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Enhancing Entrepreneurial Intentions through Self-Efficacy: A Study of Art Students in Hubei, China

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Abstract

Purpose: This study explores the influence of five variables—entrepreneurial education, self-efficacy, personal attitude, social norms, and perceived behavioral control on the entrepreneurial intentions of art students at a university in Hubei, China. The focus is particularly on identifying which factors significantly affect these intentions. **Research design, data and methodology:** Employing a mixed-method approach, the research collected data from 60 students using quantitative surveys and qualitative interviews. Multiple linear regression analysis was utilized to determine the impact of each variable on entrepreneurial intentions. All participants were involved in a 14-week strategic intervention program, with data from pre- and post-intervention analyzed through paired-sample t-tests. **Results:** The regression analysis revealed that all five independent variables significantly influenced entrepreneurial intention, with self-efficacy exhibiting the strongest effect. Entrepreneurship education, social norms, and perceived behavioral control also showed significant positive relationships, while personal attitude had the weakest yet still significant impact. The model demonstrated a strong explanatory power with low multicollinearity, highlighting the critical role of psychological and social factors in shaping entrepreneurial intention. **Conclusions:** Educational institutions can leverage these insights to design interventions that effectively cultivate an entrepreneurial mindset, especially focusing on boosting self-efficacy among students in creative fields.

Keywords: Entrepreneurial Intentions, Self-efficacy, Educational Interventions, Strategical Plan, Art Students

JEL Classification Code: A20, I23, L20, M10

1. Introduction

Huanggang Normal University, located in Hubei Province, has actively promoted entrepreneurship education among art students in alignment with national policies such as the "Mass Entrepreneurship and Innovation" initiative. However, despite these efforts, art students often face significant barriers to entrepreneurial success, including limited practical training and inadequate exposure to entrepreneurial opportunities. The lack of hands-on experience restricts their ability to develop essential business acumen, such as financial planning, marketing strategies, and risk assessment, leading to reduced confidence in launching and sustaining a business. Additionally, minimal industry exposure means these students struggle to build professional networks and access market opportunities, which are critical for transforming creative ideas into viable ventures. These factors contribute to weaker entrepreneurial intentions, as students may perceive entrepreneurship as too risky or unattainable given their skill gaps. Despite extensive research on entrepreneurship education, the unique challenges faced by art students in China's sociocultural and economic context remain underexplored. This study seeks to address this gap by examining the psychological and social factors influencing entrepreneurial intentions among art students in Hubei.

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Entrepreneurship has become a critical focus in academic and practical discourse over the past few decades (Hindle & Moroz, 2009; Potishuk & Kratzer, 2017). Entrepreneurship education aims to enhance entrepreneurial intentions—defined as an individual's readiness to initiate a new venture—has been widely studied since its formal inception in the U.S. and Europe in the 1970s. In China, its development gained momentum in the early 1990s, culminating in the 2014 "Mass Entrepreneurship and Innovation" initiative, which emphasized fostering entrepreneurial skills in higher education (Jing et al., 2015). Over the years, universities worldwide have implemented courses to cultivate students' entrepreneurial attitudes, skills, and capabilities (Dickson et al., 2008; Katz, 2008; Peterman & Kennedy, 2003). While research generally highlights the positive impact of entrepreneurship education, some studies (Krueger & Brazeal, 1994; Pittaway & Cope, 2007) present mixed findings, suggesting that self-efficacy, personal attitudes, social norms, and perceived behavioral control may mediate these effects (Wilson et al., 2007).

In China, art and design students encounter unique obstacles in entrepreneurship due to the specialized nature of their creative disciplines. In Hubei Province, known for its dense concentration of higher education institutions, art students often lack access to structured entrepreneurial training and mentorship, limiting their ability to develop the necessary business strategies and problem-solving skills. This deficit not only affects their decision-making confidence but also reduces their ability to assess market demand, identify business opportunities, and manage financial risks. Moreover, traditional arts education in China prioritizes technical and creative proficiency over entrepreneurial competencies, leaving many students unprepared for the commercial aspects of creative industries. Weak industry linkages and limited real-world exposure further hinder their network-building efforts and access to funding or startup resources (Zhao et al., 2022). At the same time, the growing creative economy, particularly in fields like digital media, service design, and user experience, demands interdisciplinary skills that merge creativity with entrepreneurial thinking (Hu et al., 2021). However, due to a lack of structured entrepreneurial guidance, many art students struggle to commercialize their artistic talents and sustain competitive enterprises. Existing research has predominantly focused on business or engineering students, leaving a critical gap in understanding how entrepreneurship education, self-efficacy, personal attitudes, social norms, and perceived behavioral control influence entrepreneurial intentions among art students.

