



Emotional Competence, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention: A Study Based on China College Students' Social Entrepreneurship Project

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Specialty section:

This article was submitted to
Educational Psychology,
a section of the journal
Frontiers in Psychology

Received: 31 March 2020

Accepted: 30 September 2020

Published: 17 November 2020

Citation:

Chien-Chi C, Sun B, Yang H,
Zheng M and Li B (2020) Emotional
Competence, Entrepreneurial
Self-Efficacy, and Entrepreneurial
Intention: A Study Based on China
College Students' Social
Entrepreneurship Project.
Front. Psychol. 11:547627.
doi: 10.3389/fpsyg.2020.547627

Entrepreneurship education has a lot of research on influencing factors of entrepreneurial intention but rarely studies the influence mechanism of emotional competences on entrepreneurial intention from the perspective of social entrepreneurship. This article takes college students' social entrepreneurs as research objects, drawing on Krueger's model, theory of planned behavior, social cognitive theory, and triadic reciprocal determinism theory. This paper constructs a conceptual model with emotional ability, entrepreneurial self-efficacy, and entrepreneurial intention, to further study their relationship. The 312 students from China College Students' Social Entrepreneurship Project engaged in early entrepreneurship practice, conducted a questionnaire survey and used the empirical test of the structural equation model to analyze the relationship between college students' emotional competences, entrepreneurial self-efficacy, and entrepreneurial intention. The result show: First, social-emotional competence had a positive effect on entrepreneurial intention, and the positive effect of personal affective competence on entrepreneurial intention was not supported or only partially supported. Second, all the dimensions of entrepreneurial self-efficacy were significantly and positively correlated with entrepreneurial intention. Third, emotional competence has a significant positive impact on entrepreneurial self-efficacy. Fourth, entrepreneurial self-efficacy mediated the relationship between emotional competence and entrepreneurial intention.

Keywords: college students, college social entrepreneurs, entrepreneurial intention, emotional competences, entrepreneurial self-efficacy

INTRODUCTION

College students have the potential for innovation and entrepreneurship. Education projects and special policies increasingly provide good infrastructure, capital, and technology support to college students to promote social entrepreneurship. While the overall entrepreneurship awareness of college students is relatively low, the proportion of the class of 2018 college graduates after 6 months of self-employment was only 2.7% (Mycos Institute, 2019). At the same time, they lack a certain degree of management, anti-risk, and competences to adapt to the environment, entrepreneurial perseverance, and hard work. The failure rate among entrepreneurs is as high as 90%. Within

3 years, more than half of all college entrepreneurs will withdraw from the entrepreneurial market. The quality of entrepreneurship education in colleges and universities in China needs to be improved. However, first, the contributions of the presupport provided by colleges and policies should be acknowledged. Next, further reviews of the purpose of entrepreneurship education should be undertaken. Also, we should emphasize greatly on the study of those entrepreneurs' psychological cognitive mechanism and their motivation.

With regard to entrepreneurship education in college, entrepreneurial intention is the strongest predictor of entrepreneurial behavior. Therefore, identifying the factors that predict entrepreneurial intention has great practical significance. The following factors have been found to influence entrepreneurial intention: decision-making mechanisms (Feola et al., 2017), entrepreneurial differences (Fini and Toschi, 2016; Roy and Das, 2019), entrepreneurship education (Xu et al., 2016; Nowiński et al., 2017; Teixeira and Forte, 2017; Wu et al., 2018), an entrepreneurial background, and environmental factors (Altinay et al., 2012; Palmer et al., 2019). The cognitive approach to entrepreneurship posits that the subjective characteristics of entrepreneurs (e.g., cognitive characteristics) influence entrepreneurial intention (Kirzner, 1978, 1997). Therefore, several scholars have examined the influence of subjective psychological factors, such as the personality traits of entrepreneurs, on entrepreneurial intention (Popescu et al., 2016; Fellnhofner, 2018; Hu et al., 2018). However, a few studies have focused on the effect of emotional competence on entrepreneurial intention, especially from the perspective of social entrepreneurship. Even fewer studies have explored the role of entrepreneurial self-efficacy in the effect of emotional competence on entrepreneurial intention. Exploring the mechanisms that underlie the effect of emotional competence on entrepreneurial intention will contribute to increased entrepreneurial awareness among college students. Emotional intelligence has been defined as the competence needed to recognize and manage one's own and others' feelings. Emotional competence encompasses the skills needed to feel, understand, and effectively capitalize on the power of emotions as a source of energy, information, confidence, and creativity as well as the skills needed to influence others (Goleman, 1995, 1998). Indeed, college students are more inclined to pursue self-employment than individuals who have not received college education. Liu et al. (2019), Cui and Sun (2019), Wang (2018), and Xu and Hao (2019) have found that entrepreneurship education has a significant positive effect on entrepreneurial intention among college students. Therefore, research findings that delineate the relationship between emotional competence, entrepreneurial self-efficacy, and entrepreneurial intention among college students may inform college entrepreneurship education and related training programs. Accordingly, this study aimed to determine whether (a) participation in entrepreneurship training improves the emotional competence of social entrepreneurs, (b) an improvement in emotional competence influences their entrepreneurial self-efficacy, and (c) the formation of entrepreneurial intention in college students is contingent on

improvements in emotional competence and entrepreneurial self-efficacy. Further, this study also sought to examine the role of entrepreneurial self-efficacy in the effect of emotional competence on entrepreneurial intention.

