An Empirical Comparison of Graduate Entrepreneurs and Graduate Employees Based on Graduate Entrepreneurship Education and Career Development

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Abstract: Entrepreneurship is a double-edged sword. Entrepreneurs may either reap great rewards or suffer great damages from crises in the near future. Therefore, it is crucial to offer entrepreneurship education to students. This would help them broaden their horizons in graduate employment. This study compares graduate entrepreneurs and graduate employees in China, focusing on their career development. The results of the study show that graduate entrepreneurs have higher career satisfaction than graduate employees. In addition, graduate entrepreneurs have greater work commitments than graduate employees, although they also have higher job stress. We also found that most graduates in either group could earn a living easily. A certain number of the two parties spent more than what they earned mainly to provide financial support to their families.

Keywords: entrepreneurship education; graduate entrepreneurs; graduate employees; career development

1. Introduction

Owing to the changes in the global economy, the training provided to students through higher education, which had traditionally played an important role in gaining employment, is no longer sufficient [1]. China, similar to many other countries, has been experiencing a significant challenge in terms of higher education. Around 7–8 million graduates from higher education institutions have been produced annually in China since 1999. Therefore, the government instituted a new reform related to higher education: Higher education institutions must accept more enrollees and prepare them to become competent in the workforce. Graduate employment in China has become an interesting topic for both the government and higher education institutions. China’s economy has been growing rapidly in recent decades, so one would assume that there are many job opportunities in the labor market. However, this is not necessarily the case.

With the increasing number of graduates in China, graduate employment can become competitive and difficult. According to Mycos Technologies’ “Blue book of employment: Chinese college graduates employment annual report” [2–4], graduate employment rates in the country were 86% in 2008, 91.4% in 2013, and 91.5% in 2018. However, the students going abroad to study and pursue master’s degrees were counted as employed. In fact, in 2018, China’s university graduate employment rate was only 73.6% when the graduates moving abroad for further study were excluded [4].

To promote adaptive career development, society must find a way to prepare the younger generations for the future. Cultivating entrepreneurship capabilities in advance might be one of...
the ways to achieve this [5]. In early 2002, the Chinese government launched a policy encouraging university graduates to start their own business ventures by streamlining business registration and reducing tax rates for startups during their early development. From 2014 to 2018, Chinese higher education institutions integrated entrepreneurial programs into other university teaching and learning activities. University students were encouraged and given incentives to develop entrepreneurial skills to start their own business ventures to employ themselves and others, which relieved job-seeking traffic in the job market.

Entrepreneurship by university graduates under specific supportive environments is crucial for economic growth and development. Thus, there have been a large number of studies that investigate how the intent of entrepreneurship forms [5–9]. The impact of entrepreneurship education on students’ intents to become entrepreneurs remains a debated subject in different fields of literature [10]. Entrepreneurship education is not limited to encouraging students to become entrepreneurs. It also involves cultivating students’ non-cognitive entrepreneurship skills, including entrepreneurship thinking, management skills, and ability to adapt to harsh environments [11]. The process of determining one’s career can be regarded as the construction of a career. It not only focuses on how the career starts but also how the interactions between the individual and the environment actively shape one’s career [12]. The career construction theory originates from Super’s [13] theory of vocational development, which emphasizes self-concept. The benefits of immersing students in entrepreneurship culture are not limited to helping those who wish to start their own business. In particular, the labor market currently favors those with entrepreneurship confidence. Entrepreneurship is important to various types of organizations, large or small. Innovative employees of organizations find unique ways to optimize processes and find new and priceless opportunities [1,14–17]. Some companies encourage internal entrepreneurship activities, which are necessary for a company to sustain its long-term growth [11].

Wenzhou City, located between the two economic powerhouses Shanghai and Guangzhou, is a role model of China’s success in the realization of independent, bottom-up entrepreneurship development [18,19]. In Wenzhou, private enterprises accounted for 53.8% of the total GDP of the manufacturing industry in 2019 (Statistics Bureau of Wenzhou) (The website of the Statistic Bureau of Wenzhou http://wztjj.wenzhou.gov.cn/art/2020/3/24/art_1243860_42359817.html). Remarkably, 15 out of China’s 500 best private enterprises are founded and run by Wenzhou entrepreneurs, 10 within the city and 5 outside of the city [20]. On average, graduate entrepreneurship in China accounted for 1–3% of the total graduate employment in recent years: 1% in 2009, 2.1% in 2013, and 2.7% in 2018 [3,4,21]. Graduate entrepreneurship in Wenzhou is more than 10 times the national average [22]. Based on our experiences with graduate employment advocacies and graduate entrepreneurship education in higher education institutions, we see that young people in Wenzhou have a higher-than-normal propensity to undertake business ventures, mainly because they are exposed to the local environment that encourages business.

This study uses graduates from higher education institutions in Wenzhou City as the sample and explores their views on their career development from the perspective of the entrepreneurship ecosystem. We focus on the differences in career development and societal culture between entrepreneurs and employees who have received entrepreneurship education. These are the insights we gained from the literature review: (1) Only a few studies have been conducted on the outcomes of entrepreneurship education [23]. This leaves an opening for us to focus on the impact of entrepreneurship education on the career development of graduates. (2) In a volatile environment, corporations need more entrepreneurial talent to handle opportunities and threats. The subjects of this study are graduates who have received entrepreneurship education, which implies that this study will benefit from the comparison of graduates based on their different career choices. (3) In previous studies, the authors selected people who claimed that they were self-employed for their samples, but they were unable to identify which of those individuals were entrepreneurs [24].
2. Literature Review

The term “entrepreneurship” was coined by the classical economists Richard Cantillon (in the mid-18th century) and Jean-Baptiste Say (in the early 19th century) [25]. However, the name Joseph Schumpeter has been most prevalent in the literature. In 1934, Schumpeter termed “innovation” as entrepreneurship in his treatise The Theory of Economic Development [26]. In the 1950s, Schumpeter further detailed the relationship between innovation and entrepreneurship and clarified the value of innovation for businesses in his other works Capitalism, Socialism and Democracy and Economic Theory and Entrepreneurial History [27,28]. Schumpeter highlighted that innovation is a critical resource for a business to survive and thrive, along with other three conventional resources: land, labor, and capital. In the past century, the successes of Bill Gates, Mark Zuckerberg, and Jeff Bezos have shown that innovative application of knowledge and skills created sustainable competitive advantages in efficiency-based economies, such as the US economy. Many other similar cases have encouraged young people to develop their own businesses and pursue entrepreneurship as a career.

