

## Entrepreneurial skills in university degrees

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### Abstract

**Purpose:** From a skills perspective, the academic field of entrepreneurship has grown to become a key element in university studies. Determining whether these skills exist among university students and how to foster them is a key in higher education. To this effect, the aim of this study is to determine the entrepreneurial skills' level among the students on the different disciplines. The empirical application considers the case of the Faculty of Business and Economics Sciences of University of Girona.

**Design/methodology:** Information about the skill level was collected using a skills model called Tricuspid, which was specifically designed for the self-assessment of entrepreneurial skills. Information about students' sociodemographic, professional and educational profile was collected using a self-administered complementary questionnaire. Bivariate analysis and statistical contrast were applied.

**Findings:** Being a man, doing sport, balancing studying with paid work and accessing university studies via the vocational training pathway are indicators of a greater entrepreneurial capacity. On the other hand, being a woman, accessing university studies via baccalaureate or having no knowledge of English, however, are factors associated with a deficit in entrepreneurial talent.

**Originality/value:** Considering the fact that attitude to entrepreneurship can be modified through educational interventions, identifying these factors enables us to formulate guidelines for teaching activities that increase students' entrepreneurial and intrapreneurial capacity for a better integration for our students into the job market.

**Keywords:** Higher education, Entrepreneurship, Competences, Skills profile

**Jel Codes:** I23, I26, J24

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### 1. Introduction

The job market is evolving at breakneck speed: traditional professions are disappearing to make way for others that were previously unimaginable. At the same time, the “job for life” is a paradigm that is now alien to the new generations. It has been estimated that by the end of the next decade there will be more people working for themselves in the OECD countries than working as an employee (Boeri, Giupponi, Krueger & Machin, 2020). Within this context, knowledge acquisition and traditional disciplines are becoming increasingly devalued, especially since specialist information can easily be found on the Internet. On the other hand, what is becoming

important for a person's CV is a set of skills linked to what is generically known as entrepreneurship: the capacity to face new problems in new contexts, generate new ideas and innovations, manage risk, creativity and flexibility in dynamic and changing work and social environment (Prüfer & Prüfer, 2020). So, the common thread in learning, science, culture and the evolution of humanity in general over the next years will be determined by the mastery of a set of cross-cutting skills related to entrepreneurship. This entrepreneurial talent, which must be acquired beyond the technical learning related to each area of study, is the new source of opportunity for university students today (Laguna, Abad, de la Fuente-Cabrero & Calero, 2020)

To this effect, the need to make major, profound changes in the design, evaluation and teaching of higher education qualifications is made explicit in the construction of the European Higher Education Area (EHEA): the restructuring of bachelor's degrees, the implementation of new system for calculating credits, and the introduction of methodologies for learning based not only on specific skills but also on what are known as generic or cross-cutting ones. Within this new framework, Spanish universities have placed great emphasis on defining and incorporating into their degrees the skills that students must acquire during their university stay, but they paid less attention to how these skills should be measured and assessed (Fariza, Guitart-Tarres, Miravittles-Matamoros, Nuñez-Carballosa, Bernardo & Bikfalvi, 2014).

Some studies have made truly interesting contributions to the assessment of entrepreneurial capacity among bachelor's, master's and post-graduate students from different areas of knowledge. In various ways, the results of these works reflect the entrepreneurial capacity of the students, enabling the development of strategies to improve the different levels (Liikamaa, 2015; Julian, Espinach, Alcalà & Bikfalvi, 2014). First, at the individual level, each subject receives a diagnosis of their entrepreneurial capacity, enabling their strengths and weaknesses and the work required to improve. Second, at the collective level, the sum of the individual results informs the skill of the class-group, enabling earning activities that help the group to improve the capacities with the greater deficit. Last, strategies can also be devised to make improvements at the institutional level, given that trends can be detected in the educational needs of new students and complementary activities and programs implemented depending on these needs.

Despite the importance of the findings provided by these studies, few of them relate entrepreneurial capacities to the demographic, social and/or economic determinants of the individuals analyzed, which could be key factors for understanding the acquisition, ownership and development of these skills. Only some national and international studies relate gender or the area of study to the entrepreneurial intention (not capacity) of students. Some others, but only at country level (and not at individual one), relate certain cultural values and economic determinants to entrepreneurial activity (Miravittles-Matamoros, Nuñez-Carballosa, Guitart-Tarres, Bernardo, Achcaoucaou-Iallouchen & Hormiga-Perez 2012).

