

Research on the influence of entrepreneurial education and entrepreneurial policy on college students' entrepreneurial intention: Intermediary role of entrepreneurial self-efficacy

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Abstract. Under the background of the high youth unemployment rate in the world, how to encourage college students to carry out entrepreneurial activities is the focus of the whole society. But even if government and college provide such a high-quality entrepreneurial platform for college students, the rate of youth entrepreneurship in the world is still relatively low. On the basis of the questionnaire of 385 college students concentrated in several colleges in Hubei Province of China, this paper used independent sample T test, single factor analysis method, multiple comparison test (LSD), correlation analysis, regression analysis and other empirical analysis methods to analyze the impact of entrepreneurial education as well as entrepreneurial policy on college students' entrepreneurial intention, and verified the intermediary role of entrepreneurial self-efficacy. The research conclusions mainly included: (1) Part of the control variables will affect entrepreneurial intention; (2) Entrepreneurial education, entrepreneurial policy positively and significantly affect the entrepreneurial intention of college students; (3) Entrepreneurship self-efficacy plays an intermediary role in the influence of entrepreneurship education and entrepreneurial policy on entrepreneurial intention. According to the conclusion of the research, this paper put forward some suggestions for government, university as well as students, and tried to provide the gamut of support system of entrepreneurship, so as to stimulate the entrepreneurial intention of college graduates and improve the entrepreneurial rate.

Keywords: College students, entrepreneurial intention, entrepreneurial education, entrepreneurial policy, entrepreneurial self-efficacy, intermediary role, countermeasures and suggestions.

INTRODUCTION

The rapid development of economy cannot be separated from innovation, and innovation has become an important index to measure the comprehensive strength of a country. Looking back on the road of global economic development after World War II, it is not difficult to find that "innovation" runs through all the time. The priority of development lies in innovation, and the key to innovation lies in talent. In order to solve the problem of the high unemployment rate of young people in the world and

encourage college students to invest in entrepreneurship, governments around the world have formulated a series of special entrepreneurial support systems according to the needs of college students on the basis of the actual situation (Keinänen *et al.*, 2018). For example, Canada opens more than 830 entrepreneurship courses in more than 200 colleges, combining entrepreneurial education for college students with innovative practice. The British government issued the "Higher Education Entrepreneurship"

program as early as 1987, aimed at improving the entrepreneurial quality and entrepreneurial level of college students.

But even if governments and colleges attach so much importance to entrepreneurial education and provide extremely generous entrepreneurship policies, the global rate of entrepreneurship among college students has generally been low in recent years, with only 1.6% of college students in developed countries starting their own businesses in 2019, which is extremely incompatible with the current youth unemployment rate of 13.6% worldwide (ILO, 2020). In this context, it is worth the common concern of society, colleges and students to explore the reasons for the low entrepreneurial rate of college students.

In fact, entrepreneurial intention is the premise of entrepreneurial activities, and the change of intention will affect the occurrence of entrepreneurial behavior directly. At the same time, theory of planned behavior points out that perceived behavior control is an important variable affecting people's entrepreneurial intention, which originates from self-efficacy theory. The theory holds that self-efficacy is an important prerequisite for behavior change which determines the initiation of corresponding behaviors. In the early stage of entering the society, students are lack of ability as well as experience relatively, and the probability of their entrepreneurial results deviating from the expected goal is much higher than that of other groups due to the influence of the external environment. But unlike ordinary entrepreneurs, the educational environment of college students can cultivate their entrepreneurial thinking and ability better, and enhance their entrepreneurial interest. At the same time, entrepreneurial policy support can reduce the obstacles for college students effectively in the process of entering entrepreneurial market, and enhance the belief to start a business successfully. Therefore, this paper selects entrepreneurial self-efficacy as an intermediary variable to study entrepreneurial intention.

Since entrepreneurial education and entrepreneurial policy affect students directly, and their evaluation can reflect the effect, this study investigates 385 college students in Hubei Province of China and constructs a conceptual model and hypotheses on the basis of clarifying the connotation of entrepreneurial education, entrepreneurial policy and entrepreneurial self-efficacy. Finally, the paper extracts some relevant policy implications on the basis of research conclusions.

LITERATURE REVIEW AND RESEARCH HYPOTHESIS

Connotation and measurement dimension of entrepreneurial intention

Planning behavior theory holds that intention is an important factor in determining behavior, which is influenced by attitude, subjective norms and perceived

behavior control. Based on this, Bird (1988) put forward the concept of entrepreneurial intention. He believed that entrepreneurial intention could predict entrepreneurial behavior effectively, entrepreneurial intention was a subjective psychological state of effectively prejudging entrepreneurial behavior, and it was the consciousness of individuals to put all their attention as well as ability on a specific task, and then pointed out that entrepreneurial ideas can only be realized through entrepreneurial intention. After that, Krueger and Carsrud, (1993) put forward that entrepreneurial intention was the commitment of entrepreneurs to entrepreneurial goals in the process of undertaking entrepreneurial activities, and the degree of commitment was limited by the psychological expectation of entrepreneurs whether they could successfully start a business. Klotz *et al.* (2016) insisted that the willingness to start a business included the innovation of entrepreneurs, ability to take risks and external environmental impact.

