



Research on the Mechanism of Entrepreneurial Education Quality, Entrepreneurial Self-efficacy and Entrepreneurial Intention in Social Sciences, Engineering and Science Education

He Jiang

Zhejiang University, CHINA

Wei Xiong

Zhejiang University, CHINA

Yonghui Cao

Henan University of Economics and Law, CHINA
Henan Institute of Science and Technology, CHINA

Received 1 December 2016 • Revised 1 January 2017 • Accepted 1 March 2017

ABSTRACT

Entrepreneurship Education in Colleges and universities is a profound reform of China's higher education paradigm. Which is a necessary choice for Chinese universities to break through the traditional educational model. It is an important measure to cultivate college students' entrepreneurial consciousness, entrepreneurship and entrepreneurial ability. On the whole, entrepreneurship education in China is still in the stage of exploration and rapid development. It is great practical significance and theoretical value to clarify the relationship between the entrepreneurship education quality and entrepreneurial intention. Based on this, this paper takes the social sciences, engineering and science students as the research object, and empirically explores the relationship among the entrepreneurship education quality, entrepreneurial orientation, entrepreneurial self-efficacy and entrepreneurial intention. We find that: (1) the quality of entrepreneurship education will positively affect entrepreneurial intention, and entrepreneurial self-efficacy plays as an intermediary role; (2) the relationship between the quality of entrepreneurship education and entrepreneurial self-efficacy will be affected by the adjustment of entrepreneurial orientation, the stronger the level of entrepreneurial orientation, the stronger the positive relationship between the entrepreneurship education quality and entrepreneurial self-efficacy; (3) the stronger the level of entrepreneurial orientation, the stronger the mediating effect between entrepreneurial self-efficacy and entrepreneurial intent.

Keywords: entrepreneurship education quality, entrepreneurial orientation, entrepreneurial self-efficacy, entrepreneurial Intention, engineering, science

© **Authors.** Terms and conditions of Creative Commons Attribution 4.0 International (CC BY 4.0) apply.

Correspondence: Yonghui Cao, *School of E-commerce and Logistics Management, Henan University of Economics and Law, Zhengzhou, 450046, China. School of Economics & Management, Henan Institute of Science and Technology, Xinxiang, 453003, China.*

✉ lurky2000@126.com

State of the literature

- How to improve the quality of entrepreneurship education in Colleges and universities, so that the real value of entrepreneurship education to achieve its function and value has become a topic worthy of further study and research of Higher Education.
- Scholars believe that the individual entrepreneurial behavior behind the individual entrepreneurial intention, but not everyone has entrepreneurial intentions. Based on this, entrepreneurial intention is the best entry point for university students' entrepreneurship research.
- The previous studies did not answer the question of what kind of factors in entrepreneurial education would affect the entrepreneurial intention of university students.

Contribution of this paper to the literature

- From the perspective of quality of entrepreneurship education in Colleges and universities, a detailed study of the entrepreneurship education quality, entrepreneurial self-efficacy influence on entrepreneurial intention, and puts forward the regulation effect of entrepreneurial orientation on the relationship between them, which is of great significance for the development of entrepreneurship education theory.
- This study has a unique perspective, an important discovery, to understand the key factors affecting the entrepreneurial intention of university students, entrepreneurship education in terms of an antidote against the disease provides the basis for the formulation of relevant policies, entrepreneurs and entrepreneurship education in Colleges and universities.
- This study covers a number of colleges and universities across the country, which is a certain degree of universality, and in-depth analysis of the data obtained, so we can correct the employment concept of university students.

INTRODUCTION

As a kind of brand-new education idea and mode of entrepreneurship education in Colleges and universities which has attracted great attention and support from the government and, has made positive progress. But on the whole, compared with the foreign countries, entrepreneurship education in China is still at the exploratory stage, the scale and quality of entrepreneurship education is far from the expected target. How to improve the quality of entrepreneurship education in Colleges and universities, so that the real value of entrepreneurship education to achieve its function and value has become a topic worthy of further study and research of Higher Education. British (1988) survey report shows that entrepreneurial ability can be obtained through learning, and suggested that colleges and business schools to carry out entrepreneurship education for college students entrepreneurs. Scholars pointed out that institutions of higher learning and business schools should not only teach students the knowledge of business management, but also should teach the relevant knowledge of college students to cultivate the entrepreneurial passion of College Students (Fatoki O. , 2014; Shamsudin S F F B, Al Mamun A, Nawi N B C, et al. , 2016). Scholar argues

