Entrepreneurial intention of Chinese students studying at universities in the Community of Madrid

Susana Lin  
Faculty of Legal and Social Sciences,  
Rey Juan Carlos University, Madrid, Spain  
E-mail: susanalinhuyn@gmail.com  
https://orcid.org/0000-0001-7094-5921

Received: 12-10-2021; Accepted: 11-01-2022; Published: 27-05-2022

Summary

Objective: is to know the entrepreneurial intention of Chinese students studying at universities in the Community of Madrid, to study the relationship of entrepreneurship education on the promotion of entrepreneurship, as well as the analysis of the sociodemographic factors that favor the creation of entrepreneurial intention and the assessment of the reasons for entrepreneurship.

Methodology: Survey and descriptive statistical analysis of the results.

Results: The desirability, viability and perception of control of the entrepreneurship process favor the creation of entrepreneurial intention, while entrepreneurship education does not seem to have a direct relationship with the promotion of the entrepreneurial spirit. Sociodemographic factors such as existence of enterprising parents and work experiences of the student have a positive impact on the creation of entrepreneurial intention. Entrepreneurial intention is not influenced by the gender of the university student. The main motive of entrepreneurship is the desire for wealth.
Limitations: This is a first preliminary and exploratory analysis.

Practical implications: To understand the role of the variables studied in the dynamization of entrepreneurship and the reasons for the increase of companies. To study the reasons why the Chinese Community has an interest in establishing commercial relations with Spain and to promote design through the studied variables that give rise to a more appropriate training program.

Keywords: entrepreneurship; entrepreneurial intention; Chinese students; Community of Madrid; education in entrepreneurship.

JEL codes: L26; M13; I29

马德里大学就读的中国学生的创业意向

Susana Lin
Faculty of Legal and Social Sciences,
Rey Juan Carlos University, Madrid, Spain
E-mail: susanalinxy@gmail.com
https://orcid.org/0000-0001-7094-5921

Received: 12-10-2021; Accepted: 11-01-2022; Published: 27-05-2022

文章摘要

研究目标：了解在马德里大学就读的中国学生的创业意向，研究创业教育与创业精神提升的关联，分析对有利于创造创业意向的社会人口因素，以及评估学生们的创业动机。

分析方法：调查及统计和描述性分析。

调查结果：创业过程的可取性、可行性和控制能力有助于创业意向的发展，而创业教育对创业精神的培训似乎没有直接关系。创业家庭背景的存在和个人以前的工作经历等社会人口因素对创业意愿的发展有正向影响。大学生创业意向不受性别的影响，以及创业的主要动机是对财富的渴望。

研究局限：初步和探索性分析。

实际应用：了解所研究的变量在振兴创业中的作用以及企业增加的原因，研究中国人与西班牙建立贸易关系的动机，以及帮助制定更有利于创造创业精神培训的培训计划。

关键词：创业;创业意向;中国学生;马德里;创业教育。

JEL代码：L26; M13; I29
1. Introduction

Entrepreneurship is very important for the growth and economic development of a country (Klofsten, et al., 2019). In Spain, entrepreneurship is underdeveloped, something that can be observed, among other factors, by the high unemployment rate of the population, although it is true that the unemployment rate of Spain has decreased in recent years, but compared to the European Union, Spain is the second country with the highest unemployment rate presenting a quota of 14.1% according to published data by the International Statistical Institute (INE, 2020). On the other hand, cultural aspects also inhibit the development of entrepreneurship in Spain, since the Spanish population tends to present a greater fear of failure compared to other countries due to its conservative culture (De Pablos Heredero & Blanco, 2013). In this sense, according to the Global Entrepreneurship Monitor (GEM) report, 55% of the Spanish population perceive the fear of failure as the most important obstacle to entrepreneurship (GEM, 2019).

Several studies have confirmed that university education is essential for the development of new entrepreneurs (Soria-Barreto., 2016; Falla et al., 2020). Encourage entrepreneurship is necessary for the education system to promote the creation of new companies (Ministry of Education and Vocational Training, 2020b).

The efforts made by Spain and China for the internationalization of university education have achieved a progressive increase in the number of Chinese students in Spanish universities, reaching a maximum of 11,810 Chinese students in the academic year 2018/2019 (Ministry of Education, 2020b).

The Graph 1 shows the evolution of Chinese students in Spanish universities in recent years.

Madrid is the city with the highest concentration of Chinese students due to its high concentration of universities, of which the largest number of agreements with China have been made (Serrano García, 2019).

Graph 1. Chinese students in Spanish universities
The reasons why Chinese students come to Spain to study are, among others, the interest in culture, improving job expectations and recommendations from friends, as we can see in graph 2 (Ministry of Education of the Embassy of Spain in Beijing, 2019).

Graph 2. Why chinese students selected Spain to study?

| Reason                                      | Percentage |
|---------------------------------------------|------------|
| Interest in Spanish culture                 | 41%        |
| Improve work expectations                   | 19%        |
| Friend recommendation                       | 18%        |
| Prestige of the center                      | 14%        |
| Study costs                                 | 5%         |
| Ease of access conditions                   | 3%         |

Ministry of Education of the Embassy of Spain in Beijing, 2019

In this paper, a descriptive analysis will be carried out on the entrepreneurial intention of Chinese students studying at universities in the Community of Madrid, the relationship of entrepreneurship education with the entrepreneurial intention of the student, the influence of sociodemographic factors on the creation of entrepreneurial intention and the identification of the main reasons for entrepreneurship.

In this article, after the introduction, in section 2 the hypotheses are developed, in section 3 the methodology used is specified, in section 4 the results are analyzed and described, in section 5 the discussions and conclusions of the research are showed and, finally, in section 6, the limitations and future lines of research of the work are exposed.