Klapper and Love [29] demonstrated that World Bank data proved Schumpeter’s claim that “entrepreneurial activities significantly facilitate economic growth.” Although entrepreneurship has been broadly observed in Western economies, it has not been very common in developing countries [7,30–32]. Moreover, several studies on entrepreneurship education were conducted in developing countries such as China, Pakistan, South Africa, and Sri Lanka [8,33–36], in which scholars and decisionmakers made efforts to discover effective ways to promote entrepreneurship education in the developing world.

Other researchers also conducted systematic and comparative studies to explore the relationships between economy and entrepreneurship as well as between social context and entrepreneurship. For example, Carr and Sequeira [37] explored how young generations are influenced by family businesses. Ghosh [38] conducted a comprehensive review to compare incentive evidence among countries. Dufays [39] explored the tensions between innovation management and entrepreneurial teams. Lastly, Lang, et al. [40] performed a comparative institutional analysis in rural central Europe on entrepreneurship economy. Notably, the entrepreneurial ecosystem theory has been considered a critical theory for developing an entrepreneurship economy.

According to Isenberg [41], an entrepreneurial ecosystem comprises encouraging policy, healthy finance, open culture, effective support for entrepreneurs, sufficient human capital, and a well-performing market. Spigel [42] defined an entrepreneurial ecosystem as a combination of social, political, economic, and cultural elements within a region that support the development and growth of innovative startups, as well as encouraging nascent entrepreneurs and other actors to take the risks involved in starting, funding, and otherwise assisting high-risk ventures. These factors encourage entrepreneurship growth in such an economy; consequently, entrepreneurial activities lead to economic growth. Parkinson et al. [43] highlighted that entrepreneurship is considered important to the economic performance of an area.

Entrepreneurship education has always focused on the cultivation of non-cognitive skills. Heckman, et al. [44] posited that some of the most essential skills for entrepreneurs are their innovation competence, vocational abilities, and adaptivity to societal developments. Heckman emphasized that non-cognitive skills play a more important role than cognitive skills. Heckman’s study was greatly influential. It changed our perspective on how education affects students and had profound implications for educational science and school policies [45]. Azizi and Mahmoudi [23] propose that the spirit of entrepreneurship should be incorporated in all courses in higher education, and the focus should be on the cultivation of non-cognitive skills. Rodriguez and Lieber [46] highlighted that students who have received entrepreneurship education have entrepreneurial mindsets, especially in the aspects of communication, collaboration, identification of opportunities, critical thinking, and problem solving.
3. Methodology

Our investigation combined qualitative and quantitative methods to examine graduate employment and graduate entrepreneurship. Specifically, we performed free-narrative personal interviews and a questionnaire survey. We then analyzed the data and interviews to reflect on the values and needs of entrepreneurial education as well as how it can be improved.

The sample used in this study was obtained from Wenzhou University. In late 2002, Wenzhou University began offering courses on entrepreneurship. Since then, methods of teaching entrepreneurship have been steadily developed at the university over 10 years. The university pioneered a new Entrepreneurship College in 2015 to fully focus on entrepreneurship education. This college introduced a scheme $3+1$ for new merchants, open to all students at the university. Through the scheme, students have a chance to design and implement their business plans while undertaking a 3-year study in their enrolled program, followed by a 1-year practice to apply their entrepreneurial knowledge. The university provides the enrolled students with an office studio and a startup grant for their business ventures.

Wenzhou University is the largest higher education institution in Wenzhou City, with 20,000 enrollees from across the country. Wenzhou merchants are known to be remarkable within and outside of China. According to the Research Center of Global Wenzhounese, there are 2.5 million Wenzhou merchants dispersed globally. In Italy alone there are over 100,000 (The website of Research Center of Global Wenzhouneses http://sjwzzr.wzu.edu.cn/). Wenzhou merchants’ renowned expertise in businesses has earned them the name Chinese Jews. Merchant culture has been a key element of the regional culture for nearly one thousand years. A key feature of this culture is strong familial ties in business. A school of ancient Chinese philosophy called the Yongjia School was created and developed in the region (The School of Yongjia by Li XW (2015), available on http://www.cssn.cn/zhx/zx_zxlp/201505/t20150519_1952034.shtml?COLLCC=2516819785&) in the post-Song dynasty (AD 1150–1200). The philosophy was based in pragmatism and realism, a philosophy based on applying theories, testing theories through experience, and rationalizing contradictory interests. Its core values are flexibility, pragmatism, and generosity.

3.1. Participants

Data collection for this study was done in two stages: an online questionnaire survey and in-depth interviews. In stage 1, the survey involved participants who had graduated from university less than 5 years, between 5 and 10 years, and more than 10 years ago. To avoid bias, random sampling was employed. A total of 205 responses were collected, and 191 out of those were fully completed. In this group, 61.3% were male, 56% were unmarried, and 27.7% were self-employed. Their majors included economics, law, information engineering, literature, science, mechanical and electrical engineering, and management. On average, they had graduated 6.89 years ago and had been at their current job for an average of 2.26 years. Thereafter, we further divided them into two groups based on whether they were currently self-employed. Pool 1 comprised 53 out of 191 respondents who were graduate entrepreneurs, and Pool 2 comprised 138 respondents who were graduate employees.

