



Research Article

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## The Impact of Chinese University Students' Perception of Collegiate Entrepreneurial Education Support on Entrepreneurial Intentions: The Moderating Role of Proactive Personality

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### Abstract

*The purpose of this study is to investigate the relationship between perceived collegiate entrepreneurial education support and entrepreneurial intentions, as well as the moderating role of a proactive personality in this relationship. 304 university students from five universities in Jiangxi Province were invited to participate in a survey using scales for entrepreneurial education support, proactive personality and entrepreneurial intentions. The results indicate that perceived collegiate entrepreneurial education support positively predicts entrepreneurial intentions; a proactive personality positively predicts entrepreneurial intentions, as well as moderates the relationship between perceived collegiate entrepreneurial education support and entrepreneurial intentions.*

**Keywords:** Collegiate Entrepreneurial Education Support, Proactive Personality, Entrepreneurial Intentions

### 1. Introduction

In the current global economic environment, entrepreneurial activities are universally regarded as a key factor in driving economic growth, fostering job opportunities, and stimulating social innovation (Pulino et al., 2019). As the new generation of the workforce, college students are receiving increasing attention, and due to their potential role in economic development and technological innovation, are considered to be the most promising source of entrepreneurs (Lu et al., 2021). To continually promote the development of innovative and entrepreneurial education, China has successively introduced a series of policies to encourage more students to consider entrepreneurship as a career option (Ambad & Damit, 2016). However, the number of college graduates engaging in entrepreneurship has not

increased significantly. According to the employment report of college students in China published by Mycos, only 1.2% of the 2023 undergraduate cohort chose to start their own business (Mycos, 2023), in stark contrast to entrepreneurship rate of 20% in developed countries around the world. Lv et al. (2021) proposed that entrepreneurship among university students is an important avenue for promoting innovation and economic transformation in China because it is not only beneficial for technological innovation in the market, but also for employment and job creation (Zhou et al., 2021). Therefore, exploring the factors that influence university students to consider entrepreneurship is a significant research issue in the current context.

Entrepreneurship is a planned and conscious action. Entrepreneurial behaviour is driven by entrepreneurial intentions, without which there would be no subsequent entrepreneurial actions, which makes entrepreneurial intentions the best predictor of entrepreneurial behaviour (Farashah, 2015). Entrepreneurial intention refers to individuals' attitude toward entrepreneurship, reflecting whether they are willing to participate in or endorse entrepreneurial activities (Krueger et al., 2000). It is only by enhancing their entrepreneurial intentions that university students can be motivated to engage in entrepreneurial behaviour (Trivedi, 2016). The factors that influence university students' entrepreneurial intentions can generally be divided into individual and environmental categories (Niu et al., 2022). Compared to general entrepreneurs, the entrepreneurial intentions of university students are influenced more by the supportive environment of their school. Therefore, the educational support provided by universities plays a vital role in developing students' knowledge and skills, and fostering their entrepreneurial beliefs (Bazkiaei et al., 2020). Collegiate entrepreneurial education support refers to education that shapes students' skills and attitude toward entrepreneurship, comprising any entrepreneurship-related teaching programme or educational process (Amofah & Saladrignes, 2022). Wegner et al. (2020) believe that universities play a significant role in encouraging students to engage in entrepreneurial activities, with their policy and educational environments being crucial in shaping students' willingness to become entrepreneurs. Universities can enhance students' entrepreneurial vitality using methods such as theoretical courses, practical courses, and entrepreneurial activities that foster their interest in pursuing an entrepreneurial career post-graduation (Aliedan et al., 2022).