This paper will help to know the entrepreneurial intention of Chinese students studying in universities in the Community of Madrid through the study of various variables that influence them, which will allow us to understand the fundamental basis that energizes the entrepreneurship of Chinese students and know the reason why the Chinese Community has so much interest in establishing commercial relations with Spain. The importance of educational activities for the promotion of entrepreneurship in universities will also be analyzed. The fact of knowing the aspects that drive university students to undertake allows to favor the design of a more appropriate training program.
2. Formulation of hypotheses

2.1. Entrepreneurial intention models

These models try to explain why people choose or have the interest to create their own companies:

- **EEM (Entrepreneurial Event Model).** This model points out that the perception of desirability, viability and the propensity to act are the key elements to entrepreneurial intentions (Shapero, 1982).

The Graph 3 shows the different variables of the Entrepreneurial Event model. Viability refers to the degree to which the person can carry out the process of creating a company, in other words, the feasibility of the process (Shapero, 1982). The viability is influenced by the attitudes of the individual towards a certain behavior, and these are determined by the resources and possibilities towards the enterprise that the individual possesses (Ajzen, 1991).

Graph 3. Entrepreneurial Event Model

![Entrepreneurial Event Model Diagram](image)

Shapero, 1982

Desirability is the degree to which the individual considers attractive the idea of the constitution of his own company, so if an individual considers entrepreneurship as a more attractive idea than working as an employee, we can say that he finds the process of creating a company as desirable (Shapero, 1982; Ajzen, 1991).

Peterman & Kennedy (2003) did a study of entrepreneurial intention of university students used the model of Shapero (1982) and concluded that the intention is determined by the entrepreneurial experience, the positive character, the desirability and the viability of the individual.

From this model we will formulate the following hypotheses:

**H1:** Viability affects the entrepreneurial intention of university students.
$H2$: Desirability affects the entrepreneurial intention of university students.

- TPB (Theory of Planned Behavior). It starts from the idea that all behaviors arise after the planning of this, through which the intention to carry out the behavior can be predicted (Ajzen, 1991).

The Graph 4 shows the different dimensions that are part of the Theory of Planned Behavior

Graph 4. Theory of Planned Behavior

According to Ajzen (1991) the determinants of intention are:

- **Attitude.** Is the favorable or unfavorable evaluation of the person towards the behavior. These evaluations arise from the beliefs and opinions of the individual (Ajzen, 1991). Authors such as Linan and Chen, (2009) and Campos and Azanza (2011) found that entrepreneurial intention is determined by the attitudes and beliefs of the individual towards entrepreneurship (Urbano, 2006). The attitude can also be reflected in the attributes that the individual considers in relation to the entrepreneurial action, such as the satisfaction that the individual perceives when they are performing a certain behavior (Liñán, Urbano and Guerrero, 2011). In addition, individuals with greater entrepreneurial attitudes perceive higher capacities to detect new opportunities in the market and are more willing to assume the risks derived from the creation of new companies (Kickul et al., 2009), they are also willing to devote more time and dedication to the entrepreneurial process (Schwarz et al., 2009).
Entrepreneurial intention of Chinese students studying at universities ...

Subjective norms. It is the degree of the action meeting the wishes of important people of the individual who is carrying it out, such as family expectations and recommendations from friends (Ajzen, 1991). It has been empirically shown that there is a positive relationship between the subjective norms that the individual perceives and his entrepreneurial intention (Campos & Azanza, 2011).

Perceived behavioral control. It is the degree of difficulty perceived by the person to carry out the action considering their abilities (Ajzen, 1991). When the individual considers that he has the necessary skills to create his own company and considers the process viable, it is when he will be encouraged and begin to carry it out (Krueger et al., 2000; Ajzen, 2002). According to previous studies by Linan and Chen (2009) and Fayolle and Gailly (2015), the perception of control is positively related to entrepreneurial intention.

From this model we will formulate the following hypotheses:

H3: The attitude of the university student towards entrepreneurship is positively related to entrepreneurial intention.

H4: The subjective norms of the university student towards entrepreneurship are positively related to entrepreneurial intention.

H5: The perception of control of the behavior of the university student towards entrepreneurship is positively related to the entrepreneurial intention.

2.2. Entrepreneurship education

Numerous studies have empirically shown that entrepreneurship education has a positive impact on entrepreneurial intention (Soria-Barreto et al., 2016; Falla et al., 2020). However, there are also studies that have not found this relationship (Poblete and Amorós, 2013; Soria-Barreto et al., 2016). According to a study of entrepreneurial intention carried out with university students in a control period of six months developed by García, Martínez and Moreno (2015), the feasibility decreased from 53.8% to 41.5% after the six months and their perceptions of control of behavior and difficulties that they have to face in the process of setting up a company also worsened, since focusing on the development of a business plan does not offer university students the necessary practical experience to carry out the venture. In addition, the reason for the decrease in viability could be the fact that students perceive that they do not have required skills to undertake compared to those successful entrepreneurs or that in the course of the program they discover that their aspirations are not the constitution of a company (Soria-Barreto et al., 2016).

The mere realization of entrepreneurship courses has little impact on entrepreneurial intention, if it does not transfer favorable values to the activity of entrepreneurship and consequently reinforce the entrepreneurial skills and competencies of students (Vélez et al., 2020).

From this, we will formulate the following hypothesis

H6: Current entrepreneurship education programs do not have a significant relationship with the entrepreneurial intention of university students.
2.3. Sociodemographic factors

To study the profile that an entrepreneur must have, we will also analyze some socio-demographic characteristics of the sample. These characteristics will allow us to know the influence that the family environment has had on the individual, asking questions to know the age, gender, family entrepreneurial experience and work experiences of the individual (Do Paco et al., 2015; Kautonen et al., 2015; Mei et al., 2016; Jaimes-Millán et al., 2017).

2.3.1. Gender

According to Gonzales Morales (2001), in the adolescence stage, gender does not influence the intentions of students, obtaining in his analysis very similar results in terms of entrepreneurial intention in men and women, being 87.8% and 86.8% respectively. Supporting this idea, we can find other authors such as Popescu et al. (2016) and Soria-Barreto et al., (2016), who also obtained similar responses when they did a study of entrepreneurial intention with university students. In conclusion, we deduce the following hypothesis:

H7: Entrepreneurial intent is not influenced by the gender of the university student

2.3.2. Family entrepreneurial experience

The entrepreneurial parents provide a favorable environment for the individual, since they are children, they motivate them to develop new ideas of entrepreneurship and carry it out. (Benavides Espinosa & Sánchez García, 2004). Entrepreneurs are largely descended from families in which one of their parents is self-employed (Mussons-Torras & Tarrats-Pons, 2020). In this way, we deduce the following hypothesis:

H8: College students with close entrepreneurial family members tend to develop greater entrepreneurial intent.

