

Chapter 3 Capacities and abilities: Factors of entrepreneurial intention among young students

Capítulo 3 Capacidades y habilidades: Factores de la intención empresarial entre los jóvenes estudiantes

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Abstract

Creating companies is undoubtedly an activity that generates important benefits, in this sense it is well known that companies owned by women in recent decades have been increasing in number, managing to establish solid companies, the business field study, as far as we know, is of a multidisciplinary character, in this sense, the theory of entrepreneurial behavior can explain the entrepreneurial intentions of an individual to start a business, therefore this work aims to relate the factors of entrepreneurial intention (capacities and abilities) among young women who are students of six bachelor's degrees at UAEM Atlacomulco University Center. Statistics were carried out to identify the relationship between entrepreneurial intention (capacities and abilities), which in turn includes eight indicators such as recognition of opportunities, writing a business plan, recruiting, estimating costs, marketing, convincing, negotiating and, productivity and women students. The main results indicate that this group of factors are not related in all degrees in the same way, even in some it is not significant.

Entrepreneurial intention, Capacities, Skills, Entrepreneurs, Business creation

Resumen

Crear empresas es sin duda una actividad que genera importantes beneficios, en este sentido es bien sabido que las empresas propiedad de mujeres en las últimas décadas ha ido en aumento logrando establecer empresas sólidas, el estudio de campo empresarial como es bien sabido, es de carácter multidisciplinar, en este sentido, la teoría de comportamiento emprendedor puede explicar las intenciones empresariales de un individuo para la puesta en marcha de un negocio, por tanto este trabajo tiene como objetivo, relacionar los factores de intención emprendedora (capacidades y habilidades) entre las jóvenes estudiantes de seis licenciaturas del C.U. UAEM Atlacomulco. Se realizaron estadísticos para identificar la relación entre la intención emprendedora (capacidades y habilidades) que a su vez incluye ocho indicadores como reconocimiento de oportunidades, escribir un plan de negocios, reclutar, estimar costos, mercadotecnia, convencer, negociar y, productividad y las estudiantes mujeres. Los principales resultados indican que este grupo de factores no se relacionan en todas las licenciaturas de la misma manera, incluso en algunos no resulta significativo.

Intención emprendedora, Capacidades, Habilidades, Emprendedoras, Creación empresas

Introduction

The creation of companies is a multidisciplinary field because several areas have nurtured it, however, so far there is no consensus to define the field, though, there are theories that focus on intentional behavior since they claim that it helps to explain why many entrepreneurs decide to start a business, therefore, these theories indicate that the intention to venture is a voluntary act of people who have entrepreneurial attitudes and knowledge in relation to entrepreneurship.

The literature review has revealed the existence of several studies on this construct in companies owned by men, more than those that focus on companies owned by women, despite the fact there is a significant percentage of successful, established companies, founded and run by women.

On one hand, following the first phase of the business creation process provided by the Global Entrepreneurship Monitor which shows starting a business potential as an individual who intends to venture, making it a fundamental agent to detonate the start-up of a business, Research work was detected that address the entrepreneurial intention in young university students, which do not make a distinction between the subjects of the samples that they address in those works, no studies that address university women and entrepreneurial intention were identified.

On the other hand, three lines of research created in the 90's were detected that address entrepreneurial intention and that have been replicated in recent research, which deals with subjective indicators for business behavior and the decision to start running a business.

Therefore, the central hypothesis that is proposed is the analysis of the entrepreneurial intention factors (perception towards entrepreneurship, social influence regarding entrepreneurship and abilities and capacities associated with entrepreneurship) allow us to identify which are those that are related to young women students of the UAEM Atlacomulco University Center, for business behavior, however, it is important to note that for this work only the results of the group of factors corresponding to the abilities and capacities associated with entrepreneurship are shown, which is made up of eight indicators (recognize opportunities, write a business plan, recruit, estimate costs, marketing, convince, negotiate, productivity).

The work is structured from a brief review of the literature about the evolution on the entrepreneurial field. Immediately afterwards, the women entrepreneurs are described, followed by the relevant theories in the entrepreneurial field, pioneering theories on the entrepreneurial intention construct, as well as the theoretical model that has been selected for this work, and finally, the results and conclusions are shown.