that when the economy is in transition, the state should give priority to and support the creation, innovation and entrepreneurial ability, especially young people (Carsrud, Brnnback, 2011; Diehl, 2016; Kirby, Ibrahim, 2017). McMullan and Long pointed out that entrepreneurship education can cultivate individual innovative thinking and entrepreneurial ability. Scholars believe that entrepreneurship education for university students has the following effects: first, to adapt to the adjustment of national education policy; second, to promote the employment of university students and the development of social economy. The above research results show that the colleges and universities carry out entrepreneurship education which plays a positive role in promoting economic and social development (Wilson, Kickul, Marlino, 2007; Fayolle, 2014; Hattab, 2014; Pantea, 2016). Solomon believes that entrepreneurship education should be based on the cultivation of entrepreneurial spirit and entrepreneurial ability. Other scholars pointed out that entrepreneurship education should be to create and run a new enterprise as the goal, curriculum content, in addition, the need to strengthen college students' entrepreneurship training, entrepreneurship and entrepreneurial behavior. Scholars believe that the individual entrepreneurial behavior behind the individual entrepreneurial intention, but not everyone has entrepreneurial intentions. Based on this, entrepreneurial intention is the best entry point for university students entrepreneurship research (Zhao, Seibert, 2005; Shamsudin, Al Mamun, Nawi, et al., 2016).

Through analyzing the literatures, we found that the research on the entrepreneurship of university students, from the object of study, most of the scholars take the students of the business school, the students of entrepreneurship, or the students who have received the knowledge of entrepreneurship and management as the research object; from the research point of view, most of the studies are based on whether students receiving entrepreneurship education is the most accepted boundaries, management knowledge instead received entrepreneurship education, to carry out their research.

It is worth noting that most of the researches are the concept of entrepreneurship education as a large category to study its impact on the entrepreneurial intention of university students (Dess, Ireland & Zahra, 2003; Kristiansen, Indarti, 2004; Higgins, Smith, Mirza, 2013; Mononen-Batista, Brunila, 2016). That is to say, the previous studies did not answer the question of what kind of factors in entrepreneurial education would affect the entrepreneurial intention of university students. From the perspective of quality of entrepreneurship education in Colleges and universities, a detailed study of the entrepreneurship education quality, entrepreneurial self-efficacy influence on entrepreneurial intention, and puts forward the regulation effect of entrepreneurial orientation on the relationship between them, which is of great significance for the development of entrepreneurship education theory. In addition, the research of this thesis has reference value for reality: First of all, this study has a unique perspective, an important discovery, to understand the key factors affecting the entrepreneurial intention of university students, entrepreneurship education in terms of an antidote against the disease provides the basis for the formulation of relevant policies, entrepreneurs and entrepreneurship education in Colleges and universities. Secondly, this

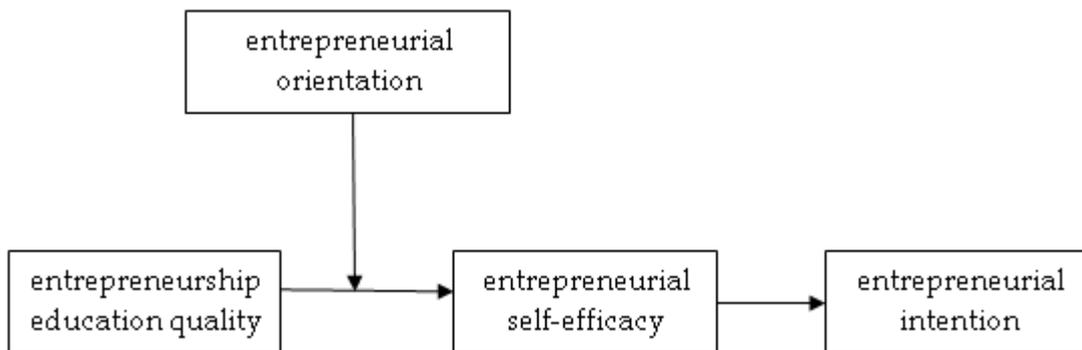


Figure 1. The framework of this study

study covers a number of colleges and universities across the country, which is a certain degree of universality, and in-depth analysis of the data obtained, so we can correct the employment concept of university students. Based on the above analysis, this paper takes the entrepreneurship education quality as the starting point, in-depth study of the entrepreneurship education quality, entrepreneurial orientation, entrepreneurial self-efficacy and entrepreneurial intention, in order to clarify its mechanism, promote the theory of entrepreneurship education, The specific research framework is shown in **Figure 1**.