This research aims to bridge this gap by focusing on art students in Hubei, offering empirical insights into the factors that drive or hinder their entrepreneurial aspirations. The findings will help design tailored educational interventions to strengthen the entrepreneurial competencies of art students, ensuring they are equipped with the necessary business knowledge, strategic thinking, and risk-taking abilities. Furthermore, this study offers practical implications for policymakers, educators, and university administrators, guiding the development of more effective curricula, mentorship programs, and institutional support systems to foster innovation and economic growth within China's creative industries.

2. Literature Review

2.1 Entrepreneurship Education

Entrepreneurship education equips individuals with the skills, competencies, and values necessary to identify business opportunities and launch successful ventures (Manimala & Thomas, 2017). It emphasizes risk management and supports the growth of enterprises from inception to maturity (Gorman et al., 1997). Research has extensively examined its global developmental stages, particularly within university settings, focusing on pedagogical approaches, curriculum integration, and experiential learning (Charney & Libecap, 2000; Plaschka & Welsch, 1990).

However, the effectiveness of entrepreneurship education is often contingent on its ability to enhance self-efficacy, a psychological factor that determines whether individuals feel capable of overcoming challenges in entrepreneurial ventures. Studies suggest that well-designed educational interventions, such as hands-on business simulations, mentorship, and networking opportunities, can significantly enhance students' self-efficacy, thus strengthening their entrepreneurial intentions (Newman et al., 2019; Nowiński et al., 2019). Yet, research remains limited on how such interventions apply to students in creative fields like art and design, where entrepreneurial competencies must align with artistic skills (Ramadani et al., 2022). While universities worldwide have implemented entrepreneurship courses, existing studies primarily focus on business and STEM students, with minimal exploration of how entrepreneurship education can be tailored to meet the needs of creative industries (Schlesinger et al., 2022). Hence, the following hypothesis is formalized:

H1: Entrepreneurship education has a significant impact on entrepreneurial intention

2.2 Self-efficacy

Self-efficacy, rooted in Bandura's social cognitive theory, refers to an individual's belief in their ability to perform specific tasks effectively, thereby influencing their actions and outcomes (Kurbanoğlu, 2004). It enhances persistence, confidence, and optimism—qualities essential for entrepreneurial success (Oyugi, 2015). Notably, self-efficacy is not only a determinant of entrepreneurial behavior but also a key outcome of entrepreneurship education. Educational programs that incorporate experiential learning, mentorship, and real-world business challenges have been shown to boost self-efficacy, making individuals more likely to develop and act upon entrepreneurial intentions (Barba-Sánchez & Atienza-Sahuquillo, 2018; Shi et al., 2020).

Despite extensive research on self-efficacy in entrepreneurship, most studies have focused on general business contexts, leaving a gap in understanding how self-efficacy develops within creative industries (Fang et al., 2023). Artists and designers may have high creative self-efficacy but low business self-efficacy, impacting their entrepreneurial confidence. More research is needed to explore how entrepreneurship education can specifically address this imbalance, ensuring that creative students gain the necessary business acumen to complement their artistic talents. Hence, the following hypothesis is formalized:

H2: Self-efficacy has a significant impact on entrepreneurial intention.

2.3 Personal Attitude

Personal attitudes, defined as emotions or thought patterns influencing behavior, consist of cognitive, emotional, and behavioral components shaped by social experiences and environmental factors (Lukas et al., 2020). Studies indicate that positive personal attitudes toward entrepreneurship are significant predictors of entrepreneurial intention (Krueger & Brazeal, 1994). However, these attitudes do not develop in isolation—they are influenced by self-efficacy, social norms, and perceived behavioral control (Ajzen, 1991).

Recent research has explored how entrepreneurship education can modify students' attitudes by challenging risk aversion and fostering opportunity recognition (Shirokova et al., 2022). However, studies on personal attitudes toward entrepreneurship in creative disciplines remain scarce. Many art students struggle with the perception that entrepreneurship contradicts artistic integrity, further discouraging their entrepreneurial ambitions (Gangi, 2023). Future research should examine how targeted educational interventions can reshape personal attitudes, reinforcing the alignment between creativity and business acumen. Hence, the following hypothesis is formalized:

H3: Personal attitude has a significant impact on entrepreneurial intention.