Following the studies that evaluate entrepreneurial capacity using Information and Communication Technologies (Keinänen, Ursin & Nissinen, 2018), the present work describes our experience with the digital platform Evolute (Shneper, 2020; Cristina, 2016), designed for the self-assessment of personal and social skills. This platform is based on different skills analysis models depending on the professional profile it is designed to analyze. We have especially applied the tool called Tricuspid, a model specifically designed for the self-assessment of entrepreneurial skills (Palolen, 2005). In this skills assessment, the individuals analyzed must indicate their perception of their current status and their future objectives in relation to entrepreneurial-type daily situations. By combining these perceptions an aggregate indicator is obtained which quantifies the current and desired future skill status of each individual. There are some important advantages of this way of proceeding. First, the fact that this skill level assessment is based on statements related to daily situations means that the individuals are not directly assessing their skills level, thus avoiding the usual bias in self-evaluation. And second, assessing both the current and the future situations enables us to identify the factors where the greatest need for improvement is perceived, and thereby quantify the creative tension (Boyatzis, Gaskin & Wei, 2015).

Deepening the knowledge and skills assessments carried out previously in the above-mentioned studies will help the higher education system to design complementary actions which, beyond specific learning in each of the bachelor's and master's degrees, will provide tools to train professionals prepared for the new social demands and the constantly changing job market, be it through self-employment, setting up one's own business or the capacity

to contribute to traditional business with new solutions (Domínguez-Fernández, Prieto-Jiménez, Backhouse & Ismodes, 2020).

Given the implications of the difference between entrepreneurial intentions and entrepreneurial skill, the present study aims to analyze the entrepreneurial talent of university students using a skills model and to complement this analysis with a study that determines what external factors (demographic, social and economic) intervene in it.

This work has the following structure. Close the introduction, there is a review of the theoretical context on entrepreneurial skills and the factors involved in its occurrence and/or development, since the interrelation between these two elements contributes relevant but previously few information. This is followed by the methodology and the results sections. Last, the conclusions are drawn, and the limitations of the study and future research derived from this analysis are stated.

## 2. Background

Professional and personal skills are worker's most important characteristics. Apart from reflecting their technical knowledge, they also influence the way they think and their problem-solving ability. Hence, skills help us to understand why some people with better aptitudes than others and how their development helps companies, institutions and organizations to be more successful (Edwards-Schachter, García-Granero, Sánchez-Barrioluengo, Quesada-Pineda & Amara, 2015). Therefore, for many years now there has been a broad knowledge base on the competitive advantages of nations, regions and companies. In fact, the states (via their national and international bodies), traditional business environments and universities have placed great importance on generating models, tools and measurement methods to certify their skill level (Manresa, Bikfalvi & Simon, 2018).

On a conceptual level, teaching and assessing skills in higher education is a broad and very well-documented topic both at the institutional level and in terms of academic research. The EHEA constitution meant the incorporation into the academic curricula a set of skills (knowledge, skills and attitudes) that students must put into practice when they join the labor market (Ramírez, 2017; Robles & Zárraga-Rodríguez, 2015). Of the eight skills defined as required for producing active, inclusive, employable, critical citizens, those that refer to having entrepreneurial initiative and talent have increasingly been shown to be the most relevant (Martínez-Vivot & Bertomeu, 2015).

Despite there is no unique and best absolute of defining an entrepreneur and its roles, scholar definitions of entrepreneurship agree that entrepreneurial mindset is a combination of talents (the ability to manage, work in team, identify and create opportunities, take risks) (Sheikh & Aghaz, 2019) that allows individuals to analyze the world and the opportunities and possibilities that it offers. On the other hand, seeking an understanding of the role of entrepreneurship in the field of economic growth, environmental problems and technological development, intrapreneurship or corporate entrepreneurship has been included in several empirical researches (Nabi, Walmsey, Liñán, Ankhtar & Neame, 2018). Because true entrepreneur acts as the motor of economic development, breaking the statics to push the economy toward development, not merely economic growth but also fundamental social changes (Tanveer, Zeng, Irfan & Peng, 2021).