On this basis, many academics began to study entrepreneurial intention around three dimensions. First, cognitive development dimension; Dan (2013) indicated that the learning of entrepreneurial knowledge and entrepreneurial activities in the past could influence their specific cognition of entrepreneurial behavior and formed a subconscious classification of entrepreneurship in their minds, which determined their intention to carry out entrepreneurial behavior in the future. Second, personal trait dimension; Hao *et al.*, (2015) pointed out that the personal background, personality traits and cognitive level of entrepreneurial risk had a strong impact on entrepreneurial intention. After that, based on European statistical studies, Santos (2016) pointed out that men always showed more favorable intentions than women and tend to start their own businesses. Tang and Zhang (2018) believed that entrepreneurial intention would be influenced by the creative personality. Jiang and Zhang (2018) also pointed out that the growth environment and life experience of college students had a significant impact on entrepreneurial intention in the path of transforming entrepreneurial intention into entrepreneurial practice. Third, external environment dimension; through research, scholars had found that a good external environment could help entrepreneurs to enhance their entrepreneurial confidence and promote the production of entrepreneurial intention.

Connotation and impact of entrepreneurial education

Although entrepreneurial education has been concerned by all walks of life in recent years, there is still much disagreement in defining the connotation. Gary (1997) first put forward that the essence of entrepreneurial education was to shape the behavior of entrepreneurs' inner spiritual world. Shortly afterwards, scholars kept on exploring and perfecting the connotation of entrepreneurial education. Walter and Joern (2016),

proposed that entrepreneurial education was the process to form the entrepreneurial attitude and skills of individuals, which was related to the self-realization of the education receiver. In China, Ma and Bai (2015) pointed out that the essence of entrepreneurial education was an activity to develop innovational talents by training their entrepreneurial consciousness and practical ability. Based on the existing literature, this paper defines entrepreneurial education as the cultivation of entrepreneurial thought and skills, aiming at deepening the cognition of entrepreneurial activities and improving students' ability to solve practical entrepreneurial problems.

The research on entrepreneurial education mainly focuses on the influence of entrepreneurial education, which is mainly reflected in four dimensions: entrepreneurial motivation, entrepreneurial consciousness, entrepreneurial self-efficacy and entrepreneurial intention. For the entrepreneurial motivation, Lima *et al.*, (2015) found that students' entrepreneurial opportunities were significantly enhanced through entrepreneurial education. What's more, Zhu *et al.* (2015) found that the value of entrepreneurial education lied in cultivating the innovative spirit and achievement motivation of college students. For the entrepreneurship consciousness, Harry and Dehghanpour (2013), showed that entrepreneurial awareness of students might increase by 1.3 times after completing an entrepreneurship course. Besides, Yu (2019) found that students who participated in entrepreneurial education had stronger entrepreneurial consciousness, entrepreneurial knowledge, and the ability to identify entrepreneurial opportunity, which indicated that effective entrepreneurial education could significantly enhance students' entrepreneurial intention. For the entrepreneurial self-efficacy, Ding and Ding, (2011) pointed out that the introduction of entrepreneurial education in colleges could help students improve their ability to solve the difficulties encountered of entrepreneurship, and treated entrepreneurial risks objectively. Solesvik *et al.* (2013) believed that in the wave of innovation-driven society, college graduates with entrepreneurial education tended to be confident and willing to start their own businesses within five years. For the entrepreneurial intention, Gao *et al.*, (2012) believed that setting up entrepreneurial education in colleges could stimulate students' interest and inspiration in entrepreneurship. Based on this, Liu (2017) constructed a model by TPB and found that entrepreneurial education was the biggest influencing factor of entrepreneurial intention.

Connotation and related research of entrepreneurial policy

The research on entrepreneurial policy began in 1990,

which focused on how to effectively use entrepreneurial policy to promote entrepreneurial activities. Hisrich and Brush (1985) first proposed that if government tax and financing policies was beneficial to entrepreneurs, it would stimulate their entrepreneurial intention greatly. According to the comparative analysis of the policies of ten countries to promote economic construction and reform, Lundstrom and Stevenson (2001) put forward that entrepreneurial policy was an important factor to affect the entrepreneurial atmosphere and vitality of a region, so government should grasp the policy as a favorable tool to develop local economy. As active entrepreneurship can promote the development of related industries and solve the problem of employment difficulties, most scholars in China focus on the research of the relationship between entrepreneurial policy and entrepreneurial intention. Luo (2015) and Zhong *et al.* (2016) pointed out that college students were the main subjects of entrepreneurial policy propaganda, so policies to students' requirements could effectively enhance their entrepreneurial intention. Cao *et al.*, (2020) found that the lack of risk-bearing ability was the key reason why college students were unwilling to start a business and had difficult to produce high entrepreneurial performance through qualitative comparative analysis and qualitative comparative analysis of 22 university students' entrepreneurial companies, so government should help college students achieve sustainable development of entrepreneurship through education guidance and policy making.

Connotation and related research of entrepreneurial self-efficacy

The concept of entrepreneurial self-efficacy was the extended of self-efficacy, which was first proposed by American psychologist Bandura in 1977. He believed that entrepreneurial self-efficacy was the judgment and belief of a person on whether he or she can accomplish a certain activity. At present, the academic circles do not define the specific dimensions of entrepreneurial self-efficacy uniformly, and scholars always study it as a whole concept, and try to explore its antecedents and outcome variables. Chen (2016) proposed that entrepreneurial attention and achievement motivation were significant factors to promote entrepreneurs' self-efficacy. At the same time, Mei *et al.* (2019) found that entrepreneurial self-efficacy of college students usually played a chain intermediary role between personal traits such as emotional intelligence and entrepreneurial intention. Therefore, entrepreneurial self-efficacy can not only affect entrepreneurial intention as an independent variable, but also be influenced by many external factors, so it is important to study whether entrepreneurial self-efficacy plays an intermediary role between the influence of other factors on entrepreneurial intention, and can also

help us enhance entrepreneurial intention better.