2.4 Social Norms

Social norms, categorized as descriptive (what people do) and injunctive (what others believe one should do), influence behavior within cultural contexts (Cialdini et al., 1990). In entrepreneurship, social norms can serve as either catalysts or barriers to business creation, depending on whether society encourages or discourages entrepreneurial risk-taking (Liñán & Chen, 2009).

Prior studies indicate that family, peers, and institutional support shape entrepreneurial intentions by reinforcing or undermining the perceived desirability of entrepreneurship (Shi & Wang, 2023). However, existing research tends to focus on business-oriented students, with limited insights into how social norms impact entrepreneurial intentions in creative industries. For instance, art students may face social pressures that prioritize artistic careers over entrepreneurial endeavors, reducing their likelihood of pursuing business ventures. Further research should explore how shifting cultural perceptions of creative entrepreneurship can encourage more artists to engage in business activities (Kraus et al., 2022). Hence, the following hypothesis is formalized:

H4: Social norms have a significant impact on entrepreneurial intention.

2.5 Perceived Behavioral Control

Perceived Behavioral Control (PBC), a core element of the Theory of Planned Behavior (TPB), represents an individual's self-assessment of their ability to perform a behavior successfully (Ajzen, 1991). Unlike self-efficacy, which focuses on belief in personal ability, PBC also accounts for external factors, such as access to resources, mentorship, and financial constraints.

Research indicates that PBC influences entrepreneurial decision-making by determining whether individuals feel capable of starting a business given their perceived internal and external limitations (Gul et al., 2023). However, few studies examine PBC in the context of creative entrepreneurship, where external factors—such as market unpredictability, funding availability, and industry gatekeeping—play a crucial role (Elia et al., 2023). A deeper understanding of how PBC interacts with entrepreneurial education and social norms could help identify strategies to strengthen students' confidence in launching creative enterprises. Hence, the following hypothesis is formalized:

H5: Perceived behavior control has a significant impact on entrepreneurial intention.

2.6 Entrepreneurial Intention

Entrepreneurial intention refers to an individual's conscious state of mind that directs their focus, experiences, and actions toward starting a business (Krueger & Brazeal, 1994). Entrepreneurial intentions are shaped by a complex interplay of personal attitudes, self-efficacy, social norms, and perceived behavioral control (Kautonen et al., 2015). While the Theory of Planned Behavior (TPB) emphasizes cognitive and environmental influences, Social Cognitive Theory (SCT) highlights the role of observational learning, suggesting that exposure to entrepreneurial role models can significantly impact students' entrepreneurial aspirations (Bayron, 2013).

Despite extensive research on entrepreneurial intention, existing studies often overlook the specific challenges faced by art students, who may struggle with business confidence despite strong creative skills (Brown et al., 2023). As entrepreneurship is increasingly recognized as a viable career path within the creative economy, future research should focus on designing interventions that bridge the gap between artistic expertise and entrepreneurial capability. Universities play a crucial role in fostering this transition by offering targeted programs that align business knowledge with creative practice.

3. Research Methods and Materials

3.1 Research Framework

This research framework is grounded in Ajzen's (1991) Theory of Planned Behavior (TPB), which posits that entrepreneurial actions are driven by entrepreneurial intentions. These intentions are influenced by personal attitudes toward entrepreneurship, perceived behavioral control, and social norms. Krueger and Carsrud (1993) further emphasized that attitudes and control mechanisms shape intentions, which ultimately lead to entrepreneurial behaviors. Additional elements were integrated with TPB, such as entrepreneurship education and self-efficacy to explore the entrepreneurial intentions of art students in Hubei, China.

Several theoretical frameworks underpin this research. Paliwal et al.'s (2022) model demonstrates that entrepreneurship education directly influences entrepreneurial intentions and indirectly impacts creativity and motivation. Duong and Le (2021) highlight self-efficacy's role in entrepreneurial intentions, noting its connection to desirability, feasibility, and even ADHD-related traits. Hasani et al.'s (2023) framework integrates personal attitudes, subjective norms, and perceived behavioral control as key drivers of entrepreneurial intentions. Social norms, as discussed by Cialdini et al. (1990) and explored by Naznen et al. (2023), also shaped by family, peers, and mentors, influence entrepreneurial activities, particularly in social entrepreneurship. By combining these perspectives, this study offers a comprehensive framework for analyzing the entrepreneurial intentions of art students in China as illustrated in figure 1. It determines the relationship between education, self-efficacy, personal values, and social norms, providing an understanding of how entrepreneurial intentions are formed.

