Reviewing the Effectiveness of Entrepreneurial Courses Held in East-Azarbaijan Province

Case Study: Azarbaijan Charkh-Nilufari Institution, Tabriz

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Abstract

The aim of this study is to investigate the effectiveness of held entrepreneurship courses at Azarbaijan Charkh-Nilufari Institution (Iran). Statistical society of this research is trainees of entrepreneurship course at Azarbaijan Charkh-Nilufari Institution (Iran) that have passed this entrepreneurship course at Azarbaijan Charkh-Nilufari Institution in 1389. Total number of statistical society of this research is 800 trainees that considering to importance of this research, all members of society were selected in this study. Tools of data collection are observation, interview and four questionnaires of researcher that have been developed by researchers. Amount of reliability that were calculated for entrepreneurship questionnaire, creativity, risk-taking and pragmatism was obtained 0.91, 0.88, 0.89, 0.86. Statistical method that used in this study is paired t-test (dependent). This research is included four hypothesis. Results of this research showed that there are differences between the mean scores of entrepreneurship, creativity, risk-taking and pragmatism of trainees before and after the implementation of course.

Keywords: entrepreneurship, entrepreneur, entrepreneurship courses, Azarbaijan Charkh-Nilufari Institution, creativity, risk-taking, pragmatism

1. Introduction

Our society is involved with unemployment and its active generation especially the educated people are looking for job. In case of not making proper decisions and neglecting the case, the oncoming economic and social crises will make the social organizations encounter different and uncontrolled risks more than before (Hashemi, 2004). Nowadays, increasing population growth, lack of facilities and resources and the creation of new social and economic needs have brought big changes for the developing countries in a way that most of these problems are rooted in the economic recession. But by regarding the development process in the developed countries, you may understand that entrepreneurship having positive use and results considered efficiency a useful way to decrease these challenges, and the most important source of economic growth in these countries as you may feel its effects in all parts and levels of those societies. However, you should not ignore the role of entrepreneurs as a gold key for development. For, entrepreneurs have been the source of big changes in the field of industry, education and service by bringing their dreams and creative ideas into reality (Razgandi & Derani). So, one essential need for countries’ economic and social development is to make and expand entrepreneurial culture. By applying cultural role to entrepreneurship, you may say that entrepreneurship is affected by educational tasks since it is a key need for development and an essential element for improving entrepreneurial behaviors. But an education is effective, which make people able to recognize and analyze threats and have a better use of opportunities. This is not possible unless by goal-orientating, conceptualizing, and correct entrepreneurial deduction (Ibid).
2. Entrepreneurship

Entrepreneurship was defined first by cant lion (1700) (kilby, 1971). But Schumpeter attributes general application of entrepreneurship in the field of economy to Mill. After Mill, Schumpeter studied entrepreneurship from other viewpoints and emphasized the innovation and its role in the dynamics of economic system and over time, various experts commented in the field of entrepreneurship (Pashayi fakhri, 2012).

The concept of the word entrepreneurship is changing like the concept of other words all around the world. Entrepreneurship is the French word that includes the concept of commitment to working (ghanimat et al., 2012) So the meaning of entrepreneur is one who makes the commitment to accept organizing and managing new business that associated with risk (Kuratko & Hodgettes, 2001, 28). Trying to conceptualize it began through different schools and it was continued by psychologists, sociologists, and management science researchers (Aghaei, Samad, 1999). In Aryanpour English-Persian Dictionary, the word entrepreneurship means bold, doer of important tasks, and etc. it has been the base for all human developments. Despite having a lot of meaning, its concept and main nature is still unknown, and there can not be a standard meaning for it. Because this concept is rooted in individuals’ thoughts, analyze and approaches toward different economic, sociological, psychological demographic schools (Derani & Moradi, 2009, 20).

In general, entrepreneurship is the process of creating a valuable thing by allocation of time and sufficient effort with financial, psychological and social risks, also receiving financial rewards and personal satisfaction from the results (Hithrich & Peters, 2002).