Relationship between entrepreneurial education, entrepreneurial policy, entrepreneurial self-efficacy and entrepreneurial intention of college students

Effects of entrepreneurial education and entrepreneurial policy on college students' entrepreneurial intention

Since China established nine pilot entrepreneurial education colleges in 2002 successfully, many universities have introduced entrepreneurial education courses. They hope to help students improve their entrepreneurial ability and interest through the combination of entrepreneurship theory teaching and practical activities, thus having an impact on their entrepreneurial intention. At the psychological level, college established basic entrepreneurship courses and related activities to help students understand entrepreneurship in depth and experience the fun, in order to stimulate their entrepreneurial interest. Cai and Zhao (2014) pointed out that the entrepreneurial interest and potential of students receiving entrepreneurial education were much higher than those without entrepreneurial education through principal component regression method. At the same time, the difference of students' entrepreneurial education degree and content will influence the intensity of their entrepreneurial interest. For example, through a comparative study on the implementation of entrepreneurial education in eight key universities in Nanjing, Jiangsu Province, Ji and Liu (2016) found that the more perfect the construction of entrepreneurial education in colleges, the stronger the students' intention to start a business. At the skill level, perfect practical teaching activities can significantly improve the comprehensive quality of students and affect their entrepreneurial skills and ability. Daniela *et al.*, (2016) and Zhang *et al.* (2018) pointed out that entrepreneurial education could enhance the comprehensive ability of the students by improving their entrepreneurial knowledge and skills, so their confidence and entrepreneurial intention in successful entrepreneurship are more obvious. Shi (2017) also found that vocational education could enable students to simulate entrepreneurial steps and possible risks in advance, and help them master the skills to solve entrepreneurial crisis, which could provide more favorable entrepreneurial conditions for college students.

The sound entrepreneurship policies can create a good entrepreneurial atmosphere and motivate local entrepreneurs to take the plunge of starting a company, thus directly affecting the level of entrepreneurship in a country or region, which includes positive cultural atmosphere, decrease of barriers to enter the market and financial support to entrepreneurs. College students are different from the general entrepreneurs in society and are restricted by multiple conditions, so a reasonable and

effective entrepreneurial policy is an important condition to affect their success or failure. Yang and Hu, (2016) found that government's support can encourage students to start a business, and government can promote the development of entrepreneurial activities by creating a favorable institutional environment.

Based on the discussion above, the following assumptions are made here:

H1: Entrepreneurial education is positively affecting college students' entrepreneurial intention.

H2: Entrepreneurial policy is positively affecting college students' entrepreneurial intention.

Effects of entrepreneurial education and entrepreneurial policy on college students' entrepreneurial self-efficacy

Entrepreneurial self-efficacy is not always the same and can be influenced by external interference such as targeted education or policy. Through entrepreneurial education, students can acquire theoretical knowledge directly and acquire experience accumulation indirectly; what's more, successful entrepreneurial experience can enhance entrepreneurs' self-efficacy significantly. At the same time, colleges invite successful entrepreneurs to carry out lectures and other activities can help students learn the behavior of other successful entrepreneurs, in order to evaluate their own ability and behavior actively in the actual process of entrepreneurship, and set goals as well as entrepreneurial plans to improve the success rate. Through the empirical study of 25751 Brazilian students from 37 colleges and universities, Lima *et al.* (2015) pointed out that setting up effective entrepreneurial education courses in colleges could help students contact the entrepreneurial process more directly and enhance their entrepreneurial cognition level, thus interfering with their entrepreneurial self-efficacy effectively. The actual entrepreneurial process is often accompanied by high risk and uncertainty, especially among college students. Because college students have been in colleges to accept theoretical learning, their entrepreneurship will be limited by many internal and external conditions, such as lack of entrepreneurial cognition, insufficiency of social experience and funds, which will affect the success rate of entrepreneurship, thus cracking down on their self-confidence and entrepreneurial self-efficacy. The role of the entrepreneurial policy is to build a policy leverage between college students and market, in order to help them enter the entrepreneurial market smoothly, and to provide a good policy and economic environment for their entrepreneurship. As the representative of entrepreneurship research, Edmund (2009) pointed out that the essence of entrepreneurial policy is to help start-ups enter the entrepreneurial market and promote their healthy development through policy tilt, and to enhance the success rate of new entrepreneurs, so as to enhance the entrepreneurial self-confidence of other individuals.

Through the positive incentive method of policy tilt, government reduces many obstacles in the process of entrepreneurship, which makes college students have a positive and optimistic attitude towards future and treat entrepreneurial behavior rationally, thus promoting the sense of self-efficacy of entrepreneurship.

Based on the discussion above, the following assumptions are made here:

H3: Entrepreneurial education positively affects college students' entrepreneurial self-efficacy.

H4: Entrepreneurial policy positively affects college students' entrepreneurial self-efficacy.