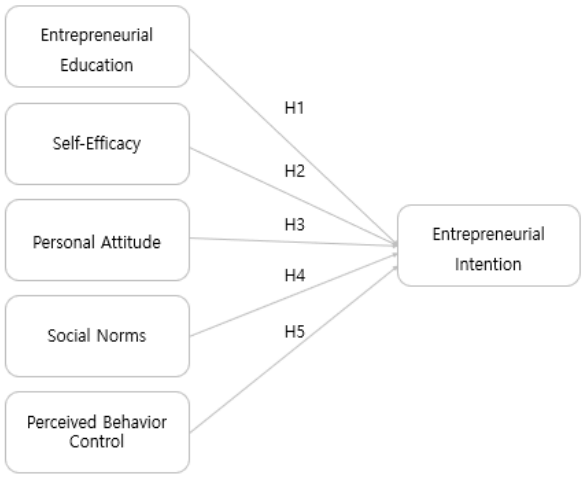

Figure 1: Research Framework

3.2 Research Methodology

The research process was conducted in four stages to examine entrepreneurial intentions using a mixed-methods approach. Quantitative methods, like surveys, measured variables such as self-efficacy and social norms, while qualitative interviews provided deeper insights into students' experiences and contextualized the findings.

The first stage, a pilot survey was conducted with 30 randomly selected students to test the clarity and reliability of the questionnaire. Feedback from participants was used to refine the survey instrument.

In the second stage, the refined survey was distributed to 60 students across different academic levels in both print and online formats. Quantitative analysis was conducted using multiple linear regression to test the conceptual framework, with significance determined at a p-value of < 0.05.

The third stage, a structured educational intervention, workshops, mentorship sessions, and business simulations aimed at enhancing students' entrepreneurial skills. The strategic plan (SP) focused on risk management, resource allocation, and peer mentoring, and creative

entrepreneurship strategies. Ethical approval was obtained from the university ethics committee. Participants provided informed consent, and all data were kept confidential and anonymized to protect student privacy. Participation was voluntary, and students could withdraw at any stage without consequences.

After completing the SP, a follow-up survey was conducted with the same 60 students. Paired-sample t-tests were used to compare pre- and post-intervention results, assessing changes in entrepreneurial intentions and the effectiveness of the SP. To complement survey data, semi-structured interviews were conducted with the students to explore their perceptions of entrepreneurship, challenges faced, and the impact of the intervention. Interview questions were developed based on prior qualitative research on entrepreneurial education and validated through expert review. This four-stage process ensured a comprehensive and robust analysis of the factors influencing entrepreneurial intentions among art students.

3.3 Population and Sample Size

3.3.1 Research Population

The research population consisted of 60 art students from Huanggang Normal University, China, including a diverse group across academic levels, lower-grade students, higher-grade students, and graduates. The aim was to collect comprehensive data on entrepreneurial intentions within this population, particularly assessing the impact of entrepreneurship education. Recruitment was facilitated through faculty recommendations and department heads, ensuring a representative sample reflective of various academic experiences and entrepreneurial exposure.

3.3.2 Sample Size

According to literature, a sample size of 30 to 500 participants is typically adequate for research of this kind. For this study, 60 students were selected to provide a balance between manageability and statistical significance. The group was divided into 15 lower-grade students, 22 higher-grade students, and 23 graduates. These groups were chosen to offer a comprehensive overview of entrepreneurial intentions across different academic stages. The sample size was justified based on the specific needs of the study, particularly the necessity to evaluate educational interventions and their effects across a stratified population of students.

3.3.2 Sampling Procedure

The researcher conducted three sampling stages to ensure comprehensive data collection. First, a pilot test was conducted with 30 randomly selected students who provided feedback on the clarity and relevance of the survey questions, which was then used to refine the instrument. Second, a pre-survey was carried out with 60 students from various academic levels, including lower-grade students, higher-grade students, and graduates. Surveys were distributed both online and in print, and all 60 responses were validated for analysis. Finally, during the SP phase, the same 60 students voluntarily participated in workshops and mentoring sessions aimed at enhancing their entrepreneurial skills and intentions.

3.4 Research Instruments

3.4.1 Questionnaire Design

The survey questionnaire was carefully designed following a systematic process. First, questionnaire items were sourced from validated instruments, such as Amundsen and Martinsen (2015), to ensure accuracy and reliability. These items were then adjusted to align with the educational context of Chinese university students, ensuring relevance to the target population. To validate the questionnaire items, the Index of Item-Objective Congruence (IOC) was implemented. Five independent experts, including one Thai professor and four Chinese professors, reviewed each item and rated its relevance using a scale of +1 (congruent), 0 (questionable), and -1 (incongruent). All items scored above 0.67, meeting the criteria for retention.

