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Research on the Relationship between Entrepreneurial Self-Efficacy and Entrepreneurial Intention

Shibo Li^{1,2*}

- ¹Woosong University, Deajeon 34606, South Korea
- ²Liaoning University of Technology, Jinzhou 121000, Liaoning Province, China
- *Corresponding author: Shibo Li, 39885082@qq.com

Abstract: Entrepreneurship is a key concept to understand the rapid development of China's economy since the reform and opening-up. It is related to the revitalization of the Chinese nation. Formulating effective entrepreneurial policies and measures, carrying out entrepreneurship education, and promoting entrepreneurial actions are important issues that government agencies, educational institutions, and the society at all levels are paying attention to. The key lies in the insight into the psychological cognitive mechanism and motivation source of entrepreneurs in starting a business. Upon reviewing previous studies, this article believes that entrepreneurial self-efficacy and entrepreneurial intentions are the key concepts and entry points connecting entrepreneurial characteristics, entrepreneurial behavior, and cognitive research. This study explores the relationship between entrepreneurial self-efficacy and entrepreneurial intention from five dimensions: entrepreneurial planning efficacy, entrepreneurial resource acquisition, relationship coordination efficacy, risk-taking efficacy, as well as innovation and reform efficacy. Suggestions and strategies have been proposed in this article to integrate the entrepreneurial ecology of universities, society and the government, reform the entrepreneurial education model, as well as improve the entrepreneurial willingness of college students.

Keywords: Entrepreneurship; Entrepreneurial self-efficacy; Entrepreneurial intention; Strategy

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1. Introduction

With the improvement of social and cultural levels today, more and more people have achieved the academic level of universities, which has a great impact on the employment of college students. Therefore, students are now more willing to start a business. In recent years, China has issued a series of preferential policies to ease employment pressure and encourage college students to start their own businesses. With the support of external resources and policies, the entrepreneurial intention, entrepreneurial ability, and entrepreneurial characteristics of college students have become important predictors of entrepreneurial behavior [1]. With the great attention from the Central Committee of the Chinese Communist Party and the State Council, the spirit of the Fifth Plenary Session of the 18th Central Committee of the Communist Party of China is in the implementation process, focusing on strengthening innovation and entrepreneurship education and independent entrepreneurship as an urgent need, accelerating education reform, and emphasizing that "employment is the foundation of people's livelihood, and entrepreneurship drives employment." Cultivating and enhancing the entrepreneurial ability of college students is not only a requirement for improving the education system in colleges and universities, enhancing their quality, and cultivating innovative talents [2], but it also meet the needs of the country's economic transformation and

upgrading, as well as the construction and development of an entrepreneurial economy.

The entrepreneurial rate of college students is mainly affected by their willingness to start a business. Entrepreneurial intention is the early psychological performance of entrepreneurs before the beginning of entrepreneurial behavior. This is an individual's active commitment to be engaged in entrepreneurial activities in the future. Therefore, entrepreneurial intention is the prerequisite for entrepreneurs to engage in entrepreneurial behavior. At present, by combing the relevant literatures on entrepreneurial intention, it can be concluded that the current research on entrepreneurial intention still has four shortcomings: (1) there are very few research on college students' entrepreneurial intention at home and abroad; (2) although some scholars have been paying attention to the related fields, they do not conduct research on entrepreneurial intention themselves and have failed to obtain the status quo as well as the characteristics of college students' entrepreneurial intention; (3) during the research process, confusions about relevant concepts do occur, and the research results are often inconsistent with the actual situation; (4) only a small number of research results are applicable for a few groups; the conclusion is not universal, so it is difficult to compare and promote its level. In this context, the research on college students' entrepreneurial intention needs to be improved. In the research process, there is a lack of research on the psychological quality of entrepreneurs. Therefore, based on the consideration of improving college students' entrepreneurial willingness and entrepreneurial success rate, selecting the subject of college students' entrepreneurial self-efficacy as a research perspective has practical significance. Self-efficacy refers to an individual's ability to perform a certain behavior to speculate or judge. It is an individual's cognitive factor and the individual's belief in the ability to perform a certain behavior [3].

Based on domestic and foreign literatures as well as the actual situation of the country, this study redefines the multiple dimensions of entrepreneurial self-efficacy and explores their relevance to entrepreneurial intention, which has important theoretical and practical significance for the development of entrepreneurship.