Effect of self-efficacy on college students' entrepreneurial intention

At present, there has been a lot of research on whether entrepreneurs start entrepreneurial behavior based on their perception and judgment of whether they can solve the risks and achieve their entrepreneurial goals successfully in the future. For example, Panagiotis and Dimo (2015) used regulatory focus theory to point out that entrepreneurial self-efficacy was related to entrepreneurial intention closely in the process of individual entrepreneurial behavior. According to an empirical study of 543 undergraduates at eight public universities in Egypt, Marwa and Kayat (2020) found that entrepreneurial self-efficacy and family support were the determinants of women's entrepreneurial intention. In China, Deng (2015) also found that entrepreneurial self-efficacy played a positive role in promoting entrepreneurial intention of college students in Shanxi Province. Wang and Yang, (2019) pointed out that entrepreneurial self-efficacy could not only reflect whether entrepreneurs have the ability to achieve entrepreneurial goals, but also reflect their entrepreneurial determination and belief, so it could play a significant predictive role in their entrepreneurial intention.

Based on the discussion above, the following assumption is made here:

H5: Entrepreneurial self-efficacy positively affects college students' entrepreneurial intention.

The intermediary role of entrepreneurial self-efficacy among college students

As a psychological state of confidence in the future entrepreneurial behavior, entrepreneurial self-efficacy has an important predictive effect and changes at all times because of the influence of many external factors. Bandura (2001) first showed that self-efficacy was easily motivated by excellent role models. Based on this, Chinese scholars had also conducted in-depth research

on the impact mechanism of entrepreneurial education and entrepreneurial policy on entrepreneurial self-efficacy. For the entrepreneurial education, Li and Zhu (2018) pointed out that students could understand entrepreneurial knowledge, improve their entrepreneurial skills and adjust their good entrepreneurial mentality better by receiving entrepreneurial education, which confirmed the intermediary role of entrepreneurial self-efficacy between entrepreneurial learning and entrepreneurial intention. For the entrepreneurial policy, Wan *et al.* (2017) found that sound entrepreneurial policy could not only create a stable entrepreneurial environment, but also help college students adapt to the role switching. In addition, policy support could ensure market resources and financial support for college students in the early stage, so as to improve their entrepreneurial self-efficacy positively, and enhance the entrepreneurial intention.

Based on the discussion above, the following assumptions are made here:

H6: Entrepreneurial self-efficacy plays an intermediary role between entrepreneurial education and entrepreneurial intention.

H7: Entrepreneurial self-efficacy plays an intermediary role between entrepreneurial policy and entrepreneurial intention.

In order to analyze the relationship between the four factors clearly, this paper constructs the hypothesis model here according to the existing theoretical research and the above hypothesis, as shown in Figure 1.

MATERIALS AND METHODS

Sample selection and data sources

The purpose of this study is to explore the impact of entrepreneurial education and entrepreneurial policy on entrepreneurial intention by analyzing the data obtained from the questionnaire, so we mainly use the method of random sampling to focus on the questionnaire distribution of many colleges in Hubei Province and to obtain the sampling data, which are partly involved in other provinces. After setting the target school, the author contacts the staffs of each employment office and entrepreneurship incubator for support. Next, after informing the questionnaire request and collection time in advance, the staffs transmit the questionnaire to the students through network, and collect the online questionnaire through WeChat, QQ group, and E-mail, so as to guarantee the saturation of sample. In order to make up for the limitation of the sample, the author pay attention to the distribution of colleges' level and specialty, including undergraduate and associate degree students, science, literature and economics majors.

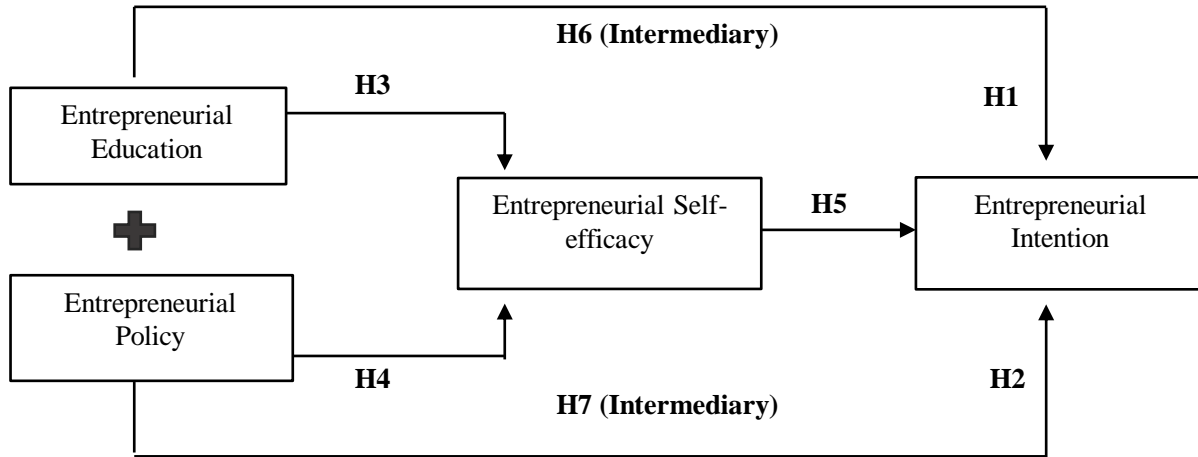


Figure 1. The Model of formation mechanism of college students' entrepreneurial intention.

