

ENTREPRENEURSHIP EDUCATION, ENTREPRENEURIAL OPPORTUNITY RECOGNITION AND PSYCHOLOGICAL CAPITAL TO INFLUENCE THE STUDENTS' ENTREPRENEURIAL INTENTION IN PRIVATE UNIVERSITIES, IN GUANGDONG

EDUCAÇÃO EM EMPREENDEDORISMO, RECONHECIMENTO DE OPORTUNIDADES EMPREENDEDORAS E CAPITAL PSICOLÓGICO COMO FATORES QUE INFLUENCIAM A INTENÇÃO EMPREENDEDORA DOS ALUNOS EM UNIVERSIDADES PARTICULARES NA PROVÍNCIA DE GUANGDONG

Article received on: 11/10/2025

Article accepted on: 3/10/2026

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The authors declare that there is no conflict of interest

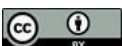
Abstract

This study aims to propose and test a model that examines the impact of entrepreneurship education on college students' entrepreneurial intentions, and also explores the mediating role of psychological capital and entrepreneurial opportunity recognition in this process. To test our research model, this article is based on the theories of planned behavior and entrepreneurial process, using a combination of quantitative methods. A total of 412 university students participated in the questionnaire, and the data were analyzed using SPSS26.0 software. After verification, entrepreneurship education positive and significantly affect entrepreneurial intention, entrepreneurship education positive and significantly affect entrepreneurial opportunity recognition, entrepreneurial opportunity recognition positive and significantly affect entrepreneurial intention, entrepreneurship education positive and significantly affect psychological capital, psychological capital positive and significantly affect entrepreneurial intention. This study provides practical support for the development of new educational programs to support current or future entrepreneurial programs for college students.

Keywords: Entrepreneurship. Education. Entrepreneurial. Opportunity Recognition. Psychological Capital. Entrepreneurial Intention.

Resumo

Este estudo tem como objetivo propor e testar um modelo que analise o impacto da educação empreendedora nas intenções empreendedoras de estudantes universitários, além de explorar o papel mediador do capital psicológico e do reconhecimento de oportunidades empreendedoras nesse processo. Para testar nosso modelo de pesquisa, este artigo baseia-se nas teorias do comportamento planejado e do processo empreendedor, utilizando uma combinação de métodos quantitativos. Um total de 412 estudantes universitários participou do questionário, e os dados foram analisados utilizando o software SPSS 26.0. Após a verificação, constatou-se que a educação empreendedora afeta positiva e significativamente a intenção empreendedora; a educação empreendedora afeta positiva e significativamente o reconhecimento de oportunidades empreendedoras; o reconhecimento de oportunidades empreendedoras afeta positiva e significativamente a intenção empreendedora; a educação empreendedora afeta positiva e significativamente o capital psicológico; e o capital psicológico afeta positiva e significativamente a intenção empreendedora. Este estudo fornece suporte prático para o desenvolvimento de novos programas educacionais destinados a apoiar programas empreendedores atuais ou futuros para estudantes universitários.



Palavras-chave: Empreendedorismo. Educação. Reconhecimento de Oportunidades Empreendedoras. Capital Psicológico. Intenção Empreendedora.

1 INTRODUCTION

Entrepreneurial behavior is formed by entrepreneurial intention, which is a long and challenging process (Elnadi, 2021). Entrepreneurial intention the formation is an important step in becoming an entrepreneur, establishing and developing a new business or enterprise (Baron, 2018). Previous scholars have pointed out that several supportive dimensions, including entrepreneurship education, entrepreneurial orientation, entrepreneurial self-efficacy, and entrepreneurial mentality, are related to the development of entrepreneurial intention for new startups (Karimi, 2020).

In the entrepreneurial context, psychological capital is a compelling and promising variable for understanding complex entrepreneurial processes (Tsai *et al.*, 2020) because it is associated with fostering creativity and maintaining entrepreneurial sustainability (Tang, 2020). Successful entrepreneurship must identify many opportunities to foster a committed entrepreneurial intention (Hanohov and Baldacchino, 2018). Opportunity recognition Develop viable business plans by acting as mediators (Bao *et al.*, 2017; Asante and Affam-Osei, 2019) to enhance entrepreneurial intention for potential growth (Shamsudeen *et al.*, 2017).