This study was designed based on the theory of planned behavior (TPB) and social cognitive theory (SCT). According to Ajzen's (1988,1991) TPB, entrepreneurial intention is influenced by attitudes, perceived behavioral control, and subjective norms. The TPB posits that the most important factor that influences behavior is intention. Behavioral intention is a necessary contributor to behavioral performance and a prerequisite for behavior (Ding and Liu, 2009). The application and practice of SCT within the domain of entrepreneurship research have revealed that entrepreneurial intention and success are largely influenced by entrepreneurial self-efficacy (Butter, 2001). The potency of entrepreneurial self-efficacy is influenced by subjective and non-subjective abilities such as entrepreneurial task difficulty, effort, and the amount of foreign aid with the environmental conditions of the tasks. The better the emotional competence of an individual is, the greater his or her awareness of entrepreneurial behavior and self-efficacy will be. Subjective competencies influence the strength of entrepreneurial self-efficacy, which is the strongest predictor of entrepreneurial intention. The basic intention-based progress model proposed by Krueger and Brazeal (1994), Yuan and Wu (2020), and Wu et al. (2020) posits that the emergence of the entrepreneurial intention process is very sensitive to initial conditions. Individuals who adopt certain behavioral goals are influenced by external factors and planned behavior attitudes. External factors include skills, knowledge, personality characteristics, and the availability of resources. Planned behavior attitudes refer to the degree of certainty of engaging in a specific behavior. Bandura and Cervone (1986) proposed the triadic reciprocal determinism theory (TRD), which posits that human behaviors are shaped by ternary interactions, are interconnected, and influence each other. Based on Krueger's model, the TPB, SCT, and TRD, a conceptual model (Figure 1), which includes emotional competence, entrepreneurial self-efficacy, and entrepreneurial intention, was developed. The objective was to examine the

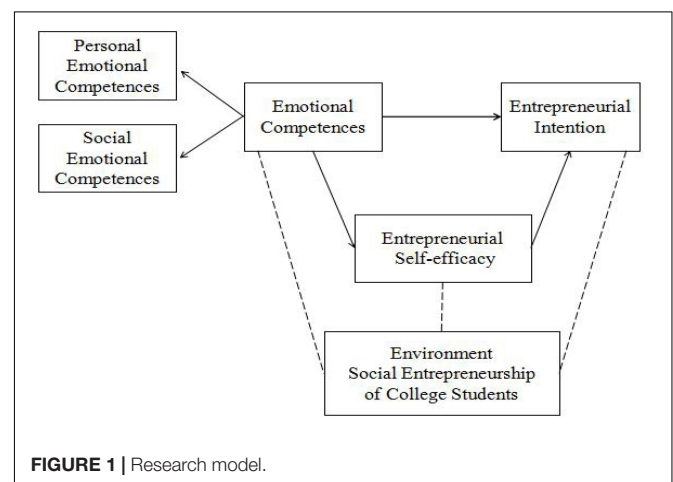


FIGURE 1 | Research model.

relationship between these variables, offer a new perspective and basis for research on innovation and entrepreneurship in China and other countries, and provide suggestions for the long-term development of entrepreneurship education. This article is structured as follows: the section “Research Hypotheses” delineates the hypothesized relationships between emotional competence, entrepreneurial intention, and entrepreneurial self-efficacy; the section “Materials and Methods” describes the data collection procedure, the participants and sampling technique, measures used to assess the study variables, and analytic procedure; the section “Data Analysis and Results” presents the results of the analyses conducted to examine the relationship between emotional competence, entrepreneurial intention, and entrepreneurial self-efficacy; and finally, the section “Conclusion and Relevant Recommendations” are presented.

RESEARCH HYPOTHESES

Emotional Competence and Entrepreneurial Intention

Individuals with high emotional competence are better equipped to undertake entrepreneurial activities. They tend to be more creative and innovative and possess better emotional control skills. In an important situation, the interpersonal relationship will not be damaged by the emotional problems of oneself or others, which are the key factors for starting a business (O’Boyle et al., 2011). Furthermore, individuals with high emotional competence demonstrate better stress tolerance, are more likely to persevere, and seek challenges. Because individuals with better emotional skills are less risk averse, they hold more positive entrepreneurial attitudes. In accordance with the TPB, Chen et al. (2018) and Yuan et al. (2019) have contended that the key to innovation and entrepreneurship education is to influence behavioral intentions related to innovation and entrepreneurship among students. Mikolajczak et al. (2007) have noted that, through self-assessments of emotional efficacy, employees can practice emotional efficacy management and improve their self-cognition competencies. This will enable them to experience greater emotional self-efficacy, take initiatives, and be creative; these changes are conducive to the formation of entrepreneurial intentions. Many studies have found that emotional competence is positively correlated with entrepreneurial intention within the domains of corporate, social, and campus entrepreneurship activities. Leutner et al. (2014) showed that differences in personality characteristics with abilities affect emotional abilities, core self-assessment, entrepreneurial trends, and attitudes are important promoters of entrepreneurial behavior. Zampetakis and Moustakis (2006) found that those with better emotional abilities are more likely to have entrepreneurial intentions. Padilla-Melendez et al. (2014) conducted a comparative analysis and found that the emotional competence of college students who participated in a training program had a significant positive effect on their entrepreneurial intentions. Bonesso et al. (2018) analyzed the emotional competences directly and the mediation effect of entrepreneurial intention, and it is concluded that higher levels of emotional competences can predict entrepreneurial

intention. Further, emotional competence is reflected in personal (how individuals handle themselves) and social abilities (how individuals handle others) (Kierstead, 1999). Therefore, the following hypotheses were formulated:

Hypothesis 1: Emotional competence will have a positive effect on entrepreneurial intention among college students.

Hypothesis 1a: Personal affective competence will have a positive effect on entrepreneurial intention among college students.

Hypothesis 1b: Social-emotional competence will have a positive effect on entrepreneurial intention among college students.