Evolution on the entrepreneurial field

Micro, small and medium-sized companies are of great relevance in all parts of the world, since they are generators of a large amount of employment, as well as regional and local development (Saavedra and Saavedra 2014).

Likewise, according to data extracted from the National Institute of Statistics and Geography (INEGI) in the section of Statistics and National Survey on Productivity and Competitiveness of Micro, Small and Medium Enterprises (ENAPROCE) for the year 2015, MSMEs represent ninety and seven percent of all companies, generate seventy-nine percent of employment in the population and contribute forty-two percent of the Gross Domestic Product (GDP) in Mexico, because of this, the government has been interested in supporting and incentivize entrepreneurs in the creation and development of these companies (Nava, 2013).

At the same time, a worrying problem in Mexico is the high failure rate of MSMEs, since, according to Cruz, López, Cruz and Meneses (2016), 75 percent of new companies in the country fail two years after starting their activities.

With the aforementioned, the need for the survival of these companies by governments has led researchers to study the causes of the main problems of MSMEs and their deficiencies in order to have greater stability and lifetime in the market (Clark, Villareal, and Padilla, 2015), some problems faced by this type of companies is the lack of business culture, that is, these types of companies do not have a mission, vision, and values, in addition to the absence of a strategic study on market needs, as well as poor administration (García, 2015), due to this, forty-three percent of companies fail (Cruz et al., 2016).

In this context, García (2015) recognizes other elements such as the lack of training of entrepreneurs, the lack of personnel that comes from the financial need, in the same way, Clark et al., (2015) have found other factors that cause the failure of MSMEs, such as leadership absence, excessive personal expenses and without control, a poor delegation of responsibilities and decision-making, lack of planning for succession that results in problems between generations, the very competition between these types of organizations.

Moreover, there is a group of researchers who are dedicated to studying the subjective factors of entrepreneurial intention that directly impact the entrepreneur and are important for the creation of companies such as motivation, abilities, leadership, professional experience, economic factors.

For their part, Morales, and Rodil (2014), Nava (2013) point out two basic sources of financing among entrepreneurs, these being their own resources, which are personal savings, and the resources of third parties, which come from relatives, suppliers, financial or government institutions. Likewise, social capital is a determining factor for the development of the entrepreneurial process, social relationships with entrepreneurs provide knowledge for the business.

Following this order of ideas, the literature review has allowed us to recognize that the business field is multidisciplinary due to the various contributions of different disciplines with different approaches (Diez, 2016), therefore, it is detected a pioneering classification on the creation of companies and various approaches proposed by Veciana (1999) which consists basically of four areas. Firstly the economic approach, which encompasses the theories that explain on the basis of economic rationality; for its part, the psychological approach investigates the entrepreneur based on certain attributes or characteristics that this person must have. Likewise, the sociocultural, also called the institutional approach, analyzes the factors of the environment that motivate the entrepreneurial activity, finally, the managerial approach, integrates the theories that refer to the fact that the creation of companies depends on the knowledge in the areas of economics and management (Espíritu, 2011).

Women Entrepreneurship

In the world, companies owned by women are equivalent to one for every three companies owned by men (Halim, 2020). In Mexico, according to the Milenio portal, companies owned by women in the country equal 36.6 percent. These companies employ around two million 904 thousand 432 people, which is equivalent to approximately 10.7 percent of the employed population in the country (Ochoa, 2020). That is why studies carried out worldwide on female entrepreneurship are mentioned below. In the American continent, specifically in the United States, there is the research of Smith-Hunter and Boyd (2004) on the theoretically supported explanation of the partial differences observed among women entrepreneurs. In the European continent, in Spain specifically, Langowitz and Minniti (2007) study the variables that influence the entrepreneurial propensity of women and if the variables have a significant correlation with the differences between sexes; also, Díaz-Casero and Cols (2007), determine the evolution of the situation of female entrepreneurs. Finally, in Latin America, studies were found in Bolivia by Méndez (2003), who shows that female participation in the labor force in the formal sector is 15.2 percent and 53.2 percent in the informal sector.

