Study on the Impact of Entrepreneurship Education in Colleges and Universities on Students’ Entrepreneurial Intention

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Abstract

This paper took students in Fuzhou University as the research object of entrepreneurial intention and collected data by random stratified sampling questionnaire. This paper also took entrepreneurship education in universities and colleges as the key explanatory variable, and other key variables like demographic variables, personality traits, entrepreneurial attitude, entrepreneurial ability, subjective norms as the model variable, and used principal component analytical method to analyze and explore the relationship between entrepreneurial education and entrepreneurship intention. Through data calculation, it is confirmed that entrepreneurial education in colleges and universities has a significant impact on students' entrepreneurship intention.

Keywords: Entrepreneurship Education in Colleges and Universities, Entrepreneurial Intention of College Students, Principal Component Analytical Method, Probit Model.

1. RESEARCH BACKGROUND AND LITERATURE REVIEW

1.1 Research background

With the further promotion of higher education reform, the tertiary education in China has transformed from elite education to popular education. In 2014, the idea of "mass entrepreneurship and innovation" was written in the report on the work of the government. In December 2014, the Ministry of Education asked all colleges and universities to set up a flexible academic system to allow school students to suspend courses to do business, which not only solved their own employment problem but also created more positions. However, among various factors that affect the realization of college students’ entrepreneurship, the single factor of entrepreneurial ability cannot guarantee the realization of entrepreneurship, but the real difference between potential and true entrepreneurs lies in the individual entrepreneurial intention.

Fujian Province has always been one of the most active entrepreneurial provinces in the country, and Fuzhou University is the most typical university in terms of entrepreneurship in Fujian Province. In recent years, Fuzhou University has explored positively in entrepreneurship education, and formed an entrepreneurship education model with the characteristics of Fuzhou University. Since 2010, more than 400 college students from Fuzhou University have been involved in the operation of entrepreneurial projects, with a total of 30 registered companies, an annual value of production of 2.7 million Yuan and the total number of employed of more than 100. The entrepreneurial rate of graduates 2014 reached even more than 2.36%, well above the national average level. Therefore, it is of typical significance to select students in Fuzhou University as the entrepreneurship research object.

1.2 Literature review

TPB and SEE were the most popular and applied entrepreneurship models abroad in the 1990s. Ajzen’s theory of planned behavior linked the beliefs, attitudes and intentions of individuals to their actual behaviors, and (Krueger, 2000) applied this theory to the research of entrepreneurship. (Cai et al., 2015) analyzed the entrepreneurial intention of Chinese college students from entrepreneurial education, family economic background and entrepreneurial services in colleges and universities, and verified that entrepreneurial education
and the entrepreneurial potentials of college students have a significant impact on their entrepreneurial intention. Looking at the related research of entrepreneurship at home and abroad, current researches on entrepreneurship focuses on entrepreneurial intention, entrepreneurial education, entrepreneurial ability and entrepreneurial psychology. One of the factors that is related to the future entrepreneurial orientation of individuals - entrepreneurial intention, is a new research hotspot. Many entrepreneurial scholars study the influencing factors of entrepreneurial intention from the perspective of individual factors of entrepreneurs such as entrepreneurial attitude and entrepreneurial self-efficacy. However, the research on the influencing factors of entrepreneurial intention is still far behind.

2. RESEARCH DESIGN

2.1 Model building

This article builds a conceptual model based on the theory of planned behavior and the entrepreneurial event model. First of all, this paper expands the personal factors of potential college entrepreneurs. Although scholars have conducted in-depth research on the "important role of entrepreneurial self-efficacy", but the role of forward-looking personality, risk-taking tendency and achievement needs of entrepreneurs has not yet been clearly explained. Secondly, the external factors of entrepreneurs also play an important role in the entrepreneurial intention of the individual. At the same time, this article explores the impact of entrepreneurial education, the key explanatory variable. Combined with the advantages of the theory of planned behavior and entrepreneurial event model, this paper constructs the theory of entrepreneurial education, personality traits, subjective norms, entrepreneurial self-efficacy and demographic variables model based on these theories. In order to explore the impact of key elements of entrepreneurship education on the entrepreneurial intention, this paper establishes a Probit model between the factor of entrepreneurial education in universities and colleges and entrepreneurial intention, and variables such as personality traits are added to explore the relationship between the factor of entrepreneurial education in universities and colleges and entrepreneurial intention, so as to know what factors will have a significant impact on the entrepreneurial intention. The meaning of specific variable and the expected direction of action are shown in the table. According to the research purpose of this article and the previous research results, the entrepreneurial intention model of college students is set as follows:

Whether students have entrepreneurial intention = f (entrepreneurship practical education, entrepreneurship knowledge education, entrepreneurial culture cultivation, forward-looking personality, risk-taking tendency, achievement needs, entrepreneurial attitude, subjective norms, entrepreneurial self-efficacy, individual characteristic variables of college students).

