Research on Influencing Factors of College Students' Entrepreneurship Based on Mixed Research

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Abstract. The revitalization and development of talents is the prerequisite for the revitalization of rural economy. The research on the entrepreneurial dilemma and support system of college students in the new era will help to solve the "talent bottleneck" faced by the Rural Revitalization Strategy. In this paper, the mixed research method is used for research. Firstly, 24 college students' entrepreneurs around a university in Dujiangyan, Chengdu are interviewed in depth. The grounded theory method is used to encode the obtained data in an open, spindle and selective manner. It is concluded that entrepreneurs' own characteristics, external environment, regular constraints and resource constraints are the main factors affecting their entrepreneurship. Then, a quantitative research model is constructed, and 117 valid questionnaires are collected by means of questionnaire survey to verify the hypothesis. Finally, it puts forward the framework of College Students' Entrepreneurship support system, which aims to help college students' entrepreneurs get rid of entrepreneurship difficulties and grow smoothly.

Keywords: Talent Bottleneck · Mixed Research · Rooted Theory · Entrepreneurial Dilemma

1 Introduction

The 19th CPC National Congress made it clear that the key to Rural Revitalization lies in people. "Mass entrepreneurship and innovation" plays an important driving role in improving China's competitiveness, promoting economic growth and realizing the transformation to high quality. In recent years, the number of college graduates in China has been increasing, reaching a new high in 2019, with a number of nearly 8.34 million. Under the dual impetus of the national innovation and entrepreneurship boom in full swing and the increasingly severe employment situation, the number of College Students' innovation and entrepreneurship is rising. However, according to Max's survey and Research Report, the proportion of College Students' Entrepreneurship in the number of college graduates is still not high, and the entrepreneurship rate of college graduates in 2019 is about 3%. On the whole, college students' willingness to innovate and start a business is low. What are the primary factors driving college students' innovation

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and entrepreneurship? How to take effective measures to cultivate college students' awareness of innovation and entrepreneurship and stimulate their willingness to innovate and entrepreneurship? The study of these problems is of great significance for improving college students' innovation and entrepreneurship tendency, improving college students' employment and promoting the construction of China's innovative country.

2 Literature Review

In the past decade, some scholars have studied the influencing factors of College Students' Entrepreneurship from the perspective of entrepreneurial ability. For example, Lu Wu [1] believes that entrepreneurial ability is the main factor affecting college students' entrepreneurship; Gao Jingyu et al. [2] believe that entrepreneurial ability is the main factor affecting college students' entrepreneurship, and entrepreneurial ability is mainly affected by ability factors such as personal background; Many scholars have also analyzed the influencing factors of College Students' Entrepreneurship from the perspective of entrepreneurial intention. For example, Wang Huafeng et al. [3] mainly analyzed the influencing factors of College Students' Entrepreneurship from the perspective of entrepreneurial intention; Cao Keyan et al. [4] mainly investigated the current situation of College Students' Entrepreneurship and its influencing factors, [5] and believed that the entrepreneurship of college students in China is mainly affected by the entrepreneurial intention, [6] which is mainly related to the personality traits of college students [7].

3 Research Scheme

3.1 Research Methods

Because the scope of College Students' entrepreneurship is very wide, there are many influencing factors and high uncertainty, we use the method of mixed research to explore. The overall research scheme is shown in Fig. 1 below: a theoretical model is formed through qualitative research. Using the model and combined with previous research, quantitative analysis is carried out by designing and collecting questionnaires, so as to verify and modify the theoretical model. This paper selects the grounded theory proposed by Barney Glaser and Anselm Stauss in 1967. This method emphasizes the establishment of theory on the basis of empirical data, and then based on systematic research, summarizes a problem with original data, and establishes an analysis framework from three stages: open coding, spindle coding and selective coding.

