Assessing the Impact of Education on Entrepreneurship Characteristics of Students

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ABSTRACT

Today, studying about entrepreneurship and training the postgraduates who have necessary abilities and skills in order to create a suitable job, is an important duty of every university. The general purpose of this research is the comparison of entrepreneurship specificities of students for studying the effect of university’s education in promotion of these specifications. The statistic community of this research was first and last semesters of undergraduate of Parsabad Islamic Azad Universities. 564 individuals were selected by the simple random sampling method and for gathering the information from questionnaire and for testing the hypothesis it used t-test and f-test. The result shows that there is no difference between first and last semesters from the entrepreneurial specificity point.

KEY WORDS: entrepreneurship, student, university education, personality traits.

INTRODUCTION

In competitive economy based on current world market which is accompanied by international environment quick and accelerated evolutions and changes and transition from industrial society to informational society and alteration of national economy to global economy, entrepreneurship is recalled as industrial development dynamic motor since it can lead to countries economical growth and development, efficiency increase, creation of social welfare and occupation (Ahmad poor et al, 2004). In today unstable environment, human capital is a capital of great value and status and education is considered as the most effective way for its development and competitive instrument. Today, universities and academic centers as the most fundamental agents of knowledge production and transference encounter various crisis including their graduates employment problem. Existent experiences in the field of employment in country show that one way to overcome this issue is to introduce a new definition of job and employment concept and to pass through application towards entrepreneurship and to propagate it by means of education (Zamani,2005). Education has the most significant role in entrepreneurship development. Universities and high education institutes should include necessary instructions for entrepreneurship development in their agenda. Universities as main agents of training society specialized forces, have determinant role in entrepreneurship development in country. For this sake today the attitude is formed that future universities main capital will be provided by entrepreneurship graduates (Shafi zade, 2007). So, in this project we are aimed at comparing first and last term students to consider whether university education has had any impact upon students’ entrepreneurship attributes to enter work market.

Theoretical Background

Presently global evolution trend has placed entrepreneurs in front line of economical and technological development. Successful experience of most of developed countries and also some of the developing countries in over coming economical crisis by virtue of entrepreneurship development in those countries, has made other countries consider special importance for entrepreneurship, entrepreneurs and formation of innovative businesses. Considering the concept of economy globalization, some believe that tomorrow global markets belong to companies which encourage entrepreneurship adventurousness and invest to expand their conceptual capitals, companies that are assiduous regarding with individual competency and pay attention to environmental conditions while planning strategies. Upon this basis, education, is one of important instruments in spreading entrepreneurship and has specifically been dealt with. According to various studies carried out recently, it is verified that entrepreneurs’ attributes are almost acquired rather than hereditary and for this sake, entrepreneurs education has become one of the most important and widespread activities of universities.

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Present era is the era of competition over resources and capital. Large industrial countries that are the winners, have pursued resources and capital utilization as their main activity and triggered development and growth engine in the light of experts and educated people and achieved creations and innovations. Attaining these innovations that has resuscitated developed countries economy hinges on entrepreneurship (Shane, 2003). Entrepreneurship issue has been dealt with by the world educational assemblies since late twentieth century.

It is important that today, in the global era, innovative and creative people have brought about significant changes in the fields of industry, pedagogy, and services. Also, wheels of economical development are always whirled by entrepreneurship development; in other words, entrepreneurship is the motor of development and growth (Schumpeter, 1934). Studies performed in the field of relation between individual attributes and economical development show that progress doesn’t belong to a certain group or religion and by enhancing some attributes in people, economical growth is realized in societies (McClelland, 1961). It seems that paying attention to entrepreneurship and paving the way for its realization in society is a necessity. McClelland, 1961, defines entrepreneurs’ attributes as: progress incentive, adventurousness, interior control, creativity and autonomy. Based on performed researches, training foresaid attributes in individuals can lead to their entrepreneurship capabilities strengthening. Creativity, adventurousness, interior control, progress incentive and autonomy are the most important attributes. Experts of Economical activities domain and thinkers recognize creativity and novelty, briefly, entrepreneurship and knowledge oriented production as key factors of remaining in today competitive markets and being successful at national and international levels. In our country these factors are realized if university graduates fall back on entrepreneurship rather than seeking job opportunities in government organs and they commence their plans in economical domains as independent activists. In this direction academic education should be effective in inspiring attributes like rivalry, adventurousness in students by offering suitable educational programs and should identify students’ potential abilities and enable them to entrepreneur for themselves and the others instead of seeking job. One of the main believes about entrepreneurship important attributes is that the people enjoying these attributes are more likely to launch entrepreneurship. Maybe it can be said that in equal circumstance, those who enjoy these incentives and attributes more in proportion to those who enjoy these incentives less, are more likely to fall back on entrepreneurship. Among attributes, some have been considered by researchers more than the others, including rivalry, adventurousness, ambitiousness, and desire to be successful. In the following the studies performed about this are discussed.