This study is based on the planning behavior theory and entrepreneurship theory, Through the empirical tests for entrepreneurship education, entrepreneurial intention, and Psychological capital, to explore the effect of entrepreneurship education on entrepreneurial intention, And the mediating role of entrepreneurial opportunity recognition and Psychological capital in entrepreneurial intention.

The questions of this study are:

RQ1: How does Entrepreneurship Education affect Entrepreneurial Intention of private university students'?

RQ2: What is the level of impact of Entrepreneurship Education on Entrepreneurial Intention of private university students'?

RQ3: What is model of private university students' entrepreneurship education, entrepreneurial opportunity recognition, psychological capital, and entrepreneurial intention?

2 LITERATURE REVIEW

2.1 The relationship between entrepreneurship education and entrepreneurial intention

Ndofirepi (2020) conducted a cross-sectional study of students, the results of which study highlighted the significant impact of entrepreneurship education on achievement needs, internal control points, risk-take tendencies, and entrepreneurial intention. Lavelle (2021) People's attitudes towards positive or negative responses to behavior are highly predictive of behavioral intentions. Sancho (2020) entrepreneurship education in higher education focuses on the cultivation of entrepreneurial thinking. When entrepreneurship education is effectively implemented, college students' perception of entrepreneurship can be improved, which in turn can change students' attitude towards entrepreneurship. Lopez (2021) proved that students receiving EE have higher entrepreneurial intention.

H1: Entrepreneurship education has a positive impact on entrepreneurial intention.

2.2 The relationship between entrepreneurship education and entrepreneurial opportunity recognition

The study by Munoz *et al.* (2021) also noted that students' entrepreneurial opportunity recognition ability can be effectively developed through entrepreneurship education. Lumpkin and Lichtenstein (2020) believe that practical learning, as an effective means to update entrepreneurs' knowledge and experience, can timely correct the deviation between vision and reality, and thus improve the efficiency and accuracy of opportunity recognition. Cohen *et al.* (2020) found that opportunity recognition

capabilities are limited, and need to be further reshaped and improved through formal teaching.

H2 : Entrepreneurship education has a positive impact on Entrepreneurial opportunity recognition

2.3 The relationship between Entrepreneurial opportunity recognition and entrepreneurial intention

Hoang *et al.* (2020) literature confirmed the impact of entrepreneurial opportunity recognition on entrepreneurial intention and achievement requirements. Manesh and Rialp Criado (2019) found that entrepreneurship education in higher education enhanced the impact of opportunity recognition on entrepreneurial intention. Ni and Ye (2018), Yaghoubi Farani *et al.* (2017) The more entrepreneurial knowledge, the stronger entrepreneurial opportunity recognition ability, and the more likely entrepreneurial intention is.

H3 : Entrepreneurial opportunity recognition has a positive impact on entrepreneurial intention.

2.4 The relationship between entrepreneurship education and psychological capital

Syed *et al.* (2020) Individuals with active psychological capital can not only correctly deal with the unexpected problems in entrepreneurship, but also flexibly respond to the entrepreneurial challenges, ensure the smooth progress of entrepreneurial activities, and realize the success of entrepreneurship. The Otache (2019) and Yousaf (2021) studies also showed that the entrepreneurial self-efficacy can be cultured by entrepreneurship education. The psychological capital study of Suksod and Somjai (2019) found that entrepreneurship education has a positive effect on promoting entrepreneurial psychological capital.

H4: Entrepreneurship education has a positive impact on Psychological capital

2.5 The relationship between psychological capital and entrepreneurial intention

Tang (2020) Psychological capital is so because of the impact it has on fostering creativity and ensuring long-term entrepreneurial viability. Cui (2021) has established a positive association between the three of the psychological capital's dimensions and entrepreneurial behavior. Fuller *et al.* (2018) believe that in entrepreneurial intention and entrepreneurship, cognition, personality, efficacy and self are indispensable, and that psychological capital concepts or cognitive factors play an important role in the formation of entrepreneurial intention. Anwar (2020) In addition, entrepreneurship is considered that self-efficacy is one of the strongest predictors of entrepreneurial intention.

H5: Psychological capital has a positive impact on entrepreneurial intention.