3.2 Samples and Data Sources of Qualitative Research

The research data is the field interview data of 47 college students' entrepreneurs in a university in Chengdu in 2021. After screening, the final sample size is 23, and another 3 cases are randomly selected as the theoretical saturation test. Due to the identity of the author, the reliability of data acquisition can be guaranteed.

3.3 Theoretical Analysis

Code and analyze 23 interview records, and stop coding when the principle of information saturation is met. According to the specific method of grounded theory, the original data are coded and labeled to form the initial category, various categories and core categories. Form all materials into written materials and conceptualize them. From the perspective of the difficulties encountered by entrepreneurs, truly reflect the written materials and sort out the codes related to the entrepreneurial difficulties of college students, as shown in Table 1.

Table 1. coding.

category	conceptualize	original statement
Lack of technology	There is a big gap between theory and practice, and the technology is not solid.	Basically, I don't know. I only know fur, but I don't know much about it. Practical technical experience is out of touch with society, and there is no way to apply it well.
Lack of experience	Blind follow-up, lack of entrepreneurial experience	For example, there are many such things in the market, and everyone is selling and planting them. We didn't do it at the beginning.
Lack of ability	Lack of management ability and inaccurate market positioning	Our computer majors are engaged in technology instead of management. Not finding out the market scale and demand correctly.
Equipment missing	Lack of office equipment and manufacturing equipment	No money to buy equipment to produce products.
Natural risk	climate	When the climate is bad, the price of fruit is very high and sales are very troublesome.
Lack of entrepreneurial partners and talents	Lack of management and technical talents	We will also find some talents with professional management knowledge and pioneering spirit to join the management team. There are some technologies that our students can't solve.
Low consumer acceptance	Do not recognize brands, products and prices.	Consumer acceptance of this product is far from as high as we expected.

(*continued*)

Table 1. (*continued*)

category	conceptualize	original statement
Lack of sales channels	Lack of sales and information channels	The biggest difficulty is that things can't be sold. We have no information sources and sales channels.
Insufficient policy support	The entrepreneurial system is not perfect	At present, it is still very troublesome for college students to apply for support.
Lack of start-up capital	The initial investment is large, and students lack funds.	The investment is still quite large, requiring more than 100,000 yuan in the early stage. Family support is rather limited.
Financing difficulties	Difficult loans, few financing channels	I can't get a loan at all, and no one has invested in me.

Table 2. Main Categories Formed by Spindle Coding.

level	number	Main category	Corresponding category
Own factor	1	College students' own characteristics	Lack of technology Lack of experience Lack of ability
external environment	2	Industry characteristics	Equipment missing Natural risk
	3	Financial factors	Lack of start-up capital Financing difficulties
Rule restriction	4	market factors	Low consumer acceptance Lack of sales channels
	5	Government factors	Insufficient policy support
Resource restriction	6	cooperative partner	Lack of entrepreneurial partners and talents

According to the grounded theory, spindle coding obtains the concept from open coding, classifies it, and finally establishes the main category. The main categories determined are shown in Table 2.

The original data are analyzed on the basis of open coding and spindle coding. It is found that the core categories can be divided into self factors, environmental factors, regular factors and resource factors, and all categories can be summarized by college students' entrepreneurial dilemma.In order to meet the saturation principle, three cases are selected as saturation coding test. There were no major differences and disputes in the

test process, and there were no representative spindle coding and selective coding, indicating that the entrepreneurial dilemma involved in this interview was deeply excavated and coded, meeting the principle of theoretical saturation.

According to the grounded theory, it can be found that the main factors affecting college students' Entrepreneurship include college students' own characteristics, industry characteristics, capital demand, government factors and market factors, which are finally summarized into four aspects: self factors, environmental factors, rule constraints and resource constraints.

4 Quantitative Study

According to the above research results and relevant theories, this paper constructs the following quantitative research model (Fig. 1), and puts forward the following assumptions:

Hypothesis H1: College Students' own factors positively affect college students' entrepreneurial intention.

Hypothesis H1a: environmental factors positively regulate the relationship between self factors and college students' entrepreneurial intention.

