ENTREPRENEURIAL INTENTION OF CHINA UNIVERSITY STUDENTS: REVIEW OF ACADEMIC LITERATURE

Zhao Ziyue
Prof. Dr Siti Maziza Mustapha
Prof. Dr Noor Saadah Zainal Abidin

ABSTRACT

Entrepreneurial intention is the best predictor and an important driving factor of entrepreneurial behavior. This study attempts to make a summary of the research on entrepreneurial intention of university students from the perspective of literature measurement, so as to provide a reference for the research direction of entrepreneurial intention of university students in China. The results show that: first, the research enters the stable development stage, but the proportion of high-quality literature research is low; second, the representativeness of the research samples is not strong, and the objectivity of the research results needs to be discussed; third, the research object is relatively general, different majors, the specific entrepreneurial direction of university students entrepreneurial intention is less; fourth, the research content mainly focuses on the factors and current situation of entrepreneurial intention. There are few studies on the influence of entrepreneurial intention on university students after starting a business.

Key words: Literature review, entrepreneurial intention of university students, literature measurement

INTRODUCTION

Entrepreneurship is one of the most powerful economic forces in modern societies. Our future well-being thus critically depends on current and future entrepreneurial activities. Entrepreneurship among young individuals, and particularly students, has a crucial economic and social impact. Their new ventures will create financial and non-financial value that is pressingly needed in the future. Therefore, it is imperative to generate in-depth insights into students’ Entrepreneurial Intentions (EIs) and activities (Sieger, Graber, Fauchart, and Zellweger, 2016). Entrepreneurial intention is the best predictor and important driving factor of entrepreneurial behavior (Liu Haiying, 2010), and the study of entrepreneurial intention should be the best entry point for the study of entrepreneurial behavior. With the gradual enrichment of research results on entrepreneurial intention of university students, this study tries to settle the research literature, analyze the main characteristics of the research results from the aspects of the research scope, research content, research quality, and research trend. The important contribution of this paper is to show the development of innovation and entrepreneurship in China in the past 20 years for other countries, to provide domestic and foreign researchers with data reference materials on the entrepreneurial intention of Chinese university students, and to deepen their understanding of the existing research on entrepreneurial intention in China.

LITERATURE DATA OF ENTREPRENEURIAL INTENTION

Literature Data Source

In this study, the China National Knowledge Infrastructure (abbreviated as CNKI) is used as the retrieval database, which has a high influence in China. “University Students’ Entrepreneurial Intention” is used as the title of the retrieval. From 2003 to 2018, 526 articles were obtained. Among them, there are only 158 journals published at international and domestic conferences, and pieces of literatures published with master theses and doctoral dissertations.

Analysis of Basic Information of Literature

Development Trend of Entrepreneurial Intention from the Number of Published Articles

The earliest published articles on “University Students’ Entrepreneurial Intention” began in 2003, and the literature research has been as long as 17 years. On the whole, the research literature of university students’ entrepreneurial intention shows an increasing trend year by year, which is divided into three stages.

Before 2009, there were only 15 articles in total, and in 2005 and 2006, the number of papers was zero. This stage is the embryonic stage of research on the entrepreneurial intention of university students in China, showing a trend of sporadic development. In 2010, the Ministry of education of the People’s Republic of China issued the outline of national medium and long term education reform and development plan (2010-2020) and the opinions on vigorously promoting innovation and entrepreneurship education in universities and the work of university students’ independent entrepreneurship. For the first time, it proposed “strengthening the employment and entrepreneurship education and employment guidance services”, requiring that the innovation and entrepreneurship education in universities should face all students.

From 2010 to 2015, the research on entrepreneurial intention of university students in China continued to grow year by year, and entered a stable growth stage, with an average annual growth rate of about 21.4%. In 2016-2018, the number of documents was stable, with an average of 100 papers per year. The research on entrepreneurial intention of university students entered a stable
development stage with high output. This stage is exactly the new concept of “mass entrepreneurship, mass innovation” proposed by Premier Li Keqiang. With the strong promotion of the government, China has entered a “stable development stage of mass entrepreneurship and innovation” nationwide. Figure 1 below shows the changing trend of the number of research works of literature on entrepreneurial intention of university students in CNKI database from the year 2003-2018.

