

STUDY ON THE INFLUENCE OF COLLEGE STUDENTS' EMOTIONAL INTELLIGENCE ON ENTREPRENEURSHIP INTENTION-PERCEIVED BEHAVIOR CONTROL AS THE MEDIATING VARIABLE



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Abstract

On the basis of summarizing previous research theories and practices, this study explores the relationship between emotional intelligence, perceived behavioral control, entrepreneurial opportunity identification and entrepreneurial intention of college students through literature analysis and questionnaire survey. College students were investigated by emotional intelligence scale, perceived Behavior Control scale, entrepreneurial opportunity Identification Scale, entrepreneurial intention scale and entrepreneurship scale. The results show that: (1) Emotional intelligence has a significant positive impact on college students' entrepreneurial intention. (2) Perceived behavioral control mediates the relationship between emotional intelligence and entrepreneurial intention. (3) Entrepreneurial opportunity identification regulates the relationship between emotional intelligence and entrepreneurial intention. (4) The control variables are gender, age, grade and major of college students.

Keywords :emotional intelligence, Perceptual behavior control, Entrepreneurial opportunity identification, Entrepreneurial intention

Research Background and Significance

From the international perspective, the world is going through a new round of scientific and technological revolution and industrial transformation. The future competition between countries is a contest of economy and science and technology, which is further reflected in human resources, innovation, education and other aspects. Science and technology is the support for high-quality development, and innovation has become a magic weapon to win. International economists generally agree that the higher a country's entrepreneurship level is, the higher its economic growth level and innovation ability will be.

From the perspective of China, innovation and entrepreneurship are the driver of national development. Taking the path of independent innovation in China, building an innovative-oriented country is the goal and pursuit of the socialist road with Chinese

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characteristics. Cultivating the innovative spirit of college students is an unshirkable mission of colleges and universities and society. Emotional intelligence is one of the important indicators of whether college students can develop in full scale and student's cultivation. As pioneers among young people, college students should learn to know themselves and others, handle interpersonal relationships, and prepare for better integration into society in the future, in addition to completing their academic tasks. The academic circle has relatively limited discussion on the research path of how college students' emotional intelligence affects their entrepreneurial intention, and the relationship between which factors affect college students' emotional intelligence and entrepreneurial intention has not been clarified. These important issues need to be tested and responded to through practical research.

This research can promote the development of the relevant theories of China's higher education, especially about innovation and entrepreneurship education, as well as reform and innovation. The research also verified that college students' emotional intelligence has a positive impact on entrepreneurial intention, and reiterated the importance of college students' emotional intelligence factors. This can not only promote the reform and innovation of relevant theories in China's higher education, especially innovation and entrepreneurship education in the reform process, making higher education pay more attention to the cultivation of college students' emotional intelligence, but also promote the development of emotional intelligence and innovation and entrepreneurship related theories. Studying the influencing factors of college students' entrepreneurial intentions can help stimulate college students' entrepreneurial behaviors, provide more jobs for the society, alleviate the severe employment situation in China, and improve the overall employment rate.

Research Hypothesis Set

1. The Influence of Emotional Intelligence on Entrepreneurial Intention

Emotional intelligence, as an important factor influencing college students' future achievements, has attracted more and more scholars' attention. According to the theory of emotional intelligence, individuals with positive emotions can improve their divergent thinking. When things go wrong, they will have more creative solutions and approaches, more entrepreneurial ideas and higher entrepreneurial intentions. Therefore, compared with individuals with low emotional intelligence, individuals with high emotional intelligence are better at finding visionary, valuable and creative solutions, and are more likely to generate entrepreneurial intentions and behaviors.

Studies have shown that emotions play a significant role in the cognition and behavior of entrepreneurs. Therefore, this article proposes the first research hypothesis:

H1: Emotional intelligence positively affects entrepreneurial intention.

2. The Influence of Emotional Intelligence on Perceived Behavior Control

Perceived behavior control, also known as Sensory Behavior Control, is generally referred to as the resources, opportunities, skills that a person can use and the prerequisites for practicing related behaviors. The definition of this concept is almost derived from Ajzen's (1991) definition of perceived behavior control that perceived behavior control refers to "barriers reflecting personal past experience and expectations". Ajzen also emphasizes that "when individuals think that they have more resources and opportunities and less expected barriers, they will have stronger perceived behavior control", which can be understood as "forces that can promote or hinder entrepreneurial intentions", When this force plays a role in promoting entrepreneurial intention, it can make entrepreneurial behavior easier. On the contrary, when this force plays an obstacle role, entrepreneurial behavior becomes difficult. According to Bandura (1997)'s relevant theoretical research, perceived behavior control includes self-efficacy, and academic research has also verified that emotional intelligence positively affects entrepreneurial intention through self-efficacy, and emotional intelligence also has a positive role in promoting self-efficacy. The higher the individual's emotional

intelligence, the higher the self-efficacy. Therefore, this study proposes the following assumptions:

H2: Emotional intelligence positively affects perceived behavior control

3. The Mediating Effect of Perceived Behavior Control

Based on the theory of planned behavior, academia has fully discussed the relationship between perceived behavior control and entrepreneurial intention, and almost all existing studies have verified the fact that perceived behavior control has a positive impact on entrepreneurial intention. For example, Ajzen (2002) used perceptual behavior control to predict the generation of individual entrepreneurial intention and entrepreneurial behavior. Perceived behavior control is an important factor in the theoretical model of planned behavior, and it has been widely recognized by the academic community that perceived behavior control can predict individual intentions and behaviors. Based on the existing theories and researches, this paper attempts to explore the effect and relationship of perceptual behavior control in the process of the impact of emotional intelligence on entrepreneurial intention.

Perceived behavior control ability is a psychological factor of individuals. How to better and more accurately perceive it has a great correlation with individual differences. As for the measurement of individual differences, it is generally recognized that there are two important factors in society, namely, individual intelligence (IQ) and emotional intelligence (EQ). The higher the individual's emotional intelligence is, the better he/she can understand, evaluate and manage his/her own emotions, form a correct understanding of himself/herself, and then become more optimistic and confident. In the process of contact and interaction between individuals and others, individuals with higher emotional intelligence will better understand, evaluate, and adjust the emotions of others, and form good interpersonal relationships, which makes individuals easier to perceive and understand the ideas and behaviors of others, learn from others, reflect on their own mistakes, and form a more positive psychological state, and then have a higher ability to control perceived behaviors. Therefore, Perceived behavior control will be affected by emotional intelligence. The higher the level of emotional intelligence, the stronger the ability of perceived behavior control; The lower the individual's emotional intelligence level is, the weaker the control ability of perceived behavior is.

Therefore, this paper proposes the following assumptions:

H3: Perceived behavior control positively affects entrepreneurial intention.

H4: The mediating effect of perceived behavior control between emotional intelligence and entrepreneurial intention.

4. Regulatory role of entrepreneurial opportunity identification

Chinese scholars have discussed the relationship between entrepreneurial opportunity identification and entrepreneurial intention, and have generally agreed that finding entrepreneurial opportunities is the basis for studying entrepreneurial issues. It can be said that without the identification of entrepreneurial opportunities, there will be no entrepreneurial intention. This shows that variable entrepreneurial opportunity identification is an important antecedent variable for investigating individual entrepreneurial intention. The more individuals who can identify entrepreneurial opportunities, the better they can perceive the power that promotes or hinders entrepreneurial intention, and thus the greater the generation of entrepreneurial intention. Therefore, we speculate that entrepreneurial opportunity identification may further improve the entrepreneurial intention of individuals by increasing the ownership of personal perceived resources. Therefore, this paper proposes the following assumptions:

H5: Entrepreneurial opportunity identification plays a regulatory role in emotional intelligence and entrepreneurial intention.

H6: Identification of entrepreneurial opportunity positively regulates the relationship between emotional intelligence and entrepreneurial intention

5. Theoretical Model Framework

This paper takes emotional intelligence as the argument, perceived behavior control as the intermediary variable, entrepreneurial intention as the dependent variable, and entrepreneurial opportunity recognition as the regulating variable of perceived behavior control and entrepreneurial intention. On the basis of previous relevant research results, a theoretical model is created for the research on the relationship framework between emotional intelligence, perceived behavior control, entrepreneurial opportunity recognition, and entrepreneurial intention,

Measurement of variables

1. Measurement of Emotional Intelligence

According to the definition of emotional intelligence by Law and Song (2004), emotional intelligence refers to the ability of individuals to evaluate, express, adjust and use their own and others' emotions. Emotional intelligence refers to the scale developed by Law&Wong (2004).

2. Measurement of entrepreneurial intention

According to the definition of entrepreneurial intention, entrepreneurial intention is a reflection of their subjective attitude towards entrepreneurial behavior. It represents a psychological state of potential entrepreneurs. Potential entrepreneurs with this state will stimulate their own attention in order to achieve a certain goal, and ultimately urge them to make decisions. This study draws on the scale developed by Liñán and Chen (2009).