From an individual perspective, many scholars believe that personality traits have a significant influence on students' entrepreneurial intentions (Cai et al., 2021; Jiatong et al., 2021; Murad et al., 2021). As one of the important personality traits, proactivity may be a key factor in determining individuals' entrepreneurial behaviour (Neneh, 2019). A proactive personality predicts entrepreneurial intentions, and students with this personality often consider entrepreneurship as a future career choice (Mustafa et al., 2016). A proactive personality refers to individuals' tendency to take the initiative in influencing their surrounding environment (Bateman & Crant, 1993). Individuals with a strong proactive personality often exhibit characteristics of being proactive, self-reliant and future-orientated (Greguras & Diefendorff, 2010), which motivate them to take action to achieve their future goals (Siebert & Kunz, 2016). Moreover, according to the vocational choice theory, people tend to choose professions that match their personality traits, and individuals with a strong proactive personality have a higher compatibility with entrepreneurial activities compared to those with lower proactivity (Holland, 1997). Therefore, individuals with a strong proactive personality are more likely to exhibit higher entrepreneurial intentions and choose entrepreneurs (Vodă & Florea, 2019). University students with highly proactive personalities usually portray strong confidence and initiative (Kim & Park, 2017) in daring to envision starting their own business in the future. Once they have an idea, they are able to fully exert their agency to learn not only knowledge related to their own field, but also to broadly engage in knowledge related to entrepreneurship, actively accumulating various skills and knowledge to form a reserve of entrepreneurial knowledge to prepare for future entrepreneurship in practice (Fuller et al., 2018). This suggests that proactive personality traits and entrepreneurial support are the prerequisites for entrepreneurship. It is indicated in existing studies that entrepreneurial education support can greatly promote the formation of students' entrepreneurial intentions (Mei et al., 2020; Qian, 2024; Wu et al., 2022; Zhuang & Sun, 2023).

However, as some students still exhibit low entrepreneurial intentions after receiving entrepreneurial education, Ganzach and Gotlibovski (2014) propose that the effectiveness of education may depend on students' individual characteristics, such as a proactive personality (Naz et al., 2021). However, few studies in China have explored the ability of a proactive personality to moderate the relationship between entrepreneurial education support and entrepreneurial intentions. These aspects provide support for the close correlation between university students' proactive personality and entrepreneurial intentions. Therefore, collegiate entrepreneurial education support is taken as the independent variable in this study and a proactive personality is taken as the moderating variable to explore its enhancement of university students' entrepreneurial intentions in order to better understand the development of this phenomenon in higher education institutions. The research results are expected to offer some strategic suggestions for collegiate entrepreneurial education support, enabling the more effective promotion and support of entrepreneurial activities.

## 2. Literature Review

### 2.1 Stimulus-Organism-Response Theory

The Stimulus-Organism-Response (S-O-R) theory was proposed by Mehrabian et al. in 1974. The stimulus refers to the external factors that affect an individual, an external influence that affects the internal state of the organism, leading to the organism producing an internal or external response through behaviour. Buxbaum (2016) pointed out that human behaviour is not directly caused by; instead, it is mediated by an organism, which undergoes changes in its sensory and other biological systems, as well as in its emotional and cognitive processes that respond to the stimulus, thereby generating a response. Similarly, Sun et al. (2021) also believe that external environmental cues act as stimuli and can trigger internal responses in organisms, thereby stimulating their behavioural intentions. This theoretical model highlights the significant role of individual factors in this process, such as the cognition and emotions of the organism, revealing a relationship between external factors and predisposed behaviour (Chopdar & Balakrishnan, 2020).