After the surveys, in-depth qualitative interviews were conducted based on the results. Participation in the interview was voluntary (Table 1). All of the participants were clearly informed that any information they provided was guaranteed to be used only in this project. Free-narrative personal interviews were conducted with five interviewees either face-to-face or over the phone. The interviews were conducted by two researchers and each lasted 30 min. The full conversations were recorded with the interviewees’ permission and transcribed thereafter. We encouraged the participants to be forthcoming in the interviews and this was made easier by the free-narrative style.
Table 1. Demographic information of the interviewees.

| Entrepreneurs | Age | Years of Entrepreneurship | Educational Background | Location | Business Scope | Number of Employees |
|---------------|-----|---------------------------|------------------------|----------|----------------|---------------------|
| Mr. Yang      | 35  | 10                        | Bachelor's degree      | Yunnan   | Rose plantation | 16                  |
| Mr. Shao      | 26  | 5                         | Bachelor's degree      | Wenzhou  | Gardenia plantations | 4                  |
| Ms. Li        | 22  | 3                         | Bachelor's degree      | Zhuji    | Pearl Handcraft   | 5                  |
| Mr. Zhu       | 25  | 3                         | Bachelor's degree      | Wenzhou  | Cross-border e-commerce | 8                |
| Ms. Yang      | 23  | 3                         | Bachelor's degree      | Wenzhou  | Cross-border e-commerce | 6                |

3.2. Measurements

Our survey was conducted using the software Survey-Star online (The website of Survey-Star https://www.wjx.cn). This software was developed by a Chinese IT company and it is widely used for conducting online questionnaires. In this study, we designed a set of 22 questions pertaining to entrepreneurship education, career development, and supporting environment from the perspective of the entrepreneurship ecosystem. These questions are based on Schumpeter’s non-cognitive entrepreneurial skills: risk-taking, superintendence, and coordination [28,44], as well as the determinant factors described by Hockerts [47], including individual cognitive ability, affective empathy, social capital, and support for entrepreneurial activities.

The basic information asked in the survey included gender, year of graduation, and university major. The other questions required respondents to rate individual preferences on a 5-point Likert-type scale from 1 (low) to 5 (high), except the last question, which requested a free-text comment: “Please offer your suggestions for the university to improve entrepreneurship education in the future, according to your experiences during the entrepreneurship study.”

4. Results

We categorically compared respondents’ answers to the same questions between the two pools, entrepreneurs and employees, and used a Pearson correlation $r$ value to examine the relationships between several factors such as job stress, job satisfaction, work commitment, and income satisfaction. The statistical software SPSS (Edition 21.0) was used for the descriptive analysis, $t$-test, and Pearson correlation analysis. The results for respondents’ preferences in the $t$-test are presented in Appendix A Table A1.

4.1. Gender

Out of the 191 respondents, 53 were business venture undertakers and 138 were employees; 12 out of the 53 entrepreneurs were women, whereas 62 out of 138 employees were women. This shows that in the sample, the proportion of women who were entrepreneurs was much lower than the proportion of men who were entrepreneurs (Figure 1).

![Figure 1. Samples.](image-url)
A possible explanation for this is that women are more conservative in undertaking business ventures compared to men. Women typically hold more conventional attitudes toward their choice of career, perhaps because they are often restricted by familial issues such as pregnancy a few years after graduation. Moreover, women are traditionally taught to establish their careers in government departments, educational institutions, and business offices to ensure job security. Because of these factors, most young women are likely to be hesitant to engage in graduate entrepreneurship and to venture into a career in business. However, we suggest that young women should contest these conventional norms and realize their own capabilities in running a business, such as the potential for hard work, perseverance, thoughtfulness, scrupulousness, and good money management.

4.2. Career Development

In addition to the gender differences in career choice, we examined other aspects of graduates’ career development. We asked three questions pertaining to the graduates’ perceptions of their own careers: (1) Please rate your sense of achievement satisfaction in your current job; (2) Please rate your perceived social approval for your current job; (3) Please rate your job prospects for your current career. Figure 2 shows that graduate entrepreneurs felt more job satisfaction than graduate employees: 28% of the entrepreneurs rated career achievement at 5 whereas only 15% of the employees rated it at 5 ($T = 2.67, p < 0.001$). The entrepreneurs rated social approval for their career slightly higher than the employees—30% and 26%, respectively ($T = 0.76, p > 0.1$)—and they rated their career prospects higher than employees: 32% rating them at 5 compared to only 20% of employees rating them at 5 ($T = 2.38, p < 0.05$).

| Pool 1 Entrepreneurs | Pool 2 Employees |
|----------------------|------------------|
| career achievement   | 4%2%             | 5%9% |
| social approval for career | 34%36% | 46%35% |
| career prospect      | 6%26%            | 6%31% |
|                      | 32%              | 28%  |
|                      | 30%              | 25%  |
|                      | 28%              | 20%  |

Figure 2. Career development.

Other questions relating to career development were also asked: (1) How much time and effort do you commit to your current job? (2) Please rate your competence in your current job; (3) How much stress do you feel from your current job? Figure 3 demonstrates that the above questions received similar responses to the questions on career achievement and prospects: Graduate entrepreneurs made more work commitments than graduate employees, although the difference was not significant ($T = 1.243, p > 0.1$). At the same time, they felt more confident in their jobs as they considered themselves more competent in their work ($T = 1.45, p > 0.1$), although they experienced more job stress than graduate employees ($T = 1.72, p < 0.1$).
were as follows: (1) Are you satisfied with your current living conditions and lifestyle?; (2) Are you satisfied with your current income?; (3) Please rate your degree of freedom in household expenses (from 1 to 5, which respectively indicate often stressed out; occasionally stressed out; balanced; easy and comfortable; free).