Entrepreneurial Self-Efficacy and Intention

Self-efficacy refers to one’s cognitive assessment of his or her ability to mobilize the motivation, cognitive resources, and action processes needed to control events (Wood and Bandura, 1989). According to SCT, individuals with high levels of self-efficacy demonstrate greater courage in uncertain dynamic environments. Therefore, they are more likely to be successful in achieving their personal goals. Entrepreneurial self-efficacy is a belief in entrepreneurial competences directed at itself. Thus, the higher one’s level of entrepreneurial self-efficacy is, the stronger his or her entrepreneurial intentions will be. Ding and Ding (2011) found that entrepreneurial self-efficacy has a strong predictive effect on entrepreneurial intention and the likelihood of occurrence of entrepreneurial behavior. Saulo et al. (2007) identified the following four dimensions of entrepreneurial self-efficacy: opportunity identification self-efficacy, innovation effectiveness, relationship management effectiveness, and tolerance effectiveness. Further, they found that there was a positive relationship between entrepreneurial self-efficacy and intention. Using the General Self-Efficacy Scale and Williams Creativity Tendency Scale, Tu and Wang (2017) found that there was a significant positive relationship between general self-efficacy and entrepreneurial intention among college students. Liu et al. (2018) conducted a study among college students. In accordance with SCT, entrepreneurial self-efficacy significantly and positively influenced participant ability to utilize opportunities and translate entrepreneurial intentions into behaviors. Many studies have used data from different countries and regions to examine the relationship between entrepreneurial self-efficacy and intention. Their results have consistently shown that entrepreneurial self-efficacy facilitates the formation of entrepreneurial intention (Salami, 2019). Therefore, the following hypothesis was formulated:

Hypothesis 2: Self-efficacy will have a significant positive effect on entrepreneurial intention among college students.

Emotional Competence, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention

Does emotional competence influence entrepreneurial self-efficacy and intention? According to past findings, emotional competence plays an important role in entrepreneurial intention. Individuals with high levels of self-efficacy demonstrate better stress tolerance. When problems arise, they are more likely to persevere. This nurtures their willingness to start a business (Panagiotis and Dimo, 2015). Martínez-González et al. (2019) found that subjective factors (beliefs, social norms, and values) initiate a chain of events, which influence action variables (motivation, self-efficacy, and intention). Emotional competence is also a subjective variable. Salvador (2008) examined the positive effects of emotional competence on entrepreneurial self-efficacy. Zhao et al. (2005) found that entrepreneurial self-efficacy influences the formation of entrepreneurial intention by playing an intermediary role in the relationship between personal characteristics and entrepreneurial intention. Tang and Zhang (2018) examined the direct effect of creative personality traits on entrepreneurial self-efficacy and willingness and the mediating role of entrepreneurial self-efficacy in the relationship between creative personality traits and entrepreneurial willingness. Mwiya et al. (2018) also examined the mediating role of entrepreneurial self-efficacy in the effect of different factors on entrepreneurial intention. Fernández-Pérez et al. (2019) found that entrepreneurship is facilitated by the development of emotional competence in university students. In sum, emotional abilities have a positive effect on entrepreneurial intention through entrepreneurial self-efficacy. Individuals with better emotional abilities also have better social abilities. This enables them to build and maintain relationships with potential investors (i.e., for entrepreneurship), and this promotes the formation of entrepreneurial intention. Individuals with high emotional competence are less risk averse. Therefore, they have more positive entrepreneurial attitudes, higher levels of entrepreneurial self-efficacy, and stronger entrepreneurial intentions. Therefore, the following hypotheses were formulated:

Hypothesis 3: Emotional competence will have a significant and positive effect on entrepreneurial self-efficacy among college students.

Hypothesis 4: Entrepreneurial self-efficacy will mediate the effect of emotional competence on entrepreneurial intention.

MATERIALS AND METHODS

Sample and Questionnaire

This study used questionnaire survey method to collect data from the innovation team of universities in 19 cities in China, selected social entrepreneurship practitioners (university students) in Chinese university innovation organizations as the research objects. College Students' Social Entrepreneurship is

an international nonprofit organization that aims to promote social entrepreneurship and entrepreneurship development among college students, improve their entrepreneurial capacity, and create entrepreneurial awareness. China College Students' Social Entrepreneurship program currently has 242 college member alliances from most parts of China, including Hong Kong. There are more than 12,000 active members. Such social entrepreneurship activities for undergraduate students promote the formation of entrepreneurial intentions and have a significant social impact. First, College Students' Social Entrepreneurship is one of the most influential social entrepreneurship organizations. It promotes entrepreneurial practice and provides sustainability training to students. It most closely resembles real-world entrepreneurial organizations. Therefore, entrepreneurial mechanisms can be adequately examined among its members. Second, social entrepreneurship among college students is an independent development project and is not intended for general commercial entrepreneurship purposes. The formation of such entrepreneurial intentions is more universal, and scholars and educators can use relevant research findings to improve entrepreneurial education. The findings can also be used to enhance the diversity of practice methods. Third, this study was designed based on a research project undertaken by the Humanities and Social Sciences Department of Shantou University and conducted with the support of China College Students' Social Entrepreneurship. Survey resources were provided, and the sample was heterogeneous. Therefore, the data derived from this pioneering project may better reflect the effect of emotional competence and entrepreneurial self-efficacy on entrepreneurial intention.

TABLE 1 | The distribution table of sample feature.

Serial number	Variable	Category	Frequency	Percentage (%)
1	Gender	Male	157	50.4
		Female	155	49.6
2	Profession	Humanities and social sciences	179	57.4
		Polytechnic	133	42.6
3	Roles	Participant	200	64.1
		Sponsor	112	35.9
4	Area	Developed area	254	81.4
		Less-developed area	58	18.6
	Recycling questionnaire	400		
	Recovery rate	368/400		92
	Valid questionnaire	312		78

1. Profession: Generally, second- and third-year college students participate in the Pioneering Bank, so there are a small number of them for more than 1 year.

2. Roles: After a long period of experience in social entrepreneurship projects, they can act as initiators/innovators, playing product/service development, business plans, initiating new projects, and forming project teams. Only a few people play such roles.

3. Locate first- and second-tier cities as developed regions, and third-tier cities and below as less developed regions.

The questionnaire and measurement items were designed based on past findings and the characteristics of College Students' Social Entrepreneurship. Second, the opinions of school teachers and class students were solicited. The Shantou University team test was conducted among 20 students. Based on their feedback, the questionnaire was refined. The revised questionnaire was distributed to a large number of students. Subjective variables were assessed using closed-ended items, which were rated on a five-point Likert scale. To avoid response biases, we ensured that the questionnaire did not

reveal which variables were being assessed. Further, positively and negatively worded items were included. Moreover, relevant questions were included in the basic situation column to detect response bias. The survey was conducted during a national competition organized by China College Students' Social Entrepreneurship. Team members from different universities in China responded to the questionnaire, and the samples have good timeliness and diversity. As in **Table 1**, the questionnaire was implemented by issuing with recycling on-site paper questionnaires. Of the 400 questionnaires that

TABLE 2 | The reliability and validity examination of entrepreneurial intent scale.