3. Measurement of perceived behavior control

According to the definition of perceptual behavior control, perceptual behavior control can also be called "perceptual behavior control". Perceptual behavior control can replace actual behavior control to predict future behavior. This study draws on the scale developed by Liñán and Chen (2009).

4. Measurement of entrepreneurial opportunity identification

Entrepreneurial opportunity identification refers to the process in which individuals acquire, process and interpret entrepreneurial opportunities. Previous knowledge and experience as well as the cognitive characteristics of evaluating these opportunities will affect the identification of entrepreneurial opportunities by different individuals. This study draws on Ozgen (2007) and other studies, and uses three topics to measure. Five level Likert scale was used for measurement.

5. Measurement of Control Variables

Control variables refer to all variables that can affect the change of dependent variables except independent variables. In this paper, control variables refer to variables that may affect the interaction between emotional intelligence and entrepreneurial intention, in addition to perceptual behavior control and entrepreneurial opportunity recognition. In practice, in order to truly reflect the mechanism of emotional intelligence on entrepreneurial intention as much as possible, it is necessary to control some relevant factors, that is, add some control variables, to draw accurate conclusions. In the empirical study, the selection of control variables has an important impact on the results. In view of this, this paper, based on the actual research, combined with previous studies, referred to the control variables considered in previous studies, took the gender, age and grade of college students as control variables, and comprehensively and deeply explored the relationship between emotional intelligence, perceived behavior control and entrepreneurial intention. In the process of measurement, this paper refers to the ideas and methods of many researchers, and strives to make scientific and reasonable judgments, in order to provide a theoretical basis for the practice of higher education reform in China.

Data analysis and hypothesis testing

1. Credibility and Validity Analysis

Text 1 Reliability analysis

	Cronbach's Alpha	Number of terms
General questionnaire	0.985	34
Entrepreneurial intention	0.956	6
Entrepreneurial opportunity identification	0.957	3
Emotional Intelligence	0.979	16
Perceptual behavior control	0.975	6

Table 1 shows that the Cronbach's alpha of the questionnaire data is 0.985, which indicates that the reliability of the questionnaire data is very high. The Cronbach's alpha of entrepreneurial intention is 0.956, the Cronbach's alpha of entrepreneurial opportunity recognition is 0.957, the Cronbach's alpha of emotional intelligence is 0.979, and the Cronbach's alpha of perceptual behavior control is 0.975. It can be seen that the data reliability is very high.

Text 2 Validity analysis

	Sampling suitability quantity of KMO	Bartlett Test of Sphericity	Degree of freedom	Significance
General questionnaire	0.955	5832.576	561	0
Entrepreneurial intention	0.905	763.236	15	0
Entrepreneurial opportunity identification	0.758	381.655	3	0
Emotional Intelligence	0.951	2434.247	120	0
Perceptual behavior control	0.898	1005.441	15	0

It can be seen from Table 2 that the KMO value of the questionnaire is 0.955, greater than 0.9. The value of *Bartlett Test of Sphericity* is 5832.576, and the significance value is 0, so the validity of the questionnaire data is very high. The KMO value of entrepreneurial intention is 0.905, greater than 0.9, and the *Bartlett Test of Sphericity* is 763.236. The KMO value of entrepreneurial opportunity identification is 0.758, greater than 0.7, and the *Bartlett Test of Sphericity* value is 381.655. The KMO value of emotional intelligence is 0.951, greater than 0.9, and the *Bartlett Test of Sphericity* is 2434.247. The KMO value of perceptual behavior control is 0.898, greater than 0.8, and the *Bartlett Test of Sphericity* is 1005.441. The significance value of all variables is 0, which is significant at 1% level. It can be seen that the validity of the four variables is very high.

2. Correlation Analysis

Test 3 Correlation analysis

	Entrepreneurial intention	Entrepreneurial opportunity identification	Emotional Intelligence	Perceptual behavior control
Entrepreneurial intention	1			
Entrepreneurial opportunity identification	.897**	1		
Emotional Intelligence	.803**	.780**	1	
Perceptual behavior control	.880**	.862**	.779**	1

** At the level of 0.01 (two tails), the correlation is significant.

As shown in Table 3, the correlation coefficients of entrepreneurial intention, entrepreneurial opportunity recognition, emotional intelligence, and perceived behavioral control are all greater than 0.5 and all are significant at the 1% level, which shows that there is a strong positive correlation between entrepreneurial intention, entrepreneurial opportunity recognition, emotional intelligence, and perceived behavioral control.

