

Relationship between College Students' Innovation with Entrepreneurship Ability and Related Education

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Abstract: This paper analyzes the influence of University Entrepreneurship Education on students' entrepreneurial ability. At the same time, this paper analyzes the intermediary role of innovation spirit in this process. The results show that entrepreneurship education plays an important role in the promotion of students' innovation spirit and the cultivation of entrepreneurial ability. Therefore, in addition to improving entrepreneurial ability of students, university entrepreneurship education should also focus on cultivating students' innovative spirit.

1. Introduction

University entrepreneurship education plays an important role in cultivating students' entrepreneurship skills and innovation spirit, which has aroused great attention in the education field [1]. The improvement of students' entrepreneurial ability and innovation spirit can directly promote the development of entrepreneurial activities [2-3]. It is not only conducive to the cultivation of technical talents, but also conducive to the formation of talent groups with strong innovation spirit. To promote the realization of the national strategy of improving the ability of independent innovation can fundamentally promote the economic growth and prosperity of a country. After ten years of development, entrepreneurship education in China's universities has accumulated some experience. However, due to the lack of clear target orientation and insufficient investment in resources, it still lags behind the needs of social and economic development.

Therefore, scientifically positioning the goal of university entrepreneurship education and clarifying the mechanism of the role of entrepreneurship education in the growth of college students are very important to enhance students' innovative spirit and entrepreneurial awareness. These can improve students' skills and knowledge structure, and promote the entrepreneurial activities of graduate students [4]. It is an urgent requirement to build an innovative country and promote comprehensive and coordinated development of society.

2. Entrepreneurship Education and Students' Entrepreneurial Ability

Regarding the goals of university entrepreneurship education, early research believes that students' entrepreneurship awareness and entrepreneurial skills should be cultivated. Through entrepreneurship education, students' ability to analyze the environment, identify and grasp business opportunities, develop markets, and form and manage entrepreneurial teams is improved. These methods can improve the success rate of entrepreneurial activities and reduce entrepreneurial risk.

The entrepreneurship education in Colleges and universities is different from the employment training aimed at solving the survival problems in the society, but it is a way to fundamentally improve the entrepreneurial potential of students. The American Entrepreneurship Education Alliance points out that entrepreneurship is a lifelong learning process, which includes at least five stages: basic cognition stage, ability awareness stage, innovation training stage, entrepreneurship practice stage and entrepreneurship development stage. In this sense, the implementation of entrepreneurship education for young people in the university stage is an important path to achieve the goal of lifelong education, and the best response to the concept of lifelong education. For a long time, entrepreneurship education in the United States has been oriented to the cultivation of

entrepreneurs. It not only cultivates entrepreneurs who can create more jobs, makes the educated become social members who seek their own career and become rich in entrepreneurship, but also improves the entrepreneurial quality of the educated, including entrepreneurial consciousness, entrepreneurial psychological quality, entrepreneurial knowledge and entrepreneurial ability in an all-round way.

From the above point of view, the most direct goal of university entrepreneurship education should be to cultivate students' entrepreneurial ability. To systematically teach students the concept, consciousness, skills and methods of entrepreneurial activities, so that they can carry out entrepreneurial activities more effectively. Experience shows that systematic entrepreneurship education plays a significant role in improving students' entrepreneurial ability. A survey of entrepreneurship education at the University of Arizona by Chaney and Rebecca shows that compared with those who have not received entrepreneurship education, the graduates who have received entrepreneurship education have stronger entrepreneurial ability, and the average entrepreneurial ability of the latter is three times that of the former [5].

The purpose of university entrepreneurship education is not only to cultivate students' obvious entrepreneurial skills and skills, but also to cultivate students' innovative spirit. The essence of the spirit of innovation lies in people's intelligent and non-intelligent psychological state in the process of actively exploring and discovering new relationships between things or in the process of creative activities. Entrepreneurship Education in universities encourages students to think creatively about the opportunities in the real environment and the untapped needs in the market. This is helpful to cultivate students' critical thinking and spirit, questioning spirit, problem consciousness, and the spirit and ability of seeking difference and innovation. These consciousness or ability are the important content of students' innovative spirit. The relationship between entrepreneurship education and students' innovative spirit has been highly valued by researchers. In the theoretical research, foreign research emphasizes the concept of entrepreneurship education, while Chinese research is trying to integrate the two concepts of innovation education and entrepreneurship education to form the concept of innovation and entrepreneurship education. In fact, innovation and entrepreneurship are inseparable. Innovation spirit and innovation activities are the foundation and core of entrepreneurship, and entrepreneurship is the embodiment of innovation.