Hypothesis H1B: resource-based factors positively regulate the relationship between self factors and college students' entrepreneurial intention.

4.1 Questionnaire Design and Data Source

According to the above qualitative research results, combined with entrepreneurship theory, the questionnaire design is divided into three parts. The first part is the basic information of college students, including gender and age. The second part is the influencing factors of College Students' entrepreneurship, including their own factors, environmental (regular) factors and resource-based factors. The third part is the entrepreneurial intention of college students. In addition to the basic information, the questionnaire items were evaluated with Likert five level scale, and the internal consistency test of small-scale pre survey was carried out, and individual items were adjusted.The formal survey was conducted for college students in a university in Chengdu. It was distributed in the form of online questionnaire for one week, and 117 valid questionnaires were recovered.

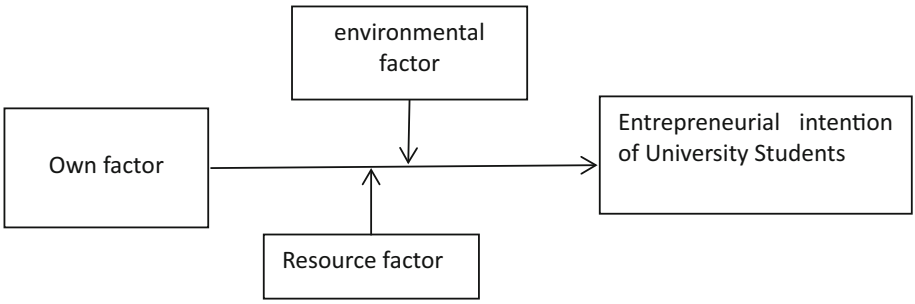

Fig. 1. Model diagram.

Table 3. Descriptive statistical analysis (N = 117).

variable	M	SD	1	2	3	4
Own factor	3.23	0.69	1.000			
Environmental (regularity) factors	2.96	0.81	0.596**	1.000		
Resource factor	2.74	0.75	0.551**	0.537**	1.000	
College students' entrepreneurial intention	3.16	0.70	0.721**	0.421**	0.428**	1.000

Note: M is the average and SD is the standard deviation. The internal consistency coefficient of the scale is in brackets. *** $p < 0.001$,** $p < 0.01$,* $p < 0.05$

4.2 Basic Information of Survey Samples

Among the 117 questionnaires collected, there were 29 male college students, accounting for 24.79%, and 88 female college students, accounting for 75.21%. More than 80% of college students are between 21 and 22 years old.

4.3 Reliability and Validity Test of Questionnaire

Using spss18 version to import data, this paper analyzes the reliability of self factors, environmental (regular) factors, resource-based factors and college students' entrepreneurial intention. Internal consistency α.The coefficients are 0.777, 0.713, 0.800 and 0.776 respectively. Spss18 is also used 0.0 factor analysis was used to test the validity. The kmo value was 0.661 and the Bartlett spherical test value was chi square 1062.616 ($P < 0.001$). It can be seen from the table of explanatory total variance that the overall explanatory degree of these four factors can reach 70.25%.

4.4 Descriptive Statistics

Table 3 presents the mean, standard deviation and correlation coefficient matrix between main variables of this study. There is a significant positive correlation between College Students' entrepreneurial intention and their own factors ($r = 0.721$, $P < 0.01$), environmental (regular) factors ($r = 0.421$, $P < 0.01$) and resource-based factors ($r = 0.428$, $P < 0.01$).

4.5 Test Hypothesis

Firstly, spss18 software is used to deal with the variables' own factors, environmental factors, resource-based factors and college students' entrepreneurial intention, and construct the variables of mutual terms' own factors, environmental factors, self factors and resource-based factors. The hierarchical regression method is used to test the adjustment effect. Table 2 shows the hierarchical regression results of environmental factors on their own factors and college students' entrepreneurial intention, and Table 3 shows the hierarchical regression results of resource-based factors on their own factors and college students' entrepreneurial intention.