Badri, 2005, carried out a project entitled “examination of students’ entrepreneurship capabilities” in Esfahan University, aimed at examination of entrepreneurship capabilities such as autonomy, interior control, progress incentive, adventurousness and creativity in students and the impact of university education upon these capabilities increase. To collect data surveyor questionnaire was used and statistical sample was consisted of 250 students of Esfahan University. Relevant data and findings showed that students’ entrepreneurship capabilities grades are higher than the mean of the standard grade and the obtained difference is significant based on correlation test and there is no significant difference between entrepreneurship capabilities of first year and last year students in the fields of autonomy, adventurousness, interior control, and progress incentive and creativity.

Mosleh Shirazi, 2005, performed a study, entitled “comparison of entrepreneurship attributes of male and female students” in Shiraz University. Using recognized scales he studied spirits of a sample of 200 students (first year and last year students) of Shiraz literature and human science and engineering universities with respect to attributes like adventurousness, ambitiousness and rivalry. Obtained results showed that totally, Shiraz university students don’t enjoy considerable entrepreneurceptive spirit. And students of engineering university in proportion to human science college enjoy higher adventurousness spirit and in contrast, students of human science college enjoyed higher spirit in proportion to engineering students and no significant difference was observed with respect to entrepreneurship attributes and entrepreneurship spirit level between male and female students. Azizi et al (2005) in a study examined entrepreneurship attributes of last year students of BA and MA in Shahid Beheshti University and 330 students were chosen by using hierarchical and multi-phase sampling method. Measured entrepreneurship attributes in this study are ambiguity tolerance, anterior control, adventurousness, creativity and autonomy. This research results showed that there is a significant relation between above variables with entrepreneurship. Also, the study showed that there is no significant relation between educational programs and students entrepreneurship extent in their point of view. In other words, university current educational programs have no impact upon students’ entrepreneurship extent. Attributes and entrepreneurship capabilities are not significant between different universities students. Rostami (2007) performed a study entitled “academic education and training students entrepreneurship spirit” in Mazandaran university aimed at surveying academic education in training students entrepreneurship spirit. Statistical society in this study has been students of bachelor degree in Mazandaran University. 335 students were selected using random- hierarchical sampling method. This study finding was so that only 25 percent of respondents believed that university educational programs have improved entrepreneurship spirit.
in them and 75 percent of students have assessed universities performance in the field of entrepreneurship development as weak. In other words, university educational programs function in the field of entrepreneurship spirit development was not successful and male respondents were at the same level with respect to enjoying entrepreneurship spirit. Saneii(2007) carried out a study entitled “developing and strengthening entrepreneurship in academic centers to train entrepreneur managers”. His purpose in this study was to examine entrepreneurship five important incentives including, ambitiousness, rivalry, adventurousness, and interior control among owner-managers and its comparison with industries professional managers. In this study using recognized scales he examined entrepreneurship spirit of a random sample of 144 people from among owner-managers and Esfahan industries managers with respect to above attributes. To collect data, questionnaires and to analyze data, T tests, one way variance analysis and correlation were used. Obtained results showed that there were no significant differences in foressed incentives between owner- managers and professional managers and the mean of ambitiousness incentive grades in professional managers was higher than that in owner-managers that the difference is significant. Also showed that the impact of education level upon ambitiousness, rivalry, adventurousness and interior control incentives were not confirmed statistically except that showed managers with higher education enjoy high incentive. The impact of managers working experience was statistically significant upon none of entrepreneurship incentives except adventurousness. Hoseini et al(2008) has done a study entitled “training fundamental entrepreneurship for employment of university graduates” in Iran aimed at examination of entrepreneurship training upon graduates in Iran. The study sample was consisted of 46 entrepreneurship specialists who were examined using Delphi method. Examination of final results showed that most of the experts believed that in the globalization era, training entrepreneurship culture and attitude, holding entrepreneurship training workshops, proposing policies and university