### 2.2 Entrepreneurial Education Support and Entrepreneurial Intentions

Universities are one of the most important instruments for regional economic and social development (Fuster et al., 2019) due to the crucial role they play in encouraging students to engage in entrepreneurial activities (Nita, 2019). In their research, Saeed et al. (2015) found that universities enable students to gain necessary entrepreneurial knowledge and skills by providing relevant courses and lectures, thereby enhancing their entrepreneurial intentions. Nabi et al. (2018) conducted a survey of business students at a UK university and found that the entrepreneurial education support provided by the school greatly increased the students' business knowledge and skills, their learning and inspiration in entrepreneurship, and significantly boosted their post-graduation entrepreneurial intentions. Meanwhile, Mensah et al. (2021) affirmed the positive impact of entrepreneurial education on university students' entrepreneurial intention by providing well-structured and targeted entrepreneurial courses and programmes that stimulate greater entrepreneurial interest among students. Additionally, students who participate in entrepreneurial projects and internships improve their abilities and intention to start their own businesses, as these practical opportunities allow them to apply theoretical knowledge to real-life scenarios, thereby enhancing their understanding of the entrepreneurial process and confidence in their entrepreneurial abilities (Sansone et al., 2021). In their research, Nowiński et al. (2019) further revealed the influence of entrepreneurial education on entrepreneurial intentions. The higher the level of collegiate entrepreneurial education support, the more students participate in various entrepreneurial learning activities, and the more entrepreneurial knowledge and abilities they acquire, thereby enhancing their entrepreneurial willingness (Boldureanu et al., 2020). Thomas (2023) also indicated in his research that entrepreneurial courses,

conferences, and hands-on practice can lead to changing mindsets or thoughts, resulting in greater entrepreneurial intentions. Therefore, the first hypothesis is proposed as follows;

H1: Perceived entrepreneurial support has a significant and positive impact on entrepreneurial intentions.

### 2.3 Proactive Personality and Entrepreneurial Intentions

A proactive personality can predict entrepreneurial intentions. In a cross-cultural study involving university students from China, Finland, Russia and the United States, it was found that a proactive personality is a predictor of individuals' entrepreneurial motivation due to greatly promoting their intention to own a company, and there were no cultural differences in this outcome (Prabhu et al., 2012). Individuals with a highly proactive personality tend to actively respond to environmental changes, handle various situations well, are keen to learn, and can discover more beneficial information, making them more likely to succeed compared to others (Sidratulmunthah et al., 2018). Mustafa et al. (2016) studied Malaysian students and proved that those with a proactive personality had a sharper response when exploring business opportunities and were more determined to choose entrepreneurship as their career. Kumar and Shukla (2019) observed in their study that a proactive personality has a significant and positive influence on entrepreneurial intentions. The stronger the proactivity of university students, the richer their entrepreneurial resource knowledge, and hence, the greater their intention to achieve an entrepreneurial goal by implementing that intention (Li & Zhang, 2015); Zeb et al. (2019) showed that the proactive personality of university students has a significant and positive impact on their entrepreneurial intention, as students with a proactive personality can better identify and seize opportunities, which ultimately helps them to form entrepreneurial intentions. Ojeleye et al. (2023) also noted that a proactive personality has a significant and positive impact on students' entrepreneurial intentions. University students with a highly proactive personality are more likely to actively choose entrepreneurship when faced with less-than-ideal employment or work conditions. The higher the proactivity, the stronger the spontaneity, adaptability to change, and future-orientated abilities (Luo et al., 2022). Therefore, the second hypothesis is proposed as follows;

H2: A proactive personality has a significant and positive impact on entrepreneurial intentions.

### 2.4 Moderating Role of Proactive Personality

Different individuals respond differently to various environmental stimuli (Kumar & Shukla, 2019). Individuals with a highly proactive personality tend to more actively seek personal learning and development opportunities, showing a higher level of sensitivity and responsiveness to internal and external motivational factors (Li et al., 2014). They are more likely to actively participate in and utilise the entrepreneurial education resources provided in order to enhance their entrepreneurial self-efficacy and intentions (Hayter et al., 2017). In contrast, individuals with a less proactive personality are less active in seeking new information and do not actively control their environment (Bateman & Crant, 1993). In a survey of undergraduate students at the Guangxi Academy of Arts, Zeng et al. (2021) found that a proactive personality plays a positive moderating role in the relationship between entrepreneurial education and entrepreneurial intentions; in other words, the higher the proactive personality, the stronger the impact of entrepreneurial education on entrepreneurial intentions, and vice versa. However, some scholars claim that a proactive personality negatively moderates the relationship between entrepreneurial education and university students' entrepreneurial intentions, and that the higher the level of proactive personality, the weaker the relationship is between entrepreneurial education and entrepreneurial intentions (Liu et al., 2022) because individuals with a highly proactive personality exhibit stronger self-confidence, which means they tend to stick to their own opinions (Hu et al., 2018), which makes them less receptive to education. In contrast,