Variable	Entry	Cronbach alpha	KMO test result	Bartlett spherical test results	Factor load (varimax)	Explaining the amount of variation (%)
Entrepreneurial intention	I think I am more likely to start a business in the future.	0.841	0.829	Approximate Chi-square: 745.164 df: 15 Sig: 0.000	0.81	56.231
	If I have a chance and I can make my own decision, I choose to start a business.				0.82	
	In order to be an entrepreneur in the future, I have been enriching myself.				0.68	
	After graduating, I want to start a business with people.				0.67	
	My career goal is to be an entrepreneur.				0.55	
	I am passionate about entrepreneurship.				0.59	

TABLE 3 | The reliability and validity examination of explanatory variables.

Variable	Entry	Cronbach alpha	KMO test result	Bartlett spherical test results	Factor load (varimax)	Explaining the amount of variation (%)
Emotional						
Self-awareness	Self-awareness-1	0.790	0.789	Approximate Chi-square: 343.187 df: 6 Sig: 0.000	0.70	61.448
	Self-awareness-2				0.72	
	Self-awareness-3				0.66	
	Self-awareness-4				0.71	
Competences						
Self-regulation	Self-regulation-1	0.785	0.830	Approximate Chi-square: 442.172 df: 15 Sig: 0.000	0.70	48.491
	Self-regulation-2				0.63	
	Self-regulation-3				0.71	
	Self-regulation-4				0.60	
Social awareness						
Social awareness-1	0.828	0.844	Approximate chi-square: 514.812 df: 10 Sig: 0.000	0.73	59.316	
	Social awareness-2				0.65	
	Social awareness-3				0.72	
	Social awareness-4				0.73	
	Social awareness-5				0.68	
Social skill						
Social skill-1	0.809	0.823	Approximate Chi-square: 537.158 df: 15 Sig: 0.000	0.58	51.427	
	Social skill-2				0.66	
	Social skill-3				0.62	
	Social skill-4				0.71	
	Social skill-5				0.71	
	Social skill-6				0.60	

were distributed, 368 were returned, but only 312 were valid. Thus, the response rate was 92%, and the effective response rate was 78%.

Measures

The questionnaire used in this study was developed for use with individuals (i.e., sample units). The questionnaire consisted of three sections: demographic and other characteristics, overall improvement in the respondent with regard to the project (including the four dimensions of emotional competence and five dimensions of entrepreneurial self-efficacy), and entrepreneurial intention. The body of the questionnaire consisted of items that had to be rated on a five-point Likert scale. Participants were required to provide objective ratings for each question.

Response Variable

Entrepreneurial intention was assessed from the perspective of the possibility of individual entrepreneurship. The items that assessed entrepreneurial intention were developed based on Krueger's (2000) assessment. As shown in

Table 2, the factor loading of each entrepreneurial intention item was greater than 0.55. This indicates that the measurement properties of the questionnaire were acceptable. The Kaiser–Meyer–Olki statistic was 0.829, and Bartlett's test yielded a significant value ($P < 0.001$). The cumulative variance contribution of the factors was 56.231%. These findings indicated that factor analysis could be conducted. The Cronbach's alpha of the assessment was greater than 0.7. This indicated that the scale had adequate internal consistency.

Explanatory Variables

Based on the definition of emotional competence proposed by Mayer et al. (1999), emotional competence was defined as the skills needed to perceive, recognize, manage, and use one's own or others' emotions to tackle related problems. Accordingly, the measure of emotional competence used in this study was largely based on the revised version of the ECI-U (Goleman and Boyatzis, 2001). The assessment consisted of four sections: self-consciousness, social awareness, self-control, and social skills. The total number of items was

TABLE 4 | The reliability and validity examination of mediation variables.

Variable	Entry	Cronbach alpha	KMO test result	Bartlett spherical test results	Factor load (varimax)	Explaining the amount of variation (%)
Entrepreneurial						
Innovation self-efficacy	Innovation self-efficacy 1	0.790	0.830	Approximate Chi-square: 457.283 df: 15 Sig: 0.000	0.64	49.110
	Innovation self-efficacy 2				0.67	
	Innovation self-efficacy 3				0.67	
	Innovation self-efficacy 4				0.63	
	Innovation self-efficacy 5				0.61	
Self-efficacy						
Opportunity identification	Opportunity identification 1	0.809	0.861	Approximate Chi-square: 566.810 df: 21 Sig: 0.000	0.64	46.934
	Opportunity identification 2				0.62	
	Opportunity identification 3				0.65	
	Opportunity identification 4				0.60	
Risk bearing	Risk bearing 1	0.776	0.809	Approximate Chi-square: 372.283 df: 10 Sig: 0.000	0.63	52.972
	Risk bearing 2				0.55	
	Risk bearing 3				0.67	
	Risk bearing 4				0.70	
	Risk bearing 5				0.66	
Relationship self-efficacy	Relationship self-efficacy 1	0.708	0.729	Approximate Chi-square: 275.250 df: 10 Sig: 0.000	0.62	46.541
	Relationship self-efficacy 2				0.60	
	Relationship self-efficacy 3				0.61	
	Relationship self-efficacy 4				0.60	
Management self-efficacy	Management self-efficacy 1	0.866	0.906	Approximate Chi-square: 832.923 df: 21 Sig: 0.000	0.71	55.714
	Management self-efficacy 2				0.71	
	Management self-efficacy 3				0.64	
	Management self-efficacy 4				0.80	
	Management self-efficacy 5				0.69	
	Management self-efficacy 6				0.70	
	Management self-efficacy 7				0.63	

18 (self-consciousness and social awareness, 9 items; self-control, 4 items; and social skills, 5 items). To enhance the validity of the questionnaire, several reverse-scored items were created. As shown in **Table 3**, the factor loading of each item was greater than 0.5. Thus, the relevance of each question was high. Emotional competences consistency coefficient Cronbach alpha value is greater than 0.7, passed the internal consistency test.