LITERATURES REVIEW

Entrepreneurship education quality and entrepreneurial intention

Wilson (2007) find that entrepreneurship education improve university students' entrepreneurial intention by teaching students entrepreneurial knowledge, shaping entrepreneurship quality, training students' awareness of entrepreneurship and entrepreneurial ability(Wilson, Kickul, Marlino, 2007). However, it does not indicate how to impact the entrepreneurial intentions of university students, whether through a certain channel or will have a direct impact, did not explain (Oehler, Höfer, & Schalkowski, 2015). Souitaris find that the entrepreneurship education should be as a multidimensional concept to study, after a period of 5 months of experiment of 230 students, the result showed that entrepreneurship education should be regarded as a multidimensional construct and should be researched from the theory of entrepreneurship education, curriculum design and others aspect. The study shows that learning, entrepreneurial inspiration and entrepreneurial resources are beneficial to university students' entrepreneurial program. In particular, through learning, so that students get the knowledge of business plans; entrepreneurial inspiration is to become entrepreneurs, emotional or induced events in a timely manner is essential to change, Among them, the entrepreneurial spirit is the spiritual pillar of the essential business students who engage in entrepreneurial projects; students can also benefit from a pool of resources, which can help students evaluate business philosophy and corporate development of their risk. Zhao, Seibert, Hills (2005) with a total of 5 Business School of the United States of America, the 265 master of business for structural equation modeling samples. It is pointed

out that entrepreneurship education is a multidimensional construct, and it plays an important role in the entrepreneurial intention from several aspects, such as Entrepreneurial content, entrepreneurship experience and Entrepreneurship education (Zhao, Seibert, 2005). Based on the above analysis, infer the following assumptions:

Hypothesis 1: the quality of entrepreneurship education has a significant positive effect on entrepreneurial intention

Entrepreneurial self-efficacy plays an intermediary role in the entrepreneurial education quality and entrepreneurial intention

The existing literature has empirically tested the impact of entrepreneurial education and education quality on entrepreneurial intention of university students. For example, Dyer's research suggests that entrepreneurial education courses can increase students' entrepreneurial confidence, cultivate students' entrepreneurial spirit, to increase the students' correct understanding of innovation and entrepreneurship. Krueger and Brazeal (1994) believe that entrepreneurship education can approach the students' awareness of entrepreneurship, entrepreneurial knowledge and entrepreneurial increase self-confidence, improve students' cognition on the entrepreneurial feasibility. Scholar assumes that entrepreneurship education can help university students to improve their business management capabilities and the probability of entrepreneurship. In addition, Souitaris also verified the entrepreneurial education project has a significant positive effect on entrepreneurial intention through empirical research

The sense of self-efficacy comes from the theory of social learning, which was put forward by Albert Bandura in 1970s, which is the judgment of the individual's ability to accomplish a specific task. Entrepreneurial self-efficacy is seen as the degree to which individuals believe they have the ability to become an entrepreneur. The one who has a high entrepreneurial self-efficacy, pursues more investment in the goal, more adhere to entrepreneurial process. Entrepreneurial self-efficacy is changed by direct experience, indirect experience, persuasion and encouragement and psychological state factors. The effect of change is determined by the information cognition, learning, absorption and transformation effect of the above factors. It is very important to study the ability of entrepreneurial learning and practical experience. Entrepreneurial learning efficacy, which is the individual's evaluation of the accumulation of knowledge and the ability of continuous learning, which is the judgment of the individual's tacit knowledge, the transformation of the explicit knowledge, the transformation from the experience knowledge to the practical ability. Some scholars point out that entrepreneurial self-efficacy is the direct variable of entrepreneurial intention, which determines the degree of intention and the possibility of transforming into behavior. The past experience of potential entrepreneurs, including direct and indirect experience of success and failure experience, through the acquisition of information, cognition, absorption and feedback, to achieve the transfer process of learning and ability, significantly affect the entrepreneurial self-efficacy. The greater the potential entrepreneur's ability to learn and the effect of

migration, the more confident they can learn from the experience and the ability to solve practical problems. The higher the possibility of entrepreneurship, the higher the probability of success, the stronger the degree of entrepreneurial intention. Thus, the following assumption is put forward