2.3.3. Work experiences

People who have worked as employees tend to develop a greater interest in creating their own business (Arenius & Minniti, 2005). One of the reasons is that it is easier for them to develop valuable contacts in the business environment (Tarapuez et al., 2018). In addition, the mere fact of working in a sector allows the detection of opportunities in it (Mussons-Torras & Tarrats-Pons, 2020). So, we deduce the following hypothesis:
H9: College students with work experiences tend to develop greater entrepreneurial intent.

2.4. Reasons for entrepreneurship

The most basic and general characterization of the motives of entrepreneurship would be by necessity or opportunity. Entrepreneurship by necessity does not usually contribute significantly to the economy, since in general, they lack innovation, and do not usually generate employment (Minniti et al., 2006).

We can also find other motivators like personal motivators, scientific knowledge, availability of resources, incubator organization and social environment (Valencia et al., 2019; García-Uceda et al., 2019). Within these reasons for entrepreneurship, the author Antolín (2010) has pointed out a particularly relevant reason that why the Chinese community comes to Spain to create a company: the perceived opportunity in the market, that is, they see that they can bring different successful business ideas developed in China and non-existent or little developed in Spain.

In relation to the reasons for entrepreneurship, we will formulate the following hypothesis:

H10: The main reason for entrepreneurship by university students is the perceived opportunity in the market.

Considering all this background and the hypotheses formulated, below, we offer our own model to evaluate the entrepreneurial intentions of university students, as we can see in graph 5.

Graph 5. Own model of entrepreneurial intention

Own elaboration
In the article, ten hypotheses have been proposed with the objective of knowing the entrepreneurial intentions of the Chinese students present in the universities of the Community of Madrid, the effectiveness of current entrepreneurship education programs on entrepreneurial intention, as well as the sociodemographic factors that affect them and the reasons for entrepreneurship.

Regarding the practical implications of the article, analyzing the variables that influence in the entrepreneurial intention allows us to understand the role that these variables play in the dynamization of entrepreneurship of Chinese students, the reason for the increase in companies that generates economic, social and environmental value and also allows us to know the reason why the Chinese Community has interests in establishing commercial relations with Spain. In addition, from the academic point of view, the fact of knowing the aspects that drive university students to undertake favors the design through the variables studied that give rise to a more appropriate training program.

In the following methodology section, we will proceed to the determination the sample and the justification of the questions included in the surveys.

3. Methodology

The methodology used for the study of the sample is a descriptive analysis of the data. It has been chosen to perform first descriptive analysis of the data since they provide a basis for the realization of a future statistical analysis, it is also the best method for the collection of data that describes the relationships and presents the real world offering a broad panorama of the subject of study, in addition to help the understanding of a certain topic and the interpretation of results of more complex statistical models (QuestionPro, 2021).

The sample is composed of Chinese students studying at universities in the Community of Madrid in the academic year 2020-2021. According to data published by the Ministry of Inclusion, Social Security and Migration, at the end of 2020 there were a total of 1,691 Chinese students enrolled in universities in the Community of Madrid, which represent a significant decrease compared to previous years caused by Covid-19 (Ministry of Inclusion, Social Security and Migration, 2021).

Once the sample to which we are going to address has been defined, we will formulate the questions to contrast the ten hypotheses formulated. The survey will consist of closed questions and the attitude assessment questions will be studied using the Likert scale from 1 to 7 being: 1 totally disagree; 2 quite disagree; 3 disagree; 4 neither agree nor disagree; 5 agree; 6 quite agree; 7 totally agree.

Next, we will make an explanation of the inspirations/justifications of the included questions.

The hypotheses that desirability and viability affect entrepreneurial intention have been extracted from the Entrepreneurial Event Model (Shapero, 1982), similar
questions were asked by Espiritu Olmos (2011) in his study to measure the entrepreneurial attitude of university students.

The questions of attitude, ability, perception of control and subjective norms were formulated based on previous research by Liñán & Chen (2009), Rivero (2015) and Fayolle & Gailly (2015).

To measure the dimension of entrepreneurship education, questions have been asked inspired by articles published by Espiritu Olmos (2011) and Montes Merino (2018).

To study the sociodemographic characteristics, questions have been asked from the GEM (2019), Morales-Gualdrón et al. (2009), Rivero (2015) and Torres-Coronadas and Vidal-Blasco (2019).

Finally, to know the reasons for entrepreneurship, a question similar to that has been asked of Montes Merino (2018).

4. Results

It has managed to reach 136 Chinese students who are studying at universities in the Community of Madrid. Among these, 52.2% are men and 47.8% are women, as we can see in graph 6.

In graph 7 we can see, in percentages, the studies that the surveyed are doing. Degree and master's studies are the most coursed, with a percentage of 39% in both cases.

Graph 8 shows the degrees in which the Chinese students surveyed are located. The degrees of Business Administration and Management and Law are the most studied with percentages of 37% and 26%, respectively.

To know the entrepreneurial intention of the sample, a question has been asked regarding the stage of entrepreneurship in which the respondents are. In graph 9 we can see the results obtained.
Graph 7. Studies

Graph 8. Degree

Graph 9. Stage of entrepreneurship
The 63% of respondents have entrepreneurial intentions, 24.3% have initiated actions for entrepreneurship and 7% have already incorporated their own companies, while the percentage of respondents without entrepreneurial intention is 6%.

Respondents have also been asked about the country in which they would like to constitute their companies. We can see the results obtained in graph 10.

**Graph 10. Country in which the companies would be located**

The 38.5% of respondents wish to return to their country to create their own companies. We can find a similar percentage of respondents who want to stay and live in Spain and constitute their companies, representing the 36%.