Likewise, Weeks and Seiler (2001) carry out a study on female entrepreneurship in Latin America and find that between 25 and 35 percent of employers and self-employed workers in the region are women, so that between a quarter and a third of the micro, small and medium (MSMEs) companies are owned by women, therefore, it can be said that there is a presence of women entrepreneurs in the female market. In the same line, in Mexico there are few studies on female entrepreneurship and women entrepreneurs, among the inquiries found in this context, Escamilla (2012) in the State of Mexico is mentioned, who makes a theoretical approach regarding entrepreneurship. and its evolution, in the same state, Montoya (2013) focuses on analyzing the importance of human capital, social capital and the demographic factor that influence the growth expectations of women entrepreneurs in some municipalities in the region, Elizundia (2014) analyzes the personal and social factors that influence the probability that women become entrepreneurs in Mexico, in the same way, Guerrero, Gómez, and Armenteros (2014) determine the factors with the greatest influence on female entrepreneurship, contrasting the profile of women entrepreneurs from the cities of Torreón and Saltillo, in Coahuila, Mexico, research motivated by the great growth of the participation of women in the world of work.

Also Compeán, Belausteguigoitia and Navarrete (2015) carry out a study in Mexico City and in León, Guanajuato to find out the main motivations of entrepreneurs or businesswomen to start, develop and keep their business, on the other hand in Tamaulipas, Briseño, Briseño and López (2016) study the factors that influence business entrepreneurship carried out by women in Mexico, identifying both the characteristics of the company and the businesswoman as well as the obstacles and impact of business activity.

Relevant theories in the entrepreneurial field

In this context, another more recent work such as that of Chávez and Vargas (2012) presents another group of theories that address the business field, among the main ones it is mentioned the role theory, which explains how in some geographical areas there are more entrepreneurs and entrepreneurship activity than in others, mainly influenced by external factors such as the industrial sector or entrepreneurial figures to follow (Nueno, 1996), as well as the theory of incubator, who addresses the importance of incubator organizations that influence a person's decision to start a business (Chávez and Vargas, 2012).

Also, the theory of values is said to be of utmost importance for the study of entrepreneurship since it is the guideline of human behavior towards personal fulfillment and social transformation, besides, there is the theory of personality traits, this approach considers that the entrepreneur or businessperson has certain attributes that form a psychological profile of business behavior (Espíritu, 2011).

On the other hand, another group of researchers who propose different theories to those already mentioned in previous paragraphs was also detected, among them, the theory of networks, which indicates that to create a company it is necessary for the entrepreneur to maintain social relationships with entrepreneurs who can provide ideas and knowledge for the creation of the new business (Fernández and Junquera, 2001); the theory of marginalization or triggering event is based on the fact that the individuals most likely to create a company are the misfits or marginalized, that is, those people who have been exposed to negative events both in the workplace such as unemployment, dismissal, etc. and personal (Brunet and Alarcón, 2004). Finally, the institutional theory, which explains what are the institutional aspects that induce people to venture, institutions provide the entrepreneur with a field of economic growth and that is the means for this growth to exist (Boettke and Coyne, 2006).

Thus, in this context, it was found that the main authors approach the issue of entrepreneurial intention from different perspectives, as indicated by de Alonso (2012), Bird and Jelinek (1988) are shown as the precursors of the theories of entrepreneurial intentions, which affirm that the entrepreneurial intention is a voluntary act of people who have entrepreneurial attitudes and knowledge in relation to entrepreneurship, in the same way, it points out that the intentional behavior helps to explain why many entrepreneurs decide to start a business a lot before opportunities are sought.

Krueger (2007) states that the causes of entrepreneurial action are entrepreneurial intentions, these are considered as a link between the entrepreneur as an individual and the context within which an initiative is created; on the other hand, Lee and Wong (2004) consider that the entrepreneurial intentions are the first link in the evolution of the business creation process.

Similarly, multiple theories have emerged that seek to explain the behavior of the entrepreneur, however, it has been concluded that the most appropriate way to study this phenomenon is through intention models (González, Valantine, Pérez, Aguado, Calabuig and Crespo, 2016), which predict possible behaviors that can be transformed into the start-up of a business.

