.425</td>
<td>0.492</td>
</tr>
<tr>
<td></td>
<td>Role Model</td>
<td>0.056</td>
<td>0.234</td>
<td>0.290</td>
</tr>
<tr>
<td></td>
<td>Social Norms</td>
<td>-0.003</td>
<td>0.123</td>
<td>0.120</td>
</tr>
</tbody>
</table>

**DISCUSSION AND CONCLUSION**

The aim of this study was investigating environmental factors that affect entrepreneurial intentions of agriculture students in Ilam University. The research findings showed that relationship between social norms and entrepreneurial intentions of students were not meaningful. Because in societies such as Iran, families prefer work in occupations such as medical and government agencies rather than entrepreneurship jobs [37], thus, social norms in students is not in line with the entrepreneurial behavior. This finding that there is not positive and significant relationship between social norms and entrepreneurial intentions is contrary with results studies of; [32- 31- 33- 16- 34]. This difference may be due to the diversity of statistical population and different values, beliefs, opinions and social norms or may be due to different measurement tools. Results showed a significant and positive relationship between entrepreneurial intentions and role models. Accordingly, in interpreting these findings can be said that the students who have role models, their entrepreneurial intentions are stronger and more sustainable and more likely in future will create a new business (entrepreneurial activity). This finding is consistent with [21- 27- 28], studies. In addition, the result implies that role model with direct effect 5.6% and indirect effects of 23.4% or with total effect of 29% on entrepreneurial intentions is third variable that influencing entrepreneurial intentions of students. [38], defined perceived desirability as attractiveness (both intra-personal and extra-personal) of starting a business. Accordingly, students who understand entrepreneurship desirable have stronger and sustainable entrepreneurial and likely in future will create a new business (entrepreneurial activity) for their own.

The path analysis results showed that the perceived desirability with 72.5% direct effect on entrepreneurial intentions of students is the most important variable in predicting entrepreneurial intentions of university students. This finding is aligning with; [16], research. Also, the results showed that social support variable with direct effect 6.7% and indirect 42.5% or with total effect 49.2% is second variable that influencing entrepreneurial intentions of students. This finding is consistent with [21- 27- 28], studies. In addition, the result implies that role model with direct effect 5.6% and indirect effects of 23.4% or with total effect of 29% on entrepreneurial intentions is third variable that affecting students' entrepreneurial intentions. This finding of the study confirms [18-19- 20], studies. Finally, the analysis showed changing social norms with direct effect of -0.3 and indirect effect of 12.3% and total effect of 13% is last and weakest variable on influencing entrepreneurial intentions of students. The weak role of social norms has been proved in theory of planned behavior (Ajzen, 1991) and in some previous research, such as, [34-32]. In some studies, the social norms has been eliminated from the model entirely, such as; [33- 18].

Therefore, findings of the path analysis techniques indicates that the perceived desirability has the most direct impact on entrepreneurial intentions of students and environmental factors included role models, social support and social norms have most indirectly impact through perceived desirability on changing the entrepreneurial intentions of students.

**REFERENCES**