The questionnaire consisted of three main sections. The first section included screening questions to filter out respondents who did not fit the target research population. The second section collected basic demographic information, such as gender, age, and birthplace. The third section contained the main survey questions aimed at measuring key variables, including entrepreneurship education, self-efficacy, personal attitude, social norms, perceived behavioral control, and entrepreneurial intentions. These variables were assessed using a Likert scale to capture participants' responses effectively.

3.4.2 Reliability and Validity

A pilot study was conducted to test the reliability and validity of the questionnaire. A total of 30 students were randomly selected to participate, and their feedback was used to finalize the survey instrument. The pilot questionnaire included 25 items covering six key constructs: entrepreneurship education, self-efficacy, personal attitude, social norms, perceived behavioral control, and entrepreneurial intentions. Cronbach's Alpha was used to evaluate the internal consistency of the constructs, and all results indicated good to excellent reliability from its value ≥ 0.7 (Nunnally & Bernstein, 1994).

The Cronbach's Alpha values for each construct were as follows: entrepreneurship education (0.815), self-efficacy (0.822), personal attitude (0.798), social norms (0.878),

perceived behavioral control (0.902), and entrepreneurial intentions (0.812). These results shown in Table 1 confirmed the questionnaire's reliability and internal consistency, ensuring its suitability for use in the full-scale study.

Table 1: Pilot Test Result

Variable	No. of Items	Cronbach's Alpha	Strength of Association
Entrepreneurship Education	5	0.815	Good
Self-efficacy	4	0.822	Good
Personal Attitude	4	0.798	Good
Social Norms	4	0.878	Good
Perceived Behavior Control	4	0.902	Excellent
Entrepreneurship Intention	4	0.812	Good

4. Results and Discussion

4.1 Demographic Profile

The study included a total of 60 participants, comprising 35 males (57.7%) and 25 females (42.3%), reflecting a relatively balanced gender distribution. In terms of age, the majority of participants (46.8%) were between 20 and 25 years old, followed by 34.3% who were over 25 years old, and 18.9% who were below 20 years old. Regarding academic standing, the participants were categorized into three groups: 15 students (25.3%) were in lower academic grades, 22 students (36.3%) were in higher academic grades, and 23 participants (38.4%) were graduates. This distribution ensured a diverse representation across different academic levels, providing insights into how entrepreneurial intentions evolve throughout students' academic journeys.

Table 2: Demographic Profile

Research Population and SP Participants (N=60)		Frequency	Percentage
Gender	Male	35	57.7
	Female	25	42.3
Age	< 20 years old	11	18.9
	20 – 25 years old	28	46.8
	> 25 years old	21	34.3
Grade	Lower grade	15	25.3
	Higher-grade	22	36.3
	Graduates	23	38.4

4.2 Multiple Linear Regression

The present study employed Multiple Linear Regression (MLR) analysis to explore the relationships between five independent variables—Entrepreneurial Education, Self-Efficacy, Personal Attitude, Social Norms, and Perceived Behavioral Control—and their effect on the dependent variable, Entrepreneurial Intention. The sample consisted of 60 art students from Huanggang Normal University.

Table 3: The multiple linear regression of five independent variables on Entrepreneurial intention

Variable	Standardized Coefficients Beta Value	t-value	p-value	VIF	R^2
Entrepreneurship Education	0.231	7.476	0.006	1.09	0.773
Self-efficacy	0.301	10.203	0.003	1.04	
Personal Attitude	0.161	5.476	0.011	1.14	
Social Norms	0.211	6.719	0.007	1.20	
Perceived Behavior Control	0.212	6.893	0.007	1.22	

Note: p-value <0.05*

As illustrated in Table 3, the regression analysis provided insights into how these five independent variables relate to the intention to engage in entrepreneurial activities among the participants. The analysis revealed a substantial R^2 value of 0.773, suggesting that the combination of these independent variables explains 77.3% of the variance observed in Entrepreneurial Intention. This high percentage indicates a strong relationship between the independent variables and the desire to pursue entrepreneurship. Additionally, the statistical significance of the results, with a p-value of less than 0.05, confirms that each of the independent variables, namely Entrepreneurial Education, Self-Efficacy, Personal Attitude, Social Norms, and Perceived Behavioral Control has a meaningful impact on Entrepreneurial Intention. Self-Efficacy emerged as the most influential factor, contributing approximately 30% to the intention to engage in entrepreneurial endeavors. This finding underscores the critical role that self-efficacy plays in shaping students' entrepreneurial aspirations.