Mediating Variable

The measure of entrepreneurial self-efficacy used in this study was designed based on the scales developed by De Noble et al. (1999) and Lucas and Cooper (2004) and the contents of the self-efficacy scale developed by Schwarzer (1997). The entrepreneurial self-efficacy scale consisted of 25 items and the following five dimensions: innovation self-efficacy, risk-taking self-efficacy, opportunity identification efficacy, relationship coordination self-efficacy, and management effectiveness. To enhance the validity of the questionnaire, several reverse-scored items were created. As shown in **Table 4**, the factor loading of each entrepreneurial self-efficacy item was greater than 0.55. This indicated that the measurement properties of the questionnaire were good and that the relevance of each question was high. The Cronbach's alphas of all the entrepreneurial self-efficacy dimensions were greater than 0.7. This indicated that they had adequate internal consistency.

Control Variables

According to past findings, factors such as gender, specialty, role, family background, social relationships, and the macro environment (including the economic environment, national policy, and business environment) have an impact on entrepreneurial intention. However, the scope of measurement is too broad and diffuse, and this method is vulnerable to privacy issues and response biases. Therefore, this study was conducted within the context of the China College Students' Social Entrepreneurship project. The aforementioned variables were assessed as follows: gender, male and female; major, humanities, social sciences, and science; role, participants and initiators; and region, developed and underdeveloped. The first options were coded as "0," and the second options were coded as "1."

DATA ANALYSIS AND RESULTS

Correlation Analysis

Using the KSI matrix in LISREL 8.7, estimates for the correlations between the measurement factors were computed. The variance was set to 1 (i.e., the data were set to the standardized coefficient; Pearson's correlation), and the factor correlation coefficient was computed using the estimation procedure. As shown in **Table 5**, there were significant relationships between the four dimensions of emotional competence (self-awareness, self-control, social awareness, and social skills), five dimensions of entrepreneurial

TABLE 5 | Correlation analysis among latent variables.

Variable	Mean	Standard deviation	Self-awareness	Self-regulation	Social awareness	Social skill	Innovation self-efficacy	Opportunity identification	Risk bearing	Relationship self-efficacy	Management self-efficacy	Entrepreneurial intention
Self-awareness	4.15	0.66	1									
Self-regulation	3.87	0.63	0.504**	1								
Social awareness	4.16	0.67	0.630**	0.504**	1							
Social skill	4.03	0.61	0.672**	0.599**	0.672**	1						
Innovation self-efficacy	3.80	0.64	0.418**	0.594**	0.418**	0.550**	1					
Opportunity identification	3.86	0.60	0.546**	0.634**	0.546**	0.638**	0.665**	1				
Risk bearing	3.94	0.69	0.545**	0.573**	0.431**	0.505**	0.408**	0.519**	1			
Relationship self-efficacy	3.95	0.55	0.602**	0.633**	0.502**	0.660**	0.608**	0.654**	0.546**	1		
Management self-efficacy	4.08	0.66	0.524**	0.589**	0.524**	0.612**	0.466**	0.532**	0.574**	0.629**	1	
Entrepreneurial intention	3.71	0.76	0.228**	0.491**	0.228**	0.372**	0.416**	0.454**	0.456**	0.504**	0.300**	1

*Significant at the level of $P < 0.05$; **significant at the level of $P < 0.01$.

TABLE 6 | The fitting index of structural equation models M1, M2, and M3.

Indicator name	Ideal value	M1 model	M2 model	M3 model
P值	0.000	0.000	0.000	0.000
X/df	≤5	37.0/8 = 4.6	79.5/19 = 4.2	78.0/22 = 3.5
RMSEA	≤0.06	0.68	0.08	0.59
RMR	≤0.08	0.054	0.065	0.037
GFI	≥0.9	0.96	0.94	0.95
AGFI	≥0.8	0.90	0.89	0.88
NFI	≥0.9	0.97	0.96	0.98
NNFI	≥0.9	0.95	0.95	0.97
CFI	≥0.9	0.97	0.97	0.98

self-efficacy (innovation effectiveness, opportunity recognition effectiveness, relationship effectiveness, and management effectiveness), and entrepreneurial intention. In addition, among the control variables, only gender and role were significantly correlated with entrepreneurial intention.

Structural Equation Modeling: Emotional Competence, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention

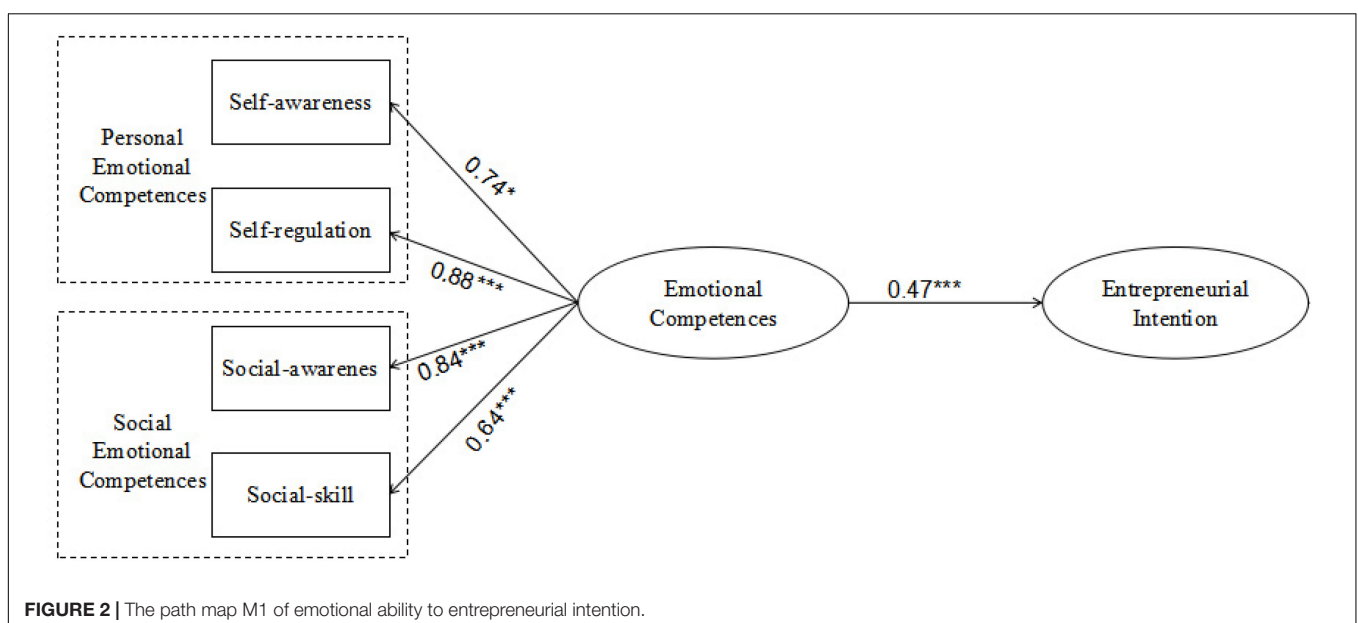
Structural equation modeling was used to test the study hypotheses. In other words, we examined the relationship between emotional competence, entrepreneurial self-efficacy, and entrepreneurial intention and the mediating role of entrepreneurial self-efficacy in the relationship between emotional competence and entrepreneurial intention. First, structural equation modeling was used to examine the relationship between emotional competence and entrepreneurial self-efficacy. As shown in **Table 6**, the Chi-squared statistic and degrees of freedom for Models 1, 2, and 3 were lower than the