**H1: Viability affects the entrepreneurial intention of university students.**

In graph 11 we can see the percentage of respondents who have thought having their own business.

**Graph 11. Have you ever thought about owning your own business?**
The 94% of Chinese students have thought about setting up their own companies. Within these 100% have entrepreneurial intention. While of those who have answered this question in the negative, none have stated that they have entrepreneurial intentions.

**H2: Desirability affects the entrepreneurial intention of university students.**

In graph 12 we can observe, in percentages, the respondents who prefer to set up their own company to work as an employee.

Graph 12. Would you rather start your own company than work for someone else?

![Graph 12](image)

The 83% of respondents prefer to set up their own companies to work as an employee. Among the 113 respondents who have answered affirmatively to this question only 98.3% have entrepreneurial intention, while those who have answered this question in the negative, 72.73% have entrepreneurial intention.

**H3: The attitude of the university student towards entrepreneurship is positively related to entrepreneurial intention.**

In graph 13 we can see, in percentages, if Chinese students consider an attractive idea to start their own businesses.

Graph 13. Is starting your own business an attractive idea for you?

![Graph 13](image)
The 87% of those surveyed have stated that they consider setting up their own companies to be an attractive idea. Within these, 97.3% have entrepreneurial intention, while in the opposite case, the percentage of respondents with entrepreneurial intention is reduced to 70.59%.

**H4: The subjective norms of the university student towards entrepreneurship are positively related to entrepreneurial intention.**

In graph 14 we can see a rating from 1 to 7, according to the Likert scale, of the statements that if the respondents consider that the close people will support them if they want to start a company.

Graph 14. Assessment of the approval by those close people regarding the decision to create a company

In Table 1 we can see the arithmetic mean of the assessment of the approval by the people close to the respondent about the decision to create a company.

Table 1. Arithmetic mean of the assessment of the approval of close people for the constitution of a company

|                  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | TOTAL | STOCKING |
|------------------|----|----|----|----|----|----|----|-------|----------|
| Close family     | 0  | 2  | 12 | 25 | 25 | 12 | 60 | 136   | 5,57     |
| Close friends    | 0  | 2  | 3  | 19 | 33 | 39 | 40 | 136   | 5,65     |
| College          | 1  | 2  | 4  | 10 | 37 | 43 | 39 | 136   | 5,68     |
| Classmates       |    |    |    |    |    |    |    |       |          |
| University       | 0  | 2  | 5  | 12 | 24 | 47 | 46 | 136   | 5,82     |
| professors       |    |    |    |    |    |    |    |       |          |
| Other people     | 0  | 0  | 4  | 12 | 23 | 52 | 45 | 136   | 5,90     |
| important to you |    |    |    |    |    |    |    |       |          |
From the graph we can highlight that the support of the other important people for the respondents are the most valued, such as the spouse, uncles, etc. The second most important group of people for respondents are university professors, followed by college classmates, close friends and, finally, close family.

In graph 15 we can see the assessment of subjective norms by the surveyed.

Graph 15. Subjective Norms

The 83% of respondents have valued their subjective norms in more than 4, which indicates they perceive that their close people will support them if they want to create a company, and the 34% of respondents have valued it at 7, feeling totally sure that their close people would fully support them at the time of constitution of a company.

H5: The perception of control of the behavior of the university student towards entrepreneurship is positively related to the entrepreneurial intention.

In graph 16 we can see the statements proposed for the assessment of the perception of control of behavior by the respondents and the level of acceptance of them. Among the statements with the highest degree of agreement on the part of the surveyed we find:

1. I know how to develop an entrepreneurial project (5.54 out of 7).
2. I can control the process of creating a new company (5.49 out of 7).
3. I know the practical details needed to start a company (5.48 out of 7).

The perception of control is largely determined by the abilities that individuals believe they possess (Krueger et al., 2000; Ajzen, 2002).

In graph 17 we can see an assessment by the respondents of the different statements related to entrepreneurial skills.
Graph 16. Assessment of the statements related to the perception of control of the behavior

- Starting a business and keeping it running would be easy for me.
- I’m ready to start a viable business.
- I can control the process of creating a new company.
- I know the practical details needed to start a company.
- I know how to develop an entrepreneurial project.
- If I tried to start a business, I would have a high probability of subsistence.

Graph 17. Assessment of the different statements related to entrepreneurial skills

The most valued statements were:

1. Implementation of ideas (5.71 out of 7)
2. Networking and professional contacts (5.65 out of 7)
3. Development of new products and services (5.6 out of 7)

In graph 18 we can see an assessment of 1-7 of the capabilities that respondents believe they possess.

The 83% of respondents have considered in more than 4 their capabilities to be an entrepreneur, and the 7% consider that they barely have the necessary skills to constitute their own company.
**H6: Entrepreneurship education is not significantly related to entrepreneurial intention in university students.**

In graph 19 we can observe, in percentages, if the students have attended any entrepreneurship course throughout their careers and if so, we can distinguish between elective courses (extracurricular activities), require courses (curricular activities) or studies in a specific entrepreneurship program.

Half of the respondents consider that they have not received course on entrepreneurship and the other half consider having attended a course related to entrepreneurship. Therefore, entrepreneurship education programs do not seem to have a significant relationship with entrepreneurial intention.

**Graph 19. Have you taken a course on business creation?**
For the respondents who have entrepreneurial intentions, 55% have indicated that they have not attended any course on entrepreneurship. Therefore, according to the results obtained in this research, entrepreneurship education does not have a significant impact on entrepreneurial intention.

