

Research on the Influence of University Innovation Education on College Students' Innovation and Entrepreneurship Behavior

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Abstract

Innovation is a hot topic in contemporary society. In order to cultivate the students' creative quality, to open innovation entrepreneurship education in colleges and universities, this paper starting from the goal, to explore university creative education influence on college students' innovative entrepreneurial intention, thus can get innovative entrepreneurial behavior prediction research. SPSS22.0 software was used for descriptive statistical analysis, reliability and validity test, regression analysis, etc., to obtain relevant statistical test results, Innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention; Innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention.

Keywords

Innovation; Entrepreneurship Education; Entrepreneurship Behavior.

1. Introduction

1.1. Research Background and Significance

Innovation is a hot topic in contemporary society. As a source of economic growth and a key factor of social and economic development, it is favored in national strategies. The party's report clearly put forward # 19, innovation is the driving force for the development of the leading, is the strategic support of construction of modern economic system, the emphasis was to continue to strengthen the construction of national innovation system and innovation into national development strategies in the global core layer, build enterprise as the main body, market oriented, the depth of the fusion of technology innovation system. The 19th National Congress also affirmed the practical effects of the innovation-driven strategy, pointing out that since the implementation of the innovation-driven development strategy, remarkable achievements have been made in building an innovative country, and scientific and technological achievements have emerged one after another.

With the trend of college enrollment expansion accelerated year by year, the number of college students continues to grow, and more and more people accept higher education, which further improves the national quality of Our country, but also leads to many practical problems: First, the number of college graduates is increasing year by year, making the social competition more and more fierce; Secondly, as China's economic growth slows down, the employment pulling effect is weakened, and college students also have their own limitations, such as the lack of social work experience. Due to the existence of pressure in many aspects, the current form of social employment is not very optimistic.

Under such employment situation, many college students gradually realize that if they want to have more advantages in the rapidly changing world and increasingly fierce social competition, they must develop innovative thinking and condense innovative thinking. At this time, many college students choose to start their own business, which has been highly valued and strongly supported by the society, governments and universities. To alleviate the employment pressure,

the party's 17th also explicitly put forward "improve our capacity for independent innovation, building an innovative country" development strategy and promote "innovation, job creation and encourage entrepreneurship to create more employment opportunities," development strategy, "public entrepreneurship, peoples innovation" also known as the new engine in China's economy, entrepreneurial innovation also gradually rise to the national strategic development level.

In this context, innovation and entrepreneurship education for college students has become an important measure to build a national innovation system and create an atmosphere for innovation and entrepreneurship. Colleges and universities train innovative and entrepreneurial talents through innovation and entrepreneurship education, which can promote and drive innovation and entrepreneurship activities at the social level and promote the development of national economy.

In innovative entrepreneurial background, various universities responded positively to the call of national Ministry of Education for innovative entrepreneurship education, create a innovation of entrepreneurship at the same time, also for education opens the actively explore innovative undertaking and conducting exploration gradually form a stable mode of education, for example, renmin university of China will venture education into quality education, in order to improve the overall quality and ability of students. Colleges and universities attach unprecedented importance to innovation and entrepreneurship education.

However, in the university innovation at the height of entrepreneurship development, "entrepreneurial low rate, low success rate, low quality" that were also there and in the process of college students' innovative undertaking, there is a widespread innovation consciousness is not high, university students also innovation in knowledge, innovation of the few problems, therefore, how to effectively carry out innovation entrepreneurship become a focus of attention from all walks of life.

In order to cultivate the students' creative quality, to open innovation entrepreneurship education in colleges and universities, this paper starting from the goal, to explore university creative education influence on college students' innovative entrepreneurial intention, thus can get innovative entrepreneurial behavior prediction research, hope this article research conclusion can help to further clarify the goals of the college students' innovative entrepreneurship education, Feasible suggestions are put forward for the optimization of innovation and entrepreneurship education system, and instructive conclusions are provided for improving the practical effect of innovation and entrepreneurship education.

1.2. Research Contents and Methods

This paper will carry out research from six parts: introduction, literature review, research hypothesis and theoretical model, research design, data statistics and analysis, and research summary. The introduction mainly expounds the current situation of innovation and entrepreneurship environment, and leads to the research problems of this paper. The literature review will carry out literature review according to the research questions in this paper, and conduct literature sorting and analysis on innovation and entrepreneurship education, intention and behavior. The research hypothesis and theoretical model will start from the research problem of innovation and entrepreneurship education in colleges and universities, put forward the research hypothesis and construct the relevant theoretical model; The design and implementation of the questionnaire as well as the distribution and recovery of the questionnaire will be explained in detail. Data statistics and analysis will verify the hypothesis and theoretical model of this paper according to the data results of the questionnaire. The study summary will summarize the findings and make recommendations.