2. Definition of entrepreneurial self-efficacy

Bandura's concept of "self-efficacy" was introduced by scholars from the field of entrepreneurial research, who redefined a new term — entrepreneurial self-efficacy. Scherer and other researchers defined entrepreneurial self-efficacy as an individual's ability to believe that he or she can successfully play and complete the role of an entrepreneur [4]. Luthans and Ibrayeva proposed that entrepreneurial self-efficacy is a kind of belief and confidence of entrepreneurs, which specifically refers to entrepreneurs believing that their abilities can influence the environment and achieve success through corresponding behaviors [5]. Entrepreneurship self-efficacy is a personal belief and a form of self-confidence, which may change; it helps to determine how entrepreneurs will start a business according to their own characteristics (such as knowledge and skills).

At present, researchers in the field of entrepreneurship are beginning to pay attention to entrepreneurs' perception of potential self-confidence and efficacy as well as their predictive effects on entrepreneurial performance. The self-efficacy theory of entrepreneurship can explain various entrepreneurial behavior problems. For example, why do individuals choose this kind of entrepreneurship rather than that kind of entrepreneurship when they are capable of doing the latter? Why do individuals with similar practical abilities have multiple entrepreneurial choices? Some people can only make one or two entrepreneurial choices, some can make entrepreneurial decisions decisively, while others cannot. This broad explanation makes the self-efficacy theory of entrepreneurship a powerful tool to understand and explain human entrepreneurial behavior.

3. Theoretical model construction and research hypothesis

At present, the measurement of entrepreneurial self-efficacy and entrepreneurial intention has not yet formed a complete measurement dimension and system. Scholars at home and abroad have proposed different measurement dimensions for this. For example, Chen divided entrepreneurial self-efficacy into five dimensions: marketing, innovation, management, risk-taking, and financial management; De Nobel divided it into six dimensions: risk-taking, product innovation, interpersonal relations, opportunity identification, resource acquisition, and management innovation; Jill divided it into four dimensions: opportunity identification, management, relationship, and risk tolerance; Han Lizheng and Bo Hong proposed two dimensions: basic competence and control efficiency [4,10].

Based on previous literatures, entrepreneurial intention is the early psychological performance of entrepreneurs before the start of entrepreneurial behavior, and it an individual's active commitment to future entrepreneurial activities ^[6]. Therefore, entrepreneurial intention is the prerequisite for entrepreneurs to engage in entrepreneurial behavior. At present, the measurement of entrepreneurial intention does not have a complete dimension. The measurement of entrepreneurial intention is not a simple yes or no measurement, but a measurement of the depth of entrepreneurial intention. Therefore, in order to determine the correlation between entrepreneurial self-efficacy and entrepreneurial intention, the measurement dimension of entrepreneurial intention needs to correspond to the dimension of entrepreneurial self-efficacy.

The theoretical model constructed in this study mainly explores the relationship between entrepreneurial self-efficacy and entrepreneurial intention from five dimensions: entrepreneurial planning efficacy, entrepreneurial resource acquisition, relationship coordination efficacy, risk-taking efficacy, as well as innovation and reform efficacy. Making the assumption that there is a positive correlation between entrepreneurial self-efficacy and entrepreneurial intention from these five dimensions.

- (1) **Hypothesis H1**: There is a correlation between the efficacy of entrepreneurial planning and college students' entrepreneurial self-efficacy.
- (2) **Hypothesis H2**: There is a correlation between the efficacy of entrepreneurial resource acquisition and college students' entrepreneurial self-efficacy.
- (3) **Hypothesis H3**: There is a correlation between relationship coordination efficacy and college students' entrepreneurial self-efficacy.
- (4) **Hypothesis H4**: There is a correlation between risk-taking efficacy and entrepreneurial self-efficacy.
- (5) **Hypothesis H5**: There is a correlation between the efficacy of innovation and reform with college students' entrepreneurial self-efficacy.

4. Empirical research on the relationship between entrepreneurial self-efficacy and entrepreneurial intention

Questionnaires were used to conduct a questionnaire survey on college XX students. A total of 234 questionnaires were distributed, and 220 valid questionnaires were obtained after elimination and screening. Among the respondents, undergraduates accounted for the vast majority, with males and females accounting for 34.6% and 65.4%, respectively. Majority of the students are majoring in humanities as well as science and engineering, and the family income per capita is mainly between 3,000 and 10,000 yuan.