They have also been asked for an assessment of the most valued activities for the foment of entrepreneurship using the Likert scale of 1-7 (Montes Merino, 2018), as we can see in table 2:

Table 2. Assessment of the different activities for the promotion of entrepreneurship

| Activity                                                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | TOTAL | STOCKING |
|-------------------------------------------------------------------------|---|---|---|---|---|---|---|-------|----------|
| Realization of readings and works                                       | 3 | 7 | 9 | 22| 18| 11| 58| 128   | 2.45     |
| Participation in real situations (case studies, response to changes in  | 1 | 2 | 3 | 15| 30| 43| 34| 128   | 3.02     |
| the environment, market analysis, simulations...)                      |   |   |   |   |   |   |   |       |          |
| Participation in projects with mentors or guides                        | 2 | 0 | 2 | 9 | 37| 45| 30| 125   | 3.08     |
| Enrichment of personal qualities and abilities                          | 1 | 1 | 1 | 14| 28| 52| 30| 127   | 3.03     |
| Preparation of a business plan                                         | 0 | 1 | 1 | 9 | 33| 54| 27| 125   | 3.09     |
| Contact or internships with local experts or entrepreneurs             | 0 | 1 | 1 | 10| 33| 60| 23| 128   | 3.23     |
| Participation in existing projects, programs or awards for young      | 1 | 3 | 0 | 13| 47| 47| 17| 128   | 3.53     |
| entrepreneurs                                                           |   |   |   |   |   |   |   |       |          |
| Guided visits to companies, organizations or other associations        | 1 | 1 | 2 | 21| 27| 55| 21| 128   | 3.23     |
| Attendance at congresses or motivational talks were presented the      | 1 | 1 | 1 | 8 | 38| 50| 28| 127   | 3.17     |
| information of the different possibilities of help to the entrepreneur  |   |   |   |   |   |   |   |       |          |
| and the start-up of new companies                                      |   |   |   |   |   |   |   |       |          |

The most valued activities by surveyed for foment entrepreneurship are:

1. Participation in existing projects, programs or awards for young entrepreneurs.
2. Contact or internships with experts or entrepreneurs of the locality.
3. Guided visits to companies, organizations or other associations.
4. Preparation of a business plan.
**H7: Entrepreneurial intent is not influenced by the gender of the university student**

In graph 20 we can see, in percentages, the respondents who have entrepreneurial intention classified by their genders.

The percentage of surveyed with entrepreneurial intentions do not differ greatly in their gender. According to author Gonzáles Morales (2001), who found that entrepreneurial intention was not influenced by gender in the stage of adolescence, because when we are young, we do not have a different perspective of the world of business.

Graph 20. Surveyed with entrepreneurial intent by gender

**H8: Students with close entrepreneurial family tend to develop more entrepreneurial intent.**

In graph 21 we can see, in percentages, if respondents have entrepreneurial parents, and the figure of them.

The 85% of respondents have an entrepreneurial parent and in graph 22 we can see the entrepreneurial intention that respondents have if their parents are or not an entrepreneur.

The entrepreneurial intention of respondents with entrepreneurial parents is greater than without entrepreneurial parents, since they provide them with a favorable environment since they are children for the development of new entrepreneurial ideas and motivate them to carry them out (Benavides & Sánchez, 2004; Rivero, 2015; Sánchez et al., 2018).

**H9: College students with work experiences tend to develop greater entrepreneurial intent.**

In graph 23 we can see, in percentages, if the respondents work or have worked in any company.
Graph 21. Is your father or mother an entrepreneur?

Graph 22. Entrepreneurial intention of Chinese students according to their entrepreneurial parents

Graph 23. Do you worked in a company?
According to studies conducted by Rivero (2015), people with work experience tend to present a higher entrepreneurial intention.

Of the 136 Chinese students surveyed, 86.8% have work experience and, within these students, 95.61% have entrepreneurial intentions, this percentage decreasing to 80% in the case of respondents without work experience.

The size of the company in which individuals work or have worked also influences their entrepreneurial intention, there being an inverse relationship between the size of the company and the entrepreneurial intention (Morales et al., 2009).

In graph 24 we can see the number of companies in which respondents have worked classified according to the size of the company and the entrepreneurial intention for each of them.

The 82.30% of the respondents have worked in microenterprises (companies with less than 10 employees) and small companies (companies with less than 50 employees). Within them, the entrepreneurial intention is very high in the respondents who have worked in microenterprises reaching a percentage of 98.53%, and this is reduced as the size of the company increases, being the percentages of 92.31% and 87.50%, respectively, for small companies and big companies.

**H10: The main reason for entrepreneurship by university students is the perceived opportunity in the market.**

In graph 25 we can see an assessment by the respondents of the different reasons for entrepreneurship using the Likert scale from 1 to 7. Table 3 shows the arithmetic mean of each of the entrepreneurial motives.
Graph 25. Respondents' assessment of the different motives for entrepreneurship

Table 3. Arithmetic mean of entrepreneurship motives

|                              | 1  | 2  | 3  | 4  | 5  | 6  | 7  | TOTAL | STOCKING |
|------------------------------|----|----|----|----|----|----|----|-------|----------|
| Opportunity                  | 1  | 1  | 7  | 20 | 18 | 14 | 72 | 133   | 5.88     |
| Need                         | 1  | 2  | 4  | 10 | 23 | 52 | 37 | 129   | 5.76     |
| Independence                 | 1  | 1  | 2  | 8  | 18 | 51 | 45 | 126   | 5.97     |
| Desire for wealth            | 0  | 2  | 3  | 11 | 13 | 49 | 52 | 130   | 6.00     |
| Need for achievement         | 1  | 1  | 4  | 10 | 12 | 57 | 46 | 131   | 5.95     |
| Need or interest in putting into practice the knowledge acquired in universities | 0  | 3  | 3  | 7  | 21 | 59 | 39 | 132   | 5.87     |
| Availability of resources    | 1  | 0  | 2  | 9  | 27 | 56 | 36 | 131   | 5.85     |

The most important entrepreneurial motive for respondents is the desire for wealth. This is followed by independence, the need for achievement and the perceived opportunity in the market.

5. Discussion and conclusions

Therefore, the affiliation of Chinese workers to social security is increasingly high, reaching a total of 106,259 in 2019, of which 53.1% are self-employed, reaching 14.24% of self-employed affiliated with Social Security in the Community of Madrid (Epdata, 2021; Ministry of Economy, Finance and Employment, 2021).

Moreover, Chinese students in Spanish universities have also increased progressively over the last few years, with preferences for studying in the provinces of
Madrid, Catalonia and Andalusia (Ministry of Universities, 2020). The main reasons why they come to Spain to pursue university studies are the interest in culture, improving job expectations and recommendation of friends.