Recent studies such as those by Adum and Orellana (2021), Bravo, Bravo, Ramírez, and Ferrín (2021), Diaz and Silva (2021), Flores, and Medalid (2021), Sandoval (2021), show the importance of the entrepreneurial intention to start a business between women and men students of Universities in various countries.

Pioneering theories about the entrepreneurial intention construct.

In the 90's, three new models of intentions emerged, which have had greater importance and are the most used in research and studies (Soria, Zúñiga and Ruiz, 2014), these being the one proposed by Shapero and Sokol (1982), known as the Entrepreneurial Event Model (EEM), where entrepreneurship is understood as an event influenced by various factors such as entrepreneurial experiences, skills, risk, among others. This model depends on three elements of personal choice to found a company: the perception of desirability, the perception of viability and the propensity to act.

Later, Ajzen (1991) reveals his model called Theory of Planned Behavior (TCP), this theory has been the most used for research purposes regarding the study of human behavior, as it explains that behavior is a function of beliefs the which intervene in a certain behavior and are considered premises that determine the factors that precede a planned behavior such as the referred attitudes, subjective (social) norms and behavior control (Soria et al., 2014).

After a while, Krueger and Brazeal (1994) elaborated a model named Entrepreneurship Potential Model (EPM) that is based on the models of the aforementioned authors, which explains that the desire and viability in entrepreneurs leads them to prioritize opportunities on threats through an intentional process (Ubierna, 2015), on the other hand, this model also has great influence from the triggering event theory.

It is important to note that the studies that have addressed these three models have been carried out worldwide, such is the case of the European continent, Romero and Milone (2016), Rodríguez (2015) and Alonso (2012) these authors base their research on entrepreneurial intentions under the Ajzen approach, aimed at men and women in companies in the life sciences and research sector (hospitals, medical centers, laboratories, research organizations) carried out in Spain; In the African continent, Yatribi (2016) applies the Krueger and Brazeal model in men and women with engineering degrees in public and private companies in Morocco.

Likewise, other studies in Latin America were identified, such is the case of Hernández-López, Moncada-Toro and Henao-Colorado (2018), Solarte, Solarte and Arcos (2015) base their research on the Shapero and Sokol model of men and women of the Colombian population, in Mexico Morales, Álvarez and Sánchez (2015), Bueckmann (2012) focus the study of entrepreneurial intentions in academic institutions, mainly in students (men and women) of different careers, implementing the models of Shapero and Ajzen in Tamaulipas, Monterrey, Mexico City, Guadalajara and the State of Mexico.

On the other hand, Guzmán and Rodríguez (2008) point out that information is scarce on the participation of women in business activity and in studies that address business intentions for the female gender, even though it is well known that companies owned by women are successful. Compeán, Belausteguigoitia and Navarrete (2016) point out that in almost all regions of the world women are more likely than men to work alone, they are emotional leaders since they maintain the balance between company and family, they stand out for their ability to offer innovative products and services, their ability to establish relationships with clients and workers, promote values, develop different tasks and priorities, and have a higher level of reflection and analysis for decision-making.

Despite this, no studies were found on the entrepreneurial intentions of female university students, only works of entrepreneurial intentions were found in young university students but focused on men and women, the exclusive selection of the female gender is not made, since they have abilities and entrepreneurial qualities regarding the management and creation of a business (Guzmán and Rodríguez, 2008).

Regarding the investigations related to studies of entrepreneurial intentions in university students, some were detected, which have been classified by continent; According to the literature review carried out, in the European continent there are the works of Arribas and Vila (2004), Maluk (2014), Espíritu y Sastre (2007), Espí, Arana, Heras and Díaz (2007), Moriano, Palaci and Morales (2006), Romero and Milone (2016), Alonso (2012) in Spain; In Latin America there are works such as those of Ackerman, Cardozo and Cervilla (2007) in Venezuela, in Mexico, Espíritu (2011), Morales, Álvarez and Sánchez (2015), Ramírez, Almanza and Negrete (2005) in the states of Colima, Tamaulipas and Guanajuato.

In the state of Mexico, specifically in the northern zone, two important investigations were found that are a theoretical and empirical approach to the study of the field of intentions, which include the work of Onofre (2013).