acceptable threshold of 5. The RMR and RMSEA values were lower than 0.08. The GFI, NFI, NNFI, CFI, and AGFI values reached the minimum required value of 0.90. These findings indicate that Models 1, 2, and 3 fit the data well.

With regard to the path from emotional competence to entrepreneurial intention (**Figure 2**), emotional competence had a direct positive effect on entrepreneurial intention. The standardized coefficient was 0.47, and the corresponding t -value was 4.16 (which is substantially greater than 1.96) and significant. This indicated that emotional competence had a positive effect on entrepreneurial intention. Thus, Hypothesis 1 was supported. The standardized coefficient that emerged for self-consciousness was 0.74 ($t < 1.96$) and nonsignificant. Thus, Hypothesis 1a, which predicted that personal affective competence will have a positive effect on entrepreneurial intention, was not supported. However, as predicted by Hypothesis 1b, social-emotional competence had a positive effect on entrepreneurial intention.

In the path map Model 2 of entrepreneurial self-efficacy versus entrepreneurial intention in **Figure 3**, the entrepreneurial self-efficacy has a direct impact on entrepreneurial intention. The standardized coefficient was 0.57, and the corresponding t -value was 8.79 (which is much higher than 1.96) and significant. Therefore, Hypothesis 2 was supported.

With regard to the path from emotional competence to entrepreneurial self-efficacy (Model 3, **Figure 4**), the standardized coefficient was 0.93, and the corresponding t -value was 12.56 (which is much higher than the required significance level; $t = 1.96$). This indicated that emotional competence had a positive effect on entrepreneurial self-efficacy. Thus, Hypothesis 3 was supported. Similarly, the five dimensions of entrepreneurial self-efficacy, namely, opportunity identification effectiveness, innovation effectiveness, relationship effectiveness, risk-taking effectiveness, and management effectiveness had factor loadings greater than 0.66, and the corresponding t -values were greater than the minimum required significance level ($t = 1.96$).



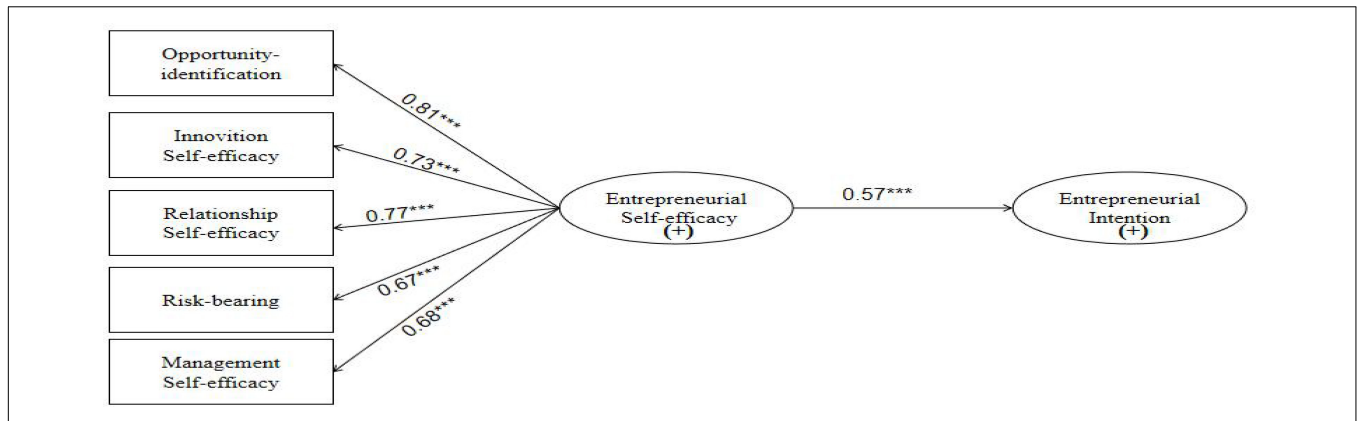


FIGURE 3 | The path map M2 of entrepreneurial self-efficacy to entrepreneurial intention. ***significant at the level of $P < 0.001$.

