

## THE INFLUENCE OF ENTREPRENEURSHIP EDUCATION ON UNIVERSITY STUDENTS' ENTREPRENEURIAL INTENTION

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### Abstract

With the implementation of central government's policy of "mass entrepreneurship and innovation" in China, it has become a national strategy to strengthen entrepreneurship education to urge college graduates to start their own businesses, so as to enhance the overall development and employment of college students. Chinese colleges and universities have set off an upsurge of entrepreneurship education. After analyzing the existing problems of entrepreneurship education and based on the Theory of Planned Behavior, this paper proposed the "TSO" (Theory Study, Simulation and Operation) theoretical model about the effects of entrepreneurship education on students' entrepreneurial intention. The objectives are to find out the antecedent factors influencing college students' entrepreneurial intention and to cultivate their innovative and entrepreneurial ability as well as to improve the quality of running colleges. 2,500 undergraduate students from 11 general universities in Guangxi of China were selected as the research objects by random sampling. Questionnaires were issued to these students and 2,420 valid questionnaires were collected. After obtaining data, this study carried out validity and reliability analysis, descriptive analysis, regression analysis with the help of statistical software. The results reveal that the three independent variables—theory study, simulation training, and operation of entrepreneurial education have positive effects on students' entrepreneurial intention. The three hypotheses proposed were supported, which verified the "TSO" model.

**Keywords:** Entrepreneurship Education, University Student, Entrepreneurial Intention, Influence Study

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## Introduction

With the global wave of knowledge-based economy sweeping across the globe, hot topics such as enhancing national economy, upgrading the overall national strength, cultivating innovative talents, and alleviating employment pressures have created an upsurge in the promotion of entrepreneurship by scholars at home and abroad.

Adhering to the innovative concept that “Education is the Basic for a One-Hundred Year Strategy of a Nation” China has promulgated a series of documents or reports such as *Opinions on Deepening the Reform and Innovation of Entrepreneurship Education in Colleges and Universities* and *Mass Entrepreneurship and Innovation*. The central government clearly emphasizes that the reform and innovation of entrepreneurship education in institutions of higher education is an urgent need for the country to implement the strategy of innovation-driven development and to promote economic upgrading. It is also an important measure to promote the comprehensive reform of higher education as well as higher-quality entrepreneurial employment for college graduates. The Ministry of Education points out in the document titled *Opinions on Promoting Innovation and Entrepreneurship Education and Entrepreneurial Work of College Students*, “innovation and entrepreneurship education is a teaching concept and model adapting to the needs of economy, society and national development strategy.”

“Entrepreneurship” is a term coined from the field of commerce. Thanks to the vigorous

promotion of entrepreneurial practitioners, it has become an important research topic in the fields such as sociology, management, economics and organizational behavior (Li, He & Ye, 2015). Under such circumstances, the innovation and entrepreneurship education in Chinese universities has been expanding in breadth and depth. There has been a trend of “popularization” and “advancement”. Therefore, entrepreneurship education has gradually become an important starting point for basic education of colleges and universities. Against this backdrop, colleges and universities in various parts of China have conducted research on entrepreneurship education so as to improve the quality of education as well as to find solutions to the bottleneck of development. Entrepreneurship education has become key work in institutions of higher education.

Entrepreneurial Intention is regarded as an important indicator and starting point of studying college students’ entrepreneurship. It is originated from the widely accepted viewpoint proposed by Krueger: Intention is the best predictor of planned behavior, so entrepreneurial intention is the best predictor of entrepreneurial behavior as well as the central point for understanding entrepreneurial behavior (Krueger, 2007). As university students are a special group with potential entrepreneurship, their entrepreneurial intention is influenced by complex factors. If the influence of entrepreneurial intention is considered as the research perspective, it will help combine the entrepreneurial subjects, the entrepreneurial process, and the entrepreneurial

environment to further improve the research framework and theoretical system of entrepreneurship study.

### **Literature review of related studies on entrepreneurial intention and entrepreneurship education**

#### **1. Definitions of entrepreneurial intention.**

“Entrepreneurship” used to be a term of the commercial sector. Thanks to the vigorous promotion of entrepreneurial practitioners, it has become an important research topic in research fields such as sociology, management, economics, and organizational behavior. In many research areas of entrepreneurship, “entrepreneurial Intention”, first proposed by the American scholar Bird (1988), has gradually become one of the focuses of research scholars in the field of entrepreneurship at home and abroad. As the scope of the research areas gradually expands, the definition of “Entrepreneurial Intention” can be described as a matter of opinion.