Hierarchical Analysis of Literature Research

Research results are not only needed to abundant in quantity but also excellent in quality. In this study, 526 pieces of literature were retrieved by checking “Core journals”, “EI” and “CSSCI” in the database of CNKI. A total of 67 works of literature were obtained, accounting for only 12.7%, which is few high-quality research results were obtained. In addition, there were 140 master’s theses and 7 doctoral dissertations, and the proportion of master and doctoral theses was 27.9%, which was relatively high. The master and doctoral theses in China require original and systematic insights into the research content, which to some extent improves the quality of the research results of the entrepreneurial intention of university students.

Regional Scope of Research Sample and Research Methods

The literature is mainly quantitative empirical research, only 53 qualitative research literatures accounting for 14.5%. Based on the quantitative research literature, the representativeness of the samples is the basis of objective and accurate research. The author tries to analyze the selected range of research samples. Statistics show that the academic circles are not standardized in the description of the data sources, and most of the literature is vague. Based on this, the author only makes statistics on the literature with a clear description of the respondents, and the summarized results are shown in Table 1.

Table 1: Research Sample Selection Range Distribution Table

<table>
<thead>
<tr>
<th>Year</th>
<th>Space scope</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Single School</td>
<td>Provincial Region</td>
<td>Whole Country</td>
<td></td>
</tr>
<tr>
<td>Before 2008</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>8</td>
<td>19</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>8</td>
<td>15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>13</td>
<td>26</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>127</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
In the literature, there are only 17 research samples of university students’ entrepreneurial intention selected from the whole country, accounting for only 8.21% of the total number of statistics, 127 regional selection based on the province, accounting for 61.35% of the total, and 63 research samples based on a single school, accounting for 30.43%. Further research found that in the regional survey samples of the province, most scholars often take multiple schools in a specific city as the sample survey, and the literature of the provincial schools as the survey area is also rare.

There are a small number of specialized research literatures on the entrepreneurial intention for university students of specific objects, which mainly focuses on three aspects: specific major, specific entrepreneurial direction, and gender research. As shown in Table 2.

| Table 2: Quantity Distribution Table of Specialized Research Literatures |
|-----------------------------|-----------------------------|-----------------------------|
| Research Object             | Literature (number)         | Research Object              | Literature (number) |
| Major                       |                             | Major                       | Agriculture        |
| Medical Science             | 7                           | Electronic Commerce         | 1                 |
| Art                         | 5                           | Culture Industry            | 1                 |
| Computer                    | 3                           | Female                      | 6                 |
| Engineering                 | 3                           | Rural Entrepreneurship      | 4                 |
| Chemical Engineering        | 2                           | Internet Entrepreneurship   | 3                 |
| Economic Management         | 2                           | Speculation and Entrepreneurship | 1 |
| Police Major                | 2                           |                             |                   |

In terms of the selection of subjects, most of the researches generally refers to the investigation of multiple majors by default. Among them, there are only 27 pieces of literature about specific majors, involving only 10 majors. Medicine and art are the most studied fields of scholars, with 7 and 5 papers respectively, followed by computer and engineering professional research with 3 papers respectively. However, there are fewer kinds of literature on the entrepreneurial intention of university students in a specific direction, totaling 8 articles, mainly including rural entrepreneurship and internet entrepreneurship. The author believes that the research orientation is related to the background of the times. At present, the domestic government attaches great importance to the construction of new countryside and encourages university students’ village officials and rural poverty alleviation in the policy. In recent years, WeChat business is a new industry with relatively low cost of entrepreneurship, so it has become a hot topic of entrepreneurship and a focus of academic research. Gender is significantly related to entrepreneurial intention. Many scholars in China have reached a consensus. The results show that male university students have higher entrepreneurial intentions than female university students. Why female university students have a low entrepreneurial intention, what kind of obstacles they have, and how their entrepreneurial characteristics have become the research interest of some scholars. There are six studies on women in the literature.