Figure 4 shows the distribution of responses to the living conditions questions. The three questions were as follows: (1) Are you satisfied with your current living conditions and lifestyle?; (2) Are you satisfied with your current income?; (3) Please rate your degree of freedom in household expenses (from 1 to 5, which respectively indicate often stressed out; occasionally stressed out; balanced; easy and comfortable; free).

We also examined the relationships between work commitment and job stress, job satisfaction, and income satisfaction. Table 2 shows a statistically significant correlation between work commitment and job stress, with Pearson’s $r = 0.535$ for entrepreneur respondents and Pearson’s $r = 0.433$ for employee respondents. Likewise, a high correlation was found between job satisfaction and income satisfaction with Pearson’s $r = 0.686$ for entrepreneur respondents and Pearson’s $r = 0.550$ for employee respondents (Table 3).

Table 2. Pearson correlation between four factors of career perception among entrepreneur respondents (Pool 1 Entrepreneurs).

|                     | Job Satisfaction | Job Stress | Work Commitment | Income Satisfaction |
|---------------------|------------------|------------|-----------------|---------------------|
| Job satisfaction    | -                | -          | -               | -                   |
| Job stress          | -                | -          | -               | -                   |
| Work commitment     | 0.460 ***        | 0.535 ***  | -               | -                   |
| Income satisfaction | 0.686 ***        | -          | 0.374 ***       | -                   |

Pearson’s $r$ was a two-tailed test, and $r ***$ indicates a positive correlation at $p < 0.01$.

Table 3. Pearson correlation between four factors of career perception among employee respondents (Pool 2 Employees).

|                     | Job Satisfaction | Job Stress | Work Commitment | Income Satisfaction |
|---------------------|------------------|------------|-----------------|---------------------|
| Job satisfaction    | -                | -          | -               | -                   |
| Job stress          | 0.300 ***        | -          | -               | -                   |
| Work commitment     | 0.557 ***        | 0.433 ***  | -               | -                   |
| Income satisfaction | 0.550 ***        | -          | 0.406 ***       | -                   |

Pearson’s $r$ was a two-tailed test, and $r ***$ indicates a positive correlation at $p < 0.01$.

The results indicate that higher job stress accompanies higher job satisfaction. This result makes sense when looked at in the social context. That is, economic development in the region is faster than in other parts of China and people are financially well rewarded, and they look forward to better prospects in their careers despite job stress and higher business competition.

Entrepreneur respondents rated lifestyle satisfaction, income satisfaction, and household finances at 5 at a much higher rate than employee respondents, who more commonly rated these at 2 or 3. Figure 4 shows the distribution of responses to the living conditions questions. The three questions were as follows: (1) Are you satisfied with your current living conditions and lifestyle?; (2) Are you satisfied with your current income?; (3) Please rate your degree of freedom in household expenses (from 1 to 5, which respectively indicate often stressed out; occasionally stressed out; balanced; easy and comfortable; free).
were significantly influenced by their families. One interviewee said that her parents set up a family business that exposed her to an entrepreneurial environment. She naturally undertook a business venture after graduation. In our survey, the question was, “Has your family where you plant your business affected your career?” Figure 6 shows that 32% of the entrepreneurs consider their career was greatly influenced by their social networks, whereas 93% of the employees stated the same (T = 1.03, p > 0.1). The results imply that they regard themselves as members of the ordinary social group.

Graduate entrepreneurs reported greater life satisfaction than graduate employees (T = 2.34, p < 0.05). Notably, we found differences between income satisfaction (T = 2.41, p < 0.05) and satisfaction in household finances (T = 2.80, p < 0.01) within the two pools as follows: 26% of the entrepreneurs were satisfied with their income, and 40% reported managing their household expenses easily and comfortably. Likewise, 19% of the employees were satisfied with their income, while 46% managed their household expenses easily and comfortably. In other words, this seems to indicate a certain proportion of the respondents (in both pools) spend more than they earn. This may be because Chinese parents sometimes support their children throughout their life, making it easier to explain the disparity between earnings and spending in some cases.

With respect to the income gap between an individual’s income and the average income of people living in their area, the two pools showed similar responses. Most respondents rated the gap between their own income and the average income of others in the area as in the middle—Figure 5 shows that 45% of the entrepreneurs and 50% of the employees consider their own income as approaching the average (T = 0.04, p > 0.1). The results imply that they regard themselves as members of the ordinary social group.

With respect to the influence of family on their career choice, the entrepreneurs reported that they were significantly influenced by their families. One interviewee said that her parents set up a family business that exposed her to an entrepreneurial environment. She naturally undertook a business venture after graduation. In our survey, the question was, “Has your family where you plant your business affected your career?” Figure 6 shows that 32% of the entrepreneurs consider their career choices to have been highly driven by their family background (T = −0.01, p < 0.1).

In addition to the initial choice between becoming an entrepreneur or an employee, factors that influenced the respondents’ careers were examined with the question, “Does your social network affect your career?” Figure 7 shows that 47% of the entrepreneurs deemed that their career was greatly influenced by their social networks, whereas with employees it was 32% (T = 1.03, p > 0.1).
In response to the question, “How much support have you been given from government policies for your startup?”, only 6% of entrepreneurs rated government support as high. When asked to consider internal and external influences on their careers, all graduates responded that their determination (internal influence) was the key force ($T = 1.37, p > 0.1$). To the question, “Has your determination or other encouragement played a part in your career?”, 91% of the entrepreneurs answered that their own determination played a significant part in their career, rather than others’ encouragement, and 93% of the employees stated the same ($T = 0.24, p > 0.1$).