In another definition, it is the process of recognizing the opportunities and using the resources to create new ideas in order that new and intelligent businesses are run (Ireland, 2003). There are some evidences showing that entrepreneurship is reason for development of the countries like America, Japan, and Germany which are industrially developed. Entrepreneurship has developed as a career, and like other careers, it should be developed and grown via special educational and academic programs based on behavioral and experiential studies (Khanka, 2001).

3. The Effects of Entrepreneurship

The range of effects of entrepreneurship in society is so extended, and it covers the changes in values and rapid economic growth. Researchers have studied the changes made by entrepreneurship and its effects in the society. From economic point of view, it has a lot of effects on society such as: fulfilling the society’s needs fast and affordable by applying new technologies and modern methods; making the still and stranded investments to be used properly; encouraging investing and creating modern industries; recognizing creating and developing new markets; increasing efficiency in the society and transmitting technology; creating economic mobility; i.e. improving poor’s economy (Amiri, 2004).

Socially, it has the following effects in the society: increasing welfare and job; organizing and using resources properly; returning to social values and job creation; developing education and encouraging individuals for creative tasks (Bashiri, et al., 2004). Entrepreneurship results in the social profit increase through the government. The money gained through tax, custom, transferring job permits to entrepreneurs can be invested in various projects like making roads and bridges, services and medical and educational facilities, preserving peace and quiet, and other social and cultural fields (Khanka, 2003, 16-17). It can be regarded as a factor stimulating and encouraging the competition sense, stimulating and mixing and providing production factors, organizing resources and using them properly, integration and connecting markets, eliminating damage, gaps and straits of markets and society, decreasing official bureaucracy, transformation and renewal of national and local life, recognizing, creating and expanding new markets, innovating and smoothing change, making balance in dynamic economy, gathering public stranded and causeless deposits, creating job in a vast scale, helping to develop regional balance, decreasing economic focus, distributing wealth and income, mobility of stranded useless investment resources, improving life-style and etc.

4. Teaching Entrepreneurship

There is a special place in the education system of many countries for the entrepreneurship. In other words, deepening and expanding entrepreneurial culture as one of the society’s important essential needs a fundamental attention toward education in this field. There is a close connection between countries’ entrepreneurship and social and economic developments so that today it is considered one of the development’s factors in the developing countries. Indeed from many economic experts’ point of view, it is the most important source of innovation, job creation, growth and development. It means deepening and developing the entrepreneurial culture as one of the society’s important essentials demands a fundamental attention to education in this field (Kia & Nassaj, 2007).
Generally, teaching entrepreneurship is a process that the individuals get familiar with their abilities to recognize, get insight, self-esteem, knowledge and skills to do something about it (Janz & English, narrated by Farahbakhsh, Abedi & Najafabadi, 2006). Establishing and running entrepreneurship teaching periods goes back to 40 years. During 1980s and 90s, demand to teach it had an unpredictable growth, which was in parallel with the growth of the number of periods offered by academic institutions and other active organizations considered in this field. This may be regarded as the results of a various set of interrelated national & international changes. From the beginning of 1980s, special researches were begun to teach entrepreneurship. Over this period, some researches and studies were carried out mostly in the field of the effects of its teaching in establishing new companies, providing the added value, which results from educational programs in universities, the benefits of applying these methods in the current situation and also in the educational units of entrepreneurship (Saxton & Buman, 1984). In 1990, research on teaching it was paid attention like a new course and developments of research methods was also paid attention to evaluating effectiveness of entrepreneurial teaching, conceptualizing, entrepreneurial deducting, creating and developing a common scientific framework in the of entrepreneurship, the effectiveness of educational methods and entrepreneur’s educational needs (Daryani, 2002). In general, nowadays, there are four main entrepreneurial teaching approaches: 1- The first group are programs about awareness and orientation toward entrepreneurship that their goal is to increase knowledge and insight about entrepreneurship as a career for people from different social classes. These programs are taught in elementary, guidance, and high school to increase students’ tendency and impulse for being an entrepreneur. This group includes racist groups, unemployed people, inventors, scientists, administrative employees; army retired people, and many different groups. The second one includes educational programs which cover the expansion and establishment of the companies. These programs have been designed according to special conditions. The third group has been designed for the growth and survival of the entrepreneurs and small companies covering small businesses. They should be paid attention in every country (Daryani, 2007, 181-191). The forth group includes programs to develop teaching entrepreneurship, which includes new educational methods and determination of modern roles of students and teachers in the process of its teaching. Educating and increasing the number of new teachers among the artisans and economic activities’ agents to teach entrepreneurship is the other target (Shahhosseini, 2004, 123). Most educational programs of entrepreneurship follow different goals. It should be considered individuals’ targets to join the course and also their scientific and skillful targets are different. Surely, different specialty demands special skills and a scientific group. But there are some aspects of teaching which can be generalized to all jobs taking their content and motivational nature into account. This kind of learning includes gaining knowledge, understanding the concepts of economic management like: how to find opportunities and get resources; gain a skill in applying the management and analytical techniques such as the ability to analyze an economic situation and mix an operational plan; and determine and improve capacity, talent and entrepreneurial skills (Block & Stump, 1992, 115). Also, it should be taken into account that each period follows its own special goals but generally educational periods’ various goals can be categorized into six cases which are as follow:

1- gaining knowledge relating to entrepreneurship; 2- gaining skills to analyze economic opportunities and mix operational plans; 3- determining and improving capacity, talent and entrepreneurial skills; 4- inducting risk taking; 5- improving consultation and mutual support in entrepreneurial exclusive aspects; 6- improving approaches to accept change (Dyran, 2007, 197).

5. Review of Carried-out Researches

A research by Loqman Ahmadipour entitled review of the effectiveness of teaching entrepreneurial skills aims to review the effectiveness of teaching entrepreneurial skills on job opportunities, self-concept of the visitors to the entrepreneurial committee in Tehran municipality. Because of that, Azadshahr center was chosen out of the centers under entrepreneurial committee in Tehran municipality. And people were invited to join entrepreneurial teaching classes via a public call. 113 people registered and 47 people got average and even low marks in the pre-test. 19 females and 11 males were chosen out of them in random and replace in two control and test group. The results of T-test showed that teaching entrepreneurial skills has increased the rate of attitude to job market and occupational self-concept of the test group’s test topics in comparison with the control group. A research was done by Saeideh Nassaj entitled review of the effectiveness of entrepreneur’s curriculum from male and female students of Work & Knowledge branch in high school of all 19 branches in Tehran. She recognized the weak and strong points and offered some solutions to improve this curriculum. This research includes 16 theories which were studied in six different majors of Work & Knowledge branch, and then its different groups’ ideas about each factor were compared. The statistical society being studied included 90 students. 73 students were chosen as samples in a random way using Morgan table. And 418 students were chosen as samples out of 13595 students of third grades of Work & Knowledge in 6 majors (Art, Computer, Construction, Sewing,
Administrative affairs, and Electronics). According to Morgan table and using stratified sampling. But finally, 49 questionnaires of trainees and 403 of students were studied through SPSS software and single-sample T-test, and independent T and ANOVA test. The results showed that both trainees and students believed that the entrepreneurial book could create entrepreneurial skills and information for them. Among the mentioned ideas in two groups, there was a meaningful difference in both group and trainees had more optimal ideas. Considering the conformity of teaching methods and suggested ones, trainees believed that they use the above mentioned methods properly. But trainees believe that their trainees use them less. In another research by Nasrin Ahadzadeh, the rate of attention of curriculum in BA period in educational science (management & planning) to improving entrepreneurial skill (personal, management, and technical skills) has been studied. Its main question is how much does the BA period’s curriculum of educational science major (Management & planning) pay attention to improving entrepreneurial skills? The statistical societies of this research are all the graduated students of educational science major, BA, (management & planning) of educational science and psychology Faculty in Shahid Beheshti University. They were reported to be 229 students. To sample, Morgan random number Table was applied and according to this table, 148 students were chosen. Using the stratified sampling method, the number of samples from each academic year and gender were determined. The results showed that the educational science major’s curriculum and its specific courses do not pay attention to improving the entrepreneurial skills. Through their researches, Hamilton (1981) and Watkins (1982) concluded that schools should start their job by improving entrepreneurship as a job choice. Miller (1983) believed that many teachers and guidance school consultants do not have entrepreneurial spirit because they usually work in a very organized system. So, the students tend to be regarded as potential staff not entrepreneurs. Valdon (1979) criticizes the traditional system that treats the students as good employees. The research aims to review the effectiveness of entrepreneurial courses held in Azarbaijan Charkhe-Nilufi Institution (Iran).