On the basis of the mature scale, combined with practical needs, the author modifies and finishes the questionnaire. After the preliminary completion of the questionnaire, the author selects 60 students randomly as pre-test subjects for questionnaire distribution to verify whether the questionnaire has feasibility. Through the analysis of the pre-test data, the author eliminates the repeated or irrelevant options, and then adjusts the ill-phrased part of the questionnaire in the process of communicating with the pre-test subjects to form a formal questionnaire. Totally 417 questionnaires are sent out, 385 are effectively received with effective recovery of 92.3%. This survey basically covers most colleges in Hubei Province, so the data is representative.

Definition and measurement of variables

The study uses Likert 5 scale to measure options in the questionnaire, and from 1 to 5 represent degrees from “completely inconsistent” to “fully consistent”. The measurement of each research variable includes: (1) Dependent variables — entrepreneurial education and entrepreneurial policy. Based on the existing research, we chose to combine Dana’s scale of entrepreneurship support system measurement (1990) and The China Startup Report of College Students to form two scales, total 11 measurement items; (2) Independent variables — entrepreneurial intention. This part directly adopts the mature and widely accepted scale proposed by Brenner (1991) and Davidson (1995), total 5 measurement items; (3) Intermediary variables — entrepreneurial self-efficacy. On the basis of a mature scale designed by Lucas and Cooper (2005), this part combines the particularity of college students with the actual needs of survey and makes alterations, total 4 measurement items; (4) Control variable. Based on previous academic research on entrepreneurial intention, we found that many demographic variables, such as individual

characteristics and past experiences, have an impact on entrepreneurial intention. For example, Fang and Zhang, (2016) pointed out that gender, age and grade are important factors affecting students' intention to start a business. In addition, through the analysis of the characteristics of female entrepreneurs, Wang (2014) found that women have fewer entrepreneurs and lack confidence than men. Therefore, this paper selects six demographic variables of gender, age, education level, professional background, entrepreneurial experience and work experience as the control variable of the study.

Test of reliability and validity

Since most of the scales involved in this study are mature scales which have been applied to related studies, the reliability and validity are standardized. In order to ensure the high standardization of the study after modified, this paper uses Cronbach's α coefficient to examine the reliability. The larger the α coefficient is, the more reliable the scale is and the more analytical the scale is. Usually 0.70 is set as the minimum standard of the scale reliability. From Table 1, the α coefficients of each scale are 0.848, 0.847, 0.782 and 0.840, and are all higher than 0.70. There are three α coefficients above 0.80, which shows that the internal reliability of the scale is very strong, and can guarantee the reliability basis of subsequent analysis. In terms of validity tests, this study first uses KMO and Bartlett test of sphericity to examine. Then according to the eigenvalue greater than 1 and the factor load greater than 0.5 to exclude unqualified factor loads, to lay the foundation for subsequent research. As Table 1 shown, KMO of four scales are 0.827, 0.837, 0.757 and 0.839, which are all greater than 0.60. The probabilities of Bartlett spherical test are all 0.000(<0.01), so the original sample is suitable for subsequent factor analysis. At the same time, the load of each measurement factor is greater than 0.5, and the cumulative variance of

Table 1. Results of reliability and validity analysis of study variables.

Name of variable	Survey items	Cronbach's α	KMO	Factor load	Cumulative explanatory margin%
Entrepreneurial education	School has a team of entrepreneurship teachers and entrepreneurial education related courses.	0.848	0.827	.800	65.256
	Most of the speakers who give lectures are successful entrepreneurs.			.771	
	The school regularly arranges the student creativity, the plan organization ability and so on training.			.785	
	The school regularly holds a business plan contest.			.767	
Entrepreneurial policy	The school has a special venture fund and entrepreneurial base to support students to start a business.	0.848	0.837	.821	62.201
	The government opens up a "green channel for college students", optimizes the examination and approval process, and supports me to start a business.			.832	
	The government set up a special entrepreneurial service organization and training platform to support me to start a business.			.784	
	College students' business registration fee reduction, support me to start a business.			.751	
	University students start a business tax relief, support me start a business.			.779	
Entrepreneurial self-efficacy	I do not like to stick to the rules and often have new ideas and methods.	0.782	0.757	.812	60.528
	I can identify valuable business opportunities and consumer unmet needs.			.771	
	I believe I can communicate effectively with others in the process of entrepreneurship to achieve my goal.			.794	
	I believe I can properly handle the risks in the process of starting a business.			.733	
Entrepreneurial intention	I think I'll start my own business in the future.	0.840	0.839	.823	61.169
	If there is a chance and free to make decisions, I will choose to start a business.			.763	
	If I encounter practical difficulties, I will still choose to start my own business.			.712	
	I'm more willing to start a business than having a stable job.			.792	
	I think I'm very likely to start a business in the next 5 years.			.816	

the four scales was 65.256%, 62.21%, 60.528% and 61.169%, so the study has excellent construct validity.

RESULTS AND DISCUSSION

Descriptive statistics and correlation analysis

In order to ensure the effective analysis and test the research hypothesis above, this paper carries out

descriptive statistical analysis and correlation analysis of each variable. Table 2 shows the mean, standard deviation and Pearson correlation coefficients of the results. From Table 2, it can be found that the mean and standard deviation of variables reflect normal distribution of the data, and the mean values of four groups of variables are 3.73, 3.78, 3.72 and 3.62, indicating that the overall level of four groups of variables is satisfied. At the same time, the standard deviation of the four groups of variables are very small, which indicates that the data

Table 2. Descriptive statistics and correlation analysis of study variables.