4.1. Reliability analysis

According to the aforementioned hypotheses, questionnaire design, and data, the reliability and validity of each factor were analyzed using SPSS 25.0. It can be seen from **Table 1** that Cronbach's alpha is 0.864,

indicating good reliability and a reliable questionnaire. Upon the deletion of any items, the business coefficient did not increase significantly. It can be concluded that the entrepreneurial self-efficacy scale has high internal consistency and good reliability.

Table 1. Reliability analysis

Cronbach's alpha	Cronbach's alpha based on standardized terms	Number of items	
0.864	0.864	33	

4.2. Validity analysis

SPSS 25.0 statistical software was used to perform factor analysis on the questionnaire data. The principal component analysis method was mainly used to extract and calculate the factors, and the maximum variance method was used for the rotation factor. In the process of factor analysis, KMO and Bartlett's tests were mainly used to judge whether it is suitable for factor analysis; KMO > 0.9 indicates very suitable; 0.8~0.9 indicates suitable; 0.7~0.8 indicates an average suitability; 0.6~0.7 indicates mediocrely suitable; 0.5~0.6 indicates barely suitable; KMO < 0.5 indicates not suitable. The probability of Bartlett's test was 0.000, which is less than 1%, indicating that the data has significant correlation and is suitable for factor analysis. According to the test results of the entrepreneurial self-efficacy scale (**Table 2**), SPSS 25.0 was used to perform KMO and Bartlett's tests on the above factors. The KMO value was 0.912 (> 0.9), and Bartlett's test showed that the p value was less than 0.01, indicating that the factor is valid.

Table 2. Validity analysis

KMO sampling appropriateness quantity		0.912		
	Approximate chi-square	5423.034		
Bartlett's sphericity test	Degrees of freedom	512		
	Sig.	0.000		

4.3. Regression analysis

SPSS 25.0 was used in this study to perform regression analysis on the factors that affect entrepreneurial intention. The independent variables include the efficacy of entrepreneurial planning, the efficacy of entrepreneurial resource acquisition, the efficacy of relationship coordination, the efficacy of risk-taking, as well as the efficacy of innovation and reform, while the dependent variable is entrepreneurial intention. As shown in **Table 3**, Sig. is an important indicator; generally speaking, more than 0.05 means the difference is not significant, but a value less than 0.05 reflects a significant difference, and a value less than 0.01 means the difference is very significant [3]. According to the output results in **Table 3**, H2, H3, and H5 are correct, but H1 and H4 are incorrect.

Table 3. Regression coefficients of entrepreneurial self-efficacy and entrepreneurial intention

	Non-standardized Standardization coefficient factor			Sig.	Collinearity statistics	
Communication model			t			
	В	Standard error			Tolerance	VIF
(Constant)	-0.172	0.222	-0.760	0.443		
Entrepreneurial planning efficacy	0.128	0.081	1.582	0.115	0.385	2.732
Entrepreneurial resource acquisition efficacy	0.406	0.083	4.832	0.000	0.338	2.951
Relationship coordination efficacy	0.205	0.076	2.602	0.010	0.398	2.532
Risk-taking efficacy	0.023	0.045	0.556	0.574	0.291	1.084
Innovation and reform efficacy	0.238	0.064	3.543	0.001	0.462	2.153

The five dimensions of entrepreneurial self-efficacy (the efficacy of entrepreneurial planning, resource acquisition, relationship coordination, risk-taking, as well as innovation and reform) were fit into the regression equation; the F value was 64.235, and the sig. value was 0.000. The results showed that the five dimensions of entrepreneurial self-efficacy can be used to explain entrepreneurial intention and 59.6% of the changes in entrepreneurial intention.