From the perspective of psychology, intention or intent refers to the psychological embodiment of an individual's future behavior. Psychology studies show that intention or intent affects the individual's behavior via influencing motivation. Based on the perspective of psychology, Bird holds that so-called “Entrepreneurial Intention” refers to a subjective willingness and mental state of potential entrepreneurs before pursuing entrepreneurial goals. Such intention will be put into plan, externalized into action and finally it will develop into entrepreneurial practice (Bird, 1988).

Qian (2007), a Chinese Scholar, from the perspective of individual personality characteristics, considers Entrepreneurial Intention as a subjective attitude of potential entrepreneurs towards entrepreneurial activities. It is the description about the extent to which people have entrepreneurial quality and capability to start a business, about their attitudes towards entrepreneurship and it is the best predictor of entrepreneurial behavior.

Based on the perspective of individual social network, Wang & Wang (2013) believes that Entrepreneurial Intention reflects the individual's entrepreneurial emotions, desirability, perception, and self-efficacy. It results from the social network of the individual's major social relationships, which provides entrepreneurs with emotional and practical support, social information and resource, as well as role models for demonstration and motivation (Li, He & Ye, 2015). Based on the above scholars' views, the author holds that Entrepreneurial Intention is a belief of potential entrepreneurs engaging in entrepreneurial activities. Mainly through the social network of the individual's major social relationships, it transforms the individual's entrepreneurial emotions, desirability, perception, self-efficacy into actions and practice. It is one of the important indicators for predicting entrepreneurial behaviors.

#### **2. Literature review of related theories on factors affecting entrepreneurial intention.**

##### **2.1 Theory of Planned Behavior**

As scholars at home and abroad continue deepening their research on entrepreneurial intention, the research focus changes

from the initial studies of related factors of entrepreneurial intention gradually to the construction of theoretical models to regulate and systematically improve the conceptual framework of various types of influencing factors and to scientifically explain basic problems. The “Theory of Planned Behavior” constructed by Ajzen (1985) argues that all potential influencing factors will indirectly affect behaviors via behavioral intention. The behavioral intention is affected by three related factors. One is the Attitude of the individual, namely, the “attitude” towards choosing a particular behavior. The second factor is the Subjective Norms derived from the outside, namely, the “subjective norms” that affects an individual’s specific behavior. The last factor is Perceived Behavioral Control.

Ajzen (1985) advocates that the individual’s will control on his/her behaviors be viewed as a continuum, with one end being completely under the control of the will and the other being completely out of the will. Bird (1988) pointed out that the establishment of a new company requires formulation of detailed plans, and the Theory of Planned Behavior is very suitable for the study of entrepreneurial intention.

## 2.2 Self-Efficacy Theory

Bandura (1977), the founder of Social Learning Theory, proposed Self-Efficacy Theory in 1977 from the perspective of Social Learning to explain why individuals are motivated under special circumstances. On the one hand, Bandura insisted on the views of behavioral psychology that emphasized the study of human behavior,

objective research principles, and reinforcement in learning. On the other hand, he explored the internal psychological process, emphasizing the mediating role of the individual’s self-factors in behavior. Claiming a combination of behavior and cognition, he advocated explaining human behavior by the interaction between environment, behavior, and the individual. A large number of studies have shown that self-efficacy has a significant positive effect on entrepreneurial intention, and Self-Efficacy Theory has thus become a basic theory of predicting entrepreneurial intention (Li, He & Ye, 2015).

## 3. Literature review of related research on entrepreneurship education

College entrepreneurship education sprouted in 1947 when Professor Myles Mace of Harvard University offered a course “Management of New Venture Enterprise” for MBA students. In 1953, Peter Drucker set up the course “Entrepreneurship and Innovation” at New York University. In 1967, Babson College gradually concentrated on related courses of entrepreneurship education. College students began to have the opportunity to take systematic entrepreneurial courses. Entrepreneurship education came to the fore (Mcmullan & Long, 1987). The formal proposal of entrepreneurship education in China began with the document *Education Revitalization Plan for the 21<sup>st</sup> Century* which was promulgated in December 1998. Since the 1990s, with the increasingly fierce global competition, more and more countries were aware that cultivating more entrepreneurial human resources and “T-type

talents" is an important guarantee for promoting economic development. In this regard, entrepreneurship has gradually become a major trend of the global economy, and entrepreneurship education has become an important starting point for basic education in colleges and universities.