Hypothesis 2: entrepreneurial self-efficacy plays an intermediary role in the entrepreneurial education quality and entrepreneurial intention

The moderating effect of entrepreneurial orientation

Entrepreneurial orientation is a description of the new business development in a dynamic environment, creating new products and action tendency of research on entrepreneurial orientation are generally considered innovative, risk-taking and proactive action is the key factors of entrepreneurial orientation indispensable, will have an important effect on entrepreneurial intention and entrepreneurial performance. The current research shows that the relationship between entrepreneurial learning and entrepreneurial orientation is close and complex, and some of them think that entrepreneurial orientation is one of the motivations for learning and entrepreneurial self-efficacy (Dess, 2003). Kristiansen and Indarti (2004) proposed that potential entrepreneurs leadership, decision-making and communication management ability cannot be ignored. Entrepreneurial leadership self-efficacy, individual assessment of unknown market insight and decision-making ability (Kristiansen, Indarti, 2004). Previous studies ignore the potential entrepreneurs on the opportunities and resources use efficiency. With the use of entrepreneurial opportunity identification self-efficacy, individual identification of entrepreneurial opportunities, evaluation and utilization of capacity and utilization of entrepreneurial resources. Perceived self-efficacy is the individual identification, evaluation and identification of entrepreneurial resources, the ability of perception. Entrepreneurial self-efficacy plays an important role in the entrepreneurial intention, influence the realization of business objectives. By their influence on entrepreneurial competence perception, individual entrepreneurial behaviour in willingness and choice, to pay for the degree, the attitude to face the difficulties with manifestation and different results. Entrepreneurship Education in different entrepreneurial oriented colleges and universities, resulting in different entrepreneurial effects. When the level of entrepreneurial guidance is higher, it can stimulate the enthusiasm of college students to start their own business actively, so as to find ways to invest in the theory and practice of entrepreneurship, so as to increase their entrepreneurial self-efficacy. Thus, the following assumption is put forward

Hypothesis 3: innovation orientation plays a moderating role in the entrepreneurship education quality and entrepreneurial self-efficacy, the higher the level of entrepreneurial orientation, the stronger the positive connection between the entrepreneurial education quality and entrepreneurial intention.

In the above discussion, we assume that: (1) entrepreneurial self-efficacy plays a mediation between the entrepreneurial education quality and entrepreneurial intention; (2) entrepreneurial orientation will strengthen the positive effects of entrepreneurship education

quality on the entrepreneurial self-efficacy (the effect of regulating the first stage), but does not affect the positive relationship between entrepreneurial self-efficacy and entrepreneurial intention (not regulated second stage). Based on these assumptions, we can further infer that the higher the level of entrepreneurial orientation, the entrepreneurial education quality will have a stronger positive effect through entrepreneurial self-efficacy and entrepreneurial intention of university students. That is, the higher the level of entrepreneurial orientation, the stronger the mediating effect of entrepreneurial self-efficacy between the entrepreneurial education quality and entrepreneurial intention

Hypothesis 4: the higher the level of entrepreneurial orientation, the stronger the mediating effect between entrepreneurial self-efficacy and entrepreneurial intention.

EVALUATED MEASUREMENTS

Methods

In this study, 2 questionnaire surveys have been carried out for a period of 10 months: the object of first survey is the 80 students colleges and universities, the content including: the background information, the quality of entrepreneurship education and entrepreneurial orientation. 5 months later, the second survey is implemented. University students are still the first survey, the content of the survey includes the entrepreneurial self-efficacy and entrepreneurial intentions of these students. After each completed questionnaire, respondents are required to be sealed the envelope and sealed after the questionnaire sent directly to researchers, or by the university employment guidance department focus back to the researchers.