Given that all skills, and particularly entrepreneurial ones, are dynamic, skills models are playing an increasingly important role in analyzing the skills knowledge of university students. These models map individual perceptions and projects for the purpose of identifying personal skills, knowledge and improvement requirements. Hence, and focusing on a holistic approach to the individual (Manresa et. al., 2018), skills status and evolution will obviously depend not only on the curriculum but also on the social employment and economic situation in which each student is immersed (Urbano, Aparicio & Audretsch, 2019).

Researchers have proposed various models to assess entrepreneurial skills among bachelor's and master's degree students, most of them based on Ajzen's Theory of Planned Behavior or the Event Model Shapero's Business (Ajzen, 1991; Shapero, 1982). Their works have been useful to identify students' strengths and weaknesses in entrepreneurial talents and develop personal strategies for improvement and also have provided teachers with information about how to design and implement training actions to match the design of academic program to

the labor market requirements (Daniel & de Castro, 2018). In other studies, the individual skills analysis is complemented with a post-assessment questionnaire where students must reflect on the activities that could help improve their skills level. Obviously, the contribution of the research in all the cases analyzed is enormously important in terms of validating the skills model and the implications of the results for the management of the university, the teaching activities implemented and the personal situation of the student. However, these studies do not mention the effect that external factors (social, demographic and economic determinants, for example) could have on shaping the personality of an entrepreneur.

The gender gap in entrepreneurial attitudes in higher education has been quite extensively studied, with women demonstrating less intention to undertake entrepreneurial activity (Einolander, Markopoulos, Kantola & Vanharanta, 2020). Independently of gender, it has also been shown that university students who come from entrepreneurial families express a greater intention to follow the path taken by their families (Boldureanu, Ionescu, Bercu, Bedrule-Grigoruta & Boldureanu, 2020). Another important aspect is age, with students' entrepreneurial intention declining as the academic cycle advances and contact with the working world approaches (Salcedo Muñoz, Arias Montero, Nuñez Guale, Robalino Rivadeneira, Nugra Betancourth & Salcedo, 2018). So, our first hypothesis focuses on determining whether entrepreneurial skill's level depends on the sociodemographic profile of the student (H1).

In relation to previous work experience, the evidence shows that the contact with the job market as an employee is favorable to the intention to be an entrepreneur (Moreno, Rodríguez & Rodríguez, 2018). Therefore, our second hypothesis analyzes if the entrepreneurial skill's level depends on the students' economic profile (H2).

Obviously, analyzing the effect of these sociodemographic and demographic factors on the intention to undertake entrepreneurial activity (Tomy & Pardede, 2020) can help to design government policies that encourage this intention in groups with the greatest predisposition. However, in our opinion, there are more factors that can affect the entrepreneurial intention, such as the students' educational pathway or their extracurricular activities. So, our third and fourth hypothesis would try to know if entrepreneurial skill's level depends on the educational profile of the student (H3) and whether entrepreneurial skill's level depends on the activity's students do in addition to their degree (H4).

Finally, it must be remembered that the intention to undertake entrepreneurial activity does not necessarily mean having the skills required to do so. So, since intention only explains the aspiration that guides what one does, the skill involves incorporating and mobilizing abilities, capacities and knowledge. For this reason we believe that using a tool that enables us to evaluate the students' skills (knowledge, group profiles, development needs, etc.) and link these results with the individual social, educational or demographic factors, would better describe the real capacity of the individual. So, we can contribute to design more responsible, individualized education and learning solutions to improve education and the quality of research, which is a priority of the universities in our country.

### **3. Methodology**

#### **3.1. Population and sample**

This study examines the students' population enrolled on the three bachelor's and dual bachelor's degrees taught at the FCEE of the UdG during the 2017-2018 academic course. UdG is a public university located in Girona, a city of around 100,000 inhabitants in the north-east of Spain.

The sample represents 33.7% of the total number of students enrolled during this academic year. The students were well distributed across the degrees: the degree with the greatest representation was Business Administration and Management and the one with the smallest representation was Economics (Table 1).