After sorting out previous literature, we found that the researches on entrepreneurship education revolved around three themes: the theory and practice model of entrepreneurship education, entrepreneurship education system, and influencing factors of entrepreneurship education.

Two kinds of theoretical models are typical for the research on the theory and practice model of entrepreneurship education of college students. One is the TPB (Theory of Planned Behavior) model constructed by scholar Ajzen (1991), which mainly consists of Attitude towards entrepreneurship, Subjective Norms and Perceived Behavioral Control (Ajzen, 1991). The other is the SEE (Entrepreneurial Event Model) proposed by Shapero & Sokol (1982). This model mainly includes three factor variables: perceived desirability, propensity to act, and perceived feasibility. The combination of theory and practice of Béchard & Grégoire (2005) has generally been recognized by the academia of entrepreneurial education. Their education model advocates teaching knowledge of management as well as skills. Through various forms of practical activities, this model helps students acquire entrepreneurial skills by experiencing the process, tempering their will,

cultivating their abilities.

Researches on entrepreneurship education systems for college students mainly focus on the setting of goals, entrepreneurship education courses (including entrepreneurship conception, financing, establishment, management, etc.), teacher training, and institutional system (implementation system and management system) and policy security system (including national policies and regulations, government, enterprises, schools, social organizations and other logistics groups).

Researches on the influencing factors of entrepreneurship education for college students mainly focus on two types. One type is the subject factors of the individual, which mainly includes the individual's characteristics of entrepreneurship, the individual's background, and gender differences. The other is environmental factors at the social level, including policies and systems, macroeconomics, employment situation, social culture, market order, business opportunities, entrepreneurship education, platform support, and network relationships.

#### 4. Literature review of the Influence of entrepreneurship education on entrepreneurial intention

Based on the perspective of influence of entrepreneurial education on entrepreneurial intention, Cluoes' regression analysis (Yang, Yin & Wang, 2017) showed that entrepreneurship education for students had a positive effect on their entrepreneurial intention. Chen, Greene & Crick (1998), through field research in a US college, found that management courses offered

to MBA students were positively related to their entrepreneurial intention. Linan & Chen (2009) carried out further research and found that the number of management courses that students had attended was positively related to entrepreneurial intention. Hills (1988) interviewed the experts and scholars who enjoyed high prestige in the field of entrepreneurship education and found that educational goals, features and management of curriculum, and issues of curriculum development can affect the results of entrepreneurial education. Zhou, Yan & Wang (2016), in the results of their descriptive statistics and logistic regression analysis, showed that professional entrepreneurship education, entrepreneurship practice training would help promote their entrepreneurship practice of college students. They further revealed that innovative activities and entrepreneurial practice training contributed more to the formation of entrepreneurial intentions. The likelihood to form entrepreneurial intentions for those who had involved in innovation activities and entrepreneurship training was 1.75 and 2.69 times than that of those without relevant experience. Wang, Bo & Lei (2016) conducted a nationwide survey of undergraduates and found that participation in the entrepreneurial process and business operations had the greatest positive impact on entrepreneurial intention. After a survey of graduates from nine universities in Xi'an, Lu, Peng & Kang (2013) carried out regression analysis which showed that talent cultivation models, off-campus internship and practice opportunities offered by the university

had a significant effect on entrepreneurial intention of college students. Chen & Wang (2016) conducted a Pearson correlation analysis of students in three universities in Shandong Province, China. The results of the analysis showed that entrepreneurship courses and entrepreneurial practices had a very significant effect on entrepreneurial intention.

### Comment on related researches

In summary of above overview of related researches, entrepreneurship education in foreign universities has formed a paradigm composed of thorough curriculum systems, diversified institutional systems, improved support systems, plural evaluation systems, and professional teacher systems. The start-up of entrepreneurship education in Chinese universities is relatively late, but relevant research results, content structure, and research methods have also made great progress. Due to the influence of multiple factors such as cultural background, institution, and education system, there are still some deficiencies in entrepreneurship education in Chinese universities, and there is great room for improvement.