entrepreneurial education can be seen as a means to introduce students with a less proactive personality, who rarely learn new things on their own, to new entrepreneurial knowledge that broadens their horizons and hence, increases their entrepreneurial intention. In their research, Mustafa et al. (2023) found that a highly proactive personality actually weakened the impact of entrepreneurial education support on the entrepreneurial intentions of students due to their higher entrepreneurial self-efficacy. On the other hand, educational support is crucial in cultivating the confidence in entrepreneurship and business ideas of students with a low to moderate proactive personality, thereby enhancing their entrepreneurial intention. Therefore, the third hypothesis is proposed as follows;

H3: A proactive personality moderates the impact of perceived educational support on entrepreneurial intentions.

### 3. Methodology

#### 3.1 Research Method

The Stimulus-Organism-Response (SOR) theory is utilised in this study to explore the impact of entrepreneurial education support on university students' entrepreneurial intentions and the moderating role of proactive personality between entrepreneurial education support and entrepreneurial intentions. The research model is illustrated in Figure 1.

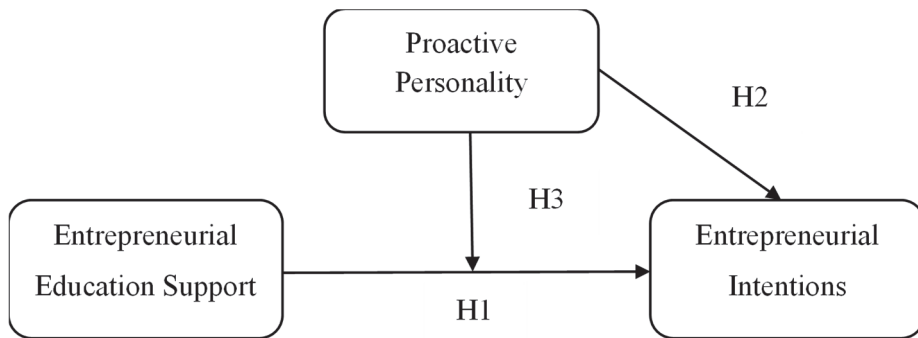


Figure 1. Research Structure

#### 3.2 Source of Sample Data

The research subjects of this study are university students from five undergraduate colleges in Jiangxi Province. These five universities are national-level entrepreneurial bases and have won gold awards in entrepreneurship competitions. They provide substantial support for student entrepreneurship education, aligning well with the objectives of this study. 200 questionnaires were distributed in the pilot testing phase, and 172 valid responses were collected. The scales used in this study have been tested and demonstrate good reliability and validity. In the official survey phase, questionnaires were distributed to samples from the five universities. A total of 350 students were surveyed, with 304 questionnaires recovered, resulting in an effective recovery rate of 86.9%. 170 of these respondents were male and 134 were female.