In the first survey, we issued a total of 400 questionnaires, the recovery of 318 valid questionnaires, the recovery rate is 79.5%. In the second survey, we fill out the first survey of 318 employees to issue a questionnaire again, a total of 258 valid questionnaires are recovered, the recovery rate is 81.1%. Among the 258 students, the male is 76%, and the average age of the sample was about the age of 22.32 (standard deviation = 6.68). From a professional, Humanities and Social Sciences is accounted for 45.8%, engineering is accounting for 39.7%, science is accounted for 14.5%. From the academic point of view, 65.1% is undergraduate, the master is about 20.2%, the 14.7% is a doctoral or postdoctoral.

Data Analysis and Results

(1) Test of discriminant validity among variables

In this study, AMOS20.0 was used to test the discriminant validity of the four key variables: the entrepreneurship education quality, entrepreneurial orientation, entrepreneurial self-efficacy, entrepreneurial intention, and contrast between multiple models. The results show that the four factor model is in good fitted, and the model is significantly superior to the goodness of fit of the model (see [Table 1](#)). The results show that the measurement has good discriminant validity.

Table 1. Results of confirmatory factor analysis

Model	χ^2	Df	RMSEA	TLI	CFI
Zero factor model a	5562.48	596	0.26	0.00	0.00
Four factor model	1031.45	548	0.05	0.92	0.93
Three factor model b	1567.26	558	0.12	0.78	0.81
Three factor model c	2121.32	558	0.11	0.80	0.81
Three factor model d	1563.12	558	0.10	0.81	0.83
Single factor model e	3928.67	567	0.17	0.48	0.49

Notes: n = 258, ** p < 0.01, * p < 0.05

a In the zero model, there is no relationship between all measurement items

b Combining the entrepreneurial education quality and entrepreneurial orientation as a potential factor

c Combining the entrepreneurial education quality and entrepreneurial self-efficacy as a potential factor

d Combining the entrepreneurial education quality and entrepreneurial intention as a potential factor

e Combining all items as the same potential factor

(2) Descriptive statistical analysis of variables

First, to do the correlation analysis among variables. The entrepreneurship education quality has a significant positive correlation with entrepreneurial self-efficacy ($r = 0.31, p < 0.01$) and entrepreneurial intention ($r = 0.54, p < 0.01$). In addition, the age ($r = 0.02$), gender ($r = 0.04$), professional ($r = 0.05$) and academic qualifications ($r = 0.03$) and the entrepreneurship education quality have no significant correlation, indicating that the entrepreneurship education quality has little difference in different age, gender, professional and academic qualifications of university students.

Hypothesis Verification

(1) Main effect test

Hypothesis 1 suggests that entrepreneurial education quality has a significant positive effect on entrepreneurial intention. In order to test this hypothesis, we first set the entrepreneurial intention as a dependent variable, and then add control variables (gender, age, profession and education), and finally the independent variables (entrepreneurial education quality) into the regression equation. The results of hierarchical regression are listed in **Table 2**. From **Table 2**, we can see that the entrepreneurship education quality has a significant positive impact on entrepreneurial intention ($M6, \beta = 0.16 \cdot p < 0.05$). Therefore, hypothesis 1 is supported by the data.

(2) Mediating effect test

Based on the analysis steps suggested by Baron and Kenny (1986), we use hierarchical regression to test the mediating effect of entrepreneurial self-efficacy on the entrepreneurial education quality and entrepreneurial intention. The results of hierarchical regression are listed in **Table 2**. From **Table 2** we can see that the entrepreneurship education quality has a significant positive impact on entrepreneurial intention ($M6, \beta = 0.16 \cdot p < 0.05$). At the same time, entrepreneurial self-efficacy has a significant positive impact on entrepreneurial

Table 2. The results of hypothesis test

	entrepreneurial self-efficacy				Entrepreneurial intention			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Control variable								
Age	0.21*	0.19*	0.19	0.18*	0.01	0.01	0.06	0.06
Gener	0.17	0.15	0.18	0.14	0.23**	0.22*	0.18	0.18*
Profession	0.20**	0.22**	0.21**	0.22**	0.03	0.03	0.09	0.09
Education	0.23**	0.22*	0.18	0.23**	0.22*	0.18	0.18*	0.23**
Independent variable								
Entrepreneurial education quality		0.30**	0.31**	0.27**		0.16*		0.06
Mediating variable								
Entrepreneurial self-efficacy							0.30**	0.28**
Moderating variable								
Entrepreneurial orientation			0.06	0.05				
Interaction term								
Entrepreneurial education quality * Entrepreneurial orientation				0.18**				
ΔR2	0.06	0.09	0.01	0.03	0.06	0.02	0.08	0.06
ΔF	3.80**	24.61**	1.02	7.82**	3.30*	5.86*	20.24**	15.34**