6. Research Methodology

Data collection of this research is description of types of survey and nature and purpose of study is application. For gathering data: 1 - Library method 2 - Field research; are used. Validity has been made of the amount of performance of questionnaire to measure its characteristics. (Sharifi, 1381) For investigating of validity of this research, measuring instruments are given to professors and also a number of experts, and we asked them after reading, write their comments about questionnaire’s validity. After collecting professors’ comments and modifying some questions, it was concluded that the questionnaire has high validity.

Validity or reliability of instrument shows the amount of reliability and compatibility in measuring a concept and it is useful to evaluating. The instrument’s ability to maintain its reliability during time, despite uncontrollable testing conditions and situation of respondents, indicates its stability and its low variability. This is the ability of indicating usefulness of instruments, because each time instrument measures, the same consistent results are obtained. (Skaran, 1384: 227) In this study, alpha’s Cronbach was used to calculate the reliability of the questionnaire and for its evaluation before the final implementation, a number of individuals randomly selected as research sample and then questionnaires are given to them. The obtained data were calculated by using SPSS software that we reached 0.91, 0.88, 0.89, 0.86 for questionnaires of entrepreneurship, creativity, risk-taking and pragmatism.

7. Statistical Society, Statistical Sample and Sampling

Statistical society of all real or hypothetical members that this tendency maybe generalized by research findings. (Delavar, 1380: 120) Statistical society of this research is trainees of entrepreneurship course at Charkhe Niloofari East Azarbaijan institute that have passed this entrepreneurship course at Charkhe Niloofari East Azarbaijan institute in 1389. Total number of statistical society of this research is 800 trainees and because of the importance of the issue, all people of society is investigated in this research.

8. Data Analysis

Paired T-test has been used to analyze the research hypothesis.

A- Trainees’ profile according to their gender

<table>
<thead>
<tr>
<th>Cumulative percent</th>
<th>The number of valid data</th>
<th>Percent</th>
<th>Frequency</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.6</td>
<td>341</td>
<td>42.6</td>
<td>341</td>
<td>female</td>
</tr>
<tr>
<td>100.0</td>
<td>459</td>
<td>57.4</td>
<td>100.0</td>
<td>male</td>
</tr>
<tr>
<td>100.0</td>
<td>800</td>
<td>100.0</td>
<td>800</td>
<td>total</td>
</tr>
</tbody>
</table>
B- Trainees’ profile in terms of their education

Table 2. Frequency distribution of trainees in terms of educational levels

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>The number of valid data</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>75</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>300</td>
<td>37.5</td>
<td>37.5</td>
<td>46.9</td>
</tr>
<tr>
<td>BS</td>
<td>320</td>
<td>40.0</td>
<td>40.0</td>
<td>86.9</td>
</tr>
<tr>
<td>MS</td>
<td>100</td>
<td>12.5</td>
<td>12.5</td>
<td>99.4</td>
</tr>
<tr>
<td>Ph.D</td>
<td>5</td>
<td>0.6</td>
<td>0.6</td>
<td>100.0</td>
</tr>
<tr>
<td>total</td>
<td></td>
<td>800</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

9. Hypothesis

1) \( H_0 \): There is no difference between students’ entrepreneurial marks average before and after the course.