As it has been already observed in previous paragraphs, the entrepreneurial intention is an object of study of great importance because if an individual has the intention to start a business it leads him to business conduct, then if he has business conduct, the setting up of the business is given.

Consequently, there are various studies on entrepreneurial intentions in the world, however, in Mexico, these studies are scarce and have only been found in universities in some parts of the country such as Tamaulipas, Monterrey, Mexico City, Guadalajara, and the State of Mexico.

On the other hand, there is also very little information from studies on women entrepreneurs and entrepreneurial intentions, in addition to this, research on women entrepreneurs and entrepreneurial intentions in university students continues to be lacking and insufficient.

The Autonomous University of the State of Mexico (UAEM) is a state public institution of higher education headquartered in the city of Toluca, Mexico, which has schools, faculties, university centers and professional academic units.

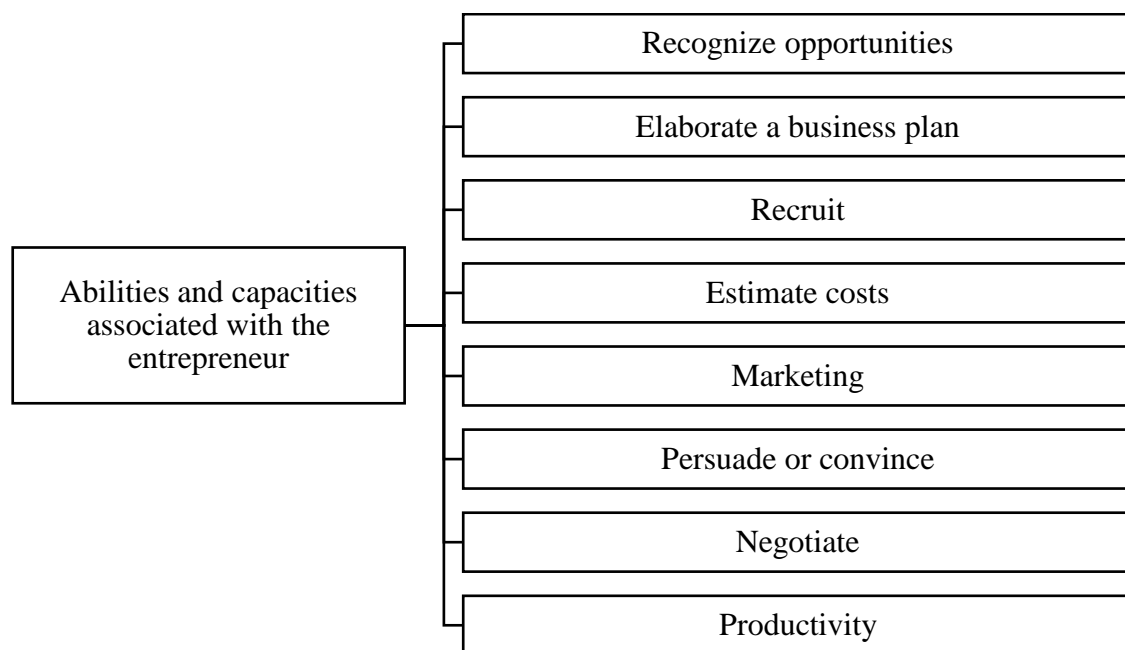
The Atlacomulco University Center houses six careers which are: computer engineering, degree in administrative informatics, degree in law, degree in psychology, degree in administration and, degree in accounting, of which four belong to the social area, one to the area of health sciences, and one more to the area of computer science.

It should be noted that an exploration of the curricula was carried out with the coordinators of the bachelor's and engineering degrees. It was found that from the economic-administrative area, the bachelor's degree in administrative informatics, accounting and administration contain subjects from the entrepreneurship area such as investment projects and business development that are taught in the seventh, eighth and ninth semester, in addition to implementing strategies to promote entrepreneurship such as forums and courses in the business incubator, while the degree in law, psychology and computer engineering, in their curricula do not have any subject related to entrepreneurship, this means that the careers in the economic and administrative area are the ones that have the most possibilities for students to be potential entrepreneurs who have the intention for business conduct.