This paper mainly uses the method of empirical research, literature research method, questionnaire survey method and quantitative research method to carry out specific research.

Through literature research on innovation and entrepreneurship education, innovation and entrepreneurship intention and innovation and entrepreneurship behavior, the theoretical model is constructed and relevant research assumptions are put forward based on previous studies, which can also provide some reference and basis for the subsequent questionnaire design.

Questionnaire survey provides research data for this study. This study designs relevant questionnaires by referring to the maturity scale of previous scholars, and distributes and collects data through the questionnaire star.

In this study, SPSS22.0 software was used for descriptive statistical analysis, reliability and validity test, regression analysis, etc., to obtain relevant statistical test results.

2. Literature Review

2.1. Innovation and Entrepreneurship Education

"The Theory of Economic Development" first appeared the word innovation, innovation is the establishment of a new production function, in which changing any factors will lead to the recombination of production factors and production conditions, so as to form a power to promote economic development. This book also summarizes the five aspects of innovation from the perspective of enterprises, that is, the emergence of new products, the use of new technology, the opening of new markets, the supply and control of new raw materials, and the establishment of new systems.

Innovation and entrepreneurship go hand in hand. It is not advisable to talk about innovation without entrepreneurship. Almost all successful entrepreneurs have systematic innovation practice experience. Analysis shows that the sharing of innovation and entrepreneurship has a positive correlation with economic growth, and there is a virtuous circle among the three. Promoting entrepreneurship and innovation can enhance economic activities, and economic activities positively affect innovation and entrepreneurship activities[1].

As for the definition of innovative education, Zhang Lichang believes that innovative education is to make use of the positive influence of heredity and environment, fully mobilize students' subjective initiative, and attach importance to students' innovative consciousness, innovative skills and innovative spirit. Innovation entrepreneurship generally refers to business management, innovation management, and other related courses, the curriculum content to theory, mainly to teach some related to aspects such as business, law, finance innovation business knowledge, and provide foundation for students' innovative entrepreneurial theory knowledge, to enhance the innovation consciousness of students, inspire their entrepreneurial thinking, cultivate independent thinking and independent ability[2].

2.2. Intention of Innovation and Entrepreneurship

In the theory of planned behavior, "behavioral intention" is the origin of the word intention. Intention is a kind of intention, which is to carry out a specific action in a given situation so as to obtain the expected performance. Intention is the most direct factor influencing the generation of behavior[3]. Entrepreneurial intention was first presented by the Brid, the word is defined as entrepreneurs directs the attention, action and experience is a mental state of the concept of business entrepreneurs at the beginning of the creation, the organization has determined the direction and the form of organization, and the subsequent tissue as a result, such as the survival, growth, development and change of organization, is based on these intentions[4]. Lkmeger believes that entrepreneurial intention is a kind of commitment, an individual's commitment to the business he or she has established. Thompson believes that entrepreneurial intention is a self-commitment, in which an individual plans to establish a new business and has a planned entrepreneurial behavior in the future[5].

At present, the research on innovation intention mainly focuses on individual characteristics, individual background factors, individual cognitive factors and environmental factors. The influencing factor model of entrepreneurial tendency proposed by Fan Wei and Wang Chongming is studied through empirical analysis, which includes three aspects: individual characteristics, individual background factors and environmental factors. He Dan believes that the factors affecting entrepreneurial tendency not only include personal characteristics, personal background and entrepreneurial environment, but also entrepreneurial attitude[6].

2.3. Innovation and Entrepreneurship Behavior

About innovation entrepreneurship, Scott and Bruce thought innovation behavior from the cognition, and concepts of the problem, then the resulting ideas into practice, in the process need to seek the support and help of the team members, so the new theory of innovation model, the innovation idea into a commercial product or service, This is a multi-stage process. Innovation behavior is defined by Liu Yun and Shi Jintao as the process in which employees generate new innovative ideas and introduce and apply innovative ideas or things beneficial to the organization in relevant work, including the development of new ideas or technologies and the idea of changing the existing management process to improve work efficiency[7]. Ding Yuelan et al. believe that employee innovation behavior is generated at work. In order to improve work performance, this behavior includes generating novel and practical ideas, and then introducing these ideas to the team and putting them into practice, so as to make some contributions to the organization[8]. Gu Yuandong think such as employee innovative behavior is in the work, employees generate ideas or solutions, and the behavior of these ideas and plans into practice, mainly includes the first phase of the initiative seeking innovation opportunities, such as idea generation, the second stage use of resources and creative execution that two stages of all innovation behavior performance.