(1) Lack of funds. Innovation and entrepreneurship education in China is still in its initial development stage because of the shortage of venture capital funds. Strictly speaking, innovation and entrepreneurship education without venture capital funds is not true innovation and entrepreneurship education.

(2) Split in theory and practice In China. The forms of innovation and entrepreneurship

education mainly include the following: firstly, universities or colleges offer entrepreneurship courses for college students, such as the public compulsory course “Foundation of Entrepreneurship”, SYB, SIYB, KAB and other entrepreneurial module courses (Ha & Gao, 2014). Second, universities organize students to participate in National Program of Innovation and Entrepreneurship Training for College Students and other relevant competitions. They also provide innovation and entrepreneurship incubators for training college students. However, lack of real practice in entrepreneurial companies, the theoretical teaching of innovation and entrepreneurship education is out of touch with practice.

(3) Students' lack of enthusiasm. Because the above forms of innovation and entrepreneurship education are almost theoretical teaching or theorizing in the simulated teaching stage, there is no practical operation in entrepreneurial enterprises. Therefore, students can not experience and feel the real innovation and entrepreneurship in company operations, and thus their passion for innovation and entrepreneurship decline in the learning process.

## Research Objective

Exploring the influence of entrepreneurship education on students' entrepreneurial intention, this study has the following objectives: (1) to find out the antecedent factors affecting college students' entrepreneurial intention so as to facilitate more targeted entrepreneurial education in universities and to solve the problems

existing in China's entrepreneurship education at the current stage; (2) to cultivate students with a certain degree of entrepreneurship, entrepreneurial awareness, entrepreneurial skills, and entrepreneurial ability to enhance their entrepreneurial aspirations and to promote the comprehensive development of college students in Guangxi; (3) to change the dismaying employment situation of college students in Guangxi and to promote the quality of self-employment and entrepreneurship for undergraduates in Guangxi so as to improve the quality and reputation of universities in Guangxi.

## Research Methods and Data

After conducting an investigation of the situation of entrepreneurship education in 11 ordinary colleges or universities in Guangxi of China, this study constructs a theoretical model of entrepreneurship education and proposes theoretical hypotheses which will be verified or falsified.

### 1. Research Methods

The questionnaires of this study made reference to some items in questionnaires of scholars at home and abroad including Li (2013), Xing, Wei & Liang (2014), Peng (1995), Guo et al. (2009), Chen, Yao & Xu (2012), Peterman & Kennedy (2003), Birdthistle (2008), Licht (2006), Phan, Kamwong & Wang (2002), Linan & Chen (2009), Xu & Mei (2014). Combining with the actual conditions of colleges and universities in Guangxi, preliminary questionnaire was compiled and the original questionnaire of entrepreneurship

education (test volume) was finally formed on the basis of consultation with entrepreneurship education experts from six universities, including Baise University, Hechi University, and Guangxi University. A small sample test was carried out to check the questionnaire, which showed high reliability and validity.

According to the three variables-behavioral attitudes, behavioral norms, and self-perceived control of the Theory of Planned Behaviors (Fayolle, Gaily & Lassas-Clerc, 2006) in combination with reality, this study identified three pre-eminent factors theory study, simulation training, operation incubation of entrepreneurship education's influence on entrepreneurial intention were identified. Considering the representativeness and persuasiveness of the sample, the investigation covered universities in eastern, southern, western, northern and central regions of Guangxi, including Hezhou University, Wuzhou University, Qinzhou University, Beihai College of Beihang University, Baise University, Youjiang Medical University for Nationalities, Guilin University of Technology, Guangxi Normal University, Guangxi University of Science and Technology, Guangxi University for Nationalities, and Nanning University. 2,500 students majoring in various disciplines of these universities were selected randomly to be investigated by questionnaires as the study subjects. The questionnaire was conducted in an anonymous manner and did not involve the privacy of any university or individual. And the data was analyzed by the software SPSS to explore the influence of entrepreneurship education on entrepreneurial

intention.

