Organizational Behaviour

Exploring Entrepreneurial Potential of Engineering Students in Islamic Azad University (IAU)

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ABSTRACT

Iran, nowadays, is in dire need of entrepreneurs like never before. Entrepreneurs are the people who use their investments to produce new products or provide services to the public that eventually boost up the level of service to the community, employment and capital assets to avoid stagnation in the economy, which means improvement in the public welfare. The role of the university, as an organization with the tasks of education and training, is very important. Entrepreneurship is a new phenomenon that has played an important role in the economy of developing countries. Entrepreneurship has a key role in the competitive economy based on the current market situations. In this study, the entrepreneurs’ capabilities of entrepreneurship (success-seeking, tendency to take risk, tendency to creativity, internal and external control and independence) have been evaluated and the influence of them in operating a business has been analyzed. The survey method and the questionnaires were used to collect data for this research. Participants in this study were selected from undergraduate students in Islamic Azad University of Tafresh, Iran. The stratified sampling has been used in sampling design and the total number of 220 questionnaires were distributed among the students. The results showed that the scores of entrepreneurial capabilities in students seeking success, tendency to creativity and locus of control were found to be above average and, on the other hand, tendency to take risks and independence were below average.

Introduction

Therefore, corporate organizations have to employ new approaches for the solution and appropriate arrangement to cope with the opportunities and threats. A great deal was given to the personality characteristics, personal background, and family background (Louw et al., 2003) of entrepreneurs such as gender, education levels, socioeconomic status that urged them to set up a business venture (Kundu & Rani, 2013). Besides, according to Kundu and Rani personality traits were neglected in the existing entrepreneurial literature such as creativity, a concept that is closely associated with change (Kundu & Rani, 2010). Entrepreneurship is a key competitive economy based on the existing market. In other words, in a dynamic economy, ideas, products, and services are constantly changing and the entrepreneur is the one, who introduces these models for coping and adapting to the new situation. In order to create jobs for the young population, it is essential to avoid dependence on raw materials (especially oil) output, from a single-product economy effect and policy makers are needed to think about more resources other than raw materials. Therefore, entrepreneurship in Iran in recent years has been considered. However, the concept of entrepreneurship for many practitioners and the general population is still unknown and strange. That is why, the universities who are offering the courses in entrepreneurship have been growing rapidly. In spite of all these efforts, it has been observed that enhancing entrepreneurship education have not affected the students accordingly.

The main objective of this research is to investigate the potential of entrepreneurship among students of Islamic Azad University. This research was conducted at the Azad University of Tafresh.

Literature Review

The grave entrepreneurial process includes all activities and tasks related to the perceived opportunities and creating organizations to pursue the opportunity. By entering into the realm of social and psychological studies about entrepreneurship and entrepreneurs, the results obtained from this research enhanced the entrepreneurship development, and this increase was more prominent in the development of entrepreneurship and educational efforts, in the past 2 decades (McClelland, 1962). Entrepreneurship is a Bridge that makes connection between Society and founded institutes for utilizing economic advantages and satisfaction of economic wishes Bagherifard et al., 2013).Organizational entrepreneurship has become a phenomenon which leads to innovative opportunities, inventive (Hejaziet al., 2013).

The research focused on the acquisition of most of the characteristics of entrepreneurs. This provides a good environment where learning, experience and skills are necessary to enhance people-efforts, creativity and innovation, entrepreneurship and interdependent, as entrepreneurship and innovation without creativity provide no results (Drucker, 1964). The entrepreneurs, in order to start up new businesses, need economic incentives for innovation and creativity (Sue, 2000). Badri et al.(2008) investigated to evaluate the entrepreneurial skills (achievement motivation, creativity, independence, risk,
internal control) possessed by students. Their research showed that the independence, internal control, progress in motivation, tendency to take risk and creativity of the students are above average. The results of this study demonstrated that the trainings in entrepreneurship education are not effective in developing entrepreneurship qualities in students. Yarai in a study showed a comparison between some spiritual entrepreneurs and industry executives that was conducted at Shiraz University and arrived at the conclusion that managers possess the higher tendency to develop students. The result revealed that, managers tendency to improve students are higher than the industry leaders. Moreover, there is no significant relationship found between the entrepreneurial students’ gender, age, birthplace, and parents’ educational level, whereas, there is a significant relationship found between entrepreneurship and skills training, achievement motivation, risk taking, and creativity needed to succeed. According to Ranjbarian et al., there is a correlation between indictors of entrepreneurship culture in university level and eight dimensions entrepreneurship development of students (Ranjbarian et al., 2013). Based on McClelland (1964) studies, entrepreneurs hold the following features:

**Tendency to creativity and innovation:** Explaining creativity can help the researchers to identify and realize every person’s unique creative talent (Sawyer, 2012) and it plays a positive role in many routine activities (Runco, 2010). Creativity is the ability to combine ideas in a unique way to communicate among unusual ideas. On the other hand, the innovation process contains the use of a creative idea and transforming it into a useful product or service. Entrepreneurial culture is based on valuing creativity and innovation. Entrepreneurs are creative people who generate new ideas and finally establish it in the form of a company. The theory comprises of six resources for creativity – intellectual processes, knowledge, intellectual style, personality, motivation, and environmental context. Creative performance is the outcome of a confluence of these elements (Sternberg& Lubart, 2010). In addition, in entrepreneurial companies, employees cannot go looking for new ways to benchmark and share experiences. In these companies, people are encouraged for creativity and initiative. Appreciating creativity, not only helps the development of the company in the long run but it also provides productive ground for the growth and development of human talents and capacities, and the boom itself is suitable for the growth of moral and spiritual virtues. Entrepreneurs are people who take calculated moderate risk (Ahmadpoor Pourdaryani, 2008).

**Tendency to Take Risks.** Entrepreneurs should be “risky” when it comes to the selection of the location, conditions, amenities, and in other words, their future rests upon the risk for “probable success”. Since investors and entrepreneurs have been able to provide all the facilities needed for a new business. For this reason, the government or individual sponsors and entrepreneurs are required to accept the risk, especially “investment risk” and carry these risks in various stages of entrepreneurship. They are not necessarily looking for an activity to be highly risky, but also want to take a moderate amount of risk that is considered normal to start a business (McClelland, 1962). Bowman and Sexton (1985) concluded that a person’s willingness to take risk is not the determining factor in deciding to become an entrepreneur. If a person wants to be an entrepreneur, he must take risks in the areas of financial prosperity (Liles, 1974).  

**Tendency to Seek Success.** It is the desire to achieve success and trying to develop a set of standards. People in every society of psychology can be divided into two main groups; The first group read and hold the opportunity to challenge them by doing the hard work to achieve a specific purpose but such groups are in the minority. The second group, does not consider the opportunities and posses non serious attitude towards it. They are in the majority. McClelland contributed greatly in explaining their success (McClelland, 1962). In his opinion, people who interact with their environment are more knowledgeable.

**Invincible Spirit.** Entrepreneurs believe that there is no such thing called failure and their only concern about the result is what can be achieved by them. Sometimes, despite all the effort and planning, it does not produce anything and comes out as a blessing. In other words it can be said that the desired result is obtained at least. However, in conclusion, positive results indicate the accuracy of the projects that have been prepared. Therefore, the invincible spirit is related to personality. Some of the most important features that have been considered in this approach are positive mental state, the need for achievement, risk taking, creativity, innovation, mood of invincibility, internal locus of control, and need for independence (Ahmadpoor Pourdaryani, 2007).

**Internal Locus of Control**  
Some people believe that they have control over their lives and some believe that external forces control their lives; Forces are beyond the control of the individual. Most of entrepreneurs have it and believe in themselves and do not attribute success and failures to fame, fortune or the same forces (Fakhr i et al., 2012). Internal control relevant to the lives of people who have control on it and the specific characteristics inherent in a situation where they will determine what will happen. They believe that what they want is achievable with the help of God’s holy nature. Research shows that people, who possess high self-esteem, seek wisdom and seriousness of a situation, could lead to control future events and results. These people occupy high-level positions and for them a sense of accomplishment is their internal reward. Entrepreneurs that have an internal locus of control believe that their success or failure and fate, luck or forces are not the same.  

**Tendency to Need For Independence.** A person’s independence includes the need to do something for himself and his freedom is what he has defined by himself. In fact, the need for independence is a factor that causes entrepreneurs to achieve their goals and dreams. Most entrepreneurs work long hours in a day, in spite of the economic and environmental constraints and take decisions by themselves in their way of doing things and act according to their own interest.

**Methodology**  
**Design of the Study.** A quantitative line of inquiry has been adopted in the proposed study. The specific survey method used in this study is cross-sectional survey design, the questionnaire survey in which questionnaires are used for data collection. This study addressed content validity and several drafts were evaluated in order to increase the content validity of the research instrument. For this purpose, this research in advance reviewed the related literature and used standard questions. In the next step, drafts of the questionnaire were assessed. In this study, Cronbach alpha is used to measure the reliability of the questions and the sample selected based on the stratified sampling method.

**Instrument and Data Collection Procedure**  
The questionnaire comprised of three distinct sections. The first section, between the features and capabilities of the entrepreneur, the most important features of the resources mentioned in the selection of appropriate questions were removed. These features include: tendency for success, tendency to take risks, tendency to creativity and innovation, locus of
control, tendency to independence. The second part of the questionnaire is devoted to questions related to entrepreneurial capabilities. The third section included questions relating to the right brain and left brain. The random sampling (41 samples or classification group) were used. Table 1-1 shows how the students were selected based on gender, orientation and level of education.