3. Research Hypotheses and Theoretical Models

3.1. Propose Research Hypothesis

Current college has formed covering bo to recognize this three levels system more comprehensive innovation education curriculum system, and innovative entrepreneurship education is the foundation of the innovation of entrepreneurship research and learning, innovative entrepreneurship institute professor including college of economics and management, institute of information and communication, etc., related to innovative entrepreneurship courses have universal coverage in school full-time students in different stages of the demand, Students can participate in learning innovation and entrepreneurship education courses in various forms, whether in the form of compulsory courses or elective courses, to meet the needs of students. In addition, many universities also hold a series of lectures related to "innovation and entrepreneurship", which can also provide a flexible way to promote the knowledge of innovation and entrepreneurship courses. Through experimental research, Souitaris concluded that participation in entrepreneurship education and training can significantly affect students' entrepreneurial intentions. Ride to the house of fai, ray to 25 students in colleges and universities across the country as the research object, study the influence of the entrepreneurship education on students' entrepreneurial intention, it is concluded that entrepreneurship experiences have a significant impact on entrepreneurial intention of a result, in entrepreneurship on college students' entrepreneurial intention than not of course, has not heard of entrepreneurship lectures the students entrepreneurial intention, The entrepreneurial intention of students who participated in entrepreneurship competition was also greater than that of students who did not participate in entrepreneurship competition. The entrepreneurial intention of students who participated in entrepreneurship

competition for many times was stronger than that of students who only participated in entrepreneurship competition once[9]. Therefore, this paper proposes hypothesis 1:

H1: Innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention.

Intention is an important predictor of behavior, which plays a decisive role in individual behavior. Based on the theory of planned behavior, many scholars at home and abroad have verified the impact of innovation and entrepreneurship intention on innovation and entrepreneurship behavior. Therefore, hypothesis 2 is also proposed in this study:

H2: College students' innovation and entrepreneurship intention will significantly positively influence their innovation and entrepreneurship behavior.

Peter Drucker pointed out: "Entrepreneurship can be taught, it is not deeply rooted in genes, and innate talent can be mastered through learning. Therefore, innovation and entrepreneurship education can directly affect innovation and entrepreneurship behavior, so hypothesis 3 is proposed:

H3: Innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship behavior.

According to hypothesis 1, hypothesis 2 and hypothesis 3 proposed above, it is concluded that innovation and entrepreneurship intention will mediate the impact of innovation and entrepreneurship education on innovation and entrepreneurship behavior, so hypothesis 4 is proposed:

H4: Innovation and entrepreneurship intention has a mediating effect on the impact of innovation and entrepreneurship courses on innovation and entrepreneurship behavior.

3.2. Theoretical Model Construction

Based on the above review, this paper proposes a model of the relationship between innovation and entrepreneurship courses, innovation and entrepreneurship intention and innovation and entrepreneurship behavior, as shown in the figure below. Through the model, this paper tries to answer the following questions: Question 1: For college students, is the purpose of innovation and entrepreneurship courses achieved? Question 2: What is the impact of university innovation and entrepreneurship courses on innovation and entrepreneurship behavior? Is it direct or indirect?

4. Study Design

4.1. Questionnaire Design

The questionnaire in this study is adjusted by referring to the maturity scale of innovation and entrepreneurship related fields at home and abroad. The questionnaire in this study is mainly divided into four parts, including personal background factors, innovation and entrepreneurship education, innovation and entrepreneurship intention and innovation and entrepreneurship behavior.

As for the factors of personal background, two scholars, Fan Wei and Wang Chongming, considered the influences of gender, educational background, family, major, entrepreneurial experience and other factors in their research on the influencing factors of entrepreneurial tendency. Holden has conducted similar research. After literature review, this paper takes gender, major, grade, academic performance and entrepreneurs around as personal background factors, and these five variables will be used as control variables in subsequent research and analysis.

In terms of innovation and entrepreneurship education, based on literature and actual research and referring to the research scale of Xiang Hui and He Dan, this study divides innovation and

entrepreneurship education into four factors: innovation and entrepreneurship course, competition, community and support.

As for the intention of innovation and entrepreneurship, this study refers to the three measurement methods of intention by Conner and Amitage and the mature questionnaire. Set up a "I would like to use innovative approach to study and work" "I am willing to consider novel or heresy, prepared from conventional to find a solution, good at divergent thinking" "will I have to participate in the activities of innovative" "if there is suitable opportunity, I would like to the school entrepreneurship, willing to bear the risk of delay graduation" "I graduated three years business possibility is very large" it Five questions.