educational programing with entrepreneurship value, cooperation with developed countries educational and research centers and exchange of teacher and student can be valuable guidelines for developing entrepreneurship thinking and graduates employment. Results of Herman Brenda Estetra (1997) shows that entrepreneur’s affective stability, that is their courage and self confidence in accepting logical adventures and their autonomy in implementing new ways to provide goods and services and also their compatible, flexible and continuous measures makes possible and strengthen successful realization of goals. Aushik (2006) carried out a study aimed at entrepreneurship being acquired. He came to conclusion that entrepreneurship is developed through training. Also, this study discusses about university success in improving entrepreneurship training and potential force for entrepreneurship. Aushik in this study insists that education is the most necessary requirement of people so that they become aware of their potential talents and prepare themselves for better life in future by learning skills. Totally, the results showed that entrepreneurship is an acquired process and should be dealt with sufficiently. Howard (2004) in a study examined the impact of entrepreneurship capabilities development (autonomy, adventurousness, progress incentive, interior control, self confidence, and creativity courage) upon entrepreneurship of 450 students and came to conclusion that there is a direct relationship between these capabilities and individuals entrepreneurship abilities. Professor Baharoon and Sheikh Ahmad (2002) from Malaysia Technology University examined technical major students’ access to entrepreneurship training. They insist that learning entrepreneurship increases the probability of university graduates success in developing independent business. Also, encouraging students’ entrepreneurial behavior in universities makes some contributions to this fact. Their study results show that entrepreneurship is learnable. Besides, introducing one entrepreneurial lesson to students is a necessity. Lu et al (2003) carried out a study to determine entrepreneurial attributes of BA students of Southern Africa high education institutes and determined five classes of attributes: competition with modified standards, self confidence, learning lesson from failures, setting goal and stability, incentive level and energy. Obtained result from this study is that most of the respondents gained good grades in each of the attributes classes. Although in comparison with the others, adventurousness received the least grade. In other words, all of entrepreneurship attributes correlated with each other except adventurousness case. Poostigu (2002) performed a study entitled “entrepreneurship training in Argentina” aimed at examination and evaluation of entrepreneurship training present condition in Argentina. Using the method of interviewing students they found that in students’ point of view the most important courses for entrepreneurship training are creativity and novelty training courses and students suggested creativity and novelty as the most effective qualities in doing entrepreneurial activities. Gogol and Aston (2006) performed a study around entrepreneurship file among Turkey university students and used many variables to direct entrepreneurship training programs in Turkey. Novelty, interior control, adventurousness, ambiguity tolerance and self confidence were independent variables of this study and inclination towards entrepreneurship was dependent variable. In this survey, questionnaires were distributed among Turkey university 400 students and questions were asked around their future programs. This study result indicates that students incline towards more novelty and enjoy more creativity, have more incentives for being successful and interior control and great tendency for adventurousness resonates in them. So according to prior
information review and the study purpose, the entrepreneurship attributes we addressed in this study are: adventurousness, rivalry and ambitiousness. In the following, we state the study hypotheses such as this:

H1. There is a significant difference between entrepreneurial attributes of first and last term students.

H2. There is a significant relation between gender and entrepreneurial attributes of first and last term students.

H3. There is a significant relation between educational major and entrepreneurship attributes of first and last term students.

MATERIALS AND METHODS

The questionnaire

We used questionnaire to obtain required data for analysis. Likert Five factor spectrum was used from the spectrum “I’m quite against” to “I’m quite in agreement” as a scale to measure questions. To measure the study variables the questionnaire questions were derived from previous studies. After providing the questionnaire, to examine the questionnaire validity, 40 questionnaires were distributed among Islamic Azad university of Parsabad center students. To examine reliability the Alpha Cronbach method was used and results indicate that the Alpha Cronbach value with 0.843 is higher than 0.7 that is an acceptable value. Also the questionnaire admissibility was affirmed by experts. So in this order the questionnaire had required validity and reliability to be distributed among statistical society.