Note : ** p < 0.01, * p < 0.05

intention (M7, $\beta = 0.30$, $p < 0.01$). After joining the mediating variables of entrepreneurial self-efficacy, the impact of entrepreneurial education on entrepreneurial intention (M8, $\beta= 0.06$) was not significant, entrepreneurial self-efficacy still has a significant positive effect on entrepreneurial intention (M8, $\beta= 0.28$, $p < 0.01$). Therefore, we can conclude that entrepreneurial self-efficacy plays a mediating role between the entrepreneurial education quality and entrepreneurial intention, which supports the hypothesis 2.

Although the standard proposed by Baron and Kenny (1986) is widely used, its important limitation is that it does not test the significance of the mediating effect. So, this study uses the Sobel method to test the significance of the mediating effect (Sobel, 1982). Entrepreneurial self-efficacy has a significant mediating effect on the entrepreneurial education quality and entrepreneurial intention ($Z = 3.19$, $p < 0.01$). Therefore, hypothesis 2 has been further supported by the data.

(3) Moderating effect test

Hypothesis 3 suggests that entrepreneurial orientation can enhance the positive relationship between entrepreneurial education quality and entrepreneurial self-efficacy. In order to verify this hypothesis, we will first set entrepreneurial self-efficacy as the dependent variable, followed by the introduction of control variables, independent variables

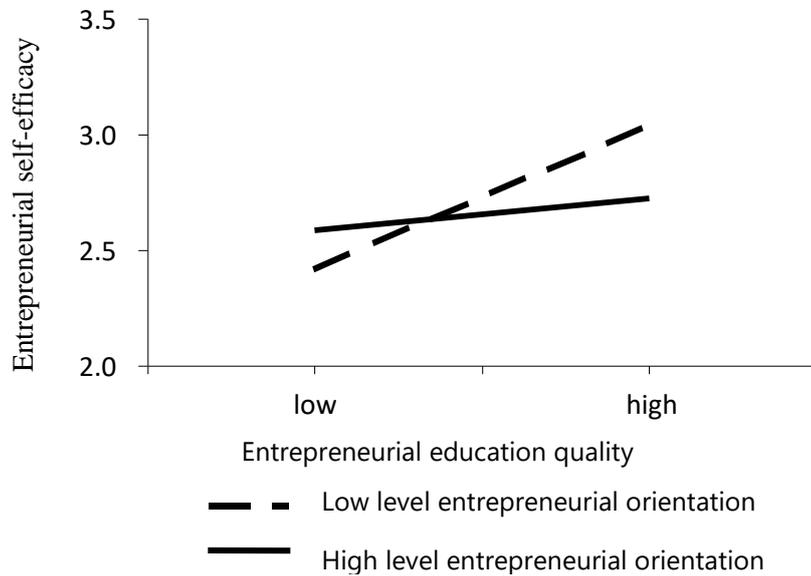


Figure 2. The difference of entrepreneurial education quality to the level of entrepreneurial self-efficacy under different levels of entrepreneurial orientation

(entrepreneurship education quality) and variable (entrepreneurial orientation), finally adding the product terms of independent variables and moderating variable. In order to eliminate collinearity, when we construct the product terms of independent variables and moderating variable, we standardized the independent variables and the moderating variable respectively. The results of the hierarchical regression analysis are also listed in **Table 2**. From the model 4 in **Table 2**, we can see that the interaction between the entrepreneurial education quality and entrepreneurial orientation has a significant positive impact on entrepreneurial self-efficacy ($M4, \beta = 0.18, p < 0.01$). This shows that the higher the level of entrepreneurial orientation, the stronger positive relationship between the entrepreneurship education quality and entrepreneurial self-efficacy, which supports the hypothesis 3. **Figure 2** shows the pattern of interaction, according to Cohen et al. (2003) recommended procedures, Based on a standard deviation above the mean and a standard deviation below the mean, we describe the level of self-efficacy of university students with different levels of innovation orientation.