The data in this study was analysed using a reliability analysis and a confirmatory factor analysis (CFA) to test the reliability, convergent validity, and goodness of fit of different scales. Awang (2012) noted that Composite Reliability (CR) is an indicator used to assess the internal consistency and reliability of a measurement for latent constructs. To achieve structural composite reliability, the CR

value must be greater than 0.6. AVE (Average Variance Extracted) refers to the average percentage of variance explained by the items measuring a latent construct. Each construct requires an AVE greater than 0.5, but a value of 0.4 can be acceptable, indicating that the convergent validity of the construct is still adequate. According to Hair et al. (2009), the goodness-of-fit test of the overall model includes three aspects in its index evaluation, namely, measures of absolute fit, which are  $\chi^2/df > 5$ , GFI  $> .90$ , AGFI  $> .90$ , SRMR  $< .05$ ; incremental fit measures which are CFI  $> .90$ , IFI  $> .90$ , NFI  $> .90$ ; and parsimonious fit measures which are PNFI  $> .50$ , PGFI  $> .50$ .

### 3.3 Entrepreneurial Education Support

The scale used to measure the university students' perceived entrepreneurial education support was developed with reference to Kraaijenbrink et al. (2010). It consists of 6 items, for example, "My university provides internships related to entrepreneurship," and "My university offers courses on entrepreneurship," etc, measured on a Likert five-point scale ranging from strongly disagree to strongly agree. The reliability of this scale is .897, with factor loadings greater than .5, an AVE of .88, and a CR value of .92, which indicates good reliability and validity. The Cronbach's alpha for the reliability of perceived entrepreneurial education support in this study was .899, greater than 0.7, which exceeds the recommended standard. A confirmatory factor analysis (CFA) was then used to test the model fit of perceived entrepreneurial education support. The factor loadings ranged from .744 to .784, exceeding the standard of 0.5; the composite reliability (CR) of the latent variable was .899, which exceeded the evaluation standard of 0.6; the Average Variance Extracted (AVE) was .594, exceeding the 0.40 assessment standard. The goodness of fit indices were:  $\chi^2=17.593$ ,  $df=9$ ,  $\chi^2/df=1.955$ , GFI=.980, AGFI=.953, SRMR=0.022. Incremental fit measures: CFI=.991, IFI=.991, NFI=.982. Parsimonious fit measures: PNFI=.589, PGFI=.420. These results indicate that the scale had composite reliability and convergent validity and met the standard of fit.

### 3.4 Proactive Personality

Proactive personality was measured using the scale developed by Shang & Gan (2009), which consists of 11 items, measured on a five-point Likert scale, ranging from strongly disagree to strongly agree. The reliability of this scale is .86, with fit indices showing that CFI = .91, GFI = .91, AGFI = .87, and NNFI = .88. The scale's reliability and validity have been verified as satisfactory. With regard to the reliability of the proactive personality scale in this study, the Cronbach's alpha was .944, exceeding the standard of 0.7, indicating good internal consistency. A confirmatory factor analysis (CFA) was then used to test the model fit of the scale. The factor loadings ranged from .737 to .811, exceeding the standard of 0.5; the composite reliability (CR) of the latent variable was .944, surpassing the 0.6 assessment standard; the Average Variance Extracted (AVE) was .607, exceeding the 0.40 assessment standard. The goodness of fit indices were:  $\chi^2=56.162$ ,  $df=44$ ,  $\chi^2/df=1.276$ , GFI=.968, AGFI=.952, SRMR=.021. Incremental fit measures: CFI=.995, IFI=.995, NFI=.976. Parsimonious fit measures: PNFI=.780, PGFI=.646. These results indicate that the scale had composite reliability and convergent validity and met the standard of fit.

### 3.5 Entrepreneurial Intentions

The entrepreneurial intention scale is usually used to measure the intention of university students to engage in entrepreneurship. An individual entrepreneurial intention scale was developed for this study by referring to Thompson (2009), in which the respondents rated the degree to which each item description matched their actual situation. The scale was originally in English, but was translated into Chinese for this study using translation software. It consists of 10 items, including three reverse-scored items. For example, "In the future, I plan to start a company," and "I spend time learning how to establish a business," etc. The scale is measured using a Likert five-point scale,