To examine the role of educational institutions, we designed three questions: (1) How much did the knowledge and skills you learned at university contribute to your current career? (2) How much did the entrepreneurship education at university benefit your current career?; (3) How much did entrepreneurship encourage you in your career? Figure 8 shows the responses. These results hold key insights that can help educators understand what is most important when designing university programs for career development, and curricula that best meet career requirements.

| Pool 1 Entrepreneurs | major program on career | entrepreneurial education on career | influence from entrepreneurship on career |
|----------------------|-------------------------|------------------------------------|------------------------------------------|
|                      | 19%                     | 19%                                | 38%                                      |
|                      | 15%                     | 13%                                | 30%                                      |
|                      | 9%                      | 23%                                | 21%                                      |
|                      | 17%                     | 8%                                 | 43%                                      |

| Pool 2 Employees | major program on career | entrepreneurial education on career | influence from entrepreneurship on career |
|------------------|-------------------------|------------------------------------|------------------------------------------|
|                  | 20%                     | 22%                                | 35%                                      |
|                  | 25%                     | 23%                                | 34%                                      |
|                  | 9%                      | 12%                                | 34%                                      |
|                  | 15%                     | 5%                                 | 25%                                      |
|                  | 8%                      | 7%                                 | 19%                                      |

Figure 8. Role of educational institutions.

A majority of the respondents commented that the program they studied at university played only a moderate role in their career choice ($T = 0.35, p > 0.1$). On the other hand, they deemed that entrepreneurial education ($T = 3.46, p < 0.01$) and entrepreneurship influences ($T = 3.06, p < 0.01$) significantly influenced their choice of career. Through free-narrative personal interviews, interviewees expressed that the knowledge and skills learned at the university played only a small role in business operations or were not sufficient for business purposes. Entrepreneurs expressed that they were eager for practical skills to develop their business, such as finance and accounting, business law and taxation, time management, problem solving, socializing, self-evaluation, and human resources management.

4.3. Review of the Interviews

Through the above analyses, we have seen that the important data are not all quantitative. In this section, we review the personal interviews and explain how certain specific enterprises operate and grow.

Mr. Yang is in charge of a business called Rose Plantation in Yunnan, which focuses on plantation and cultivation, as well as derived products such as cosmetics and health supplementary products. He started his enterprise 10 years ago and has developed the business by incorporating multiple business partners, specifically by authorizing more farms to grow the plants and more distributors to sell the products. The incorporated business has run for three years, with a key technology—extraction of rose essential oil. He said the business had experienced difficult times, experiencing several fluctuations and long periods of financial rewards.

Mr. Shao has run his gardenia farm, which includes a 120-hectare plantation, for five years. Furthermore, the business is involved in farm tourism, selling gardenia fruit for use in traditional Chinese medicine, and promoting skin care products derived from gardenia flower products. Shao admitted that profits have fluctuated over the past five years. Currently, the business operates with four managers and eight full-time workers, with casual helping hands in peak seasons. Dias, Rodrigues and Ferreira [25] illustrated that such on-farm agricultural enterprises require entrepreneurs...
to exert considerable efforts as the long-term fluctuation of returns in agricultural businesses is triggered by various social, economic, and environmental factors.

Ms. Li has run her enterprise for three years. She manages five employees and 60 sales agents. The business revenue is about 2 million Chinese Yuan every year. Li created pearl crafting techniques to transform pearls with blemishes into artistic jewelry. To develop her business, she uses channels such as e-commerce platforms and the new online social media platform WeChat to circulate advertisements of the products. She rents shops and booths in fairs to sell her products. Her creative arts-jewelry is popular among students, university staff, and employed women. However, due to the COVID-19 outbreak, she has had to shift her focus to online platforms because her offline business channels are closed. Two other enterprises used the same means to deal with the impact of the pandemic. Mr. Zhou, using online channels, increased his business sales three times compared to the same period in the previous year. Another entrepreneur, Ms. Yang, who deals in women clothes, made the most use of online retail during the outbreak by circulating women’s fashion videos via smartphones. To achieve good profits, they all made changes to their operational processes, and shifted to fully online business channels.

Notably, regarding the benefits from government policies, the interviews and the survey results yielded similar findings. The entrepreneurs complained that government policies had little beneficial effect on their business startups, although the government incentives were intended to boost graduates’ desire to undertake business ventures. To further encourage entrepreneurship, the Chinese government has rolled out numerous supportive policies, such as providing graduate entrepreneurs with training courses on entrepreneurship and business management, as well as services such as consultation, counseling, tracking and support, and transformation of achievements. Related policies were also put in place for venture capital and business premises. However, the results showed that some entrepreneurs still did not feel the impact of these policies.

5. Conclusions

The above analysis of the survey and review of the interviews are testimony to our research hypothesis that entrepreneurship education, self-concept, and business environment all have a significant impact on career choices [12,13,48]. The results also supported the theorized reciprocal relationship between entrepreneurship education and the strength of the local economy. The results of this study are summarized as follows: (1) The proportion of women entrepreneurs was significantly lower than the proportion of male entrepreneurs. This was not true for employees. (2) Entrepreneurs rated their career achievements and prospects higher than employees rated theirs. (3) Entrepreneurs made more work commitments than employees (although the difference was not statistically significant) and were more stressed out, but had higher job satisfaction. (4) Compared to employees, entrepreneurs were more satisfied with their life and income, but struggled with household finances. (5) Family background and social network had a great influence on career choice. (6) Career development was influenced by entrepreneurship education and entrepreneurial spirit. (7) Insufficient publicity of government policies for entrepreneurship restricted entrepreneurship development.

In previous studies on entrepreneurial intention, Majumdar and Varadarajan [49] found no gender effect on entrepreneurship. However, they may not have been able to identify who from their sample would become entrepreneurs in the future. Women accounted for 35% of all self-employed people. In the past 20 years, their self-employment rate has been lagging behind that of men [50]. Wildman [51] and Parkinson, Nowak, Howorth and Southern [43] suggested that gender should be considered when reporting entrepreneurial attitudes. Our research findings reveal a gender gap among those who undertake entrepreneurial ventures. This gap persists despite the region’s dynamic economy and inherent mercantile culture.