(4) Mediating effect of Moderating

Hypothesis 4 suggests that entrepreneurial orientation can enhance the mediating effect of entrepreneurial self-efficacy on the entrepreneurial education quality and entrepreneurial intention. In order to verify this hypothesis, according to Edwards and Lambert (2007) proposed the bootstrap method which is analyzed in different levels of entrepreneurial orientation, entrepreneurial self-efficacy plays a mediating effect between the entrepreneurship education quality and entrepreneurial intention. The results are listed in **Table 3** (entrepreneurial intention is the outcome variable). As can be seen from **Table 3**, when

Table 3. Mediating effect of Moderating

Moderating variable	entrepreneurial education quality (X) → entrepreneurial self-efficacy (M) →entrepreneurial intention (Y)				
	Stage		Effect		
	First stage	Second stage	Direct effect	Indirect effect	Total effect
	P_{MX}	P_{YM}	P_{YX}	$P_{YM} \cdot P_{MX}$	$P_{YX} + P_{YM} \cdot P_{MX}$
Low level entrepreneurial orientation	0.08	0.23*	0.06	0.02	0.08
High level entrepreneurial orientation	0.39**	0.31**	0.17	0.12**	0.29**
Difference	0.31**	0.08	0.11	0.10*	0.21*

Note: $n = 258$; ** $p < 0.01$, * $p < 0.05$; P_{MX} : The effect of entrepreneurial education quality on entrepreneurial self-efficacy, P_{YM} : the effect of entrepreneurial self-efficacy on entrepreneurial intention, P_{YX} : the effect of entrepreneurial education quality on entrepreneurial intention. High level entrepreneurial orientation represents the mean plus 1 standard deviation, Low level entrepreneurial orientation on behalf of the mean minus 1 standard deviation.

the level of entrepreneurial orientation is low, the impact of entrepreneurial education quality on entrepreneurial self-efficacy is not significant ($r = 0.08$). When the level of entrepreneurial orientation is high, the entrepreneurship education quality has a positive impact on entrepreneurial self-efficacy ($r = 0.39$, $p < 0.01$). At the same time, there is a significant difference between the two factors ($\Delta r = 0.31$, $p < 0.01$). Therefore, entrepreneurial orientation will strengthen the impact of entrepreneurial education quality on entrepreneurial self-efficacy, and further support the hypothesis 3. At the same time, we can see from **Table 3**, the indirect effect of the entrepreneurial education quality on entrepreneurial intention is not significant at the low level of entrepreneurial orientation ($r = 0.02$), while the high level of entrepreneurial orientation is significantly positive ($r = 0.12$, $p < 0.01$), and the difference between the two is significant ($\Delta r = 0.10$, $p < 0.05$). Therefore, Hypothesis 4 is supported by the data.

CONCLUSION AND RECOMMENDATION

To carry out entrepreneurship education in Colleges and universities, which is not only to solve the employment problem of college students, also is not for the sake of the training of enterprise managers, but to cultivate students to be able to start their own businesses, and be good at managing business entrepreneurs. Realization the reform of "creating customer", and let each have entrepreneurial intentions of college students, who have the ability and space to start their own businesses. In this paper, the study object is the university students, empirical study on the relationship between entrepreneurial education quality, entrepreneurial orientation, entrepreneurial self-efficacy and entrepreneurial intention. We find that: (1) the entrepreneurship education quality positively affect entrepreneurial intention, and entrepreneurial self-efficacy plays a mediating role; (2) the relationship between the entrepreneurship education quality and entrepreneurial self-efficacy will be affected by

entrepreneurial orientation; The stronger level of entrepreneurial orientation, the more positive relationship between the entrepreneurship education quality and entrepreneurial self-efficacy; (3) the stronger level of entrepreneurial orientation, the more mediating effect between entrepreneurial self-efficacy and entrepreneurial intention. In a word, this study explores the influence of the entrepreneurial education quality on entrepreneurial intention and the mediating and moderating mechanism. Using of multi temporal longitudinal research design, which not only helps to reduce the common method bias, but also helps to reveal the causal relationship between variables. At the same time, we have assumed that the verification using not only traditional regression analysis and mediating effect of Sobel test and other statistical analysis technique, bootstrapping method also used to make the study more deeply and accurately carved painting relationship between variables, enrich the research the depth and breadth. Because of various subjective and objective reasons, in this paper, we only discussed the effect of entrepreneurial orientation for contingency entrepreneurship education quality process. But in fact, factors affecting the entrepreneurship education quality process is varied, therefore, the following studies can explore the impact of entrepreneurial climate and other variables on the entrepreneurial education quality and entrepreneurial intention.