The innovation and entrepreneurship education in universities should be an overall and systematic education and teaching project with the cultivation of innovation consciousness as its main purpose. Compared with traditional training objectives, entrepreneurship education requires greater respect for personality freedom and personality development in the school's educational philosophy to stimulate students' potential. Therefore, entrepreneurship education should go out of the utilitarian value orientation deviation of entrepreneurs' quick success and focus on cultivating the entrepreneurship and innovation ability of the educated. From the perspective of the implementation process of entrepreneurship education, when entrepreneurship education is integrated with subject courses and fully integrated into students' professional education, it is easier to achieve the goal of cultivating students' innovative spirit.

Based on the above viewpoints, it can be found that the goal of university entrepreneurship education should be positioned in the following two aspects: One is to cultivate students' entrepreneurial ability, systematically impart various knowledge, methods and skills needed for entrepreneurial activities to students, and develop entrepreneurship for students Lay the foundation for practical activities; the second is to cultivate students' sense of innovation from a deeper level. This is also in line with the spirit of my country's comprehensive education and quality education, and is conducive to fundamentally improving the national innovation spirit and overall quality.

3. Experiment Study

3.1 Selection of Consensus Indicators for School Education

The students are classified into grades, disciplines, and academic levels to study the targeted cultivation of entrepreneurial ability. Furthermore, as mentioned above, it has become a common

international trend for colleges and universities to extensively carry out entrepreneurship education to enhance the entrepreneurial ability of college students. In addition, a large number of studies abroad have shown that the potential for entrepreneurship can be stimulated in activities and interactions, especially the self-determination that is directly related to entrepreneurial actions, which is also stimulated in activities. Coincidentally, in our country, it has shown that tacit knowledge plays an important role in the process of forming entrepreneurial ability, and college activities are a channel for tacit knowledge transfer. Competence is particularly important. Any innovative attempt in the construction of college student association resources, capacity building and operation mode can cultivate entrepreneurial ability in practice, and it may play a role in enlightenment and reference for entrepreneurial activities of college students [6-8]. According to the survey, college students have improved their entrepreneurial ability by participating in student organizations, such as their own organizational ability, personal adaptability, communication and interpersonal skills, decision-making and planning abilities.

3.2 The Selection of Consensus Indicators of College Students' Entrepreneurial Ability

Entrepreneurship is a high-level comprehensive ability, which can be divided into three abilities: professional ability, method ability and social ability. Professional ability refers to the ability required by the main posts or post groups closely related to the business direction. Method ability refers to the working methods that entrepreneurs need in the process of entrepreneurship, and it is the basic ability of entrepreneurship. Social ability refers to the behavior ability needed in the process of entrepreneurship. It has many things in common with the connotation of EQ, which is the main guarantee for the success of entrepreneurship and the core ability of entrepreneurship. This ability division has also been approved and adopted by many subsequent researchers. Although there is no specific concept of entrepreneurial ability of college students abroad, there are many discussions on entrepreneurial ability.

Recent studies have proposed that an important output of entrepreneurship education is entrepreneurship, which can be divided into three dimensions: knowledge, including opportunity identification, start-up of innovative enterprises and enterprise operation process, entrepreneurship process, innovation and creation, entrepreneurship ethics, etc.; skills, including planning, organization, management, leadership, negotiation, risk control, team and individual division of labor coordination, etc.; state Degree, including independence, creativity and imagination, curiosity, self-confidence, professionalism, tolerance of failure, etc.. Form the scale according to the literature research, select the above consensus indicators, and build an analysis model of the impact of school education on College Students' entrepreneurial ability. According to the model, the observation indexes are further refined. In order to ensure the content validity of the questionnaire and verify the observation indicators, 10 experts in related fields were selected to evaluate the detailed observation indicators in the form of questionnaire and make further modifications. The selection criteria of experts are: senior experts of entrepreneurship education for college students (long-term engaged in entrepreneurship guidance and research for college students, with the title of vice high school or above) and senior college students entrepreneurs (the established enterprise has a life span of more than 3 years). With the help of social network and telephone contact in advance, the questionnaire of these 10 experts was sent out and collected by on-site filling or e-mail according to different situations, so as to ensure the recovery rate and effective questionnaire rate of 100%.