Entrepreneurs rated their career development higher than employees. We surmised that having more opportunities to act autonomously at work gives entrepreneurs a greater sense of self-empowerment compared to employees. Entrepreneurial work is more likely to build skills such
as self-efficacy and self-expectations in problem solving and decision making over time. Hence, entrepreneurs report higher job satisfaction and greater optimism regarding career prospects. Several studies \[43,52\] also show that entrepreneurial experience often strengthens young people’s self-esteem and makes them feel empowered.

Entrepreneurs exhibited a better person–job fit. Usually, an entrepreneur needs to deal with more complicated work situations, such as making decisions, planning operations, and deploying personnel. These activities seem to result in more stress for the entrepreneurs and require more commitment. Furthermore, graduate entrepreneurs may have a shortage of social and cultural capital, skills, and experience in business management, which would lead to them feeling more stressed. However, they gain more job competency over time through the increased pressure and commitment.

Family background and social network influenced graduates’ decisions to become entrepreneurs. Carr and Sequeira \[37\] demonstrated that family business exposure has great influence on the progeny’s attitude toward starting business ventures. Kirton and Guillaume \[53\] compared two cities in England in different business social contexts and demonstrated how young people’s exposure to business environment and affluence level influenced their attitudes toward entrepreneurship. Parkinson, Nowak, Howorth and Southern \[43\] also demonstrated the same phenomena. Dias and Franco \[54\] pointed out that social networks and co-operation support small and mid-sized businesses in difficult times and assist in expanding businesses in normal times. Other researchers \[40,43\] also reported that personal connections have a greater influence on social entrepreneurial success than local or national government support.

From the literature, we have seen that in many circumstances, researchers have found that entrepreneurs were often not content with government incentive policies \[40,43,55,56\]. Therefore, we suggest that governments and educational institutions should be cognizant of this and reconsider how to accomplish the desired outcomes from relevant policies for graduate entrepreneurship.

Furthermore, we posit that curriculum reform, program planning, knowledge updates, and skill development should be considered together to address the challenge. Through our experiences in teaching entrepreneurship and consulting graduate employment, we have been cognizant of the fact that entrepreneurial business activities require structural management. We emphasize learning management skills as a priority in entrepreneurship education, along with creativity and risk-taking. This is because well-structured management helps young entrepreneurs break barriers such as financial difficulties and time pressure. Hence, we provide practical programs that involve the graduates who enrolled in the 3+1 program in the local business culture, allowing them to work with local entrepreneurs and learn structural management in the real world.

For many years, the focus of higher education has been “training for employment.” The focus has been on training for roles such as scientists, engineers, doctors, accountants, lawyers, and business professionals. However, today, all higher education institutions are confronted with graduate employment pressure, as a large number of highly skilled individuals are readily available in the world job market, according to the Organization for Economic Co-operation and Development report \[57\]. This is true not only in the developed world, but also in the developing world \[52\]. This is because globalization has led to increased economic convergence, and higher education graduates from developing countries are also able to be competitive for high-skill employment \[38\]. If entrepreneurship education is not made a major part of higher education, many young people are at risk of being unemployed after they complete university education. The similarities that globalization has brought to different economies have resulted in many different nations experiencing the same issue of graduate unemployment.

Lastly, the COVID-19 pandemic has cast a gloomy future over the global economy. This has made graduate entrepreneurship education an ever more pressing matter that needs to be addressed. Elia et al. \[58\] argued that digital entrepreneurship formed by network collaboration and collective intelligence may be a solution. The emergence of digital entrepreneurship ecosystems has introduced a new important ecosystem, one which allows small startups to develop new products and services.
together with a large number of individuals on the platform [59]. This new ecosystem also provides graduate entrepreneurs with a wider range of opportunities. We believe that the insights from this study are valuable for educators. Our results show that the need for more entrepreneurial education is great, as the economy is in need of more entrepreneurs. Entrepreneurs, especially those trained through higher education, start new ventures and boost economies nationally and internationally. Entrepreneurship education has been an important vehicle for economic growth, job creation, regional development, and technology innovation commercialization in the past decades [27], and its role will only get more important from here.

Research Limitations and Suggestions

This study uses quantitative and qualitative research to understand the complex role of entrepreneurship education in the career development of graduates. We rely on samples taken from a single university in one culture, so caution should be exercised when extrapolating the results of this study to other cultures. Future research can build upon this study by testing our hypothesis in other contexts and making cross-cultural comparisons. All of the respondents in this study have completed entrepreneurship courses, so studies sampling other graduates can also build on this research. Lastly, this study has strived for stratified sampling to avoid research bias. This has resulted in entrepreneurs being a small proportion of our sample as compared to employees, especially when it comes to women. Future research can strive for more balanced samples between self-employed people and employees. Finally, there are few studies on the influence of entrepreneurship education on career decisions and the career development of graduates. Therefore, it is necessary to conduct more studies in this area.

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Appendix A

Table A1. T-test.