As for the innovation and entrepreneurship behavior, Scott and Bruce defined the individual innovation behavior from three stages, including idea generation, seeking support from team members and putting the idea into practice. This study design "I can always find new technologies, new methods, new techniques or new ideas" "I always give others provide a new idea" "I always provide adequate arrangements for the implementation of the new ideas and plans to" "I'm spending time and energy to prepare for entrepreneurship" "I always pay attention to, looking for the right opportunity" the five item.

4.2. Investigation and Implementation

The research object of this study was college students. Questionnaires were collected through online distribution and online filling. The home page of the questionnaire explained the purpose of the survey to students, expressed gratitude and confidentiality commitment.

4.3. Innovation and Entrepreneurship Behavior

About innovation entrepreneurship, Scott and Bruce thought innovation behavior from the cognition, and concepts of the problem, then the resulting ideas into practice, in the process need to seek the support and help of the team members, so the new theory of innovation model, the innovation idea into a commercial product or service, This is a multi-stage process. Innovation behavior is defined by Liu Yun and Shi Jintao as the process in which employees generate new innovative ideas and introduce and apply innovative ideas or things beneficial to the organization in relevant work, including the development of new ideas or technologies and the idea of changing the existing management process to improve work efficiency[10]. Ding Yuelan et al. believe that employee innovation behavior is generated at work. In order to improve work performance, this behavior includes generating novel and practical ideas, and then introducing these ideas to the team and putting them into practice, so as to make some contributions to the organization[8]. Gu Yuandong think such as employee innovative behavior is in the work, employees generate ideas or solutions, and the behavior of these ideas and plans into practice, mainly includes the first phase of the initiative seeking innovation opportunities, such as idea generation, the second stage use of resources and creative execution that two stages of all innovation behavior performance[6].

5. Data Statistics and Analysis

5.1. Descriptive Statistical Analysis of Sample Data

In the valid questionnaires returned, the relevant results of students' personal background information are as follows:

Male students account for 58% and female students for 42%. There is not much difference between male and female students. The major I studied mainly was economics and management, accounting for 58%, science and technology 17% and art 7%. Students are mainly in junior and senior grades, with master degree accounting for 14%. These grades are more related to various factors of innovation and entrepreneurship, which makes the results relatively accurate

to a certain extent. 42% of students ranked between 11% and 30%, and the rest were almost equal; Entrepreneurial people around are concentrated in other relatives, classmates or friends, and no one takes the least proportion, indicating a strong entrepreneurial atmosphere around college students.

5.2. Exploratory Factor Analysis and Reliability Test

SPSS software was used to conduct KMO and Bartlett tests on the scale of innovation and entrepreneurship intention. The results are as follows. According to the results, we can see that factor analysis is more suitable.

The reliability test of the innovation intention scale was carried out, and the results were as follows. It can be seen that the Cronbach coefficient was 0.777, close to 0.8, indicating that there was good internal consistency and it could pass the reliability test.

KMO and Bartlett tests were performed on the scale of innovation and entrepreneurship behavior, and the results are as follows. According to the results, we can see that factor analysis is more suitable.

The reliability test of the innovation behavior scale was carried out, and the results were as follows. It can be seen that the Cronbach coefficient was 0.846, greater than 0.8, indicating good internal consistency and passing the reliability test.

5.3. Correlation Analysis

In order to avoid multiple collinearity problems in the subsequent regression analysis, correlation analysis was carried out first, and correlation analysis was conducted on several major research variables: innovation and entrepreneurship education, innovation and entrepreneurship intention, and innovation and entrepreneurship behavior. The results are as follows:

The correlation coefficient between innovation and entrepreneurship competition and innovation and entrepreneurship intention is -0.157, showing no significant correlation. The other innovation and entrepreneurship courses, community activities and support all have significant positive correlation with action intention.

The correlation coefficient between innovation and entrepreneurship community activities and innovation and entrepreneurship behavior was 0.192, showing no significant correlation. The rest of innovation and entrepreneurship courses, competitions and support all had significant positive correlation with innovation and entrepreneurship behavior.

From the correlation coefficient of innovation and entrepreneurship behavior and innovation and entrepreneurship intention, the degree of correlation between the two is high, indicating that there is a significant positive correlation between them.