2.2 Design of questionnaire

There are many factors that influence students’ entrepreneurial intention and this study mainly chooses entrepreneurship education as the key explanatory variable. From the perspective of entrepreneurship education in colleges and universities, this paper studies the extent to which entrepreneurial education influences college students’ entrepreneurial intention. The questionnaire design of this paper adopts Likert five-level scale method and gives score from (-2) to (+2) for "very non-conformity", " non-conformity ", " not sure", "conformity " and "very conformity ". The higher the score, the higher the degree of identity of the condition described in the item, and conversely, the lower the degree of identity of the condition described in the item. According to the research of (Autio, 2001), (Kolvereid, 2006), (John, 2014) and (Schlaegel, 2015), the personality trait, entrepreneurial attitude, subjective norms and entrepreneurial self-efficacy are taken as the study variables and the personal factors and family factors are the control variables influencing the entrepreneurship of college students.

Empirical analysis

The model variables include demographic variables, key variables of entrepreneurial education, personality traits, entrepreneurial attitude, entrepreneurial ability, subjective norms and other key variables, of which 2 items are dependent variables; the key variables in entrepreneurial education include entrepreneurial knowledge education, entrepreneurial practice education, entrepreneurial culture cultivation, which altogether include 18 questions; personality traits include forward-looking personality, risk-taking tendency, achievement needs, which altogether include 10 questions; entrepreneurial attitude includes 3 questions; subjective norms include 4
questions; entrepreneurial self-efficacy includes 3 items; Demographic variables include individual factors and family factors. Individual factors include age, gender, major and entrepreneurial experience, which altogether include 6 questions; family factors include parental work, school years and family income, which altogether include 3 questions.

3. EMPIRICAL ANALYSIS

3.1 Sample descriptive statistical analysis

The validity and reliability of the questionnaire data collection directly affect the fit of the research model, thus determining the scientificity of results. In order to balance the gender and the proportion of college students in different grades, this study adopts random stratified sampling method to select college students of different grades from 6 majors in Fuzhou University. 300 questionnaires were distributed and 274 valid questionnaires were collected. The recovery rate was 91.33%.

3.1.1 College Entrepreneurship Education

Only 23.1% of the 272 students interviewed had elective courses related to entrepreneurship education, such as advanced business entrepreneurship, small and micro enterprise management and entrepreneurial practice class; 76.9% did not take any business-related courses. In the entrepreneurship training and entrepreneurship competition, only 23.1% of these 272 students have participated in entrepreneurship training and competition and proportion of nonparticipants accounted for 76.9%. Overall, most of the students did not participate in any entrepreneurship training and entrepreneurship competition, and students’ willingness and enthusiasm to participate in entrepreneurship courses, entrepreneurship training and entrepreneurship competition need to be further improved, rather than conducting selective "elite" entrepreneurship education.

3.1.2 Entrepreneurial Intention of College Students

Of the 272 students interviewed, only 43 had entrepreneurial experiences, accounting for 16.7% of respondents, while 83.3% of respondents had no entrepreneurial experience. This data shows that with the deepening of entrepreneurship education, many students currently are trying to start a business during their study in universities and colleges. These entrepreneurial attempts will also affect the future entrepreneurial intention of their classmates. Of 272 respondents, 63 participated in entrepreneurship education and 209 did not attend entrepreneurship education. Of the students who did not participate in entrepreneurship education, 40% of students might choose to start a business after graduating from college, while 48.9% made it clear that they did not intend to start a business. Of the students who participated in entrepreneurship education, 54.8% of the students might choose to start a business after graduating from college, which was significantly higher than those students who did not participate in entrepreneurship education.

3.2 Impact of entrepreneurship education on the entrepreneurial intention of college students

The KMO and Bartlett’s spherical test was conducted on the items related to the variables of entrepreneurial intention of college students, and the results were shown in Table 1

<table>
<thead>
<tr>
<th>Table 1 KMO and Bartlett’s Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

According to the above data, the KMO score of the independent variable scale influencing college students’ entrepreneurial intention was 0.906, greater than 0.7, indicating that the questions of the questionnaire system are highly relevant and very suitable for factor analysis. In addition, the significance rate of the Bartlett’s test was 0, which indicated the existence of common factors in the overall correlation matrix and thus it can be used for the factor analysis in the next step.
Table 2
Principal Component Analysis Table