Table 4. Hierarchical regression results of environmental factors on self-factors and entrepreneurial intention of college students.

variable	College students' entrepreneurial intention		
	Model 1	Model 2	Model 3
Own factor	0.721***	0.728***	0.750***
	(11.148)	(9.006)	(9.627)
Environmental (regularity) factors		−0.013	−0.025
		(−0.161)	(−0.318)
Self * environmental factors			0.206***
			(3.294)
variance ratio	124.277	61.625	48.252
Adjusted R^2	0.515	0.511	0.550

Note: T value in brackets, * *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ and * $p < 0.05$.

Table 5. Hierarchical regression results of resource factors on self-factors and entrepreneurial intention of college students.

variable	College students' entrepreneurial intention		
	Model 1	Model 2	Model 3
Own factor	0.721***	0.696***	0.752***
	(11.148)	(8.963)	(9.722)
Resource factor		0.044	−0.025
		(0.567)	(−0.248)
Self-factors * resource factors			0.196**
			(3.000)
variance ratio	124.277	61.933	47.187
Adjusted R^2	0.515	0.512	0.544

Note: T value in brackets, * *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ and * $p < 0.05$.

It can be seen from Table 3 that the R-side of model 3 has changed significantly, and the interaction coefficient is significantly correlated, indicating that environmental factors have a strong regulation on their own factors and college students' entrepreneurial intention. It can be seen from Table 4 that the R-square of model 3 has changed significantly, and the interaction coefficient is significantly correlated, indicating that resource factors have a strong regulatory effect on their own factors and college students' entrepreneurial intention.

5 Result Discussion

Through the hierarchical regression results of environmental factors on their own factors and college students' entrepreneurial intention and the hierarchical regression results of resource factors on their own factors and college students' entrepreneurial intention, it can be seen that the correlation coefficients between their own factors and college students' entrepreneurial intention are positive, and the correlation coefficients are about 0.7, which can verify hypothesis H1: College Students' own factors positively affect college students' entrepreneurial intention. Through the results of Table 5 and Table 6 and the results of regulation effect diagram, it can be verified that hypothesis H1a: environmental factors positively regulate the relationship between self factors and college students' entrepreneurial intention. Hypothesis H1B can be verified: resource-based factors positively regulate the relationship between their own factors and college students' entrepreneurial intention.

6 Conclusions

This paper adopts the method of mixed research. First, 24 college entrepreneurs around a university in Dujiangyan, Chengdu were interviewed in depth. Based on grounded theory, the difficulties encountered in college students' entrepreneurial process were conceptualized and categorized, which formed the entrepreneurial dilemma faced by college students. The results show that,The factors affecting college students' entrepreneurship mainly lie in four aspects: self, environment, regularity and resource-based. On this basis, the paper constructs a quantitative research model and puts forward three hypotheses: H1 college students' own factors positively influence their entrepreneurial intention. H1: Environmental factors positively regulate the relationship between self-factors and entrepreneurial intention of college students. H1B:Resource-based factors positively regulate the relationship between self-factors and entrepreneurial intention of college students. 117 valid questionnaires were collected by questionnaire survey, which verified the hypothesis. The results of this paper show that the success of college students' entrepreneurship depends not only on their own efforts, but also on the support of entrepreneurial environment and resource policies. In order to better solve the problem of college students' entrepreneurship, Proposed the following entrepreneurial support system.

In view of self-factors and resource-based constraints, we should strengthen guidance and provide services, guide innovation consciousness, and cultivate innovative and entrepreneurial leaders on campus. In view of environmental factors, schools should provide and increase financial support, incubate high-quality projects, try to buy shares in student enterprises, grow and develop together, and provide all-round entrepreneurial services. The government should simplify the process of college students' venture capital subsidies, and consider increasing the intensity of capital subsidies. College students also need to strengthen risk awareness, improve the publicity of companies and products, and improve the market awareness and acceptance.

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