Name of variable	Mean	Standard deviation	Entrepreneurial education	Entrepreneurial policy	Entrepreneurial self-efficacy	Entrepreneurship willingness
Entrepreneurial education	3.73	.893	1			
Entrepreneurial policy	3.78	.865	.772**	1		
Entrepreneurial self-efficacy	3.72	.786	.647**	.772**	1	
Entrepreneurship intention	3.62	.857	.540**	.504**	.659**	1

Note: ** Represents significant correlation at 0.01 level (bilateral).

distribution of the obtained samples is relatively stable, and provides a good data base for subsequent analysis. From the Pearson correlation coefficient, between independent variables and dependent variables, entrepreneurial education and entrepreneurial policy have significant positive relationship to entrepreneurial intention at 0.01 level. Between independent variables and intermediary variables, entrepreneurial education and entrepreneurial policy have significant positive relationship to entrepreneurial self-efficacy at 0.01 level. Between intermediary variables and dependent variables, there is a significant positive relationship between entrepreneurial self-efficacy and entrepreneurial intention at 0.01 level, that is to say, the stronger entrepreneurial self-efficacy of college students, the stronger they want to carry out entrepreneurial activities.

Differential analysis of individual characteristics in entrepreneurial self-efficacy and entrepreneurial intention

Because the following analysis will use entrepreneurial intention and self-efficacy as intermediary variables and dependent variables, considering that individual differences may have an impact on the sample results, this paper takes part of the population characteristic variables as control variables. The paper uses independent sample T test and single factor variance analysis to analyze the difference between entrepreneurial self-efficacy and entrepreneurial intention of college students. The specific analysis results are shown in Table 3.

(1) Gender differences. Gender has no significant impact on entrepreneurial self-efficacy and entrepreneurial intention. Since most subjects in this survey are students with high education, the gender-neutral entrepreneurial education in schools enables every subject to have the

same educational background, and students can participate in the relevant entrepreneurial practice activities equally. In practice, the entrepreneurial self-efficacy of students can be effectively promoted and the entrepreneurial intention increases, so gender does not have much influence.

(2) Differences in work experience. Work experience has a significant impact on entrepreneurial self-efficacy. Entrepreneurial self-efficacy can be affected by the past activity experience. Through work and practice experience, college students can get a real feel to the social environment, and accumulate entrepreneurial skills and knowledge in the process of work. What's more, they also have the opportunity to contact more successful people to learn from their excellent experience, and have more confidence in future successful entrepreneurship.

(3) Educational differences. Education has a significant impact on entrepreneurial self-efficacy and entrepreneurial intention. According to one-way analysis of variance, we can find that educational level of the study subjects has a significant impact on entrepreneurial self-efficacy and entrepreneurial intention. At the same time, through LSD multiple comparative analysis, the result shows that for self-efficacy, master's graduate students have the highest self-efficacy in entrepreneurship, followed by doctoral students, third undergraduate students, and the lowest is college degree students. For entrepreneurial intention, the higher the degree, the more obvious the intention to start a business. Since the degree of individual education is limited by their own qualifications, and entrepreneurial education is not very mature in China, so the students with higher education may receive more consummate education. Therefore, if the student receives longer entrepreneurial education and practice, he or she is more likely to generate entrepreneurial ideas and is confident about future entrepreneurship.

(4) Differences in entrepreneurial experiences.

Table 3. Analysis of individual characteristics of entrepreneurial self-efficacy and entrepreneurial intention.

Dependent variable	Individual characteristics	N	Mean	F	t	Significant	LSD
Entrepreneurial self-efficacy	Gender	Male (N = 181) 14.87 ± 2.48 Women (N = 204) 14.89 ± 2.41			-.077	.939	
Entrepreneurship willingness	Gender	Male (N = 181) 14.89 ± 2.41 Women (N = 204) 17.99 ± 3.47			.758	.449	
Entrepreneurial self-efficacy	Work experience	Working experience (N = 272) 15.09 ± 2.37 No work experience (N = 113) 14.37 ± 2.55			2.666	.008	
Entrepreneurship willingness	Work experience	Working experience (N = 272) 18.28 ± 3.30 No work experience (N = 113) 17.71 ± 3.41			1.515	.131	
Entrepreneurial self-efficacy	Education	1 College and below 2 undergraduate degree 3 Postgraduate studies 4 Ph.D. graduate	64 246 53 22	3.60 3.68 3.97 3.95	5.329	.001	③>④>②>①
Entrepreneurship willingness	Education	1 College and below 2 undergraduate degree 3 Postgraduate studies 4 Ph.D. graduate	64 246 53 22	3.44 3.56 3.92 4.13	10.926	.000	④>③>②>①
Entrepreneurial self-efficacy	Entrepreneurship experience	1 Never 2. There were two 3. Entrepreneurship	163 188 34	3.64 3.80 3.69	3.027	.050	②>③>①
Entrepreneurship willingness	Entrepreneurship experience	1 Never 2. There were two 3. Entrepreneurship	163 188 34	3.45 3.72 3.91	11.362	.000	③>②>①
Entrepreneurial self-efficacy	Professional background				.988	.939	
Entrepreneurship willingness	Professional background				1.038	.449	

Table 4. Multiple regression analysis of entrepreneurial education, entrepreneurial policy, entrepreneurial self-efficacy and entrepreneurial intention.