## 2. Data collection and analysis

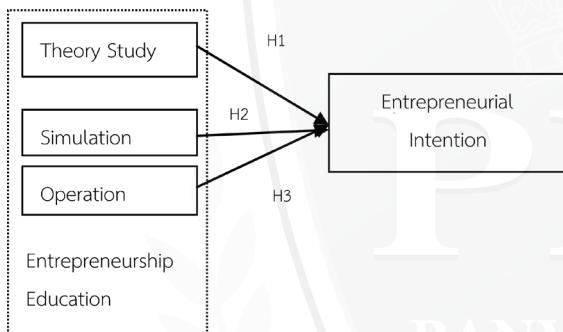
200 questionnaires were distributed in each university except for Baise University where 500 questionnaires were distributed. A total of 2,500 questionnaires were distributed and 2,450 questionnaires were returned. According to the research need, the questionnaires were screened. The following three types of invalid questionnaires were excluded: (1) Under representative questionnaires. If the total number of questionnaires returned by the same university was less than 100, all the questionnaires filled by the students in this university shall be excluded. (2) The questionnaires in which items were missed in the section of personal information. (3) Questionnaires with missing items in the main body of the questionnaire. In the end, 2,420 effective questionnaires were obtained, and the effective recovery rate was 98.8%. Only when the recovery rate of the questionnaires exceed 70% can ensure the validity of the survey results (Li, 2004).

## Model and Hypotheses

The author has been working in one of the universities of Guangxi and feed the thoughts, observations, and reflections on the reality into this research. Combining the Theory of Planned Behaviors and the Theory of Learning in Practice, the author proposes the theoretical model and hypotheses about the influence of entrepreneurship education on entrepreneurial intention so as to solve the problems in entrepreneurship

education of colleges and universities in China.

Based on the Theory of Planned Behaviors (Ajzen, 1991), this theoretical model measures the influence of entrepreneurship education on entrepreneurial intention with three dimensions: Theory Study, Simulation, Operation, namely, the three independent variables. The influence of Theory Study, Simulation and Operation on the dependent variable Entrepreneurial Intention is abbreviated into “TSO” model which is shown in the following figure 1.



**Figure 1** The Theoretical Model of Entrepreneurship Education

The Theoretical Model of Entrepreneurship Education mainly divide all the students of a university into three categories according to training objectives and their entrepreneurial interests. In accordance with their aptitude, corresponding entrepreneurship education is carried out accordingly. First, all the students have to take courses of general education. Second, according to their interest in innovation and entrepreneurship, students will receive different simulation training based on innovative training program and other various types of competitions. Third, based on their interest,

the above two types of students participate in two types of operations of innovation and entrepreneurship to develop practical entrepreneurial ability. The students are divided into groups, one of which are assessed and sent to study at the entity entrepreneurship institute supported by the university's funds. Some other are re-selected to enter the business incubation base and business park for college students to receive practical training of authentic projects.

The students entering entrepreneurship institute first learn theories of business management and take professional courses such as Business Management, Entrepreneurial Skills, Entrepreneurial Simulation, and Entrepreneurial Practice. Then they receive simulation training of business management, mainly including project-driven team training based on network environment, 3D modeling by simulation software, simulating business operations in flash, so as to master the basic knowledge of business operations. Finally, practical training is conducted. All the projects of student teams will be incubated in incubation bases provided by the university in free. Meanwhile, the students (teams) will form the characteristics of five “one hundred percent” after entity-based innovation and entrepreneurship education: Namely, 100% of students join projects; 100% join entrepreneurial teams; 100% practice in bases; 100% guided by tutors; 100% supported by funds.

After logical reasoning, three hypotheses are proposed based on the theoretical model and the relationship between the various components.

H1: Taking courses on entrepreneurial theories has a positive effect on students' entrepreneurial intention.

H2: Entrepreneurial Simulation has a positive effect on students' entrepreneurial intention.

H3: Entrepreneurial operation training has a positive effect on students' entrepreneurial intention.

## Empirical Analysis

Spss 21.0 was used to test the consistency of the three hypotheses. Specifically, reliability and validity of the data collected through questionnaires were analyzed to verify the authenticity and reliability of the data. Then we carry out descriptive analysis and regression analysis of related variables.

### 1. Reliability analysis

**Table 1** Reliability Test of the Variables

Variables	Cronbach Alpha
Theory Study	0.907
Simulation	0.843
Operation	0.861
Entrepreneurial Intention	0.697

**Data sources:** The author compiled data from Spss analysis results

Table 1 shows that the reliability coefficient of entrepreneurial intention is 0.697 which is close to 0.7, and the reliability coefficient of the other three variables are all higher than 0.7. Therefore, the reliability of the variables involved in this study is acceptable, and the sample data is accurate and reliable.