\( H_1 \): There is a difference between students’ entrepreneurial marks average before and after the course.

\[ H_0: \mu_2 - \mu_1 = 0 \rightarrow H_0: \mu_d = 0 \]

\[ H_1: \mu_2 - \mu_1 = 0 \rightarrow H_1: \mu_d \neq 0 \]

Table 3. Descriptive statistics of trainees’ entrepreneurial marks

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Error standard deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial marks of the trainees before taking the course</td>
<td>37.35</td>
<td>4.594</td>
<td>0.162</td>
<td>800</td>
</tr>
<tr>
<td>Entrepreneurial marks of the trainees after taking the course</td>
<td>41.57</td>
<td>2.532</td>
<td>0.090</td>
<td>800</td>
</tr>
</tbody>
</table>

The above table shows the descriptive statistics of students’ entrepreneurial marks before and after the enforcement of entrepreneurial courses like average, standard deviation and deviation error.

Table 4. T-test results with paired samples

<table>
<thead>
<tr>
<th>Significant level</th>
<th>T</th>
<th>Degrees of freedom</th>
<th>Higher limit</th>
<th>Lower limit</th>
<th>Error standard deviation</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>24.287-</td>
<td>799</td>
<td>3.789-</td>
<td>4.561-</td>
<td>0.174</td>
<td>4.914</td>
<td>4.220-</td>
<td>Entrepreneurship before and after taking the course</td>
</tr>
</tbody>
</table>

The above table shows the results of T-test. According to a meaningful level acquired which is 0.000 and it’s smaller than 0.05, zero hypothesis can be failed. So it can be said that a considerable difference among students’ entrepreneurial marks before and after taking the course.

The 95% confidence interval for the difference average of trainees’ entrepreneurial marks before and after taking the course is as follow:

\[-4.561 \leq \mu_d \leq -3.879\]

According to the fact that the zero hypotheses failed and the other one which represents a difference between the entrepreneurial marks’ average of the trainees before and after taking the course is confirmed, it can be announced that the educational period held in Azarbaijan Charkh-e-Nilufari Institution has been effective.

2) \( H_0 \): There is no difference between students’ creativity marks average before and after the course.

\( H_1 \): There is a difference between students’ creativity marks average before and after the course.

\[ H_0: \mu_2 - \mu_1 = 0 \rightarrow H_0: \mu_d = 0 \]

\[ H_1: \mu_2 - \mu_1 = 0 \rightarrow H_1: \mu_d \neq 0 \]

Table 5. Descriptive statistics of trainees’ creativity marks

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Error standard deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity marks of the trainees before taking the course</td>
<td>14.8588</td>
<td>2.48274</td>
<td>2.48274</td>
<td>800</td>
</tr>
<tr>
<td>Creativity marks of the trainees after taking the course</td>
<td>20.5988</td>
<td>1.95705</td>
<td>1.95705</td>
<td>800</td>
</tr>
</tbody>
</table>
The above table shows the descriptive statistics of students’ creativity marks before and after the enforcement of entrepreneurial courses like average, standard deviation and deviation error.

Table 6. T-test results with paired samples

<table>
<thead>
<tr>
<th>Variables</th>
<th>Significant level</th>
<th>T</th>
<th>Degrees of freedom</th>
<th>Higher limit</th>
<th>Lower limit</th>
<th>Error standard deviation</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>creativity before and after taking the course</td>
<td>0.000</td>
<td>-53.705</td>
<td>799</td>
<td>-5.53020</td>
<td>-5.94980</td>
<td>0.10688</td>
<td>3.02305</td>
<td>-5.74000</td>
<td>creativity before and after taking the course</td>
</tr>
</tbody>
</table>

The above table shows the results of T-test. According to a meaningful level acquired which is 0.000 and it’s smaller than 0.05, zero hypothesis can be failed. So it can be said that a considerable difference among students’ creativity marks before and after taking the course.

The 95% confidence interval for the difference average of trainees’ entrepreneurial marks before and after taking the course is as follow:

\[-5.94980 \leq \mu_d \leq -5.53020\]

\[\mu_1 - \mu_2 < 0 \rightarrow \mu_1 < \mu_2\]

Given that both the upper and lower limit obtained is negative, we can say that the average difference between the two communities is less than zero and the mean average score of the period before the holding period is smaller. In other words:

\[\mu_1 - \mu_2 < 0 \rightarrow \mu_1 < \mu_2\]

3) \(H_0\): There is no difference between students’ risk taking marks average before and after the course.