Table (1) Summary of demographic

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>Samples</td>
<td>140</td>
</tr>
<tr>
<td>Total</td>
<td>210</td>
</tr>
</tbody>
</table>

Based on literature review following three hypotheses are formulated:
Hypothesis 1: The entrepreneurial capabilities of the Islamic Azad University of Tafresh are lower than average.
Hypothesis 2: Students of Islamic Azad University Tafresh do not have the authority to set up an independent business.
Hypothesis 3: There is a relationship between gender and entrepreneurship.

Data Analysis

To measure entrepreneurial capabilities, five features were selected: success-seeking, risk-taking, creativity, independence and control Centre. To test these hypotheses, one sample T test and Chi-square conducted. All tests have been done during this season. The 95% confidence level, in other words, the error rate of 5% is considered (α = 0.05).

To test the Hypothesis three the Chi square test used and result of that is following:

Table (4) Chi-Sq Test To Measure Relation Between Gender And Entrepreneurship

<table>
<thead>
<tr>
<th>gender</th>
<th>Day laborer</th>
<th>Entrepreneur of the border</th>
<th>Potential entrepreneur</th>
<th>Entrepreneurs and potential entrepreneurs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50</td>
<td>43</td>
<td>40</td>
<td>24</td>
<td>157</td>
</tr>
<tr>
<td>Female</td>
<td>50.84</td>
<td>44.11</td>
<td>36.63</td>
<td>25.42</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>16</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>17.16</td>
<td>14.89</td>
<td>12.37</td>
<td>8.58</td>
<td></td>
</tr>
<tr>
<td></td>
<td>68</td>
<td>59</td>
<td>49</td>
<td>34</td>
<td>210</td>
</tr>
<tr>
<td>Chi-Sq</td>
<td>1.705</td>
<td></td>
<td>0.636</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To tests the Hypothesis three the Chi square test used and result of that is following:

Table (4) Chi-Sq Test To Measure Relation Between Gender And Entrepreneurship

Discussion

Examination of result H3 revealed that the entrepreneurial ability scores (achievement, ambition, creativity and locus of control) are higher than average. The reason could be a higher education, social status, young age and condition as mentioned. But the potential (tendency to take risk and independence) is lower than average. The reasons for the dismal economic conditions can affect the instability in many macroeconomic decisions, public works, attachment, negligence to the industry as a university graduate.

Based on the research results (H2), it was demonstrated that the majority of students are eligible to set up a business, but they may need an expert to accompany and advise them. Perhaps this is because the students do not know the community and its needs and how to behave properly. The last hypothesis (H3) was about the role of gender. As it was thought to be the result of a statistical test between men and women, but there are differences in entrepreneurship and the entrepreneur and it has nothing to do with these issues. It addresses its own specific features, which can be either a man or a woman or may have developed themselves.

Suggestion

In order to further improve the research in the future, an investigation on features such as prudence and foresight, responsibility and tolerance of ambiguity also needs to be considered and discussed. There are some administrative (university) suggestions such as: i) the need to go through the entrepreneurship curriculum for all courses (a course should be developed to suit the needs of all groups). ii) Use of qualified and competent teachers for the students. iii) Preparation, translation and introduction of books and articles in the field of entrepreneurship and placement of students. iv) Creation of the working group on entrepreneurship and workforce analysis teams. v) Invite entrepreneurs’ as guests for speech in university about entrepreneurship. vi) Holding workshops or conferences on entrepreneurial activities.

References


The table 2 revealed that the average of seeking success (mean = 21.53); creativity (mean = 7.27); control Centre (mean = 8.26) of students (University of Tafresh) is more than criteria (t-criteria = -1.652). This means, they try to solve own problems and choose goals carefully. The students tend to be creative and have faith in victory or defeat in the struggle for power. However, as for the characteristics of risk and independence students of Islamic Azad University Tafresh do not want to risk too much and are looking for activities where the risk is low.

To analyze hypothesis two, the t test was used to:

\[ H_0: \mu \geq 12 \]
\[ H_1: \mu < 12 \]

Table (3) T- Test To Measure Capacity Of Students To Start Independent Business

<table>
<thead>
<tr>
<th>Construct</th>
<th>N</th>
<th>mean</th>
<th>stDev</th>
<th>t-criteria</th>
<th>T</th>
<th>P_value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence of Independent Business</td>
<td>210</td>
<td>14.091</td>
<td>2.95</td>
<td>-1.65</td>
<td>10.24</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The table 3 shows that the students of Tafresh university have the capability to start independent business. (Mean 14.09; t =10.24; p_value 1.000).