## 2. Validity Test

**Table 2** Validity Test of the Variables

Variables	KMO	Chi-square	DF (Degree of Freedom)	Sig
Theory Study	0.904	8765.753	15	0.000
Simulation	0.802	4143.493	6	0.000
Operation	0.850	5559.763	11	0.000
Entrepreneurial Intention	0.575	842.323	3	0.000

**Data source:** Compiled from Spss analysis results

According to Table 2, the KMO of entrepreneurial intention is 0.575, lower than 0.6, which is acceptable. The KMOs of the remaining three variables are all higher than 0.7, and all pass the Bartlett Test of Sphericity ( $P = 0.000$ ), thus indicating the validity of all the variables is acceptable. The sample data can effectively express the conceptual information of the variables.

The analysis of reliability and validity shows that the sample data is reliable and authentic.

### 3. Descriptive analysis

Of the 2,420 available questionnaires for this survey, all were answered by undergraduate students in 11 universities. Specific data are shown in Table 3 and Table 4.

**Table 3** Descriptive Analysis

Questions	Options	Frequency	Percentage
Gender	Female	1,597	66.0
	Male	823	34.0
Grade	Others	1,943	80.3
	Juniors	352	14.5
	Seniors	125	5.2
Student cadres or not?	General students	1,261	52.1
	Student cadre	1,159	47.9
Grade credit ranking	Under 51%	422	17.4
	Between 31-50%	646	26.7
	Between 11-30%	881	36.4
	Top 11%	471	19.5
Total		2,420	100.0

**Data source:** Compiled from SPSS analysis results

Table 3 indicates that, of the sample students', 1,597 are girls, accounting for 66%; 823 boys. Girls are significantly more than boys, in line with the current reality that male students in China's colleges and universities are less than girls. In terms of the grade distribution,

there are 352 juniors, 125 seniors and other 1,943. According to the grade credits of students, there are 471 at top 11% 881 between 11-30%, 646 between 31-50%, 422 behind 51%, which indicate that students' grade scores are evenly distributed. 1,159 students served as student

cadres and 1,261 are not student cadres, but their proportion remains basically the same.

The sample had a good representation.

**Table 4** Means and standard deviations

Variables	N	minimum	maximum	Means	Standard deviations
Theory Study	2,420	1.00	5.00	3.26	0.74
Simulation	2,420	1.00	5.00	3.14	0.72
Operation	2,420	1.00	5.00	2.23	0.85
Entrepreneurial Intention	2,420	1.00	5.00	3.09	0.67

**Data sources:** Compiled from SPSS analysis results

Table 4 shows that the sample has the highest degree of recognition of theoretical learning, with an average score of 3.26. For the variable of operation, the sample as a whole shows a non-approval attitude, with an average score of 2.23 and a standard deviation of 0.85, indicating large fluctuations. The other two variables show neutral attitude. Based on such results, it is possible to conduct more positive

entrepreneurship education, specifically in strengthening practical training.

#### 4. Correlation analysis

Correlation between entrepreneurial intention and the three variables (theory study, simulation, and operation) was analyzed so as to prepare for multiple regression analysis to prove the theoretical model and hypotheses.

**Table 5** Correlation analysis of entrepreneurial intention and the variables

	El	Theory Study	Simulation	Operation
El	1			
Theory Study	0.434 <sup>**</sup>	1		
Simulation	0.477 <sup>**</sup>	0.787 <sup>**</sup>	1	
Operation	0.406 <sup>**</sup>	0.454 <sup>**</sup>	0.474 <sup>**</sup>	1

Note: <sup>\*\*</sup> indicates significant at the level of 0.1 (two-tailed) El = Entrepreneurial Intention

**Data sources:** Compiled from SPSS analysis results

Table 5 shows that the person correlation coefficients between entrepreneurial intention and theory study, simulation, operation are all higher than 0.4, and all of the correlation coefficients are significant. Thus there are significant positive correlations between entrepreneurial intention and the three variables. Their relationship is very close indicating that regression

analysis of the influence relations are feasible.

### 5. Regression analysis

Regression analysis of the relations between entrepreneurial intention and theory study, simulation, operation is showed in Table 4 and Table 5.