2.6 The mediating role of entrepreneurial opportunity recognition

Tsai *et al.* (2016) entrepreneurial intention is the result of a careful analysis of current feasible opportunities. entrepreneurship education Improve entrepreneurial intention by increasing opportunity recognition capability. entrepreneurship education It is conducive to the change of entrepreneurial attitude and the improvement of entrepreneurial ability (Sanchez,2017). Corbett (2017) found that the knowledge gained by individuals through entrepreneurship education had a positive effect on their entrepreneurial opportunity recognition.

H6 : Entrepreneurial opportunity identification has an mediating role in the relationship between entrepreneurship education and entrepreneurial intention.

2.7 The mediating role of psychological capital

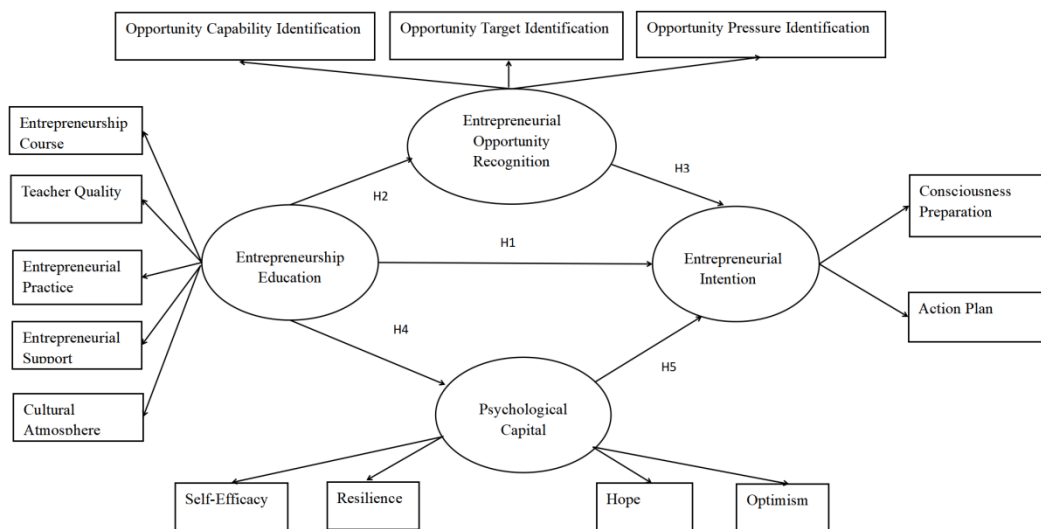
Anwar (2021) A large number of empirical studies show that entrepreneurial self-efficacy is mediated between entrepreneurship education and entrepreneurial intention. Nowinski *et al.* (2019), Wegner *et al.* (2020) recently demonstrated the indirect effects of entrepreneurship education on entrepreneurial intention through entrepreneurial self-efficacy.

H7: psychological capital Has a mediating role in the relationship between entrepreneurship education and entrepreneurial intention.

In this study, entrepreneurship education as the entry point, included entrepreneurship education as the independent variable of this study, entrepreneurial intention as the dependent variable, and psychological capital as the mediating variable underlying the mechanism of entrepreneurship education and entrepreneurial opportunity recognition on entrepreneurial intention.

Figure 1

Conceptual Framework



3 METHODOLOGY

We deliberately selected 412 university students as the study subjects for the investigation. As the research objects of the survey, these college students showed diversity in terms of gender, grade, origin, professional category, and entrepreneurial experience, which ensured the breadth and representativeness of the research sample. Through diverse data analysis, we expect to collect real feedback from Entrepreneurship Education, Entrepreneurial Opportunity Recognition and Psychological Capital on Entrepreneurial Intention and further validate its feasibility and validity. Data were analyzed using the Smart PLS 4.0 and SPSS 26.0 software. The analysis mainly includes

descriptive reliability and validity tests, and structural equation modeling (SEM) analysis.

4 CONCLUSIONS

4.1 Testing of structural equation model

In the structural equation modeling (SEM) analysis, the main role of the analytical structural model is to evaluate the causal relationship and the path coefficient between the variables. Through the structural model analysis, the researcher can determine the explanatory power of each variable to the model and the degree of interaction between the variables.