Type of variable	Model	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Control variables									
Education	.244***	.117***	.183***	-.001	.244***	.135***	.244***	.117**	.121***
Entrepreneurship experience	.207***	.187***	.048	.049	.207***	.170***	.207***	.187***	.157
Work experience			-.140*	-.071*					
Independent variable									
Entrepreneurial education		.311***		.238***				.311***	.180**
Entrepreneurial policy		.236***		.515***				.236***	.173**
Entrepreneurial self-efficacy						.621***			.538***
R ²	.114	.362	.056	.530	.114	.485	.114	.362	.499
Adjustment R ²	.109	.355	.049	.524	.109	.481	.109	.355	.493
F (sig.)	24.530 (.000)***	53.899 (.000)***	7.552 (.000)***	85.548 (.000)***	24.530 (.000)***	119.574 (.000)***	24.530 (.000)***	53.899 (.000)***	75.623 (.000)***

Note: * stands for significant at 0.05 level, ** stands for significant at 0.01 level, *** stands for significant at 0.001 level.

Entrepreneurial experience has obvious influence on entrepreneurial self-efficacy and entrepreneurial intention. This paper uses LSD to put up multiple comparison and finds that in terms of entrepreneurial self-efficacy, the students with entrepreneurial experience in the past have the strongest self-efficacy, and the students with no entrepreneurial experience have the lowest. In terms of entrepreneurial intention, students who are in the stage of entrepreneurship currently are more willing to continue their entrepreneurial activities in the future, because they can participate in more activities directly and learn more entrepreneurial knowledge at this stage, which helps them to enhance their entrepreneurial intention and continue their entrepreneurial activities in the future.

(5) Professional background differences. Professional background has no significant effect on entrepreneurial self-efficacy and entrepreneurial intention. In class, the school provides all students with entrepreneurship theory

and related economic and management lectures; outside of the classroom, students can use convenient Internet to achieve entrepreneurial education resources and obtain the latest entrepreneurship policies. Students with every background could improve their entrepreneurial skills and accumulate entrepreneurial knowledge at school, so they can enhance the confidence of future effectively, thereby enhancing their entrepreneurial self-efficacy, stimulating a stronger entrepreneurial intention. Therefore, professional background has little to do with entrepreneurial self-efficacy and entrepreneurial intention.

Hypothesis test results

Through the previous analysis, we can find that there is a significant correlation with the four variables in this paper, but we need to use further multivariate regression analysis to confirm the specific causality and affecting strength among

the four variables. Table 4 shows the results of multiple regression analysis among the entrepreneurial education, entrepreneurial policy, entrepreneurial self-efficacy and entrepreneurial intention. The nine models are divided into four groups. Under the influence of control variables, four groups verify the effects of two independent variables on dependent variable as well as intermediary variable, the effects of intermediary variable on dependent variable and the intermediation of intermediary variables. Model 1 and Model 2 explore the influence between dependent variables and entrepreneurial intention by adding control variables as well as entrepreneurial education and entrepreneurial policy as two independent variables; Model 3 to Model 6 aim to explore the influence of entrepreneurial education and entrepreneurial policy on intermediary variables and intermediary variables on entrepreneurial intention under the influence of test control variables; Model 7 to Model 9 are designed to verify the intermediary

role of entrepreneurial self-efficacy in the relationship between dependent variables and independent variables. In practical terms, among the control variables, education level, entrepreneurial experience and work experience all have significant effects on entrepreneurial self-efficacy and entrepreneurial intention in varying degrees. Among the significance test of the equation, F of each model are significant, which indicates that the overall linear relationship of the model is significant. After the addition of independent variables, R^2 increases significantly, which also reflects that the introduction of new variables in the model is appropriate. In a word, the above model can test the relationship between the main research variables, get function as follows:

(1) The influence of entrepreneurial education and entrepreneurial policy on the entrepreneurial intention of college students. From Model 1 and Model 2, control variables (level of education and entrepreneurial experience) have a very significant positive impact on entrepreneurial intention. F in Model 2 is 53.899, which indicates a significant relationship between the whole model and the dependent variable. And under the premise of controlling variables, the adjusted R^2 in Model 2 is 0.355, which indicates that 35.5% variation in entrepreneurial intention can be explained. What's more, R^2 in Model 2 is larger than the value in Model 1, so the role of entrepreneurial education and entrepreneurial policy on dependent variables is not affected by the control variables. Meanwhile, β of entrepreneurial education and entrepreneurial policy are 0.311 and 0.236, which means the significant effect on dependent variables. So far, H1 and H2 have been validated.

(2) The influence of entrepreneurial education and entrepreneurial policy on the entrepreneurial self-efficacy of college students. In Model 3, education level has a positive and significant impact on entrepreneurial self-efficacy at 0.001 level, and work experience reversed significantly for the dependent variable at 0.05 level. F in Model 4 is 85.548, so the relationship between the whole model and dependent variables is significant. And as controlling for other relevant variables, adjusted R^2 in Model 4 is 0.524, which can explain more than half of the variation in entrepreneurial intention. Meanwhile, β of entrepreneurial education and entrepreneurial policy are 0.238 and 0.515, and has a significant impact on dependent variables. So far, H3 and H4 have been validated.