The sample

The statistical society was consisted of first and last term students of Islamic Azad University (Parsabad Branch) from 14 educational majors during December 2011 according to table 1.

<table>
<thead>
<tr>
<th>Table (1). Statistical society number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 people</td>
</tr>
<tr>
<td>First term students</td>
</tr>
<tr>
<td>861 people</td>
</tr>
<tr>
<td>Last term students</td>
</tr>
</tbody>
</table>

In present study, simple random sampling method was used for sampling. To determine required sample volume we used Morgan table. Since the study includes two statistical societies, according to Morgan table required sample volume in statistical society is 560 people, in this direction 700 questionnaires were distributed in statistical society to collect data and finally 564 questionnaires were applicable for the study purpose. So questionnaire return rate for this study is 0.8.

Respondents’ demography information can be observed in table 2

<table>
<thead>
<tr>
<th>Table (2). Demography Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abundance</td>
</tr>
<tr>
<td>205</td>
</tr>
<tr>
<td>356</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>51</td>
</tr>
<tr>
<td>86</td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>95</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>59</td>
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<tr>
<td>17</td>
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<tr>
<td>22</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

Data analysis and examination of the study hypotheses

Analysis of the study data is one of the most important parts of a scientific study since in this part data is analyzed and is converted in to important and analyzable information. In this study we used different statistical methods to analyze the study data including T-test to compare entrepreneurial attributes of first and last term students and K2 test to examine the impact of gender and educational major upon entrepreneurs’ characteristics. All
of the computations related to hypotheses testing were carried out by SPSS software that is one of the most powerful statistical analysis soft wares in social science. In the following we examine the study hypotheses.

First hypothesis

H₀: there is no difference between first and last term students with respect to entrepreneurship attributes.
H₁: there is no difference between first and last term students with respect to entrepreneurship attributes.

Table (3). T-test of personality attributes of first and last term students

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>personality attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>N</td>
</tr>
<tr>
<td>personality</td>
<td></td>
</tr>
<tr>
<td>attributes</td>
<td></td>
</tr>
<tr>
<td>First term</td>
<td>289</td>
</tr>
<tr>
<td>Last term</td>
<td>275</td>
</tr>
</tbody>
</table>

According to table (3) and Levene’s test, variances are equal. To obtain t value we use the column Equal variances assumed. According to sig=0.967 we conclude that there is no difference between first and last term students with respect to personality attributes.

Separating first hypothesis (subsidiary hypotheses):

1-There is a significant difference between first and last term students with respect to adventurousness.

H₀: There is no difference between first and last term students with respect to adventurousness.
H₁: there is a difference between first and last term students with respect to adventurousness.

Table (4). T-test of first and last term students’ adventurousness

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>adventurousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>N</td>
</tr>
<tr>
<td>adventurousness</td>
<td></td>
</tr>
<tr>
<td>First term</td>
<td>289</td>
</tr>
<tr>
<td>Last term</td>
<td>275</td>
</tr>
</tbody>
</table>

According to table (3) and Levene’s test, variances are equal. To obtain t value we use the column Equal variances assumed. According to sig=0.967 we conclude that there is no difference between first and last term students with respect to adventurousness.
According to table (4) and considering that Levene’ sp >0.05 so variances are equal. To obtain T value we use column Equal Variances assumed. Considering sig=0.989 we conclude that there is no difference between first and last term students with respect to adventurousness.

2. There is significant difference between first and last term students with respect to seeking success.

\[ \text{H}_0: \text{there is no difference between first and last term students with respect to seeking success.} \]
\[ \text{H}_1: \text{there is difference between first and last term student with respect to seeking success} \]

Table (5). T-test of first and last term students’ seeking success

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Term</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>seeking success</td>
<td>First term</td>
<td>289</td>
<td>2.0727</td>
<td>.80250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last term</td>
<td>275</td>
<td>2.1527</td>
<td>.78672</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>seeking success</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td>F</td>
<td>.014</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t-test for Equality of Means</td>
<td>df</td>
<td>562</td>
<td>561.499</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>232</td>
<td>232</td>
<td></td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-.08006</td>
<td>-.08006</td>
<td></td>
</tr>
<tr>
<td>Std. Error Difference</td>
<td>.06696</td>
<td>.06693</td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>-2.1158</td>
<td>-2.1152</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>.05146</td>
<td></td>
</tr>
</tbody>
</table>

According to table (5) and considering Levene’ sp>0.05 so variances are equal. To obtain T we use Equal variances assumed. And considering sig=0.232 we conclude that there is no difference between first and last term students with respect to seeking success.