Figure 2

Structural Equation Model in SmartPLS 4.0



4.2 PLS predictive analysis

According to S. Wold and C. Albano *et al.*, if the difference between PLS S-LM (i.e., the difference between PLS-SEM_RMSE and LM_RMSE) is generally low; if the

differences are generally high, not; if most models are low, the few models are moderate. As shown in Table 1 the difference between the errors of the PLS model and the LM model is very small. Therefore, we can conclude that our model has a strong predictive power.

Table 1

Partial Least Squares (PLS)

Variable	Construct	Q2 Predict	PLS-SEM -RMSE	LM-RMSE	PLS-LM
Psychological Capital	Self-efficacy	0.135	0.837	0.844	-0.007
	Resilience	0.181	0.731	0.735	-0.004
	Hope	0.232	0.824	0.829	-0.005
	Optimism	0.170	0.877	0.886	-0.009
	Opportunity capability identification	0.224	0.850	0.856	-0.006
Entrepreneurial Opportunity Recognition	Opportunity target identification	0.162	0.940	0.951	-0.011
	Opportunity pressure identification	0.252	0.968	0.979	-0.011
	Conscious preparation	0.273	0.803	0.807	-0.004
Entrepreneurial Intention	Action plan	0.213	0.810	0.818	-0.008

4.3 Direct path analysis

Table 2 shows the direct pathway coefficients and the related statistics. The hypothesis that H1-H5 are verified.

Table 2*Direct Path Coefficients*

No.	Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
H1	Entrepreneurship Education-> Entrepreneurial Intention	0.249	0.249	0.049	5.114	0.000
H2	Entrepreneurship Education-> Entrepreneurial Opportunity Recognition	0.569	0.568	0.040	14.262	0.000
H3	Entrepreneurial Opportunity Recognition-> Entrepreneurial Intention	0.229	0.228	0.050	4.593	0.000
H4	Entrepreneurship Education-> Psychological Capital	0.538	0.538	0.045	12.012	0.000
H5	Psychological Capital-> Entrepreneurial Intention	0.338	0.337	0.044	7.728	0.000

4.4 Indirect path analysis

Table3 presents the mediation effects of the two different pathways in the studied model. Mediation analysis was used to explore whether the relationship between two variables is transmitted through a third variable. The indirect effect generated by these path are significant.

Table 3*Mediation Effect*

No.	Path	Original sample (O)	Bias-corrected 95% CI		P-value
			2.50%	97.50%	
H6	Entrepreneurship Education -> Entrepreneurial Opportunity Recognition -> Entrepreneurial Intention	0.130	0.075	0.196	0.000
H7	Entrepreneurship Education -> Psychological Capital-> Entrepreneurial Intention	0.185	0.128	0.248	0.000

5 DISCUSSION

In this paper, on the basis of the research done in the existing literature, Combined with the current situation of entrepreneurship education in colleges and universities, Based on the theory of planning behavior, Based on the planned behavioral theory and the entrepreneurship theory, Through the empirical tests for entrepreneurship education, entrepreneurial intention, entrepreneurial opportunity recognition, and psychological capital, To explore the effect of entrepreneurship education on entrepreneurial intention among students of private universities in Guangdong, And the mediating role of entrepreneurial opportunity recognition and psychological capital in it.

This paper suggests to strengthen the construction of entrepreneurship related courses, constantly strengthen entrepreneurship practice education, create a positive entrepreneurial cultural atmosphere, the comprehensive popularization is conducive to the improvement of students' comprehensive ability, but also can stimulate the entrepreneurial intention of potential entrepreneurs, and promote the occurrence of entrepreneurial behavior. The sample data of this study is limited by the subjects, number, and time. To further expand the collection of sample data and improve the improvement of data validity through more means will provide a more convincing basis for the demonstration of this study model.

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Authors' Contribution

All authors contributed equally to the development of this article.

Data availability

All datasets relevant to this study's findings are fully available within the article.

How to cite this article (APA)

Song, D., & Sungkhamanee, K. (2026). ENTREPRENEURSHIP EDUCATION, ENTREPRENEURIAL OPPORTUNITY RECOGNITION AND PSYCHOLOGICAL CAPITAL TO INFLUENCE THE STUDENTS' ENTREPRENEURIAL INTENTION IN PRIVATE UNIVERSITIES, IN GUANGDONG. *Veredas Do Direito*, 23(6), e235865. <https://doi.org/10.18623/rvd.v23.5865>