CONTENT ANALYSIS OF RESEARCH ON ENTREPRENEURIAL INTENTION OF UNIVERSITY STUDENTS

With the theme of “Entrepreneurial intention of University Students”, advanced search is carried out on the CNKI. As shown in figure 2, high-frequency research subjects involve entrepreneurship intention, entrepreneurship education, influence factor, entrepreneurial self-efficacy, and entrepreneurial environment, entrepreneurial motivation, entrepreneurial behavior, entrepreneurial attitude, personal characteristics, entrepreneurial practice, etc.

Select the top three subjects-“Entrepreneurial Intention”, “Entrepreneurial Education”, “Influencing Factors”, and make a comparative analysis on the starting time and number of articles. As mentioned above, the research on entrepreneurial intention starts the earliest time and the number of published articles is also the largest, accounting for 47%. The research on entrepreneurship education started in 2007, and the number of articles has reached 119 so far, accounting for 12%. The research on the influencing factors of entrepreneurial intention began in 2007, and the number of articles reached 84, accounting for 10%. With the introduction of the concept of entrepreneurial intention, more and more factors focus on the current situation of university students’ entrepreneurship. The survey of entrepreneurial intention is no longer only about the intention of university students, but a more in-depth understanding of the factors affecting their intention. For example, how does entrepreneurship education affect the entrepreneurial intention of university students from the aspects of talent training system, curriculum system, entrepreneurial practice, education mode, etc.
Study and Analysis of Influencing Factors

At present, the academic circle mainly focuses on the measurement and correlation analysis of the influencing factors of university students’ entrepreneurial intention. In the research literature, only 17 pieces of literature have constructed and comprehensively discussed the comprehensive factors affecting the entrepreneurial intention of university students. Most scholars focus on the measurement of the entrepreneurial intention of university students by a single factor, whose statistical frequency is shown in Table 3.

Table 3: Frequency Distribution of Influencing Factors

<table>
<thead>
<tr>
<th>Rank</th>
<th>Influence Factor</th>
<th>Frequency</th>
<th></th>
<th></th>
<th>Rank</th>
<th>Influence Factor</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Master Variable</td>
<td>Mediator Variable</td>
<td>Total</td>
<td></td>
<td></td>
<td>Master Variable</td>
</tr>
<tr>
<td>1</td>
<td>Personal Background Factors *</td>
<td>115</td>
<td>5</td>
<td>120</td>
<td>6</td>
<td>Entrepreneurial Behavior</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Entrepreneurship Education</td>
<td>118</td>
<td>1</td>
<td>119</td>
<td>7</td>
<td>Entrepreneurial Competence</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Entrepreneurial Self-efficacy</td>
<td>61</td>
<td>23</td>
<td>84</td>
<td>8</td>
<td>Entrepreneurial Attitude</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Entrepreneurial Environment</td>
<td>40</td>
<td>0</td>
<td>40</td>
<td>9</td>
<td>Personal Characteristics *</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Entrepreneurial Motivation</td>
<td>22</td>
<td>2</td>
<td>24</td>
<td>10</td>
<td>Entrepreneurial Practice</td>
<td>11</td>
</tr>
</tbody>
</table>

The symbol * indicates that the relevant factors are integrated: Personal background factors including gender, major, household registration, source of students, education background, grade, entrepreneurial experience, practical experience, school cadre, school level, school region, etc.; The factors of personality traits including big five personality traits, entrepreneur personality traits, etc.; School factors including school region, school level, school leadership, etc.
traits, Eysenck personality traits, etc.; Family background factors including family economic income, family entrepreneurial experience, parents’ occupation, parents' educational background, etc.