3-there is significant difference between first and last term students with respect to rivalry.

\[ \text{H}_0: \text{There is no difference between first and last term students with respect to rivalry.} \]
\[ \text{H}_1: \text{There is difference between first and last term students with respect to rivalry.} \]

Table (6). T-test of first and last term students’ rivalry

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Term</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rivalry</td>
<td>First term</td>
<td>289</td>
<td>1.8858</td>
<td>.78888</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last term</td>
<td>275</td>
<td>1.9818</td>
<td>.75191</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>rivalry</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td>F</td>
<td>5.549</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t-test for Equality of Means</td>
<td>df</td>
<td>562</td>
<td>561.998</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.140</td>
<td>.139</td>
<td></td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-.09601</td>
<td>-.09601</td>
<td></td>
</tr>
<tr>
<td>Std. Error Difference</td>
<td>.06496</td>
<td>.06488</td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>-22.259</td>
<td>-22.344</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>.03158</td>
<td></td>
</tr>
</tbody>
</table>

1456
According to table(6) and considering Levene's test, the p-value < 0.05, so variances are not equal. To obtain T value, we use the column Equal variances not assumed. According to the significance level (sig) = 0.139, we conclude that there is no difference between the first and last term students with respect to rivalry.

4. There is significant difference between first and last term students with respect to ambitiousness.

H₀: there is no difference between first and last term students with respect to ambitiousness.

H₁: There is significant difference between first and last term students with respect to ambitiousness.

Table(7). T-test of first and last term students ambitiousness

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Term</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ambitiousness</td>
<td>First term</td>
<td>289</td>
<td>1.9792</td>
<td>.76801</td>
<td>.04518</td>
</tr>
<tr>
<td></td>
<td>Last term</td>
<td>275</td>
<td>1.8109</td>
<td>.74031</td>
<td>.04464</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Samples Test</th>
<th>ambitiousness</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td>F</td>
<td>.598</td>
<td>.440</td>
</tr>
<tr>
<td>t-test for Equality of Means</td>
<td>t</td>
<td>2.648</td>
<td>2.650</td>
</tr>
<tr>
<td>df</td>
<td>562</td>
<td>561.905</td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.008</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>Mean Difference</td>
<td>.16833</td>
<td>.16833</td>
<td></td>
</tr>
<tr>
<td>Std. Error Difference</td>
<td>.06357</td>
<td>.06351</td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>.04346</td>
<td>.04358</td>
</tr>
<tr>
<td></td>
<td>Upper</td>
<td>.29320</td>
<td>.29308</td>
</tr>
</tbody>
</table>

According to table(7) and considering Levene’s test, the p-value < 0.05, so variances are not equal. To obtain T value, we use the column Equal variances not assumed. According to the significance level (sig) = 0.008, we conclude that there is no difference between the first and last term students with respect to ambitiousness.

Second hypothesis

H₀: there is no significant relationship between gender and entrepreneurship characteristics of students.

H₁: there is significant relationship between gender and entrepreneurship characteristics of students.

Table(8). Chi-square test, personality characteristics and gender

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
<th>Cases</th>
<th>gender and entrepreneurship characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Valid</td>
<td>563</td>
<td>99.8%</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crosstabulation gender and entrepreneurship characteristics

<table>
<thead>
<tr>
<th>Count</th>
<th>gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Man</td>
<td>Woman</td>
</tr>
<tr>
<td>entrepreneurship characteristics</td>
<td>62</td>
<td>132</td>
</tr>
<tr>
<td>Average</td>
<td>90</td>
<td>136</td>
</tr>
<tr>
<td>up</td>
<td>33</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>205</td>
<td>358</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>2.823*</td>
<td>2</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>2.842</td>
<td>2</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.188</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>563</td>
<td></td>
</tr>
</tbody>
</table>
According to table (8) and the significant level of 0.05 is the Pearson chi-square value tells us that there is no relationship between gender and personality traits.