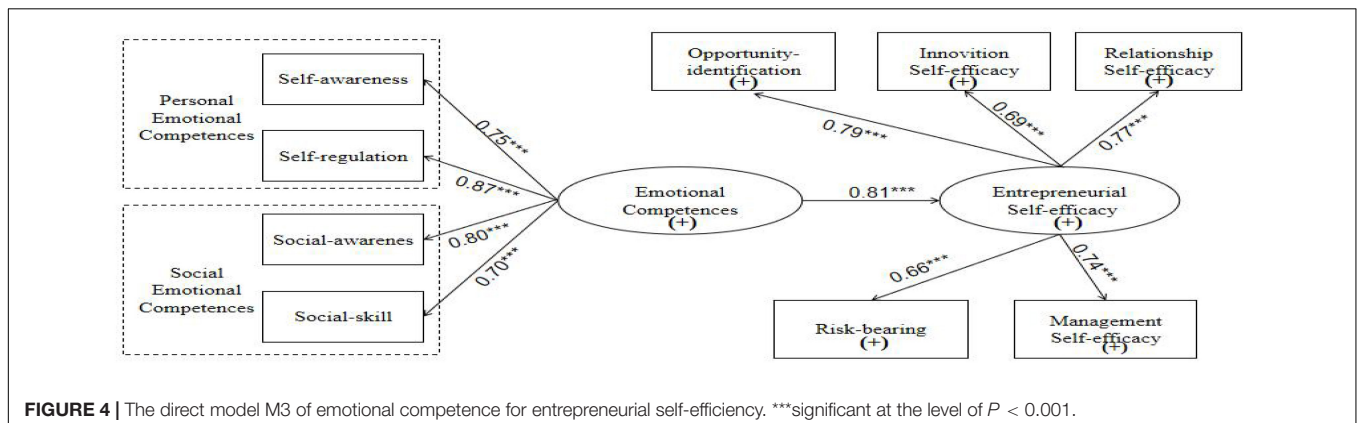


FIGURE 4 | The direct model M3 of emotional competence for entrepreneurial self-efficacy. ***significant at the level of $P < 0.001$.

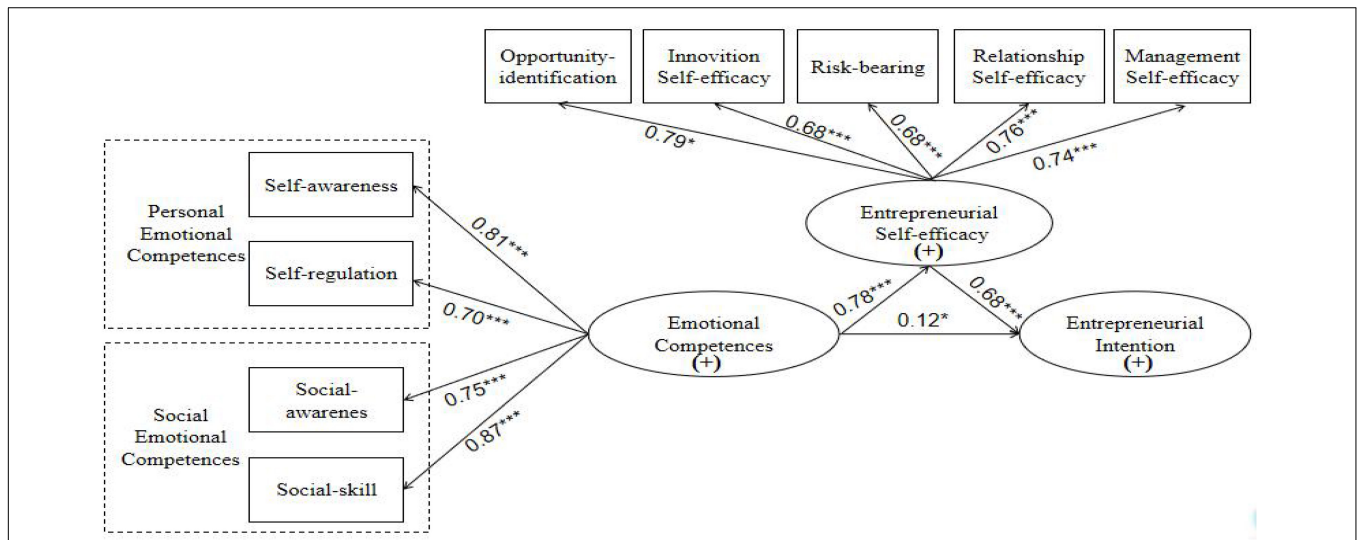


FIGURE 5 | The integration model M4 of entrepreneurial self-efficacy as a mediator variable. *Significant at the level of $P < 0.05$; ***significant at the level of $P < 0.001$.

TABLE 7 | The data fitting results of structural equation model M4.

Structural equation model	X/df	P-value	RMSEA	RMR	GFI	NFI	NNFI	CFI
M4	1,086.07/458 = 2.06	0.000	0.07	0.06	0.80	0.94	0.96	0.97

Emotional competence had a positive effect on opportunity recognition effectiveness, innovation effectiveness, relationship effectiveness, risk tolerance effectiveness, and management effectiveness (i.e., entrepreneurial self-efficacy). Thus, Hypothesis 3 was further supported.

The Mediating Role of Entrepreneurial Self-Efficacy

LISREL was used to analyze Model 4 and examine the role of entrepreneurial self-efficacy in the relationship between emotional competence and entrepreneurial intention (Figure 5). As shown in Table 7, the fit indices that emerged for Model 4 reached the accepted thresholds: RMSEA = 0.07 (should be less than 0.08), GFA = 0.80 (should be greater than 0.8), and RMR = 0.06 (should approximate 0.06). The NFI, NNFI, and CFI values were all greater than 0.9. Thus, Model 4 was found to be a good fit for the data.