In the research of influencing factors, personal background factors are often examined and measured as a series of factors in the literature, with a total of 120 references. Gender, major, grade, and entrepreneurial experience are the main measurement factors among individual background factors. Gender is the most studied personal background factor in the academic world, as a single influence variable. There are 6 research works of literature about gender on the entrepreneurial intention of university students. Liu Min (2011), Peng Zhengxia (2013), Li Hailei (2011) studied the influence of gender difference in entrepreneurial intention, Hu Xianqiu (2016), Qi Min (2017), Wan Pengyu (2018) studied gender as a moderator of cognitive style, uncertainty tolerance and entrepreneurial environment. In addition, Lau Wei (2018), Wei Junfeng (2010, 2015), Hou Dianmu (2009) conducted a special study on the influence of female University students' entrepreneurial intention.

The number of research works of literature on personality traits with a total of 32, which is reflected in the four research directions. First, the entrepreneurial personality factors were measured as influencing variables, with a total of 17 articles, accounting for the largest proportion. Scholars in the industry have different opinions on the constitutive dimensions of entrepreneurs' personality traits. After statistical analysis, there are as many as 14 characteristic dimensions: independence, source of control, achievement motivation/need, risk-taking, positivity, innovation ambiguity tolerance, autonomy, adaptability, excellence orientation, growth orientation, risk-taking, problem-solving ability, and value orientation. Among them, achievement motivation, risk tendency, and fuzzy tolerance are the most frequent trait dimensions in scholars' research results. It can be seen from table 3 that achievement motivation, as an important driving force of entrepreneurial intention, and risk-bearing ability are the original driving force for university students to choose entrepreneurship (Wu Qiyun, 2008). There are 6 literatures for specific research respectively. The second is to adopt the general personality traits generally recognized by the psychological circle-big five personality model as the influencing factor variable of the research, there are a total of 9 papers; The third is to measure the introversion-extroversion of Eysenck’s Personality Traits, there are a total of 3 papers; The fourth is the research on the influence of a certain personality on the entrepreneurial intention of university students, including personality disorder (1 article), narcissistic personality (1 article), creative personality (1 article), proactive personality (4 articles) and proactive personality (7 articles).

Among the influencing factors as a single variable, entrepreneurial education (119 articles in total), entrepreneurial self-efficacy (61 articles in total), and entrepreneurial environment (40 articles in total) have always been the research hotspots among the influencing factors. Many scholars in China have reached a consensus on the significant correlation between entrepreneurial self-efficacy, entrepreneurial education, entrepreneurial environment, and entrepreneurial intention. Some scholars have also found that entrepreneurial self-efficacy plays a mediating role in the entrepreneurial intention of university students, which cannot be ignored. There are as many as 23 research works of literature indirectly affected by the mediating effect, accounting for 39.65% of the research on the influence of this factor.

Analysis of Current Research

The level of the entrepreneurial intention of university students is the main body of the current research literature. Based on this, the current research is carried out in three directions. First is the status quo of the structural dimensions of university students’ entrepreneurial intention. According to the entrepreneurial event model, such as Luo Hongge (2018), Yan Lixia (2017), Wang Chunyan (2016), Yan Jianwen (2009) measured the level of entrepreneurial intention of university students from three dimensions of entrepreneurial possibility, entrepreneurial behavioral tendency and demand. Zhao Mengmeng (2017) measured the entrepreneurship level in her master’s thesis from four dimensions: entrepreneurial idea intention, entrepreneurial preparation intention, entrepreneurial choice intention and entrepreneurial action intention. Second, the research on university students’ specific preference for entrepreneurship and entrepreneurial conditions, including the time and place, field, form, preparation, environment, motivation and education of starting a business (Wu Hang, 2010; Ye Xian, 2010; Li Cuiciu, 2014; Guanzxue, 2014; Bai Xiaobin, 2014). Third, the research on the status quo of the difference in the level of entrepreneurial intention of university students in different personal backgrounds (gender, grade, major, school level, entrepreneurial or practical experience, etc.) and different family background factors (family entrepreneurial experience, economic conditions, etc.) (Yan Jianwen,2009; Guo Leizhen, 2016; Wang Linyu, 2018; Shang Wenjie, 2016; Wang Yijie, 2016; Lau Zhi, 2013).