Table (9). Intensity of relation between gender and personality attributes

<table>
<thead>
<tr>
<th>Symmetric Measures</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>.071 .244</td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>.071</td>
<td>.244</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>563</td>
<td></td>
</tr>
</tbody>
</table>

According to table(9) and considering fee value significance level that is more than 0.05 it can be observed that this relation intensity is not significance.

**Third hypothesis**

H0: There is no significant relation between educational major and students’ entrepreneurship attributes.

H1: there is significant relation between educational major and students’ entrepreneurship attributes.

Table (10). table of K2 test of two educational majors and personality attributes.

<table>
<thead>
<tr>
<th>Case Processing Summary</th>
<th>Cases</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>educational major and</td>
<td>Valid</td>
<td>Percent</td>
<td>Missing</td>
<td>Total</td>
</tr>
<tr>
<td>students' entrepreneurship</td>
<td>N</td>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>564</td>
<td>100.0%</td>
<td>0</td>
<td>564</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crosstabulation educational major and students' entrepreneurship</th>
<th>personality attributes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational major</td>
<td>Low</td>
<td>Average</td>
</tr>
<tr>
<td>Business Management</td>
<td>21</td>
<td>15</td>
</tr>
<tr>
<td>Computer</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>Government Management</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Persian Literature</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Accounting</td>
<td>34</td>
<td>28</td>
</tr>
<tr>
<td>Bank Keeping</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Physical Education</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Counseling</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Architecture</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>English Language</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Electric- Power Engineering</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Agricultural- Water Engineering</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Construction Engineering Technology</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>226</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>30.176</td>
<td>26</td>
<td>.260</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>31.233</td>
<td>26</td>
<td>.220</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>3.053</td>
<td>1</td>
<td>.081</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>564</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n. 5 cells (11.9%) have expected count less than 5. The minimum expected count is 2.30.

According to table (10) and significance level of khi 2 Pearson value that is more than 0.05 we conclude that there is no relation between educational major and personality attributes.

Table(11). Intensity of relation between educational major and personality attributes

<table>
<thead>
<tr>
<th>Symmetric Measures</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>.231 .260</td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>.164</td>
<td>.260</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>564</td>
<td></td>
</tr>
</tbody>
</table>
According to table (11) and significance level of fee value that is more than 0.05, it can be seen that the intensity of the relation is not significant.

**Conclusion**

This research was applied and supported in Parsabad Islamic Azad University and following findings show that there is no difference observed between students in two statistical societies comparing first and last term students with respect to entrepreneurship personality attributes, the reasons can be:
1. The content of lessons taught in universities more has theoretical aspect and this can not alone influence students entrepreneurship attributes.
2. Professors teaching at universities have not been trained in this field and there is no plan for training professor in this field on behalf of high education.
3. University programs have bee adjusted in a manner that could not strengthen entrepreneurship attributes in students. And these factors altogether resulted in lack of difference between students with respect to entrepreneurship attributes.

Also, according to the study finding it is suggested that some measures be taken in order to modify and revise educational programs to strengthen students’ entrepreneurship capabilities. So an accurate and cohesive planning should be done in the field of entrepreneurship training in universities. In this direction it is suggested that:
1. Make some plans to determine the contents of lessons which lead to strengthening of business proficiencies or in other words enhance entrepreneurial personality attributes in students.
2. Use experiences of the other countries universities in the field of entrepreneurship training and make some attempts to hold joint educational courses and exchange experiences.
3. Pay significant attention to training entrepreneurship teachers and professors.
4. Financially support universities graduates wishing to start or develop small occupations. The government and banks can make some contributions.
5. In designing entrepreneurship education, universities should consider local and regional needs and also their students specific attributes and design educational program proportionate to those needs.
6. Testing students’ personality attributes at the beginning of the year and grouping them based on their need for strengthening entrepreneurial attributes.

According to table (7) and Levene sp>0.05 so variances are equal. To obtain T value we use the column Equal variances assumed. According to sig=0.008 we conclude that there is a difference between first and last term students with respect to ambitiousness.

7. University education should take some measures to develop and strengthen entrepreneurship attributes through holding conferences, seminars and meetings.

**REFERENCES**


Kalantari, Samad et al. (2004). "Examination of entrepreneurship level of graduates in the domain of literature and publications", Social Science Publication, Shahrivar page 45-68.