3.3 The Selection of Consensus Indicators of College Students' Entrepreneurial Ability

Excel2003 and SPSS17.0 software is used to perform statistical analysis on the recovered expert questionnaires, and calculate the arithmetic mean, standard deviation, coefficient of variation, and full score frequency of each index. According to the index screening criteria, retain the index with frequency > 0.1 or arithmetic mean value > 2.5 and coefficient of variation value < 0.23. In the open-ended questions, experts also added several indicators of entrepreneurship and entrepreneurship education. Through frequency statistics, we have drawn higher frequency indicators. The screened and updated observation indicators are handed over to experts to assign values according to importance, and finally form a scale composed of two parts: school education and entrepreneurial

ability of college students. The scale uses Likert five-point scoring method, “very strong” is 5 points, and then decreases in turn. T

He commonly used Cronbacha reliability coefficient method was used to test the reliability of the scale. The results show that the reliability of the Entrepreneurship Ability Scale and Entrepreneurship Education Scale are 0.864 and 0.891, respectively, which are both greater than 0.7, proving that each scale has a high internal consistency. The commonly used analysis methods of validity test include correlation analysis and factor analysis. This study uses correlation analysis. According to the theory of factor analysis, there should be a medium degree of correlation between each factor. If the correlation is too high, it means that there is a coincidence between the factors, and some factors may not be necessary; if the correlation between the factors is too low, it means that some factors may be measured It is completely different from what you want to measure. Generally speaking, $r \geq 0.70$ indicates high correlation, $0.30 \leq r < 0.70$ indicates moderate correlation, and $r < 0.30$ indicates low correlation. Using the Person correlation analysis in the correlation analysis function of SPSS17.0 software, the two scales were analyzed respectively, and the results are shown in Table 1 and Table 2.

Table 1 the Correlation Coefficient Matrix of the Observation Indexes of the Entrepreneurial Ability Scale.

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	All	A12	A13
A1	1.00												
A2	0.33	1.00											
A3	0.32	0.38	1.00										
A4	0.34	0.38	0.36	1.00									
A5	0.32	0.41	0.30	0.38	1.00								
A6	0.29	0.30	0.36	0.30	0.35	1.00							
A7	0.36	0.39	0.39	0.37	0.39	0.35	1.00						
A8	0.27	0.38	0.30	0.35	0.31	0.59	0.31	1.00					
A9	0.36	0.36	0.30	0.34	0.38	0.30	0.37	0.38	1.00				
A10	0.30	0.33	0.31	0.31	0.38	0.42	0.38	0.32	0.36	1.00			
All	0.37	0.35	0.37	0.36	0.32	0.30	0.42	0.34	0.32	0.44	1.00		
A12	0.29	0.34	0.30	0.36	0.44	0.43	0.43	0.57	0.33	0.51	0.39	1.00	
A13	0.30	0.49	0.36	0.31	0.34	0.35	0.38	0.33	0.32	0.33	0.36	0.44	1.00

Table 2 Correlation Coefficient Matrix of the Observation Index of Entrepreneurship Education Scale.