Degrees taught at the FCEE	n	%
Accounting and Finance (CiF)	69	22
Business Administration and Management (ADE)	114	36.3
Economics (ECO)	64	20.4
Dual degrees	67	21.3
<b>Total</b>	<b>314</b>	<b>100</b>

Table 1. Sample's size and percentage of the total of the sample for each degree

### 3.2. The skills model

Similar to previous studies, we use the skills model of the Evolute SystemPlatform (Ghouse, McElwee & Durrah, 2019). This platform, based on a generic fuzzy network, uses a numerical scale instead of the commonly and inaccurate language descriptors (Rico, de la Torre Cruz, Llamazares, Palmero & Palmero, 2020). More specifically, we have used the tool Tricuspid (Palolen, 2005) to self-assess students' entrepreneurial skills (Sánchez-Torné, Pérez-Suárez, García-Rio & Baena-Luna, 2021). With this tool, participants are required to assess the current and future perception on 99 statements related to entrepreneurial daily life situations with a fuzzy scale with levels between “always” to “never”. This exercise enables abstract and subjective perceptions to be combined and incorporated into 31 indicators (which are grouped in 2 and 6 higher levels) that measure the skills status of each individual (Figure 1a). Additionally, an immediate return comparing individual awareness with future objectives is given to each of them through a report which each one can determine their individual gaps to search personal improvement strategies (Vall-Llosera, Linares-Mustarós, Bikfalvi & Coenders, 2020).

Level 2	Level 6	Entrepreneurial Skill
<b>Personal skills</b>	<b>Self-Control</b>	Integrity
		Flexibility
		Innovation
		Searching for information
		Productive efficiency
		Adventurous spirit
		Decision taking
		Tolerance to stress
		Emotional awareness
		Self-confidence
	<b>Self-knowledge</b>	Self-assessment
		Recognizing your strong points
		Analytical thought
		Technical knowledge
	<b>Cognitive capacity</b>	Strategic thought
		Metacognitive skill
		Recognizing and solving problems
		Goal-directed
	<b>Self-innovation</b>	Initiative
		Optimism
Self-development		
Searching for realistic opportunities		
Creativity		
<b>Social Skills</b>	<b>Empathy</b>	Understanding others
		Developing others
		Service orientated
		Processing change
		Resolving conflicts
	<b>Social abilities</b>	Leadership
		Managing
		Collaboration

Profile	Variable
<b>Sociodemographic</b>	Sex
	Age
	Place of birth
	Trips abroad
<b>Work</b>	Work experience
	Current employment situation
	Working day
	Work abroad
<b>Educational</b>	Family business
	Degree studied
	Current degree year
	Credits enrolled for
	Pending credits
	Access pathway to the degree
	Stays o training abroad
<b>Activities outside the degree</b>	Knowledge of languages
	Other degrees studied
	Languages
	Sporting
	Cultural
	Cooperation activities
Entrepreneurial activities	

Figure 1. Tricuspid Entrepreneurial Skills (a) and profile variables (b)

The assessment process took place during a regular class session at computer's classroom. The teachers responsible for the project conducted the session. Each individual assessment generated a skills report for that student containing the 31 project manager skills. This information was complemented with a post-assessment questionnaire which collected information on the social, demographic, employment and educational activities profiles of each of the participants (Figure 1b).

### 3.3. Statistical analysis

To analyze the data and test the hypotheses formulated, bivariate analysis was performed to study the relationship between the current skills values and the creative tension for the different profiles of students. Since skills values and creative tension variables are continuous numerical variables and the ones that reflect the students' profile are categorical variables, ANOVA contrast was applied using the F of Fisher or the Brown-Forsythe statistic depending on whether the condition of equality of variances between the different categories of the qualitative variables was met or not. The contrasts of Pearson correlation coefficient were calculated to analyze the relationship between two quantitative variables.

## 4. Results

The assessment of the current skill level for the sample group of students is shown in Figure 2. Overall, in the grouping at level 2 personal skills were assessed slightly higher than social skills. Regarding the indicators of the more disaggregated grouping (level 6), the students assessed self-knowledge and empathy more positively and social skills and cognitive capacity more negatively.

Regarding the assessment of the need for improvement (creative tension) in the same indicators as above, the students perceived a greater need for improvement in personal skills than in social skills (Figure 3). With reference to grouping in 6 indicators, self-control and cognitive capacity stand out significantly from the rest, demonstrating the need for the students to improve in these two indicators. The indicators where less need for improvement was perceived was self-knowledge.