Other Research and Analysis

The 23 papers are about other research directions. Although the number of them is small, they show three major research directions. The first is the research review and hotspot analysis of entrepreneurial intention of university students, with a total of 4 pieces of literature (Zhao Miao, 2017; Yu Shishi, 2016; Ye Haiyan, 2015; Lau Zhi, 2012); The second is the interpretation of the dimensions and structure of entrepreneurial intention of university students, with a total of 3 pieces of literature (Chen Lu, 2017; Li Xiaoling, 2015; Lau Zhi, 2013); Third, the backward research in the logic chain of entrepreneurial intention research of university students. The influencing factors and current situation in the logic chain based on the entrepreneurial intention research of university students are forward research, while the backward research is about the follow- up entrepreneurial motivation and behavior, entrepreneurial psychological dilemma, entrepreneurial learning, entrepreneurial team building and other aspects of the entrepreneurial intention of university students. In which Tao Yanglin (2018), Lau Zhi (2016), Li Jingwei (2013), and Guo Ying (2010) made corresponding studies on the status quo, transformation process, and influencing factors of entrepreneurial behaviors of students with entrepreneurial intention. Wang Huling (2018), Xu Haibo (2015) and Wang Sanqiang (2012) investigated and analyzed the psychological distress, personality disorder, depression, and anxiety of students with entrepreneurial intention in entrepreneurship. Wang Li (2010) and Li Hui (2010) discussed the influence of entrepreneurial

CONCLUSION AND PROSPECT

Through the literature review, the paper shows the development process of innovation and entrepreneurship in China in the past 20 years. It is found that the number of research results on the entrepreneurial intention of university students in China is increasing, and this research has become a hot spot of research in Chinese universities and related institutions. Existing studies have shown the following characteristics.

Firstly, research has entered a stage of steady development, but there are few high-quality literature studies. So far, only 12.7% of the papers are published in “Core journals” “EI” and “CSSCT” in the database of CNKI.

Secondly, the representativeness of the research samples is not strong, and the objectivity of the research results needs to be discussed. Most of the literature is researches on the entrepreneurial intention of university students in China, but the sample selection proportion nationwide is too small. 30.34% of the works of literature take single school as the selected object, and 61.35% take provincial and partial regional cities as the main sample selection scope.

Thirdly, the research object is relatively general, and there are few targeted studies. The vast majority of the literature is on university students of all majors and entrepreneurial directions, and there are few studies on specific majors and entrepreneurial directions. In practice, due to the differences in professional characteristics, industry development, and employment, entrepreneurial intention also reflects the difference in business trips, which has different characteristics. The academic community should conduct further research on this.

Fourthly, in terms of research content, the research direction is still the influence factors and current situation of entrepreneurial intention. Personal background factors, personal characteristics, entrepreneurial self-efficacy, entrepreneurial education, and entrepreneurial environment are the main factors affecting the entrepreneurial intention of university students. The current research is carried out from three aspects: the measurement of the structural dimensions of intention, the preference and conditions of entrepreneurial intention, and the background difference level of individuals with entrepreneurial intention. The influence factors and current situation of entrepreneurial intention are all forward studies, while the research on how entrepreneurial intention in backward studies affects university students’ entrepreneurial motivation and behavior, entrepreneurial psychological dilemma, entrepreneurial learning, entrepreneurial team construction, and other aspects is weak and needs to be further strengthened.

REFERENCES


---

Zhao Ziyue  
Faculty of Business, Information and Human Sciences  
Infrastructure University Kuala Lumpur, 43000 Kuala Lumpur, Malaysia  
Shangluo University, 726000 Shaanxi, China  
Email: 147492734@qq.com

Prof. Dr Siti Mazilha Mustapha  
Faculty of Business, Information and Human Sciences  
Infrastructure University Kuala Lumpur, 43000 Kuala Lumpur, Malaysia  
Email: maziha@iukl.edu.my

Prof. Dr Noor Saadah Zainal Abidin  
Faculty of Business, Information and Human Sciences  
Infrastructure University Kuala Lumpur, 43000 Kuala Lumpur, Malaysia  
Email: saadah@iukl.edu.my