Furthermore, the multicollinearity tests on five independent variables, EE, SE, PA, SN and PBC. The Variance Inflation Factor (VIF) coefficients of each variable are respectively at 1.09, 1.04, 1.13, 1.20 and 1.22. The results are all less than 5, indicating that there is no multicollinearity between the five variables (Hair et al., 1995). To sum up, after the testing by MLR, results supported all five proposed hypotheses to proceed with educational intervention stage of strategic plan.

4.3 Strategic Plan

The 20-week Strategic plan (SP) is based on quantitative and qualitative data collected in the Pre-SP phase to achieve the purpose of this study, namely, to improve students' Entrepreneurial Education, Self-Efficacy, Personal Attitude, Social Norms, and Perceived Behavioral Control, thereby increasing students' Entrepreneurial Intention. The researchers illustrate SP in chronological order, as shown in Figure 2.

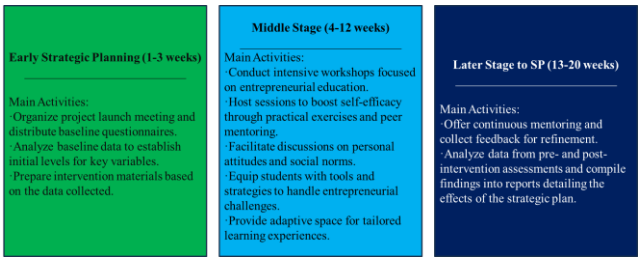

Figure 2: Strategic Plan

The strategic plan included workshops on risk management, resource allocation, and peer mentoring. Additionally, semi-structured interviews with the target students were conducted to provide qualitative insights, allowing for thematic analysis to contextualize the statistical findings. Ethical approval was obtained from the university ethics committee, and all data were anonymized to protect participant confidentiality. Post-intervention analysis showed a notable improvement in students' self-confidence and entrepreneurial skills.

4.3 Pre-SP and Post-SP Comparison Results

The researchers performed a paired sample T-test analysis for independent variables to determine whether there were differences in Entrepreneurial Intention during the pre-SP and post-SP phases. This statistical test assessed whether students' perceptions and entrepreneurial competencies significantly improved after participation. The results ($p < 0.001$ across all variables) confirmed a significant positive impact on students' entrepreneurial education, self-efficacy, personal attitudes, social norms, perceived behavioral control, and overall entrepreneurial intention. Table 4 summarizes the analysis result of five variables by paired sample T-test:

Table 4: Paired-sample T-test Results

Variable	Mean	SD	t-value	p-value
Entrepreneurial Education				
Pre-EE	3.14	0.989	-7.731	<0.001
Post-EE	4.34	1.143		
Self-efficacy				
Pre-SE	2.66	0.799	-8.867	<0.001
Post-SE	4.299	1.492		
Personal Attitude				
Pre-PA	3.56	0.822	-5.125	<0.001
Post-PA	4.259	1.113		
Social Norms				
Pre-SN	3.06	0.846	-7.826	<0.001
Post-SN	4.175	1.079		
Perceived Behavioral Control				
Pre-PBC	3.23	0.979	-6.286	<0.001
Post-PBC	4.386	1.487		
Entrepreneurial Intention				
Pre-EI	3.36	1.261	-6.75	<0.001
Post-EI	4.342	1.113		

Entrepreneurial Education: The analysis demonstrates that there was a significant increase between pre-EE (M=3.14, SD=0.989) and post-EE (M=4.34, SD=1.143) phase, with $p<0.001$. The positive and significant mean difference at 1.2 confirms the effectiveness of strategic plan.

Self-efficacy: The analysis demonstrates that there was a significant increase between pre-SE (M=2.66, SD=0.799) and post-SE (M=4.299, SD=1.491) phase, with $p<0.001$. The positive and significant mean difference at 1.639 confirms the effectiveness of strategic plan.

Personal Attitude: The analysis demonstrates that there was a significant increase between pre-PA (M=3.56, SD=0.822) and post-PA (M=4.259, SD=1.113) phase, with $p<0.001$. The positive and significant mean difference at 0.699 confirms the effectiveness of strategic plan.