Further, we examined whether entrepreneurial self-efficacy mediated the aforementioned relationship fully or partially. As per the guidelines provided by Baron and Kenny (1986), if the path from emotional competence to entrepreneurial intention is not significant, then it can be concluded that entrepreneurial self-efficacy fully mediated the relationship. Otherwise, it can be concluded that it played a partial mediating role. As shown in Table 8, the direct effect of emotional competence on entrepreneurial self-efficacy was significant, but the indirect effect was not significant. The total effect of emotional competence on entrepreneurial intention was significant ($t = 6.07$). The direct effect was significant ($t = 1.99$), and the indirect effect was also significant. The corresponding t -value was 2.76 (i.e., substantially higher than 1.96). When entrepreneurial self-efficacy was included in the model, the significant positive relationship between emotional competence and entrepreneurial intention

remained significant. Thus, Hypothesis 4 was supported. Entrepreneurial self-efficacy partially mediated the relationship between emotional competence and entrepreneurial intention.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the present findings, several conclusions can be drawn. First, social-emotional competence had a positive effect on entrepreneurial intention, and the positive effect of personal affective competence on entrepreneurial intention was not supported or only partially supported. When their emotional competence improves, college students feel more confident about their entrepreneurial abilities. This helps them seize entrepreneurial opportunities. Second, all the dimensions of entrepreneurial self-efficacy were significantly and positively correlated with entrepreneurial intention. In other words, the higher their level of entrepreneurial self-efficacy was, the stronger their entrepreneurial intentions were. Third, the four dimensions of emotional competence (self-awareness, self-control, social awareness, and social skills) were positively related to the five dimensions of entrepreneurial self-efficacy (innovation effectiveness, opportunity recognition effectiveness, management effectiveness, risk tolerance effectiveness, and relationship effectiveness). Therefore, emotional competence has a significant positive impact on entrepreneurial self-efficacy. Fourth, entrepreneurial self-efficacy mediated the relationship between emotional competence and entrepreneurial intention. The present findings are consistent with the results of Salvador's (2008) study in which emotional competence had a positive effect on the self-efficacy of entrepreneurs. Further, they enrich our understanding of the results reported by Tang and Zhang (2018) and Mwiya et al. (2018). They also delineate the relationship between emotional competence, self-efficacy, and entrepreneurial intention. In sum, emotional competence reinforced entrepreneurial intention by improving entrepreneurial self-efficacy. It is important to cultivate college students' emotional abilities, including the management of personal and social-emotional abilities, and continuously provide guidance for future entrepreneurial endeavors. This is an important and effective means by which entrepreneurial intentions can be cultivated among college students (Baron and Kenny, 1986).

Recommendations

First, the development of emotional competence, especially the ability to overcome communication barriers, among college students should be emphasized. Entrepreneurship training programs should be provided to college students. The cultivation

TABLE 8 | Analysis of effect of the latent variable path analysis.

Variable	Entrepreneurial self-efficacy		Entrepreneurial intention	
	Normalization coefficient	t-Value	Normalization coefficient	t-Value
Emotional competences				
Direct effect	0.78	14.85***	0.12	1.99*
Indirect effect	–	–	0.71	2.76***
Overall effectiveness	0.78	14.85***	0.54	6.07***
Entrepreneurial self-efficacy				
Direct effect	–	–	0.68	2.79***
Indirect effect	–	–	–	–
Overall effectiveness	–	–	0.68	2.79***

When the value of t is greater than 1.96, * $P < 0.05$; when it is greater than 2.58, ** $P < 0.01$; when it is greater than 3.96, *** $P < 0.001$.

and application of emotional abilities will not only enhance their self-confidence and independence, help them build good interpersonal relationships, and respond to stress adaptively but also help them achieve resource integration at work or during entrepreneurial activities. Actively carrying out the activities about cultivating and applying college students' emotional abilities in colleges, including adding related training in emotional use and management, stress response and management, interpersonal relationship coordination; providing scenario simulation, experience training, quality development, and social practice so as to improve the emotional competences of college students.

Second, drawing upon existing theories, college students should be differentiated based on their emotional competence and entrepreneurial self-efficacy levels. This will facilitate the exploration of a more comprehensive mechanism to promote innovation and nurture talent. Even though the emotional abilities of students are classified as abilities, entrepreneurial self-efficacy is a subjective assessment and belief (i.e., that one possesses the abilities needed for entrepreneurship) and is classified as a self-assessment of abilities. These two factors are closely related. Enhancing the emotional competence of college students will improve their entrepreneurial self-efficacy. Therefore, it is necessary and important to emphasize the cultivation and use of emotional abilities, underscore the role of entrepreneurial self-efficacy, actively establish personnel training measures, flexibly promote classroom diversity, nurture innovative thinking, and improve the practical abilities of students (Zeng et al., 2017).

The importance of strengthening the development of early-stage entrepreneurship practice platforms cannot be emphasized enough. This will foster collaboration between teachers and students and promote after-class practice. They serve as an important platform through which entrepreneurial intentions can be cultivated among college students. Equipped with good projects and ideas, college students will have to only take the first steps toward an entrepreneurial "long march." Indeed, college students are afforded limited work experience. In general, when they explore business opportunities or entrepreneurial projects, they tend to remain in the theoretical analysis stage. When they are faced with problems and risks, college students tend to behave immaturely. As a result, their entrepreneurial ventures often result in failure. The development of an early entrepreneurial practice platform will ensure that students interact with their communities more closely, actively engage in practical activities, and translate their creative ideas into action. In this manner, they can explore and identify their strengths. Through collective effort, one can provide practical experience, management experience, business knowledge, resources, and assistance to cultivate thinking patterns for acquired entrepreneurship. This will help

college students form more stable entrepreneurial intentions and lay the foundation for future entrepreneurial actions.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent to participate in this study was provided by the patient/participants' or patient/participants legal guardian/next of kin.

AUTHOR CONTRIBUTIONS

CC-C and MZ planned the study, collected the data, and wrote the manuscript. MZ, BS, and BL analyzed the data and wrote the manuscript. Three graduate students collected the data and wrote the manuscript. All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

FUNDING

This paper was supported by Guangdong Provincial Social Science Fund Project (GD16XYJ34), Guangdong Provincial Natural Science Foundation (2018A0303070008), Guangdong Provincial Natural Science Foundation Project (2018A030307040), Guangdong Province Philosophical and Social Science Planning Special Projects (GD20SQ25), Special Reinforcement Project and Discipline Construction of Foshan University (2019), High-level Talent Start-up Project Fund, the Innovation and Economic Transformation and Upgrading Research Center of the Guangdong Social Science Research Base, Guangdong Province Science and Technology Department Project "Industrial Ecosystem and Rural Revitalization", and Guangdong Innovation and Entrepreneurship Education Curriculum: "Integrated Thinking Application and Practice".

ACKNOWLEDGMENTS

The authors wish to thank the reviewers for their helpful comments on earlier drafts of this manuscript.

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Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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