5. Discussion

Through regression analysis, it can be concluded that three out of the five dimensions of entrepreneurial self-efficacy passed the significance test. The efficacy of entrepreneurial resource acquisition is indirectly reflected in the entrepreneurial environment, such as administrative, financing, social, and cultural environmental factors ^[7]. The richer these resources are, the stronger the individual's entrepreneurial willingness, and the greater the possibility of engaging in entrepreneurial behavior in the future. People with good interpersonal relationships and reputation usually have high entrepreneurial willingness, and the sense of efficacy of innovation and reform has a very significant positive impact on entrepreneurial intention. However, the efficacy of entrepreneurial planning and risk-taking failed to pass the significance test. College students lack sufficient social experience to fully understand the production process and financial relationships. Undergraduate entrepreneurs generally put theory into practice directly; however, they are not capable enough to predict and evaluate risks in addition to a poor sense of detecting risk. On the whole, there is a strong correlation between college students' entrepreneurial self-efficacy and innovation intention. Entrepreneurship self-efficacy enhances college students' confidence in successfully implementing entrepreneurial behaviors, affects college students' confidence in successfully implementing entrepreneurial behaviors, affects college students' entrepreneurial willingness.

6. Strategies

6.1. Integrate the entrepreneurial ecology of universities, society, and government, as well as enhance the entrepreneurial resources of college students

- (1) Carry out and encourage students to participate in various entrepreneurial competitions, such as the "Challenge Cup" National College Student Entrepreneurship Plan Competition, establish an entrepreneurial incubation base, as well as provide more entrepreneurial opportunities and resources to the students.
- (2) In launching entrepreneurial planning competitions, colleges and universities should pay attention to extensive connections with communities and enterprises as well as provide excellent students

- with entrepreneurial resources, so that the winners of these competitions can be cultivated into real entrepreneurs [3].
- (3) Government bodies at all levels should improve the specific laws and regulations for undergraduate entrepreneurship, set up a special funds for undergraduate entrepreneurship, provide policy support for undergraduate entrepreneurship financing, standardize the process of undergraduate entrepreneurship, as well as reduce unnecessary procedures and expenses [3]. Policy advantages should be utilized to provide college students with more abundant entrepreneurial resources, and college students should be encouraged to actively innovate and undergo reform.

6.2. Reform the entrepreneurial education model to enhance entrepreneurs' interpersonal skills

- (1) Reform the curriculum and teaching system. In addition to learning professional knowledge related to entrepreneurial enterprises, customer market knowledge, and basic knowledge of entrepreneurial risk control, the learning of courses, such as management communication and business etiquette, should also be strengthened [8].
- (2) Create an entrepreneurial practice platform. This would encourage college student entrepreneurs to improve their communication skills through practice.
- (3) Promote a coordinated development of industrial research to improve entrepreneurs' innovation and transformation capabilities. As an effective way to promote the transformation of scientific and technological innovation achievements of universities, there is a natural partnership between government, enterprises, universities, and scientific research institutions. For innovative knowledge and innovative products, schools should encourage college student entrepreneurs to transform, and they should also promote college students' entrepreneurial innovation and transformation capabilities. The society and the government should strengthen the protection of innovative knowledge and innovative products of college student entrepreneurs, escort the innovation and reform of college students, improve the value of innovation, as well as recycle to promote the improvement of college students' entrepreneurial ability [9].

6.3. Explore the diversified development of innovation and entrepreneurship education

China's innovation and entrepreneurship education is still in its early stages of development, especially in schools. Most innovation and entrepreneurship education are still confined to campuses, lacking cooperation and integration with enterprises and society. Therefore, combining social and corporate resources through launching innovation and entrepreneurship competitions, building school-enterprise cooperation platforms, giving full play to the professional advantages of colleges and universities, establishing an excellent entrepreneurial student model, as well as creating an innovation and entrepreneurship incubation base allow students to be exposed to more practical opportunities [10]. In the course of practice, the "hard power" of students' entrepreneurship has improved, and their "soft" qualities have also improved correspondingly.

7. Conclusion

In the increasingly fierce market environment, the frequency of independent entrepreneurship among college students would increase. Universities, governments, and institutions should strive to provide a stable environment for college students to start their own businesses, in order to increase the success rate of entrepreneurship. From the perspective of college students' entrepreneurship, the entrepreneurial intention of college students changes under the influence of entrepreneurial self-efficacy. Therefore, in order to

promote the development of undergraduate entrepreneurship, it is necessary to improve the entrepreneurial self-efficacy among undergraduates and ensure that their entrepreneurial intention is more specific and clearer.

Disclosure statement

The author declares that there is no conflict of interest.

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