Some of the good practices to be developed to improve entrepreneurship education would be: raising awareness in society and the educational community, seeking an adequate balance between theory and practice, reinforcing collaboration with external agents, encouraging students to participate in extracurricular activities and support the creation and consolidation of companies (European Commission, 2009; Ministry of Education, Culture and Sport, 2015; IE University, 2020). As an example, the Rey Juan Carlos University launches internships for the development and promotion of entrepreneurial initiatives through business incubators with activities such as the week of the resident entrepreneur, the Santander "Explorer" program and, in addition, more 24 training workshops per year, elevator pitch contests and contests to promote entrepreneurship through the Móstoles business incubator. The Autonomous University of Madrid has an Entrepreneurship Unit called "UAM Emprende", which offers advice from the initial phase, resources (networking events, help with legal aspects, workshops in different areas,...) and coworking spaces. . The Polytechnic University of Madrid also has an entrepreneurship program called "Actúaupm" whose main objective is "the generation of innovative companies with high growth potential and support for the entrepreneurial spirit" in which activities such as analysis of the feasibility of the project, continuous advice, orientation to the elaboration of the Business Plan, support in the search for financing and competitions aimed at young entrepreneurs. The Complutense University of Madrid also has a center aimed at supporting the university community with business ideas called "Compluemprende" with activities such as conferences on sustainable educational entrepreneurship, the Startup program and visits to Reference Entrepreneurial Ecosystems (URJC, 2021; UPM, 2021; UAM, 2021; UCM, 2021).

There are several studies that analyze the entrepreneurial intentions of university students, but none of them has focused on Chinese students, who are having an increasing presence in Spanish universities, reaching the fifth place as foreign students present in Spanish universities (Ministry of Education and Vocational Training, 2020b; Ministry of Science, Innovation and Universities, 2020). This work tries to fill this gap by studying the entrepreneurial intentions of this sample, identifying the profile of students, analyzing sociodemographic factors and their influence on entrepreneurial intentions and their entrepreneurial motives.

From the results obtained, it should be noted that the majority of respondents, specifically 94%, have entrepreneurial intentions, have initiated actions for entrepreneurship and even have already established their own companies. This is due to the entrepreneurial culture of China and especially of the Zhejian region, in which most individuals choose to set up their own companies to work as an employee (Brasó, 2020). Among the respondents that they have their own companies, 40% have constituted it to establish commercial relations between China and Spain and the remaining 60% have located their companies in Spain.
From the Entrepreneurial Event Model (Shapero, 1982) and the Theory of Planned Behavior (Ajzen, 1991) the first five hypotheses have been formulated, where we can observe that most Chinese students tend to present a high degree of desirability, feasibility, attitudes towards entrepreneurship, subjective norms and perception of control. The determination of these variables allows us to identify students with entrepreneurial potential and develop personalized educational activities for this group to expand their knowledge, develop their skills and motivate them to undertake, by providing help and support for entrepreneurship.

The activities most valued by the respondents for the promotion of the entrepreneurial spirit are the participation in existing projects, programs or awards towards young entrepreneurs, the contact or practices with experts or entrepreneurs of the locality and the guided visits to companies, organisms or other associations, these refers to the third mission of universities, where refers that entrepreneurial universities must establish relationships with agents and organizations in the environment to help and facilitate access to the world of work by students (Gutiérrez-Solana, 2020). Therefore, the university-company-environment relationship should be strengthened to carry out the activities for the promotion of the entrepreneurial spirit.

We also have analyzed the sociodemographic factors that favor the creation of the entrepreneurial spirit. According to the results obtained, individuals with entrepreneurial backgrounds and previous work experiences favor the development of entrepreneurial intention this is similar in men and women. Finally, in relation to the motives of entrepreneurship, the most important motive is the desire for wealth.

6. Limitations and future lines of research

As for the limitations of the research, it should be pointed that, in the first place, it is an exploratory analysis and a initial contact with the topic of entrepreneurial intention in Chinese students, since previously this sample has not been studied, in addition to the fact that it is based on its own model for the study of entrepreneurial intention in which numerous relationships that had not been studied jointly are raised.

It would be interesting to make a comparison between Spanish and Chinese university students in terms of their profile and entrepreneurial intention to detect what are the cultural, demographic and social differences that affect the notable differences in entrepreneurial intention between the Chinese and Spanish community.

A more statistical model should be created for the analysis of survey data.

Acknowledgement

I would like to express my sincere gratitude to all my friends and colleagues who did me the favor of completing and disseminating the survey, without them it would be impossible for me to do this research.
Also, I would like to thank my family for all their love and support at all times.

Declaration of conflicts of interest

The author declares that she does not present conflicts of interest in relation to the research, authorship or publication of this work.

Financing

The author has not received financial support for the research, for authorship and/or for the publication of this work.

Bibliography

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.

Ajzen, I. (2002). Perceived Behavioral Control, Self-efficacy, Locus of Control, and the Theory of Planned Behavior. Journal of Applied Social Psychology, 32(4), 665-683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Antolin, J. B. (2010). Asian communities in Spain: transnational mobility in a border territory. CIDOB magazine of international affairs, (92), 15-37.

Arenius, P. and Minniti, M. (2005). Perceptual variables and nascent entrepreneur. Small Business Economics, 24(3), 233-247. https://doi.org/10.1007/s11187-005-1984-x

Autonomous University of Madrid (UAM) (2021). UAM Undertakes. https://uam-emprende.es/

Benavides Espinosa, M.M. and Sanchez Garcia, I. (2004). The university student as an entrepreneur: a qualitative analysis from the perspective of the different agents involved. In S. Roig, D. Ribeiro, V. R. Torcal, A. de la Torre, and E. Cerver (eds.), The entrepreneur and starting up new R&D&I business. The innovative entrepreneur and the creation of R+D+i companies (pp. 403-419). Publications Service of the University of Valencia. https://www.uv.es/~motiva/libromotiva/24BenavidesSanchez.pdf

Braso, B.C. (2020). Trade and Technology Networks in the Chinese Textile Industry. Opening Up Before the Reform. Palgrave Macmillan.