ranging from strongly disagree to strongly agree. The reliability of this scale is .83, with a test-retest reliability of .88. The factor loadings range from .57 to .89. The fit indices are AFI = .993, NFI = .983, CFI = .988, and RFI = .980, demonstrating that the scale has been verified to have good reliability and validity. In terms of the reliability of the entrepreneurial intention scale in this study, the Cronbach's alpha was .941, which exceeded the standard of 0.7, indicating good internal consistency. A confirmatory factor analysis (CFA) was then used to test the model fit of the scale. The factor loadings ranged from .757 to .817, exceeding the standard of 0.5; the composite reliability (CR) of the latent variable was .945, surpassing the 0.6 assessment standard; the Average Variance Extracted (AVE) was .630, exceeding the 0.40 assessment standard. The goodness of fit indices were:  $\chi^2=53.305$ ,  $df=35$ ,  $\chi^2/df=1.523$ , GFI=.965, AGFI=.945, SRMR=.022. Incremental fit measures: CFI=.992, IFI=.992, NFI=.976. Parsimonious fit measures: PNFI=.759, PGFI=.614. These results indicate that the scale had composite reliability and convergent validity and met the standard of fit.

#### 4. Results

A hierarchical regression analysis was conducted on the predictor and moderator variables to determine whether a proactive personality can moderate the relationship between perceived entrepreneurial education support and entrepreneurial intention. In the first step, perceived entrepreneurial education support was included in the regression equation. In the second step, both perceived entrepreneurial education support and entrepreneurial intention were included. In the third step, perceived entrepreneurial education support, proactive personality, and the interaction term of perceived entrepreneurial education support and proactive personality were included. As shown in Model 1 of Table 1, perceived entrepreneurial education support had a significant and positive impact on entrepreneurial intention ( $\beta = .394, p < .001$ ), explaining 15.5% of the variance ( $R^2$ ). These results indicate that perceived entrepreneurial education support can significantly and positively predict university students' entrepreneurial intention and explain 15.5% of the variance in entrepreneurial intention. Therefore, Hypothesis H1 of this study is supported.

As shown in Model 2 of Table 1, a proactive personality has a significant and positive impact on entrepreneurial intention ( $\beta = .316, p < .001$ ), explaining 23.6% of the variance ( $R^2$ ). The results indicate that a proactive personality can significantly and positively predict entrepreneurial intention, and explain 23.6% of the variance in entrepreneurial intention. Therefore, Hypothesis H2 of this study is supported.

As shown in Model 3 of Table 1, a proactive personality has a significant and positive moderating effect on the relationship between perceived entrepreneurial education support and entrepreneurial intention ( $\beta = .181, p < 0.05$ ). This means that a proactive personality plays a moderating role in the relationship between perceived entrepreneurial education support and entrepreneurial intention. Therefore, Hypothesis H3 of this study is supported. Additionally, with  $VIF < 10$ , there is no severe collinearity problem.

**Table 1.** Hierarchical Regression Analysis Summary Table

Variable	EI		EI		EI		VIF
	$\beta$	t	$\beta$	t	$\beta$	t	
Independent Variable							
EES	.394	7.451***	.275	5.073***	.246	4.572***	1.001
Moderating Variable							
PP			.316	5.821***	.269	4.904***	1.166
Interaction Term							
EES*PP					.181	3.445**	1.137
R <sup>2</sup>	.155		.241		.270		
AdjR <sup>2</sup>	.152		.236		.262		
F	55.515***		47.720***		36.918***		

Notes: EES= Entrepreneurial Education Support; PP= Proactive Personality; EI= Entrepreneurial Intentions; Note2: \* $p < .01$ ; \*\* $p < .001$ .

To more clearly determine the moderating effect of a proactive personality on the relationship between perceived entrepreneurial education support and entrepreneurial intention, a simple slope test was conducted to further analyse the moderating role of proactivity. As shown in Figure 2, the results indicated that a proactive personality enhances the relationship between perceived entrepreneurial education support and entrepreneurial intention. Specifically, the relationship between perceived entrepreneurial education support and entrepreneurial intentions is stronger in students with a highly proactive personality; conversely, it is weaker in students with a less proactive personality.