**Table 6** Multicollinearity Analysis

Model	Non-standardization Coefficients		Standardization Coefficients	t	p	Collinearity statistics	
	B	Standard error				Tolerance	VIF
Constants	-0.0001	0.18	-	.000	1.000	-	-
Theory Study	0.91	0.029	0.91	3.178	0.001	0.375	2.668
Simulation	0.262	0.029	0.262	9.016	0.000	0.367	2.728
Operation	0.243	0.020	0.243	11.985	0.000	0.749	1.334

**Dependent variable:** Entrepreneurial intention

**Data source:** Compiled from SPSS analysis results

Table 6 shows that the VIF of Theory Study is 2.668; that of simulation is 2.728; operation 1.334. The VIFs of the three variables are all between 0 and 10, indicating no serious

collinearity between the variables. Therefore, it is feasible to study the influence relations of independent variables and dependent variables.

**Table 7** Regression analysis of entrepreneurial intention and the variables

DV	Independent variables	Non-standardized Coefficients		Standardized Coefficients Beta	t	p	R <sup>2</sup>	Adjustment R <sup>2</sup>	F
		B	Standard error						
EI	Constants	1.450	0.063	-	23.157	0.000	0.286	0.284	107.509 <sup>**</sup>
	Theory Study	0.100 <sup>**</sup>	0.026	0.101 <sup>**</sup>	3.881	0.000			
	Simulation	0.274 <sup>**</sup>	0.027	0.292 <sup>**</sup>	10.229	0.000			
	Operation	0.153 <sup>**</sup>	0.017	0.192 <sup>**</sup>	9.177	0.000			

\*p<0.05 \*\*p<0.01 DV = Dependent Variable

Taking the three variables of theory study, simulation, and operation as independent variables and entrepreneurial intention as the dependent variable, multilinear regression analysis shows in Table 7 that the R-square of the model is 0.286, which means that these three variables can explain the change of 28.6% in entrepreneurial intention. Moreover, the F value of the model is 107.509, sig<0.01 which passes the F-test, indicating that at least one of the three variables affect entrepreneurial intention.

The B value of Theory Study is 0.100 with sig<0.01. That of simulation is 0.274 with sig<0.01. And that of operation is 0.153 with sig<0.01. The regression coefficients of all the three variables are significant. The regression coefficient B for all the three variables is greater than 0, indicating that they all have positive effects on entrepreneurial intention.

## Conclusion and Discussion

### 1. Conclusion

The above empirical analysis shows that each of the independent variables (theory study, simulation, operation) has influence on entrepreneurial intention, and each of them has significant positive effect on entrepreneurial intention. The higher the sample's recognition of theory study, simulation and operation, they have stronger entrepreneurial intention.

Thus the proposed three hypotheses H1, H2, and H3 are all verified, indicating that the proposed "TSO" model is valid and the development of entrepreneurship education including theory study, simulation, and operation plays a positive role in enhancing students' entrepreneurial intention.

### 2. Discussion

Before the research on entrepreneurship education, some scholars put forward entre-

preneurial education models such as “theory + case”, “simulation + platform”, “guidance + practice”, “major subjects + entrepreneurship” (Ning & Li, 2012), but these models are still not perfect and comprehensive and cannot solve the common problems in entrepreneurship education. These problems include that the models are not clear, that the students are not involved in a wide range, and that the participation is not active. This research proposes the “TSO” model of entrepreneurship education in colleges and universities. Based on the Theory of Planned Behavior, more consideration is given to the actual situation of students in this model. From the perspective of subjective norms, this model puts forward the antecedent factors that affect students’ entrepreneurial intention. As a good model, it comprehensively covers entrepreneurial education models such as “theory + case”, “simulation + platform” proposed by the previous scholars, and comprehensively and systematically solves the shortcomings in entrepreneurship education. However, this paper only proposes entrepreneurial education model and selects sample based on the actual situation in colleges and

universities of Guangxi, China, which inevitably has certain limitations.

## Prospect

This study randomly selected 2,500 students from 11 colleges or universities in Guangxi and found that entrepreneurship education, from the three aspects-theory study, simulation training, and operation incubation, can significantly enhance the entrepreneurial intention of college students. The enhancement of entrepreneurial intention can promote the employment rate and quality of universities and colleges by improving graduates’ employment and self-employment. It will promote the formation of atmosphere of innovation and entrepreneurship in the society.

In addition, entrepreneurial environment and some demographic variables on students’ entrepreneurial intention have not been taken into account in the theoretical model. The relationship between the students’ entrepreneurial intention and practical entrepreneurial behaviors after graduation will be the focus of future research.

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