|                          | Entrepreneurs | Employees | t-Value | Cohen’s d | Effect-Size Correlation |
|--------------------------|---------------|-----------|---------|-----------|-------------------------|
| Career achievements      | 3.79          | 3.36      | 2.67    | **0.43**  | 0.21                    |
| Social approval for career | 3.75          | 3.62      | 0.76    | 0.12      | 0.06                    |
| Career prospect          | 3.94          | 3.57      | 2.38    | **0.39**  | 0.19                    |
| Work commitment          | 4.08          | 3.87      | 1.24    | 0.21      | 0.10                    |
| Competencies in job      | 4.08          | 3.88      | 1.45    | 0.23      | 0.11                    |
| Stress of the job        | 3.89          | 3.62      | 1.72    | *0.28     | 0.14                    |
| Life satisfaction        | 3.70          | 3.33      | 2.34    | **0.38**  | 0.19                    |
| Income satisfaction      | 3.51          | 3.09      | 2.41    | **0.40**  | 0.20                    |
| Current household finances| 3.87          | 3.46      | 2.80    | ***0.47** | 0.23                    |
| Income gap               | 3.25          | 3.24      | 0.04    | 0.01      | 0.00                    |
| Family background        | 3.34          | 3.34      | −0.01   | 0.00      | 0.00                    |
| Social networks          | 4.13          | 3.99      | 1.03    | 0.16      | 0.08                    |
| Government policies      | 2.49          | 2.23      | 1.37    | 0.22      | 0.11                    |
| Encouragement            | 2.80          | 3.60      | −1.14   | 0.56      | 0.27                    |
| Major program on career  | 2.75          | 2.69      | 0.35    | 0.06      | 0.03                    |
| Entrepreneurial education on career | 3.09 | 2.43 | 3.46 | ***0.55 | 0.27 |
| Influence of entrepreneurship on career | 3.91 | 3.32 | 3.06 | ***0.50 | 0.24 |

Note: * p < 0.1, ** p < 0.05, *** p < 0.01.
References

1. Lima, E.; Lopes, R.M.; Nassif, V.; Silva, D. Opportunities to improve entrepreneurship education: Contributions considering brazilian challenges. *J. Small Bus. Manag.* 2015, 53, 1033–1051. [CrossRef]

2. Mycos Technologies. *Blue Book of Employment: Chinese College Graduates Employment Annual Report*; Mycos Technologies: Beijing, China, 2009.

3. Mycos Technologies. *Blue Book of Employment: Chinese College Graduates Employment Annual Report*; Mycos Technologies: Beijing, China, 2014.

4. Mycos Technologies. *Blue Book of Employment: Chinese College Graduates Employment Annual Report*; Mycos Technologies: Beijing, China, 2019.

5. Obschonka, M.; Silbereisen, R.K.; Schmitt-Rodermund, E. Entrepreneurial intention as developmental outcome. *J. Vocat. Behav.* 2010, 77, 63–72. [CrossRef]

6. Sieger, P.; Monsen, E. Founder, Academic, or Employee? A Nuanced Study of Career Choice Intentions. *J. Small Bus. Manag.* 2015, 53, 30–57. [CrossRef]

7. Kakouris, A. Exploring entrepreneurial conceptions, beliefs and intentions of Greek graduates. *Int. J. Entrep. Behav. Res.* 2016, 22, 109–132. [CrossRef]

8. Yu, T.-L.; Wang, J.-H. Factors affecting social entrepreneurship intentions among agricultural university students in Taiwan. *Int. Food Agribus. Manag. Rev.* 2019, 22, 107–118. [CrossRef]

9. Sánchez, J.C. University training for entrepreneurial competencies: Its impact on intention of venture creation. *Int. Entrep. Manag. J.* 2011, 7, 239–254. [CrossRef]

10. Wu, Y.J.; Liu, W.-J.; Yuan, C.-H. A mobile-based barrier-free service transportation platform for people with disabilities. *Comput. Hum. Behav.* 2020, 107, 105776. [CrossRef]

11. Yuan, C.-H.; Wu, Y.J. Mobile instant messaging or face-to-face? Group interactions in cooperative simulations. *Comput. Hum. Behav.* 2020, 113, 106508. [CrossRef]

12. Walcott, S.M. Wenzhou and the third Italy: Entrepreneurial model regions. *J. Asia-Pac. Bus.* 2007, 8, 23–35. [CrossRef]

13. Wu, F.; Mao, C. Business environment and entrepreneurial motivations of urban students. *Front. Psychol.* 2020, 11, 1483. [CrossRef]

14. China Federation of Industry and Commerce. *China’s Top 500 Private Enterprises*; China Federation of Industry and Commerce: Beijing, China, 2019.

21. Mycos Technologies. *Blue Book of Employment: Chinese College Graduates Employment Annual Report*; Mycos Technologies: Beijing, China, 2010.

22. Zhejiang Education Evaluation Institute. *Graduate Employment and Career Structure of Zhejiang Province High Education (2019)*; Zhejiang Education Evaluation Institute: Zhejiang, China, 2018.

23. Azizi, M.; Mahmoudi, R. Learning outcomes of entrepreneurship education: Entrepreneurship education for knowing, doing, being, and living together. *J. Educ. Bus.* 2019, 94, 148–156. [CrossRef]

24. Martínez, D.; Mora, J.-G.; Vila, L.E. Entrepreneurs, the self-employed and employees amongst young European higher education graduates. *Eur. J. Educ.* 2007, 42, 99–117. [CrossRef]

25. Dias, C.; Rodrigues, R.G.; Ferreira, J.J. Agricultural entrepreneurship: Going back to the basics. *J. Rural Stud.* 2019, 70, 125–138. [CrossRef]
27. Birch, C.; Lichy, J.; Mulholland, G.; Kachour, M. An enquiry into potential graduate entrepreneurship: Is higher education turning off the pipeline of graduate entrepreneurs? *J. Manag. Dev.* 2017, 36, 743–760. [CrossRef]

28. Camage, H.R.; Wickramasinghe, A. Western perspectives on entrepreneurship and their sensitivity in the context of Asian cultures. *Int. J. Entrep. Small Bus.* 2012, 17, 525–537. [CrossRef]

29. Klapper, L.F.; Love, I. Entrepreneurship and development: The role of information asymmetries. *World Bank Econ. Rev.* 2011, 25, 448–455. [CrossRef]

30. Zhou, Z.; Verburg, R. Open for business: The impact of creative team environment and innovative behaviour in technology-based start-ups. *Int. Small Bus. J.* 2020, 38, 318–336. [CrossRef]

31. Helena, S.; Teresa, P. Entrepreneurship education: Background and future. In *Handbook of Research on Approaches to Alternative Entrepreneurship Opportunities*; Dantas, J.G.L., Carvalho, L.C., Eds.; IGI Global: Hershey, PA, USA, 2020; pp. 1–12. [CrossRef]