Social Norms: The analysis demonstrates that there was a significant increase between pre-SN (M=3.06, SD=0.846) and post-SN (M=4.175, SD=1.079) phase, with $p<0.001$. The positive and significant mean difference at 1.115 confirms the effectiveness of strategic plan.

Perceived Behavioral Control: The analysis demonstrates that there was a significant increase between pre-PBC (M=3.23, SD=0.979) and post-PBC (M=4.386, SD=1.487) phase, with $p<0.001$. The positive and significant mean difference at 1.156 confirms the effectiveness of strategic plan.

Entrepreneurial Intention: The analysis demonstrates that there was a significant increase between pre-EI (M=3.36, SD=1.261) and post-EI (M=4.342, SD=1.113) phase, with $p<0.001$. The positive and significant mean difference at 0.982 confirms the effectiveness of strategic plan.

This progression suggests that the strategic planning interventions were effective in enhancing the entrepreneurial behavior and skills of the participants, especially in self-confidence, affirming the success of the SP in fostering key entrepreneurial attributes.

5. Conclusions and Recommendation

5.1 Conclusions

This research explored the factors shaping the entrepreneurial intentions of art students in Hubei, China, through a 20-week Strategic Plan (SP). The study focused on five key variables: entrepreneurial education, self-efficacy, personal attitudes, social norms, and perceived behavioral control. Using quantitative surveys and qualitative interviews, the findings provide compelling evidence of how these elements foster entrepreneurial intentions.

Self-efficacy emerged as the most influential factor in promoting entrepreneurial intentions, a result consistent with Bandura's (1986) Social Cognitive Theory and previous studies emphasizing self-belief as a key predictor of entrepreneurial behavior (Fang et al., 2023; Newman et al., 2019). The implementation of the SP intervention, which included mentorship, workshops, and experiential learning activities, significantly increased students' confidence in their entrepreneurial capabilities, confirming that educational interventions can effectively nurture entrepreneurial traits.

Entrepreneurship education also had a strong positive impact, reinforcing findings from Barba-Sánchez and Atienza-Sahuquillo (2018) that well-structured training improves entrepreneurial readiness. However, this study uniquely demonstrates that entrepreneurial education alone is insufficient unless paired with self-efficacy-enhancing experiences. This highlights the importance of integrating practical training, business simulations, and mentorship programs into entrepreneurship curricula to bridge the gap between theoretical learning and real-world application (Shi et al., 2020).

Unexpectedly, personal attitudes and social norms, though positive, played a less significant role than anticipated. While previous research (Krueger & Brazeal, 1994) suggests that favorable attitudes and supportive social environments should strongly predict entrepreneurial behavior, this study found that these factors alone did not significantly increase entrepreneurial intentions unless students had high self-efficacy. The t-test results for personal attitudes and social norms showed improvement post-intervention, but qualitative interviews revealed that students often faced societal and family pressures discouraging entrepreneurship in favor of stable employment. This suggests that cultural expectations may still act as barriers to entrepreneurial engagement, a factor that should be addressed through policy and institutional support.

Similarly, perceived behavioral control (PBC) showed a moderate but less pronounced effect than expected. While Ajzen's (1991) Theory of Planned Behavior (TPB) emphasizes PBC as a critical determinant of entrepreneurial intentions, this study's findings suggest that students' perceived control over entrepreneurial outcomes remains constrained by external factors, such as limited industry exposure, financial constraints, and lack of networking opportunities. This aligns with Elia et al. (2023), who highlight that creative industry entrepreneurs face unique structural challenges that cannot be addressed solely through education. The qualitative findings further support this, as students frequently mentioned concerns about market unpredictability and limited access to startup funding, reinforcing the need for practical entrepreneurial experiences, financial literacy training, and industry partnerships.

The paired-sample t-tests revealed a statistically significant improvement across all variables, confirming the effectiveness of the intervention in enhancing students' entrepreneurial mindsets. However, qualitative findings provided essential context, illustrating that self-efficacy improvements were primarily driven by mentorship and experiential learning, rather than traditional lectures. Entrepreneurial education was most effective when students engaged in real-world applications, such as business simulations and networking activities, reinforcing the need for hands-on learning. While social norms showed numerical improvement, qualitative interviews revealed persistent cultural barriers, with students citing concerns about societal expectations and financial security, which continued to shape their career decisions. Similarly, perceived behavioral control improved, but students remained constrained by external factors, including limited funding and lack of business exposure, emphasizing the need for broader institutional and policy support.