\(H_1\): There is a difference between students’ risk taking marks average before and after the course.

\[H_0: \mu_2 - \mu_1 = 0 \rightarrow H_0: \mu_d = 0\]

\[H_1: \mu_2 - \mu_1 = 0 \rightarrow H_1: \mu_d \neq 0\]

Table 7. Descriptive statistics of trainees’ risk taking marks

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Error standard deviation</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>creativity marks of the trainees before taking the course</td>
<td>800</td>
<td>0.09144</td>
<td>2.58627</td>
<td>18.4325</td>
<td>creativity marks of the trainees before taking the course</td>
</tr>
<tr>
<td>creativity marks of the trainees after taking the course</td>
<td>800</td>
<td>0.06859</td>
<td>1.94008</td>
<td>20.8175</td>
<td>creativity marks of the trainees after taking the course</td>
</tr>
</tbody>
</table>

The above table shows the descriptive statistics of students’ risk taking marks before and after the enforcement of entrepreneurial courses like average, standard deviation and deviation error.

Table 8. T-test results with paired samples

<table>
<thead>
<tr>
<th>Variables</th>
<th>Significant level</th>
<th>T</th>
<th>Degrees of freedom</th>
<th>Higher limit</th>
<th>Lower limit</th>
<th>Error standard deviation</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk taking before and after taking the course</td>
<td>0.000</td>
<td>-21.427</td>
<td>799</td>
<td>-2.16651</td>
<td>-2.60349</td>
<td>0.11134</td>
<td>3.14828</td>
<td>-2.38500</td>
<td>Risk taking before and after taking the course</td>
</tr>
</tbody>
</table>

The above table shows the results of T-test. According to a meaningful level acquired which is 0.000 and it’s smaller than 0.05, zero hypothesis can be failed. So it can be said that a considerable difference among students’ risk taking marks before and after taking the course.

The 95% confidence interval for the difference average of trainees’ risk taking marks before and after taking the course is as follow:

\[-2.60349 \leq \mu_d \leq -2.16651\]

According to upper and lower obtained amount, both of them are negative. We can say that the difference between the average of two communities is less than zero, and the average of score before holding the course is smaller than the average of score after holding the course. In other words:

\[\mu_1 - \mu_2 < 0 \rightarrow \mu_1 < \mu_2\]

4) \(H_0\): There is no difference between students’ pragmatism marks average before and after the course.

\(H_1\): There is a difference between students’ pragmatism marks average before and after the course.

\[H_0: \mu_2 - \mu_1 = 0 \rightarrow H_0: \mu_d = 0\]

\[H_1: \mu_2 - \mu_1 = 0 \rightarrow H_1: \mu_d \neq 0\]
Table 9. Descriptive statistics of trainees’ risk taking marks

<table>
<thead>
<tr>
<th>Variables</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Error standard deviation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pragmatism marks of the trainees before taking the course</td>
<td>18.7900</td>
<td>2.94478</td>
<td>0.10411</td>
<td>800</td>
</tr>
<tr>
<td>Pragmatism marks of the trainees after taking the course</td>
<td>21.0338</td>
<td>1.97800</td>
<td>0.06993</td>
<td>800</td>
</tr>
</tbody>
</table>

The above table shows the descriptive statistics of students’ pragmatism marks before and after the enforcement of entrepreneurial courses like average, standard deviation and deviation error.

Table 10. T-test results with paired samples

<table>
<thead>
<tr>
<th>Significant level</th>
<th>T</th>
<th>Degrees of freedom</th>
<th>Lower limit</th>
<th>Higher limit</th>
<th>Error standard deviation</th>
<th>Standard deviation</th>
<th>Average</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>-18.155</td>
<td>799</td>
<td>-2.48635</td>
<td>0.12359</td>
<td>3.49566</td>
<td>-2.24375</td>
<td></td>
<td>Pragmatism before and after taking the course</td>
</tr>
</tbody>
</table>

The above table shows the results of T-test. According to a meaningful level acquired which is 0.000 and it’s smaller than 0.05, zero hypothesis can be failed. So it can be said that a considerable difference among students’ pragmatism marks before and after taking the course.