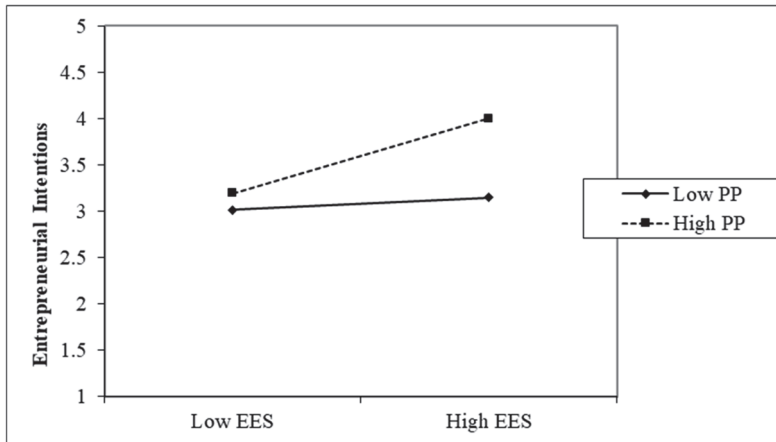


Figure 2. Moderating Effect Diagram

## 5. Discussion and Conclusion

The mechanism of the impact of perceived collegiate entrepreneurial education support and a proactive personality on entrepreneurial intention was explored in this study based on the Stimulus-Organism-Response theory. It was found that, firstly, students' perception of the educational support provided by their schools has a significant and positive impact on their entrepreneurial intention, which is consistent with previous studies (Hoang et al., 2021; Mensah et al., 2021; Nabi et al., 2018). This finding underscores the importance of entrepreneurial education support. Universities aid students in acquiring the necessary entrepreneurial knowledge and skills by offering courses, lectures and seminars related to entrepreneurship. Additionally, universities enable students to experiment with and apply entrepreneurial concepts in a safe environment by encouraging them to participate in entrepreneurial practices (Valencia-Arias et al., 2022). Therefore, Chinese universities should continue to increase their investment in entrepreneurial education support to improve the educational environment. Optimizing curriculum design, promoting university-enterprise cooperation and offering practical opportunities can help students to better understand the entrepreneurial process, enhance their entrepreneurial skills and confidence, and encourage them to pursue entrepreneurship.

Secondly, a proactive personality has a significant and positive impact on entrepreneurial intention in, which is consistent with previous studies (Kumar & Shukla, 2019; Ojeleye et al., 2023; Zeb et al., 2019). This indicates that university students with a highly proactive personality have a stronger intention to become entrepreneurs because they tend to have stronger self-motivation and intrinsic motivation. They are better at identifying and seizing opportunities, and this proactive attitude makes them more likely to consider entrepreneurship after graduation (Gao & Chen, 2022). Furthermore, entrepreneurship often involves uncertainty and risk, and university students with a



proactive personality usually have greater initiative and confidence, enabling them to accept and manage these risks, thereby enhancing their entrepreneurial intention (Tu et al., 2021). Additionally, a proactive personality plays an enhancing role between perceived entrepreneurial education support and entrepreneurial intention. University students with a highly proactive personality are more inclined to take positive actions, actively seek and utilise opportunities and are more willing to actively learn and apply what they have learned (Lestari et al., 2022). This behaviour enables them to benefit more from entrepreneurial education, thereby strengthening their entrepreneurial intention. Therefore, as university students' proactive personality plays a crucial role in the formation and development of their entrepreneurial intentions, Chinese universities should emphasise and cultivate students' proactive personality in order to further enhance the effectiveness of entrepreneurial education support and students' entrepreneurial intentions.