5.4. Regression Analysis and Hypothesis Testing

Amos is used to analyze the impact of innovation and entrepreneurship education on innovation and entrepreneurship behavior, and four models are obtained. Model one is the regression model of five control variables on innovation and entrepreneurship behavior, and the VIF value is 6.334. Model two is the regression model of control variables and innovation and entrepreneurship education on innovation and entrepreneurship behavior, and the VIF value is 7.144. Model 3 is the regression model of control variables, innovation and entrepreneurship intention on innovation and entrepreneurship behavior, VIF value is 4.638; Model 4 is the influence of control variables, innovation and entrepreneurship intention, innovation and entrepreneurship education on innovation and entrepreneurship behavior, VIF value is 6.134, VIF value of the four models are less than 10, DW value is close to 2. It shows that the regression results of the four models are relatively reliable.

It can be seen from Model 2 that innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship behavior, which can verify hypothesis 3 that innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship behavior.

The influence of innovation and entrepreneurship education on innovation and entrepreneurship intention is analyzed. Model 1 is the regression model of five control variables on innovation and entrepreneurship intention, and the VIF value is 5.324. Model 2 is the regression model of control variables and innovation and entrepreneurship education on innovation and entrepreneurship intention, and the VIF value is 5.174. Model 3 is the regression model of control variables and innovation and entrepreneurship education on innovation and entrepreneurship intention. The VIF value is 4.568. The VIF value of the three models is less than 10, and the DW value is close to 2, indicating that the regression results of the three models are relatively reliable.

It can be seen from Model 2 that innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention, which can verify hypothesis 1 that innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention.

The influence of innovation and entrepreneurship intention on innovation and entrepreneurship behavior is analyzed. Model 1 is the regression model of five control variables on innovation and entrepreneurship behavior, with VIF value of 5.324. Model 2 is the regression model of control variables and innovation and entrepreneurship intention on innovation and entrepreneurship behavior, with VIF value of 6.174. Model 3 is the regression model of control variables and innovation and entrepreneurship intention on innovation and entrepreneurship behavior, and the VIF value is 4.778. The VIF value of the three models is less than 10, and the DW value is close to 2, indicating that the regression results of the three models are relatively reliable.

It can be seen from Model 2 that innovation and entrepreneurship intention has a significant positive impact on innovation and entrepreneurship behavior, which can verify hypothesis 2, that is, innovation and entrepreneurship intention has a significant positive impact on innovation and entrepreneurship behavior.

To test whether the innovation and entrepreneurship intention plays a mediating role between innovation and entrepreneurship education and innovation and entrepreneurship behavior, firstly, the relationship between innovation and entrepreneurship intention and innovation and entrepreneurship education is verified, and the results show that there is a significant effect. Secondly, it verifies the relationship between innovation and entrepreneurship behavior and innovation and entrepreneurship intention, and the results show that there is a significant effect. Then verify the relationship between innovation and entrepreneurship education and behavior, both have significant influence; Final inspection intermediary role, can see innovation entrepreneurship education regression coefficient in greatly reduced, regression coefficient was not significant, therefore innovative entrepreneurial intention between innovation entrepreneurship education and entrepreneurial behavior play a partial mediating effect, can validate hypothesis 4, namely the innovative entrepreneurial intention for innovation entrepreneurship for innovation entrepreneurship the influence of the intermediary role.

6. Research Summary and Prospect

6.1. Research Conclusions

Based on the above research, we can draw the following conclusions: Innovation and entrepreneurship education has a significant positive impact on innovation and entrepreneurship intention; Innovation and entrepreneurship education has a significant

positive impact on innovation and entrepreneurship intention; Innovation and entrepreneurship intention has a significant positive impact on innovation and entrepreneurship behavior. Innovation and entrepreneurship intention has a mediating effect on the influence of innovation and entrepreneurship curriculum on innovation and entrepreneurship behavior.

6.2. Practical Enlightenment

Through the study found that innovation entrepreneurship education to promote university students' innovative undertaking ability, promote the grasp of college students' innovative entrepreneurial knowledge plays a huge role, also can promote the ascension of innovative entrepreneurial intention, so as to guide innovation entrepreneurship, innovation and entrepreneurship education is divided into a variety of forms, can be the teaching of course, can also be held of the competition, The establishment of the community and the strong support of the school. Therefore, it is necessary to enrich the forms of innovation and entrepreneurship education in colleges and universities. Attention must also be paid to the standardization of various forms of education. Strengthening supervision, regular assessment and establishing a perfect evaluation system of innovation and entrepreneurship education are good means for improvement.

6.3. Research Limitations and Prospects

The number of valid questionnaires received in this study is small, and the coverage of schools is too small, which will have a certain impact on the results; Moreover, longitudinal indexes such as time and event course are not considered, which has certain limitations.

In the future, the selection of samples should cover a wider range of topics and measures can be expanded from more levels. Longitudinal research methods can also be used to carry out dynamic tracking research on the selected samples to obtain more reliable conclusions.

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