ACKNOWLEDGEMENTS

This work is financially supported by the major project of National Social Science Fund (12&ZD206); Science and technology innovation talent support program of Henan province higher education (HUMANITIES AND SOCIAL SCIENCES), 2017-cxrc-04; Ministry of education humanities and Social Science Fund(15YJC630006); Henan social science program of Henan Province in 2016(2016BJJ017); Key research projects of Humanities and social sciences of Henan Provincial Department of education in 2016(2016-zd-046); 2014 Henan provincial government decision-making research tender topic(2014154); Key research projects of Humanities and social sciences of Henan Provincial Department of education in 2014(2014-zd-011); General research project of Humanities and social sciences of Henan Provincial Department of education in 2016(2016-gh-122); General research project of Humanities and social sciences of Henan Provincial Department of education in 2017(2017-ZZJH-163); Henan Institute of Science and Technology major research projects(2015); 2017 general program of philosophy and social science research project of Henan Institute of Science and Technology. Thanks for the help.

REFERENCES

- A Kirby, D., & Ibrahim, N. (2017). Entrepreneurial Education and the Entrepreneurial University: The Challenge of Creating an Institutional Entrepreneurship Ecosystem in a Factor Driven Economy. *Technology Transfer and Entrepreneurship*, 4(1), 38-46. doi:10.2174/2213809903666160531105838
- Carsrud, A., & Brnnback, M. (2011). Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management*, 49(1), 9-26. doi:10.1111/j.1540-627X.2010.00312.x
- Dess, G. G., & Ireland R. D., & Zahra, S. A. (2003). Emerging Issues in Corporate Entrepreneurship. *Journal of Management*, 29(3), 351-378. doi:10.1016/ S0149-2063_03_00015-1

- Diehl, M. (2016). From Entrepreneurship to Entrepreneurial Education in Lower Secondary School: Pedagogising by Means of the Pedagogic Device. *Journal of Educational Issues*, 2(1), 36-56. doi:10.5296/jei.v2i1.8748
- Fatoki, O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), 294-299. doi:10.5901/mjss.2014.v5n7p294
- Fayolle, A. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663-666. doi:10.1016/j.jbusres.2013.11.024
- Hattab, H. W. (2014). Impact of entrepreneurship education on entrepreneurial intentions of university students in Egypt. *The Journal of Entrepreneurship*, 23(1), 1-18. doi:10.1177/0971355713513346
- Higgins, D., Smith, K., & Mirza, M. (2013). Entrepreneurial education: Reflexive approaches to entrepreneurial learning in practice. *The Journal of Entrepreneurship*, 22(2), 135-160. doi:10.1177/0971355713490619
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intention among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(1), 55-78. doi:10.1142/S021849580400004X
- Mononen-Batista Costa, S., & Brunila, K. (2016). Becoming entrepreneurial: Transitions and education of unemployed youth. *Power and Education*, 8(1), 19-34. doi:10.1177/1757743815624115
- Oehler, A., Höfer, A., & Schalkowski, H. (2015). Entrepreneurial education and knowledge: empirical evidence on a sample of german undergraduate students. *The Journal of Technology Transfer*, 40(3), 536-557. doi:10.1007/s10961-014-9350-2
- Pantea, M. C. (2016). On entrepreneurial education: dilemmas and tensions in nonformal learning. *Studies in Continuing Education*, 38(1), 86-100. doi:10.1080/0158037X.2015.1032920
- Shamsudin, S. F. F. B., Al Mamun, A., & Nawawi, N. B. C., et al. (2016). Policies and practices for entrepreneurial education: The Malaysian experience. *The Journal of Developing Areas*, 50(5), 307-316. doi:10.1353/jda.2016.0053
- Shamsudin, S. F. F. B., Al Mamun, A., & Nawawi, N. B. C., et al. (2016). Policies and practices for entrepreneurial education: The Malaysian experience. *The Journal of Developing Areas*, 50(5), 307-316. doi:10.1353/jda.2016.0053
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387-406. doi:10.1111/j.1540-6520.2007.00179.x
- Zhao, H., & Seibert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90, 1265-1272. doi:10.1037/0021-9010.90.6.1265

<http://iserjournals.com/journals/eurasia>