3. Hypothesis Test

3.1 Regression analysis of intermediary effect

Test 4 Intermediary effect regression analysis summary

Model	Model 1	Model 2	Model 3
dependent variable	Entrepreneurial intention	Perceptual behavior control	Entrepreneurial intention
Perceptual behavior control			0.922** (8.81)
Emotional Intelligence	0.529*** (14.41)	0.338*** (13.14)	0.217** (4.8)
Age	0.963 (1.4)	0.557 (1.15)	0.449 (0.84)
Grade	0.169 (0.28)	0.124 (0.3)	0.055 (0.12)
Sex	0.490 (0.4)	1.792** (2.06)	-1.163 (-1.2)
Professional category	-1.721*** (-2.66)	-0.736 (-1.63)	-1.042** (-2.08)
_cons	-3.978 (-1.21)	-3.127 (-1.35)	-1.094 (-0.43)
Sample size	115	115	115
R ²	0.6937	0.6587	0.8218
调整 R ²	0.6796	0.643	0.8118
F 值□	49.36***	42.07***	82.98***

** p<0.05 *** p<0.01 The value of T is in brackets.

The comparative analysis of the three models shows that the F-value and R² of the model are increased after adding the variable of perceived behavioral. so it is preliminarily believed that perceived behavioral control has a mediating effect between emotional intelligence and entrepreneurial intention. To further verify the relationship among emotional intelligence, entrepreneurial intention and perceived behavioral control, we use emotional intelligence as a independent variable, perceptual behavior control as a intermediary variable, and entrepreneurial intention as a dependent variable to construct the model. We will test the intermediary effect.

Test 5 Bootstrap Mediation Effect Hypothesis

Intermediary effect hypothesis	Effect value	Lower 95% confidence interval	95% confidence upper interval	P
Emotion-Perceived behavior control- Entrepreneurial intention	.565	.456	.723	.000

Table 5 is a test of mediating effect by Bootstrap method based on AMOS software, repeating the sample 2000 times and calculating the 95% confidence interval, from the results of the above table, it can be seen that the mediating path [emotional intelligence - perceived behavioral control - entrepreneurial intention] effect value is 0.565, the 95% confidence upper and lower interval is [0.456-0.723] does not contain 0, and the P-value is less than the significant level 0.05, indicating that the mediating effect exists, so the hypothesis is valid. When the independent variable and the mediating variable are both present in the model, the independent variable still significantly affects the dependent variable and can be identified as a partial mediating effect. Emotional intelligence affects entrepreneurial intention directly and also indirectly through perceived behavioral control.

3.2 Regression analysis of moderating effects

In order to further verify whether the relationship between emotional intelligence and entrepreneurial intention will be affected by other variables, we take emotional intelligence as an independent variable, entrepreneurial intention as a dependent variable, and entrepreneurial opportunity as a moderator to test the moderation effect. The results are as follows.

Test 6 Adjustment effect regression summary

Model	Model 1	Model 4	Model 5
dependent variable	Entrepreneurial intention	Entrepreneurial intention	Entrepreneurial intention
Entrepreneurial opportunity identification		1.988*** (10.06)	0.957 (1.72)
Emotional Intelligence	0.529*** (14.41)	0.192*** (4.49)	0.091 (1.38)
Entrepreneurial opportunity identification *Emotional Intelligence			0.016** (1.98)
Age	0.963 (1.4)	0.351 (0.7)	0.185 (0.37)
Grade	0.169 (0.28)	-0.311 (0.72)	-0.352 (-0.82)
Sex	0.490 (0.4)	-0.965 (1.07)	-1.633 (-1.71)
Professional category	-1.721*** (-2.66)	-0.971** (-2.06)	-1.130** (-2.39)
_cons	-3.978 (-1.21)	-0.350 (-0.15)	7.625 (1.63)
Sample size	115	115	115
R ²	0.6937	0.8419	0.8475
调整 R ²	0.6796	0.8331	0.8375
F 值 □	49.36***	95.83***	84.93***

** p<0.05 *** p<0.01 The value of T is in brackets.

In Table 8, emotional intelligence * entrepreneurial opportunity identification is the interaction term obtained by multiplying emotional intelligence and entrepreneurial opportunity identification. As can be seen from Table 8, the F-value of the regression equation of model 1 is 49.36, and the p-value is significant at the 1% level, indicating that the

establishment of model 1 is significant. Adjusted R^2 is 0.6796, greater than 0.5, indicating that the goodness of fit of the model is medium. The significance value of professional discipline and emotional intelligence are less than 0.05, the regression coefficient of professional discipline is less than 0, and the regression coefficient of emotional intelligence is greater than 0, which can be seen that emotional intelligence has a significant positive effect on entrepreneurial intention, and professional category has a significant negative effect on entrepreneurial intention.