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13
B1	1.00												
B2	0.47	1.00											
B3	0.38	0.50	1.00										
B4	0.33	0.36	0.42	1.00									
B5	0.47	0.37	0.28	0.30	1.00								
B6	0.30	0.32	0.47	0.34	0.25	1.00							
B7	0.35	0.29	0.39	0.33	0.24	0.49	1.00						
B8	0.29	0.33	0.39	0.33	0.28	0.39	0.51	1.00					
B9	0.25	0.32	0.42	0.35	0.29	0.44	0.46	0.55	1.00				
B10	0.26	0.30	0.37	0.30	0.25	0.42	0.38	0.46	0.47	1.00			
B11	0.29	0.30	0.28	0.37	0.30	0.29	0.25	0.30	0.33	0.28	1.00		
B12	0.27	0.33	0.38	0.31	0.28	0.38	0.37	0.48	0.41	0.42	0.41	1.00	
B13	0.26	0.31	0.31	0.31	0.26	0.37	0.34	0.35	0.35	0.29	0.31	0.43	1.00

In order to investigate the impact of the implementation of entrepreneurship education on the entrepreneurial ability of college students, we take the overall entrepreneurial ability as the

dependent variable, and take the observation indicators of entrepreneurship education, including a series of courses of entrepreneurship guidance, special lectures of entrepreneurship education, seminars or communities of entrepreneurship education, entrepreneurship mentors' entrepreneurship guidance, training of communication ability, evaluation of entrepreneurship ability, business simulation activities, etc Independent variable, conduct multiple linear regression analysis (see Table 3). The results show that the regression coefficient hypothesis test probability (p-value) of the 13 independent variables of “entrepreneurial tutor for entrepreneurial guidance” and “enterprise visit” is less than 0.05, indicating that the two indicators have a significant impact on the overall entrepreneurial ability of college students, while the regression coefficient hypothesis test probability (p-value) of the other 11 independent variables is greater than 0.05, not statistically significant The significance shows that there is no significant impact on the overall entrepreneurial ability of college students.

Table 3 Regression Analysis of Various Indicators of Entrepreneurship Education and Entrepreneurship Ability of College Students.

Index	Reversion coefficient	Standard error	Standardized regression coefficient	t	P
Entrepreneurship guidance series	-0.012	0.025	-0.024	•0.48	0.631
Special information on Entrepreneurship Education	-0.017	0.025	-0.034	-0.686	0.493
A seminar or association for entrepreneurship education	0.022	0.021	0.052	1.05	0.294
Entrepreneurship tutor to guide Entrepreneurship	0.042	0.019	0.097	2.2	0.028*
Training of communicative competence	0.021	0.019	0.048	1.106	0.269
Evaluation of entrepreneurship	-0.052	0.022	-0.115	-2.415	0.160
Business simulation activities	-0.006	0.019	-0.015	-0.322	0.748
Entrepreneurship feasibility study	0.007	0.02	0.017	0.336	0.737
Entrepreneurial games or competitions	-0.023	0.02	-0.057	-1.145	0.253
Entrepreneurial community or forum	0.001	0.018	0.003	0.061	0.951
Internship training and practical activities	-0.001	0.018	-0.002	-0.053	0.958
School enterprise practice project	0.018	0.019	0.045	0.936	0.349
Business visit	0.041	0.018	0.103	2.271	0.023*
Complex correlation coefficient: R ² =0.43, P=0.13					

4. Conclusion

Entrepreneurship education in universities has played a role in the dissemination of knowledge. Various explicit knowledge imparted in entrepreneurship education courses, such as analysis

methods of environmental opportunities, formation and management of entrepreneurial teams, risk prediction and response strategies, and some basic theoretical content, Can be absorbed by college students and transformed into their entrepreneurial skills or skills, thereby enhancing their entrepreneurial ability. The courses, learning atmosphere and practical opportunities provided to students in the process of university entrepreneurship education can change the students' mental characteristics to a certain extent, which is conducive to the formation of students' exploration spirit and innovative habits. The strength of students' innovative spirit has a significant impact on the formation of entrepreneurial ability. Students with strong innovative spirit are more likely to absorb entrepreneurial knowledge and master entrepreneurial skills, so the effect of university entrepreneurship education on their entrepreneurial ability is more significant. Based on the above conclusions, university entrepreneurship education should be dedicated to improving students' entrepreneurial ability, and at the same time, it should also focus on cultivating students' innovative spirit and stimulating students' entrepreneurial enthusiasm, so as to promote the vigorous development of entrepreneurial activities of college students in my country.

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