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Variance</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>3.754</td>
<td>10.147</td>
<td>40.524</td>
</tr>
<tr>
<td>3</td>
<td>2.143</td>
<td>5.793</td>
<td>46.317</td>
</tr>
<tr>
<td>4</td>
<td>1.630</td>
<td>4.407</td>
<td>50.724</td>
</tr>
<tr>
<td>5</td>
<td>1.415</td>
<td>3.824</td>
<td>54.548</td>
</tr>
<tr>
<td>6</td>
<td>1.148</td>
<td>3.104</td>
<td>57.651</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

As can be seen from the above table, a total of 6 common factor cumulative variance were extracted from the questionnaire survey of independent variables, with a contribution rate of 57.65%. In view of the fact that this article is a measurement of the subjectivity people with low precision, it was basically sufficient to describe the influencing factors of the entrepreneurial intention of college students.

As it can be seen from the first principal component that all the items set up in college entrepreneurship practical education had a high load, which could be called as the college education practice factor, with a cumulative contribution rate of 30.77%; the high load part in the second principal component was the risk-taking personality and forward-looking personality, and it could be called as forward-looking personality factor, with a contribution rate of 10.14%; the high load part in the third main component was mainly subjective norms and entrepreneurial attitude, with a contribution rate of 5.79%; the high load part in the fourth main component was entrepreneurship education, with a contribution rate of 4.407%; the high load part in the fifth main component of the load is mainly subjective norms, with a contribution rate of 3.824%; the sixth main component load was entrepreneurial education atmosphere, which could be called as the entrepreneurial atmosphere factor, with a contribution rate of 3.104%.

The regression results showed that gender, parental years of education, parental work, parents’ monthly income, entrepreneurial knowledge education, entrepreneurial practice education, entrepreneurial culture and education, risk-taking tendency, entrepreneurial attitude and entrepreneurial self-efficacy has significant statistical impact on the entrepreneurial intention of college students and the specific conditions and the marginal effects of various factors on the entrepreneurial intention of college students are as follows:

3.2.1 Impact of Entrepreneurship Education in Colleges and Universities on Students’ Entrepreneurial Intention

This article is most concerned about the key variables of impact of entrepreneurship education in colleges and universities on students’ entrepreneurial intention, and what is in line with the hypothesis in this article is that entrepreneurial education in colleges and universities do have a significant impact on the entrepreneurial intention of students. The estimated coefficient of the entrepreneurial knowledge education variable is significant at the level of 5%, which passes the significance test and the coefficient sign is positive, indicating that the entrepreneurship-related courses and entrepreneurship training and entrepreneurship knowledge lecture experience can enhance their entrepreneurial intention. The regression results show that the estimated coefficient of the entrepreneurial practice education factor is significant at the level of 10%. Compared with students who did not participate in the practice of entrepreneurship education, the entrepreneurial intention of students who participated in the practice of entrepreneurship education will increase. The factor of entrepreneurial culture cultivation also has a significant positive impact, and its coefficient is estimated to be significant at the level of 5%. The above analysis shows that, as the key explanatory variable in this study, entrepreneurship education in colleges and universities have a significant positive impact on the entrepreneurial intention of students.
3.2.2 Impact of Personality Traits on the Entrepreneurial Intention of College Students

Whether different personality traits of college students affect the entrepreneurial intention is also a concern of this research. The regression results show that different entrepreneurial personality traits do have an impact on college students’ future entrepreneurial decisions. Students with adventurous tendency have a significant positive impact on the probability of future entrepreneurial choices and it is statistically significant at 10%.

3.2.3 Impact of Three Key Factors in TPB Theory on Students’ Entrepreneurial Intention

Based on the theory of planned behavior, this article also includes the entrepreneurial attitude, subjective norms and entrepreneurial self-efficacy into the model to further verify the TPB theory. The entrepreneurial attitude and entrepreneurial self-efficacy variables are significant at 1% level and the coefficient sign is positive, while subjective norms are insignificant at 10% statistical level. The above data show that the more active the students’ attitude, the stronger their entrepreneurial intention. However, the impact of parents, relatives, friends, and teachers on students’ entrepreneurship is not significant.

3.2.4 Impact of Family Background on Students’ Entrepreneurial Intention

This study finds that the coefficient of the parents’ working nature variable is estimated to be positive and have a significant positive effect at the 10% level, which shows that entrepreneurial intention has a strong intergenerational transitivity. The family economic background is significant within 5%, which is negatively related to the entrepreneurial intention of college students, which is a factor that cannot be ignored in the entrepreneurial intention of students. Colleges students from poor economic background are eager to make money to break the poverty cycle and are full of enthusiasm for entrepreneurship. Families with strong economic background are prone to make their students to seek stable jobs.

REFERENCES