The 95% confidence interval for the difference average of trainees’ Pragmatism marks before and after taking the course is as follow:

\[-2.48635 \leq \mu_d \leq -2.00115\]

\[\mu_1 - \mu_2 < 0 \rightarrow \mu_1 < \mu_2\]

According to upper and lower obtained amount, both of them are negative. We can say that the difference between the average of two communities are less than zero, and the average of score before holding the course is smaller than the average of score after holding the course. In other words:

\[\mu_1 - \mu_2 < 0 \rightarrow \mu_1 < \mu_2\]

10. Conclusion

Effectiveness of entrepreneurship courses held in Charkhe Niloofari East Azarbaijan institute could be caused by several factors: 1- Using experienced professors. 2- Transmission of concepts in a manner of application. 3- Teaching environment and using of educational facilities and educational aids in this course. 4- Using specified types of headlines. 5- Using active members in education and research groups. 6- Using executive personnel and...

Proportional to research and interviews that were conducted before starting the course, educational needs of each group was determined and proportional to needs of each group, with cooperation and consultation of research and educational group, related headlines to this institute was started. Of course because some headlines are determined by Iranian Ministry of Labor and Social Affairs, this event makes some problem for this institute, but by using necessary methods and thoughts by management personnel, consultation, using brainstorming techniques, consultation meetings with executive personnel, Professors and faculty members of educational and research group, a series solutions could offer to overcome these problems. In this strategy, professors appropriate with educational environment and with the use of their ability of creativity, could use different techniques in order to more understanding of concepts and are guided trainees toward the ultimate goal of headlines. Executive personnel of this institute, have significant role in institutionalizing the purpose during the course. In this way, that the issues related to changing of attitude and advantages of using its techniques were observed objectively in executive personnel, so that individuals after leaving the classroom and transferring some theoretical issues, the topics were observed objectively in executive personnel and the results of using these techniques clearly could be seen for people and individuals were encouraged to operating these patterns.

Various grades that have been achieved during this study, obtained by interview, observation and questionnaires. In the course of entrepreneurship, the standard headlines that determined by the Ministry of Labor and Social Affairs, are as follow: Principles of entrepreneurship, processing idea, creativity, marketing, pricing, business model types, real and legal regulations of companies and prepare a business plan and after them, changing of
attitude towards the process of entrepreneurship, creativity, risk-taking and pragmatism were considered. Individuals taking the course have been studied in terms of gender, table 1, educational levels, table 2, and trainees’ entrepreneurial marks, table 3. Table 4 is about the entrepreneurs’ marks before and after taking the course. Table 5 is related to creativity score before and after the course. Table 6 is research’s hypothesis tests that achieved due to the significance level and amount of it, is 0/000 and this number is less than 0/05. We can say that the creativity grade of trainees before and after the holding of courses is different. Table 7 is related to risk-taking score before and after the course. Table 8 is research’s hypothesis tests that achieved due to the significance level and amount of it, is 0/000 and this number is less than 0/05. We can say that the risk-taking grade of trainees before and after the holding of courses is different. Table 9 is related to pragmatism score before and after the course. Table 10 is research’s hypothesis tests that achieved due to the significance level and amount of it, is 0/000 and this number is less than 0/05. We can say that the pragmatism grade of trainees before and after the holding of courses is different.

What is clear is that entrepreneurs are not essentially born entrepreneurs. It must be taught through confined and proper activities. Because teaching and learning belong to the strategic process and strategy is formed on the base of goal and goal is entrepreneurial dialectic, the increase of tendency for entrepreneurship and finally a successful business. To succeed, it is necessary to consider conceptualization and methodology to some extend. Conceptualizing requires knowledge, skill, and attitude. And since the aim of learning and teaching is thinking, in methodology, active methods based on creative ideas should at least be used. For, creativity is one of the fundamental bases of entrepreneurship.

References