Campos, T. and Azanza, G. (2011). Entrepreneurial intention in university students. The case of the University of Deusto. BizcaiLab.
Entrepreneurial intention of Chinese students studying at universities ...

Complutense University of Madrid (UCM) (2021). Undertake. https://www.ucm.es/compleumprende/quienes-somos-compleumprende-universidad-complutense-de-madrid-centro-de-emprendimiento.

De Pablos Heredero, C. and Blanco Jiménez, F. J. (2013). The hundred mistakes of entrepreneurship. ESIC Publisher.

Díaz-García, C., Sáez-Martínez, F. and Jiménez-Moreno, J. (2015). Evaluation of the impact of the educational program "Emprendedores" on the entrepreneurial intention of the participants. RUSC. Universities and Knowledge Society Journal, 12(3). 17-31. http://doi.org/10.7238/rusc.v12i3.2146

Do Paco, A., Ferreira, J.M., Raposo, M., Rodrigues, R.G., & Dinis, A. (2015). Entrepreneurial intentions: is education enough? International Entrepreneurship Management Journal, 11, 57-75. https://doi.org/10.1007/s11365-013-0280-5

Epdata (2021). The Chinese community in Spain, in data and statistics. Retrieved on January 3, 2021 from https://www.epdata.es/datos/comunidad-china-espana-datos-estadisticas/290

European Commission (2009). Final report of the Group of experts. Entrepreneurship in vocational education and training. https://www.todofp.es/dam/jcr:340f8e9d-41c5-4851-873e-97ee2d3f51c7/informe-de-la-comision-europea-sobre-el-espiritu-empresarial-en-la-fp-pdf.pdf

Falla, G. D. H., Avilés, A. M. S., & Diaz, V. B. (2020). Influence of higher education on youth entrepreneurship in university students: a theoretical approach. Redipe Bulletin Magazine, 9(8), 166-180. https://doi.org/10.36260/rbr.v9i8.1049

Fayolle, A. and Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: hysteresis and persistence. Journal of Small Business Management, 53(1), 75-93.

García-Uceda, E., Murillo-Luna, J. L., and Lafuente, J. A. (2019). Motivations for social entrepreneurship. Actions and Social Research, (40), 219-245. https://doi.org/10.26754/ojs_ais/ais.2019404203

Global Entrepreneurship Monitor (GEM) (2019). GEM Spain Report 2018-2019. https://www.gem-spain.com/wp-content/uploads/2020/06/Informe-GEM-Espana-C3%BF1a-2019_20.pdf

Gonzalez Morales, M.O. (2001). Attitudes and motivations towards work and business creation according to gender. ICE Economic Bulletin (2709), 21-29.

Gutierrez-Solana, F. (2020). Entrepreneurial universities to promote permanent innovation. College. https://www.universidadsi.es/universidad-emprendedora-para-impulsar-la-innovacion-permanente/

IE University (2020). Entrepreneurship. https://www.ie.edu/en/university/experienciaeu/entrepreneurship/

Jaimes-Millán, F., Jaramillo-Jaramillo, M., and Pérez-Chávez, M. A. (2017). Factors that affect the entrepreneurial intention of students of the Temascaltepec
University Center. Venezuelan Journal of Management, 22(78), 210-231. https://doi.org/10.31876/revista.v22i78.22875

Kautonen, T., Van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. Entrepreneurship Theory & Practice, 39(3), 655-674. https://doi.org/10.1111/etap.12056

Kickul, J., Gundry, L.K., Barbosa, S.D., & Whitcanack, L. (2009). Intuition versus analysis? Testing differential models of cognitive style on entrepreneurial self-efficacy and the new venture creation process. Entrepreneurship theory and practice, 33(2), 439-453. https://doi.org/10.1111/j.1540-6520.2009.00298.x

King Juan Carlos University (URJC) (2021). Supporting entrepreneurship with business incubators. https://www.urjc.es/todas-las-noticias-de-actualidad/3501-apoyando-el-emprendimiento-con-los-viveros-de-empresas.

Klofsten, M., Fayolle, A., Guerrero, M., Mian, S., Urbano, D., & Wright, M. (2019). The entrepreneurial university as driver for economic growth and social change: Key strategic challenges. Technological Forecasting and Social Change, 41(1), 149-158. https://doi.org/10.14203/j.baca.v41i1.585

Krueger, N.F., Reilly, M., & Carsrud, A. (2000). Competing models of entrepreneurial intentions. Journal of Business Venturing, 15, 411-432. https://doi.org/10.1016/S0883-9026(98)00033-0

Liñán, F. and Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. Entrepreneurship theory and practice, 33(3), 593-617. https://doi.org/10.1111/j.1540-6520.2009.00318.x

Liñán, F., Urbano, D. and Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. Entrepreneurship & Regional Development, 23(3-4), 187-215. https://doi.org/10.1080/08985620903233929

Mei, H., Zhan, Z., Fong, P.S.W., Liang, T., and Ma, Z. (2016). Planned behavior of tourism students' entrepreneurial intentions in China. Applied Economics, 48(13), 1240-1254. https://doi.org/10.1080/00036846.2015.1096006

Ministry of Economy, Finance and Employment (2021). Affiliation to Social Security. https://www.comunidad.madrid/sites/default/files/doc/economia/nota_afiliacion_a_la_seguridad_social_junio_2021_cm.pdf

Ministry of Education and Vocational Training (2020a). EducaBase: Number of foreign students enrolled in the Spanish University System (SUE) by type and type of university, area of nationality, academic level and sex. http://estadisticas.mecd.gob.es/EducaDynPx/educabase/index.htm?type=pcaxis&path=/Universitaria/Internacionalizacion/Estudiantes_Profesores_Extranjeros/&file=pcaxis.

Ministry of Education and Vocational Training (2020b). Entrepreneurship in Europe, Government of Spain. https://www.todofp.es/en/orientacion-profesional/busca-empleo-entrename/emprendedores/emprender-europa.html.