The above discussion highlights the importance of entrepreneurial education support and a proactive personality in enhancing university students' entrepreneurial intentions. Chinese universities and the Chinese government should make greater efforts to provide students with a more conducive entrepreneurial environment. The education department should implement relevant policies to encourage and support universities in the implementation of entrepreneurial education programmes and provide them with the necessary financial support to ensure the smooth completion and sustainable development of these programmes. To enhance students' practical entrepreneurial experience and skills, universities could establish complementary educational systems based on their professional background characteristic in which entrepreneurial research is integrated with practice. Strengthening cooperation between universities and enterprises and building platforms for sharing entrepreneurial information will create a campus environment that encourages innovation and entrepreneurship. This will stimulate students' entrepreneurial enthusiasm, proactive behaviour and attitude, thereby enhancing their entrepreneurial intentions. Such multi-channel, multi-level support will help students to perceive the value of entrepreneurial education, enhance their entrepreneurial confidence and skills, and ultimately, promote the development of entrepreneurial education in Chinese universities.

## 6. Suggestions

The research results show that collegiate entrepreneurial education support and a proactive personality can enhance students' entrepreneurial intention, which highlights the importance of entrepreneurial education support. Universities can foster students' entrepreneurial intention and proactive personality by providing entrepreneurial-related education, guidance, and practical experience (Khardin & Giatman, 2022; Tian et al., 2022). Therefore, Chinese universities need to accurately determine the value of entrepreneurship courses, incorporate them as indispensable formal courses into the campus education and teaching system, and add requirements for cultivating college students' entrepreneurial ability to the university's talent training goal system, so that all teachers and students will pay attention to cultivating and training students' entrepreneurial spirit and ability.

Secondly, Teachers should regularly update and optimise their entrepreneurial courses to ensure that the content aligns with current entrepreneurial trends, technological developments and market dynamics. These entrepreneurial theory courses should be integrated with professional courses to teach entrepreneurial knowledge in a targeted manner, while simultaneously increasing their practicality and interest. This approach can stimulate students' interest in learning, enhance their sensitivity to market and policy changes, and increase their likelihood and initiative in identifying opportunities. Third, while offering entrepreneurial courses, Chinese universities should also focus on providing psychological training, entrepreneurial guidance and practical experience to increase students' entrepreneurial initiative, knowledge and skills. They could invite entrepreneurs and former students to give lectures and share their entrepreneurial experience. Universities could organise entrepreneurial simulations and competitions to enable students to use their problem-

solving skills in a real entrepreneurial scenario, thereby fostering their ability to proactively identify and solve problems, increasing their entrepreneurial confidence, and enhancing their entrepreneurial intention. Participation in competitions will be included as a bonus item in evaluating students' academic performance, encouraging them to actively participate in entrepreneurial activities to improve their entrepreneurial enthusiasm and ability, increase their entrepreneurial knowledge, and enhance their proactive personality and entrepreneurial intention.

Moreover, to enhance the effectiveness of collegiate entrepreneurial education, evaluation should not be limited to educators' perspective, but should be extended to consider students' feelings and needs. In this context, universities should organise regular discussions related to student entrepreneurship and conduct surveys on perceived support to gain a deeper understanding of students' actual needs and expectations during the entrepreneurial process. These practices can ensure that entrepreneurial education support is more targeted than just being based on the subjective judgment of educators because what educators believe to be helpful may not always fully align with students' needs in reality. By adopting this student-centred evaluation approach, universities can more effectively provide practical and useful entrepreneurial education support that truly meets students' needs.

## 7. Limitations

The subjects of this study were limited to university students from five universities in Jiangxi Province, which imposes certain limitations on the generalizability of the research findings. Future researchers in this field are encouraged to expand the geographic scope of the sample to enhance the generalizability of the results. Additionally, this study was solely based on a survey analysis, Future researchers are recommended to incorporate qualitative research methods, such as interviews, on order to validate the accuracy of the analytical results.

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