The F value of the regression equation of model 4 is 95.83, and the p value is significant at the 1% level, indicating that the establishment of model 2 is significant. The adjusted R^2 is 0.8331, which is greater than 0.8, indicating The goodness of fit of the model is extremely high. The significance of entrepreneurial opportunity recognition, emotional intelligence and professional category is less than 0.05. The regression coefficient of entrepreneurial opportunity recognition and emotional intelligence is greater than 0, and the regression coefficient of professional category is less than 0. It can be seen that entrepreneurial opportunity recognition and emotional intelligence have a significant positive correlation with entrepreneurial intention, and professional category has a significant negative correlation with entrepreneurial intention.

The F value of the regression equation of Model 5 is 84.93, and the P value is significant at the 1% level, which indicates that the establishment of model 1 has significant significance. The adjusted R^2 is 0.8375, which is greater than 0.8, indicating that the goodness of fit of the model is high. The significance of emotional intelligence and professional category is less than 0.05. The regression coefficient of entrepreneurial opportunity recognition and emotional intelligence is greater than 0. The professional category of regression coefficient is less than 0. It can be seen that entrepreneurial opportunity recognition and emotional intelligence have a significant positive correlation with entrepreneurial intention, while professional categories have a significant negative correlation with entrepreneurial intention. In summary, in model 5, emotional intelligence* entrepreneurial opportunity recognition is significant at the 5% level, which shows that entrepreneurial opportunity recognition has a significant moderating role in emotional intelligence and entrepreneurial intention.

Conclusion

To study the related issues in the field of emotional intelligence and entrepreneurship of Chinese college students, we must be rooted in China, and study them in combination with the domestic environmental background and the characteristics of Chinese college students. Combining the analytical methods of normative research and empirical research, this paper integrates emotional intelligence, perceived behavior control, entrepreneurial opportunity recognition, and entrepreneurial intention into the research, builds an overall research framework, analyzes the relationship between various variables through relevant theories, and proposes and verifies the hypothesis that perceived behavior control acts as the intermediary effect between emotional intelligence and entrepreneurial intention, The hypothesis that entrepreneurial opportunity recognition plays a positive moderating role between perceived behavior control and entrepreneurial intention. The research further verified some empirical results in the previous literature, and obtained some innovative conclusions and views through empirical analysis, which enriched the existing research results and provided new ideas and perspectives for the research on the impact mechanism of emotional intelligence on entrepreneurial intention of college students in China, with certain theoretical value.

Through empirical test and analysis, we can see that all the hypotheses in this study are supported, so emotional intelligence has a significant positive impact on college students' entrepreneurial intention. Perceived behavior control plays a mediating role between emotional intelligence and college students' entrepreneurial intention, and entrepreneurial

opportunity recognition positively regulates the relationship between emotional intelligence and college students' entrepreneurial intention.

Research prospect

Based on scientific and rigorous attitude and normative research standards, this paper explored the relationship and path of college students' emotional intelligence on entrepreneurial intention. However, due to the limited time and energy, the following limitations and deficiencies may exist in the research, and we look forward to further research in the future to enrich this research field.

1. In terms of research objects, although the survey scope of this study covers the eastern, southern, western, northern and central regions of China, it is mainly universities in Yunnan Province. The research sample is 1322 randomly selected college students. Although it meets the requirements of statistical analysis and is representative, regional differences may be ignored due to the small coverage of the survey area. Therefore, the universality of the research conclusions has declined. In addition, the number of freshmen and sophomores in the data sample is large, while the number of junior and senior students is small, and the proportion of grades is slightly unbalanced. Therefore, there are some limitations in the applicability of the findings of this study. It is still necessary to further expand the scope of the survey, increase the number of samples, and adjust the proportion of different regions and grades to make the results more applicable.

2. Although the variable measurement scales of this study are all mature scales of foreign experts and scholars, which are modified through translation. These mature scales have been verified in domestic authoritative journals, and have good reliability and validity in this study. However, the situation differences of these original scales may have some errors with those of China. In the future research, we should build a new scale based on China's reality and characteristics to obtain data more in line with China's local conditions.

3. Limitations of the structural model. This paper selects the representative variables of college students' emotional intelligence, perceived behavior control, and entrepreneurial opportunity recognition to analyze college students' entrepreneurial intention. However, in the real environment, other variables may also have an impact on entrepreneurial intention, such as social support, family background, subjective norms, entrepreneurial environment and other factors may affect individual entrepreneurial intention to a certain extent. Therefore, in the future research, we can try to include more other variables into the entrepreneurial intention model for analysis and testing, carry out more in-depth research, and more effectively promote the development and progress of entrepreneurship related theories.

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