(3) The influence of entrepreneurial self-efficacy on the entrepreneurial intention of college students. In Model 5, both education and entrepreneurial experience can positively and significantly influence entrepreneurial intention. F in Model 6 is 119.574, so the relationship between the whole model and the dependent variables is significant. And as controlling for other relevant variables, adjusted R^2 in Model 6 is 0.481, so it can explain 48.1% of the variance in entrepreneurial intention. The R^2 in

Model 6 is larger than the R^2 in Model 5, therefore, the effect of entrepreneurial self-efficacy on dependent variables is not affected by controlled variables. Meanwhile, β of entrepreneurial self-efficacy is 0.621, and has a significant impact on dependent variables. So far, H5 has been validated.

(4) The intermediation test of entrepreneurial self-efficacy. From Model 7 to Model 9, three models are all significant at 0.001 level. It can be found that the impact of entrepreneurial education and policy on entrepreneurial intention is very obvious in Model 8. After adding the intermediary variable as the third layer independent variable in Model 9, the R^2 increases from 0.362 to 0.499, thereby the explanatory power of the model become stronger. And after introducing entrepreneurial self-efficacy, although β of entrepreneurial education and entrepreneurial policy decrease, the model is still significant. It shows that the influence of entrepreneurial education and entrepreneurial policy on the entrepreneurial intention of college students is partly implemented through the entrepreneurial self-efficacy. So entrepreneurial self-efficacy plays a partial mediation role between them. So far, H6 and H7 have been validated.

CONCLUSIONS AND RECOMMENDATION

Based on the questionnaire of college students in Hubei Province, this paper explores the effect of entrepreneurial education and entrepreneurial policy on college students' entrepreneurial intention under the premise of entrepreneurial self-efficacy as an intermediary variable. The study concludes that: (1) Part of the control variables will affect entrepreneurial intention. The difference of education level and entrepreneurial experience has a significant effect on entrepreneurial self-efficacy and entrepreneurial intention, and the difference of work experience only has a significant impact on entrepreneurial self-efficacy. However, the difference of gender and professional background has no significant effect on entrepreneurial self-efficacy and entrepreneurial intention. (2) Entrepreneurial education and entrepreneurial policy are positively affecting the entrepreneurial intention of college students. Through empirical research, this paper shows that the first two variables have a positive impact on the entrepreneurial intention of college students, which is the same as many scholars' results. Providing a stable entrepreneurial environment for start-ups can reduce the risk in the process of entrepreneurship, thereby enhancing the entrepreneurial intention of college students. (3) As an intervening variable, entrepreneurial self-efficacy plays a key role in these mechanisms. In 2012, Marina has proposed that if students are better educated in entrepreneurship, their intention to start a business in the future will become more obvious. And the accumulation of theoretical knowledge as well as the study of related

courses can enhance students' confidence in entrepreneurship greatly. Meanwhile, the preferential policies for college students can not only help them reduce the risks of funds, approval process and entrepreneurial resources, but also provide a platform for students who intend to start a business. It can be seen that sound entrepreneurial education and policy can improve students' self-efficacy, thus enhancing the entrepreneurial intention.

Based on the research conclusions and practical needs, we must build an entrepreneurial support system including government, colleges and students to encourage students to start business actively and become a powerful booster for the transformation of high-tech to productivity. For the government, on the one hand, it is necessary to improve the supporting policies and the level of security. For example, they can establish specialized entrepreneurial service institutions which focus on the policy publicity for college students. At the same time, the government should adjust the national policy flexibly according to local economy and the implementation of entrepreneurial policy, then introduce supporting policies such as approval, loan or tax preference, such as opening up "green passage" for college students, so as to enhance the flexibility and pertinence of entrepreneurial policy, and reduce the constraints of external environment on the entrepreneurship. On the other hand, government should increase financial support to achieve precision support. In addition to reducing the fees for business registration and taxes, government should also set up a special incubator fund to support poor students to start a business, such as providing venture capital support for students' start-up enterprises, helping students with difficult economy but strong entrepreneurial intention to carry out free entrepreneurial practice, and so on.

For the college, on the one hand, we should give full play to the advantages of "the first classroom" and innovate the form of entrepreneurial education. Colleges can set up different courses of entrepreneurial education according to the different needs of various majors, and set up a credit replacement mechanism to ensure the operability of entrepreneurial education. At the same time, teachers need integrate entrepreneurship into the daily teaching, and support students to participate in entrepreneurship competitions to enhance their entrepreneurial ability. On the other hand, we should strengthen the construction of teachers and improve the precision of entrepreneurial education. Colleges should organize a team for teachers to conduct entrepreneurial knowledge training and seminars regularly, and send teachers to other colleges for entrepreneurial education and study, so as to pick up excellent experience.

For students, they should acquire entrepreneurial information actively, so as to enhance the awareness of entrepreneurial activities, and change the blindness and fears of entrepreneurship. What's more, students are supposed to participate in the entrepreneurial education

and competition actively, and improve the entrepreneurial knowledge and practical experience through the combination of theory and practice. Students who have entrepreneurial intention can also form an entrepreneur club or students venture capital association to share entrepreneurial information and exchange experiences, thus transforming passive entrepreneurs into active entrepreneurs.

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