32. Luis-Rico, M.-I.; Escolar-Llamazares, M.-C.; de la Torre-Cruz, T.; Herrero, Á.; Jiménez, A.; Arranz Val, P.; Palmero-Cámara, C.; Jiménez-Eguizábal, A. The association of parental interest in entrepreneurship with the entrepreneurial interest of Spanish youth. *Int. J. Environ. Res. Public Health* 2020, 17, 4744. [CrossRef] [PubMed]

33. Lent, M.; Anderson, A.; Yunis, M.S.; Hashim, H. Understanding how legitimacy is acquired among informal home-based Pakistani small businesses. *Int. Entrep. Manag. J.* 2019, 15, 341–361. [CrossRef]

34. Ndedi, A.A. Challenges and perspectives facing the development of entrepreneurship education and training in South Africa. *World J. Entrep. Manag. Sustain. Dev.* 2013, 9, 126–132. [CrossRef]

35. Sachitra, V.; Siong-Choy, C. The moderating effect of religiosity on resource-capability-competitive advantage interaction: Empirical evidence from Sri Lankan agribusiness farm owners. *Int. J. Soc. Econ.* 2019, 46, 722–740. [CrossRef]

36. Wen, Y.; Chen, H.; Pang, L.; Gu, X. The relationship between emotional intelligence and entrepreneurial self-efficacy of Chinese vocational college students. *Int. J. Environ. Res. Public Health* 2020, 17, 4511. [CrossRef]

37. Carr, J.C.; Sequeira, J.M. Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. *J. Bus. Res.* 2007, 60, 1090–1098. [CrossRef]

38. Ghosh, S. Regulation and entrepreneurial intention: Cross-country evidence. *J. Entrep. Public Policy* 2017, 6, 193–205. [CrossRef]

39. Dufays, F. Exploring the drivers of tensions in social innovation management in the context of social entrepreneurship teams. *Manag. Decis.* 2019, 57, 1344–1361. [CrossRef]

40. Lang, R.; Fink, M.; Kibler, E. Understanding place-based entrepreneurship in rural Central Europe: A comparative institutional analysis. *Int. Small Bus. J.* 2014, 32, 204–227. [CrossRef]

41. Isenberg, D. Introducing the entrepreneurship ecosystem: Four defining characteristics. *Forbes* 2011, 25, 2011.

42. Spigel, B. The relational organization of entrepreneurial ecosystems. *Entrep. Theory Pract.* 2017, 41, 49–72. [CrossRef]

43. Parkinson, C.; Nowak, V.; Hovworth, C.; Southern, A. Multipartite attitudes to enterprise: A comparative study of young people and place. *Int. Small Bus. J.* 2020, 38, 293–317. [CrossRef]

44. Heckman, J.J.; Stixrud, J.; Urzua, S. The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior. *J. Labor Econ.* 2006, 24, 411–482. [CrossRef]

45. Moberg, K. Two approaches to entrepreneurship education: The different effects of education for and through entrepreneurship at the lower secondary level. *Int. J. Manag. Educ.* 2014, 12, 512–528. [CrossRef]

46. Rodriguez, S.; Lieber, H. Relationship between entrepreneurship education, entrepreneurial mindset, and career readiness in secondary students. *J. Exp. Educ.* 2020, 43, 277–298. [CrossRef]

47. Hockerts, K. Determinants of social entrepreneurial intentions. *Entrep. Theory Pract.* 2017, 41, 105–130. [CrossRef]

48. Savickas, M.L. Life design: A paradigm for career intervention in the 21st century. *J. Couns. Dev.* 2012, 90, 13–19. [CrossRef]

49. Majumdar, S.; Varadarajan, D. Students’ attitude towards entrepreneurship: Does gender matter in the UAE? *Foresight* 2013, 15, 278–293. [CrossRef]

50. Smith, R.M.; Sardeshmukh, S.R.; Combs, G.M. Understanding gender, creativity, and entrepreneurial intentions. *Educ. Train.* 2016, 58, 263–282. [CrossRef]
51. Wildman, J.M. Life-Course influences on extended working: Experiences of women in a UK baby-boom birth cohort. *Work Employ. Soc.* 2020, 34, 211–227. [CrossRef]
52. Valliere, D. Culture, values and entrepreneurial motivation in Bhutan. *J. Enterp. Community People Place Glob. Econ.* 2014, 8, 126–146. [CrossRef]
53. Kirton, G.; Guillaume, C. When welfare professionals encounter restructuring and privatization: The inside story of the probation service of England and Wales. *Work Employ. Soc.* 2019, 33, 929–947. [CrossRef]
54. Dias, C.; Franco, M. Cooperation in tradition or tradition in cooperation? Networks of agricultural entrepreneurs. *Land Use Pol.* 2018, 71, 36–48. [CrossRef]
55. Frederiksen, S.H.; Berglund, K. Identity work in entrepreneurship education: Activating, scripting and resisting the entrepreneurial self. *Int. Small Bus. J.* 2019, 38, 271–292. [CrossRef]
56. Williams, N. Moving beyond financial remittances: The evolution of diaspora policy in post-conflict economies. *Int. Small Bus. J.* 2020, 38, 41–62. [CrossRef]
57. Froy, F.; Giguère, S.; Meghnagi, M. *Skills for Competitiveness: A Synthesis Report*; OECD Publishing: Paris, France, 2012.
58. Elia, G.; Margherita, A.; Passiante, G. Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process. *Technol. Forecast. Soc. Chang.* 2020, 150, 119791. [CrossRef]
59. Nambisan, S.; Baron, R.A. On the costs of digital entrepreneurship: Role conflict, stress, and venture performance in digital platform-based ecosystems. *J. Bus. Res.* 2019. [CrossRef]

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