Theoretical model selection

The present work is solidly based on the research carried out by Rueda, Fielden and Herrero (2012), which includes three groups of important factors for the entrepreneurial intention of young university students, these being the perception towards entrepreneurship, the social influence regarding entrepreneurship, as well as the skills and abilities of the individual to develop an entrepreneurial project. However, it is important to emphasize that this work will only show the group of factors corresponding to abilities and capacities, which is made up of eight indicators (Recognize opportunities, write a business plan, recruit, estimate costs, marketing, convince, negotiate, productivity).

Figure 3.1 Indicators Diagram



Source: Own Elaboration

Methodology to develop

Universe of study

The universe under study is made up of all the female students enrolled in the fall 2018 B school period of the six bachelor's degrees: Administration, Administrative Informatics, Accounting, Law, Psychology and Computer Engineering offered by the UAEM Atlacomulco University Center who study the first, third, fifth, seventh and ninth semester, having a total of 810 female students (see annex 1), registering the following:

- a. In the first place, the bachelor's degree in Administration, a total of 157 female students are enrolled in this degree, distributed in the following semesters: 34 women in the first semester, 32 women in the third semester, 29 women in the fifth semester, 29 women in the seventh semester and 33 women in the ninth semester.
- b. Secondly, the bachelor's degree in Administrative Informatics, a total of 70 female students are enrolled in this degree, distributed in the following semesters: 8 women in the first semester, 14 women in the third semester, 10 women in the fifth semester, 13 women in the seventh semester and 25 women in the ninth semester.
- c. In third place, bachelor's degree in Accounting, in said bachelor a total of 134 female students are enrolled, distributed in the following semesters: 27 women in the first semester, 31 women in the third semester, 23 women in the fifth semester, 24 women in the seventh semester and 29 women in the ninth semester.
- d. In fourth place, the Law Degree, in this degree a total of 176 female students are enrolled, distributed in the following semesters: 49 women in the first semester, 34 women in the third semester, 29 women in the fifth semester, 30 women in the seventh semester and 34 women in the ninth semester.
- e. In fifth place, the Degree in Psychology, in this degree a total of 228 female students are enrolled, distributed in the following semesters: 48 women in the first semester, 58 women in the third semester, 29 women in the fifth semester, 41 women in the seventh semester and 52 women in the ninth semester.
- f. In sixth and last place in Computer Engineering, a total of 45 female students are enrolled in said Engineering, distributed in the following semesters: 11 women in the first semester, 12 women in the third semester, 6 women in the fifth semester, 5 women in the seventh semester and 11 women in the ninth semester. Data was obtained with information given by the Institution's School Control Department.

Population under study

In this context and for the present research, the target population is considered to be constituted only by female students from the fall 2018 school period B of the six bachelor's degrees; Administration, Administrative Informatics, Accounting, Law, Psychology and Computer Engineering offered by the UAEM Atlacomulco University Center, thus registering that the number of female students of the bachelor's degree in Administration enrolled in that period corresponds to a total of 157 students, likewise, the bachelor's degree in Administrative Informatics has a total of 70 students, for its part, the bachelor of Accounting has a total of 134 students, while the bachelor of Law has a total of 176 students. In the same way, the bachelor of Psychology has a total of 228 female students and the Computer Engineering that registers a total of 45 female students, obtaining a total population of 810 female students.

Sample selection

To calculate the sample size, the general formula was used to calculate the sample, taking a 95% reliability and a 5% error, resulting in a total of 261 female students belonging to the fall 2018 school period B of the six Bachelor's degrees; Administration, Administrative Informatics, Accounting, Law, Psychology and Computer Engineering offered by the UAEM Atlacomulco University Center, subsequently the stratified sampling formula proposed by Hernández, Fernández and Baptista (2010) was implemented, thus obtaining the following distribution of women to be surveyed by career, 51 belonging to the Bachelor of Administration, 23 to the Bachelor of Administrative Informatics, 43 to the Bachelor of Accounting, 57 to the Bachelor of Law, 73 to the Bachelor of Psychology and 14 to Computer Engineering.