This study contributes to entrepreneurial intention theory by reaffirming the critical role of self-efficacy and education while also highlighting gaps in traditional models, such as Ajzen's (1991) Theory of Planned Behavior (TPB). The findings suggest that existing models may overestimate the influence of personal attitudes and perceived control, without adequately considering sociocultural constraints unique to creative industries. Future research should refine entrepreneurial intention models by integrating cultural and practical experience as moderating factors, ensuring a more comprehensive understanding of entrepreneurial decision-making in creative fields.

5.2 Recommendations

Based on the findings of this study, several recommendations emerge to help educational institutions foster entrepreneurial intentions among art students. The strategic plan implemented in this research demonstrated the potential to significantly enhance students' self-efficacy, entrepreneurial attitudes, and intentions. The following recommendations aim to provide actionable steps that institutions can take to strengthen their entrepreneurship education programs:

Integrate Entrepreneurship Education into Core Curriculum: Educational institutions, particularly those focused on the arts, should incorporate entrepreneurship education into the core curriculum. By introducing courses that provide both theoretical knowledge and practical application, students can gain a deeper understanding of business concepts and how they apply to creative industries. Workshops, case studies, and experiential learning

opportunities should be integrated to allow students to actively engage with entrepreneurial concepts.

Focus on Self-Efficacy Enhancement: The enhancement of self-efficacy emerged as a crucial factor influencing entrepreneurial intentions within the scope of this study. To capitalize on this finding, it is imperative for educational institutions to implement tailored interventions designed specifically to bolster students' confidence in their entrepreneurial capabilities. Such initiatives could include engaging hands-on projects, participation in real-world business challenges, and the establishment of mentorship programs. These approaches would provide students with valuable opportunities to apply their theoretical knowledge and skills in practical contexts. By fostering a robust sense of self-efficacy, students will be better equipped to tackle entrepreneurial endeavors, ultimately approaching them with a heightened sense of confidence and resilience.

Mentorship and Peer Support Programs: Establishing mentorship programs where experienced entrepreneurs or alumni guide current students can greatly enhance their entrepreneurial journey. Peer support programs can also be introduced, allowing students to learn from their colleagues' experiences and challenges. These programs create a supportive environment that fosters collaborative learning and boosts entrepreneurial motivation.

Create Adaptive Learning Opportunities: Recognizing that each student has unique entrepreneurial goals, educational institutions should provide adaptive learning environments that cater to individual needs. Flexible course structures, personalized feedback, and access to resources that support diverse entrepreneurial pathways will enable students to tailor their learning experiences according to their personal ambitions.

Emphasize Intrinsic Motivation: Encouraging students to focus on intrinsic rewards—such as the satisfaction of mastering new skills or achieving personal goals—can cultivate a lasting passion for entrepreneurship. Educational institutions should create environments that promote creative exploration and self-driven learning rather than solely emphasizing external rewards such as grades or financial incentives.

Continuous Monitoring and Feedback: Regular assessments of students' progress, including self-efficacy, entrepreneurial attitudes, and intentions, should be conducted. By monitoring these variables, institutions can provide timely interventions and support to students who may be struggling. Ongoing feedback will ensure that the development of entrepreneurial skills remains a priority throughout the educational experience.

Faculty Training: Institutions should provide professional development opportunities for faculty to learn techniques that foster entrepreneurial thinking. This includes training on how to encourage student initiative, provide constructive feedback, and support students in overcoming entrepreneurial challenges.

By embracing these recommendations, educational institutions can create a robust and supportive framework for developing entrepreneurial skills among art students. Empowering students through a combination of theoretical education, practical experience, mentorship, and continuous support will enable them to thrive in the increasingly competitive and dynamic creative industries.

5.3 Limitation and Further Study

This research offers important perspectives on the elements that affect entrepreneurial intentions in art students; however, it is essential to acknowledge various limitations that highlight areas for future investigation. Its findings are limited by a small sample size and focus on a single university in Hubei, China, restricting generalizability. Future research should include larger, more diverse samples across multiple institutions and cultural contexts to enhance the applicability of the results. The short-term nature of the 20-week intervention also limits understanding of its long-term impact, which could be addressed through longitudinal studies to assess lasting effects on entrepreneurial intentions and behaviors.

Additionally, the study's reliance on self-reported data and absence of a control group constrains the ability to objectively measure outcomes. Future research should incorporate experimental designs, objective performance metrics, and explore other factors like risk tolerance, resilience, and access to networks. Tracking students' entrepreneurial success post-graduation would further enrich understanding of how intentions translate into real-world outcomes.

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