Ministry of Education of the Embassy of Spain in Beijing (2019). Profile of the Chinese student in Spain. http://www.iberchina.org/files/2016/profil_estudiantes_chinos.pdf
Ministry of Education, Culture and Sports (2015). Education for entrepreneurship in the Spanish educational system. https://sede.educacion.gob.es/publiventa/la-educacion-para-el-emprendimiento-en-el-sistema-educativo-espanol-ano-2015/educacion-politica-educativa/20842

Ministry of Inclusion, Social Security and Migration (2021). Foreigners with valid stay authorization for studies. https://extranjeros.inclusion.gob.es/ficheros/estadisticas/operaciones/con-autorizacion/202012/Estudiantes_31_dic_2020.pdf

Ministry of Science, Innovation and Universities (2020). Number of foreign students in Spanish Universities. Retrieved from: https://public.tableau.com/views/Extranjeros_EI19/Infografia?%3AshowVizHome=no&%3Aembed=true#6

Ministry of Universities (2020). Data and Figures of the Spanish University System. https://www.educacionyfp.gob.es/dam/jcr:b9e82c7a-1174-45ab-8191-c8b7e-626f5aa/informe-datos-y-cifras-del-sistema-universitario-espao-l-2019-2020-correctido.pdf

Minniti, M., Bygrave, W. D., & Autio, E. (2006). Global Entrepreneurship Monitor Report. London Business School and Babson College.

Montes Merino, A.M. (2018). Emotional competences in the analysis of the entrepreneurial intention of university students: implications for entrepreneurship education [Doctoral thesis]. University of Granada.

Morales-Gualdrón, S. T., Gutiérrez-Gracia, A. and Dobón, S. R. (2009). The entrepreneurial motivation in academia: a multidimensional construct. International Entrepreneurship and Management Journal, 5(3), 301-317. https://doi.org/10.1007/s11365-009-0113-8

Mussons-Torras, M. & Tarrats-Pons, E. (2020). The impact of gender and social factors on the entrepreneurial credibility of Spanish university students. 3C Company. Research and Critical Thinking, 9(2), 133-153. https://doi.org/10.17993/3cemp.2020.090242.133-153

National Statistics Institute (INE) (2020). Unemployment rates by different age groups, sex and Autonomous Community. https://www.ine.es/jaxiT3/Tabla.htm?t=4247

Peterman, N.E. & Kennedy, J. (2003). Enterprise education: Influencing students’ perceptions of entrepreneurship. Entrepreneurship theory and practice, 28(2), 129-144. https://doi.org/10.1046/j.1540-6520.2003.00035.x

Poblete, C. and Amorós, J. E. (2013). Support of Universities in the development of regional entrepreneurial activity: an exploratory study of Chile. Regional Research = Journal of Regional Research, (26), 159-177. https://investigaciones-regionales.org/en/article/support-of-universities-in-the-development-of-regional-entrepreneurial-activity-an-exploratory-study-of-chile/

Polytechnic University of Madrid (UPM) (2021). actuaupm, UPM Entrepreneurship Program. https://www.upm.es/Investigacion/innovacion/CreacionEmpresas

Popescu, C.C., Bostan, I., Robu, I.B., & Maxim, A. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. Sustainability, 8, (8), 771. http://doi.org/10.3390/su8080771
Question Pro (2021). What is descriptive analysis? https://www.questionpro.com/blog/en/descriptive-analysis/
Rivero, C.A.P. (2015). The entrepreneurial intention of university business management students [Doctoral thesis]. King Juan Carlos University.
Sánchez, P. I., Maldonado, C. J., de las Heras Pedrosa, C., and Velasco, A. P. (2018). Effectiveness of entrepreneurship education programs on entrepreneurial intention. The challenge of entrepreneurship in the 21st century school: proceedings of the international symposium, Seville, December 18 and 19, 2017 (pp. 78-133). Sevilla University.
Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D. A., & Breitenecker, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: An Austrian perspective. Education+Training, 51(40), 272-291. https://doi.org/10.1108/00400910910964566
Serrano Garcia, M. (2019). Language tourism in Spain [End-of-degree project]. University of the Balearic Islands. http://hdl.handle.net/11201/149712
Shapero, A. (1982). Social dimensions of entrepreneurship. In C. A. Kent, D. L. Sexton and K. H. Vesper, K.H. (eds), The encyclopaedia of entrepreneurship (pp.72-90). Prentice Hall.
Soria-Barreto, K., Zuniga-Jara, S., and Ruiz-Campo, S. (2016). Education and entrepreneurial intention in university students: A case study. University Education, 9(1), 25-34. http://doi.org/10.4067/S0718-50062016000100004
Spirit Olmos, R. (2011). Entrepreneurial attitude in university students: an analysis of explanatory factors in the Community of Madrid. Complutense University of Madrid, Publications Service.
Tarapuez, E., García, M. D. and Castellano, N. (2018). Socioeconomic aspects and entrepreneurial intention in university students from Quindío (Colombia). Innovate: Journal of Administrative and Social Sciences, 28(67), 123-135. https://doi.org/10.15446/innovate.v28n67.68618
Torres-Coronas, T. and Vidal-Blasco, M.A. (2019). The importance of perceived behavioral control as a determining element of entrepreneurial intention among university students. University and Business Magazine, 21(37), 108-135. http://doi.org/10.12804/revistas.urosario.edu.co/empresa/a.6522
Urbano, D. (2006). The creation of companies in Catalonia: support organizations and attitudes towards entrepreneurial activity. Generalitat of Catalunya.
Valencia, F. A. M., Restrepo, I.A.M. and Restrepo, J.M.V. (2019). The Individual and his motivations in the entrepreneurial process. University and Business, 21(36), 149-174. https://doi.org/10.12804/revistas.urosario.edu.co/empresa/a.6197
Vélez, C. I., Bustamante, M. A., Loor, B. A., and Afcha, S. M. (2020). Entrepreneurship education as a predictor of an entrepreneurial intention of university students. University Education, 13(2), 63-72. http://doi.org/10.4067/S0718-5006202000200063