Table 3.1 Research Technical File

Geographic Scope	Local (UAEM Atlacomulco University Center)
Universe	Female students from UAEM Atlacomulco University Center
Universe size	810 female students
Application Mode	Survey through structured questionnaire
Sampling Method	Stratified sampling by degrees
Sample size	261 valid surveys
Sampling fraction	32.22%
Error	5%
Confidence Level	95%

Source: Own Elaboration

Measurement Instrument Design

Therefore, firstly, there is a block referring to sociodemographic data and, block two, referring to entrepreneurial intention. Likewise, the beliefs of the subjects regarding entrepreneurship, the perceived social influence regarding this behavior, and the perceived abilities and capacities that condition the subject's control to carry out their entrepreneurial project, which is composed of 8 approaches, which are measured through Likert scales using five positions, where 1 = Total disagreement, 2 = Somewhat disagree, 3 = Neither agree nor disagree, 4 = Somewhat agree, 5 = Total agreement. Once the blocks that constitute the measurement instrument have been mentioned, it is necessary to emphasize that this work only shows the results corresponding to the variable abilities and perceived capacities.

Coding of the variable abilities and perceived capacities

Abilities and capacities are the beliefs that potential entrepreneurs have that they have the skills, knowledge and experience necessary to start their business (Elizundia, 2014). For this research eight approaches are taken from the article prepared by Rueda, Fernández and Herrero (2012), on the abilities and capacities that female students with an entrepreneurial intention believe they possess for starting a business, Table 3.2 shows the coding of this variable and the indicators that comprise it.

Table 3.2 Coding abilities and capacities associated with entrepreneurship

CODING	ITEM	DESCRIPTION
IEPI	27. Recognize the potential of an idea / opportunity, which allows the emergence of a newly created company successfully.	Personal perceptions about the knowledge, abilities and experiences that are possessed to start a new business. 1 = Total disagreement 2 = Somewhat disagree 3 = Neither agree nor disagree 4 = Somewhat agree 5 = Full agreement Nominal variable
IIEP	28. Write a business plan, clearly and completely.	
IEEI	29. Recruit the right employees for a new project / company.	
IEEC	30. Correctly estimate the costs of managing a new product / company.	
IESM	31. Select the best marketing approach to bring a new product / service to market.	
IECC	32. Convincing a customer to try a new product / initiative.	
IENP	33. Negotiate better prices with a supplier to ensure the success of the new company.	
IEPB	34. Work productively under continuous stress, pressure and conflict and make decisions under uncertainty and risk.	

Source: Own Elaboration

Instrument validation

The Cronbach's alpha (α) reliability test of the measurement instrument was performed, and because the questionnaire is not homogeneous, since the sociodemographic characteristics do not have the same measurement scale, they cannot be validated, but they are considered factors of great significance according to the theoretical basis. To this end, the Cronbach's alpha reliability test was applied to the dimensions that make up the entrepreneurial intention approaches. The results obtained show that the dimension of entrepreneurial intention contained in the sections of perception towards entrepreneurship, social influence, and abilities and capacities associated with entrepreneurship, exceed the level of reliability coefficient ($\alpha = 0.906$ respectively), therefore, considered an acceptable value according to Hair, Anderson, Tatham, and Black (1999).

Results

A bivariate analysis was performed which is used to study the relationship between two variables (Santiago, 2012). To carry out the bivariate analysis and identify whether there is a relationship between the study variables, the SPSS program was used to calculate Pearson's correlation coefficients¹ (r) between entrepreneurial intention and entrepreneurial intention factors, specifically skills and abilities. In six educational programs of the UAEM Atlacomulco University Center, the results obtained are described:

Regarding the abilities and capacities associated with the entrepreneurship of the bachelor's degree in administration, the crossing of the entrepreneurial intention variable with recognizing opportunities (IEPI) is significant with (0.401), as well as writing a business plan (IEEP) with (0.298) and estimate costs (IEEC) with (0.378).

Regarding the abilities and capacities associated with the entrepreneurship of the degree in accounting, no variable was significant for the entrepreneurial intention. Likewise, regarding the skills and abilities associated with the entrepreneurship of the degree in administrative informatics, no variable was significant for the entrepreneurial intention.

Regarding the abilities and capacities associated with the entrepreneurship of the degree in psychology, the crossing of the entrepreneurial intention variable with recognizing opportunities (IEPI) is significant with (0.561), as well as writing a business plan (IEEP) with (0.560), recruit (IEEI) with (0.423), estimate costs (IEEC) with (0.518), marketing (IESM) with (0.554), persuade or convince (IECC) with (0.613), negotiate (IENP) with (0.639), and finally, productivity (IEPB) with (0.378).

Regarding the abilities and capacities associated with computer engineering entrepreneurship, the crossing of the entrepreneurial intention variable with recognizing opportunities (IEPI) is significant with (0.832), as it is recruiting (IEEI) with (0.612), and marketing (IESM) with (0.554).

Regarding the abilities and capacities associated with entrepreneurship of the law degree, the crossing of the entrepreneurial intention variable with recruiting (IEEI) is significant with (0.300) and estimating costs (IEEC) with (0.352).

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¹ Pearson's correlation coefficient is a statistical test to analyze the relationship between two variables measured at an interval or ratio level, and is symbolized by r (Hernández and authors, 2010).

Conclusions

Starting from the objective set out in the present work, which was to relate the factors of entrepreneurial intention (capacities and abilities) among the young students of the six degrees of the C.U. UAEM Atlacomulco, the following conclusions were obtained:

Firstly, it is important to emphasize that the group of factors corresponding to the abilities and capacities for entrepreneurial intention is made up of eight indicators, which were not entirely significant for any of the six careers offered in the C.U. Atlacomulco, however, for the degrees in Administration, Psychology and Computer Engineering, they were significant, this means that the young students of these careers recognize the potential of an idea and then materialize it, as Elizundia (2014) points out, while for the degrees in Accounting, Administrative Informatics, and Law, this indicator was not significant.

Likewise, the indicator writing a business plan stood out in the degrees in Administration and Psychology, which refers that the students of these degrees know how to develop the strategies to carry out the start-up of a business and thus achieve its objectives, on the contrary, to the degrees in Accounting, Administrative Informatics, Law and Computer Engineering this indicator was not significant, this leads to the indicator estimate costs that stood out in the degrees in Administration, Psychology, and Law, where the students know how to make forecasts of the resources that they will use in the future To carry out a business, another indicator that was significant is to recruit, for the degrees of Psychology and Law, where the students know how to select the ideal personnel for a certain position, while for the degrees of Administration, Accounting, Administrative Informatics, and Engineering in Computing this indicator was not significant.

Another significant indicator for entrepreneurial intention is marketing, where the degree in Psychology and Computer Engineering stood out, the students belonging to these careers know of strategies to introduce a new product to the market, unlike the degrees in Administration, Accounting, Administrative Informatics, and Law that do not possess this ability. For the degree in Psychology, the indicators, convincing, negotiating and productivity were also significant, this means that the young students of this degree have skills and knowledge about persuading a person, seeking an agreement to obtain a benefit and, in addition, complying with the responsibilities that correspond to you. Benavides (2004) points out that entrepreneurs are people who have a special ability to solve problems and face unstructured situations, being important the possession of a series of knowledge and a starting training level that allows them to successfully complete their project, Similarly, Rueda, Fernández, and Herrero (2012) those surveyed with a firmer purpose of developing an entrepreneurial project consider that they have greater capacities and management skills, both to identify business opportunities, to specify an action plan, access to the necessary resources and develop operations correctly.

Regarding the limitations of this work, it is mainly found that not all the factors corresponding to the entrepreneurial intention are presented, but we only show the factors corresponding to the capacities and abilities that make up eight indicators, likewise we consider that other limitations of the work global and that have an impact on this are the little information in articles on entrepreneurial intention in university students and, above all, in women in our country. The selection of the sample was difficult because in two careers there were very few women. The questionnaire was modified because some items of the sociodemographic characteristics of the base questionnaire were not transcendental for the research in university women, in addition, they caused confusion in the students at the time of answering and, finally, the low availability of university students for the application of the questionnaire.

Concerning future lines of research, a comparative study between the University Centers of UAEMEX would be important to generate the necessary strategies in the entrepreneurship programs that the University itself has developed in order to strengthen the entrepreneurial intention among students, likewise, analysis with other statistical techniques would be important and the inclusion of other variables.

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