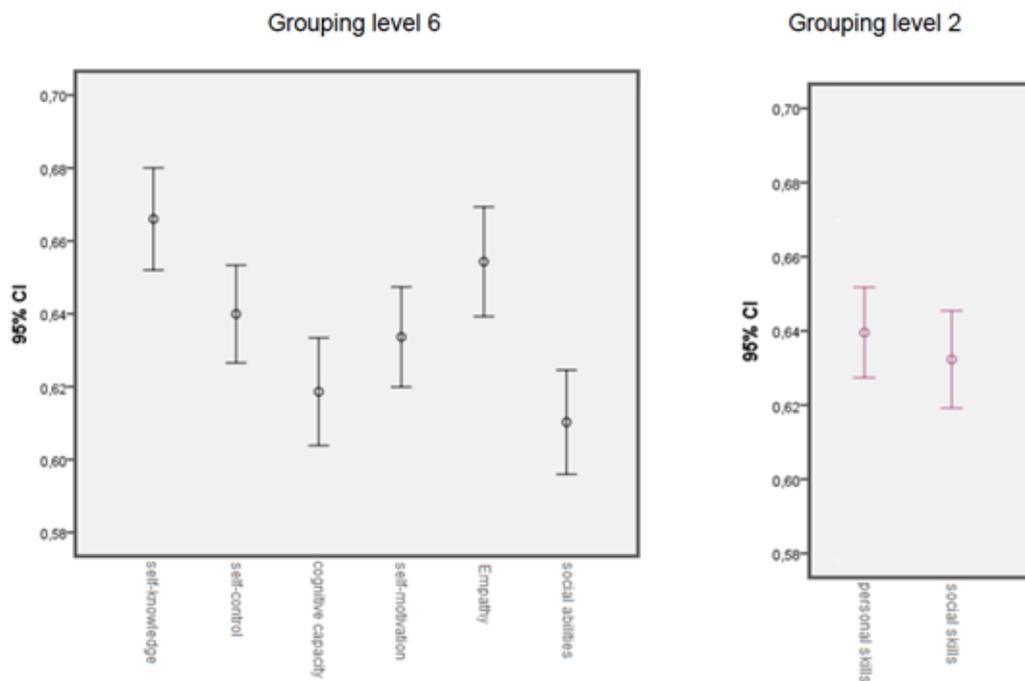


Figure 2. Assessment of current entrepreneurial skills (95% IC)

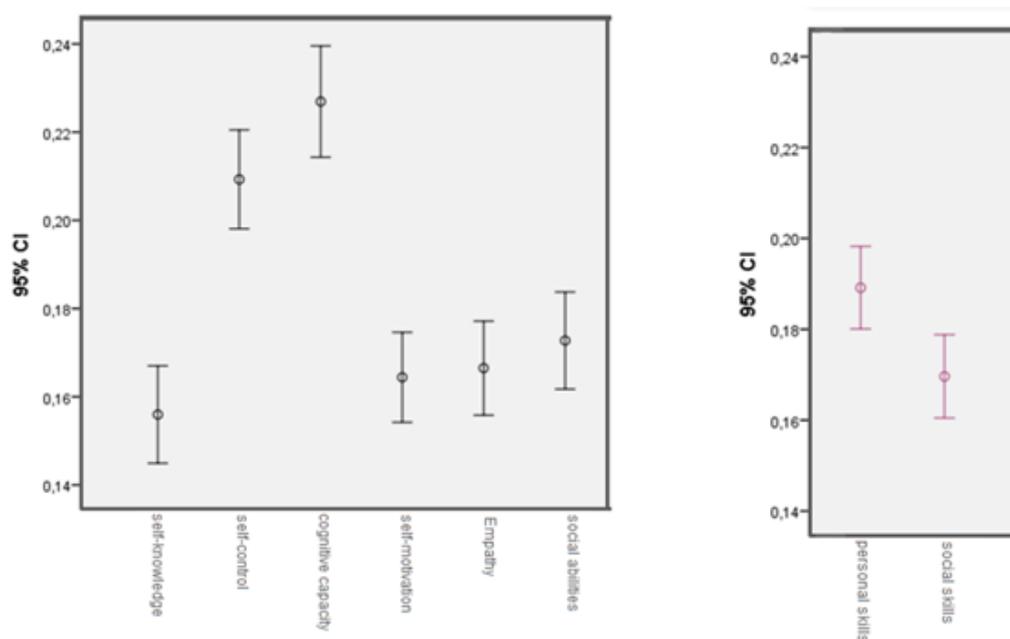


Figure 3. Assessment of creative tension in entrepreneurial skills (95% IC)

When analyzing the relationship between the assessment of current skills and the different student profiles, we observe that the students who assessed their personal skills most highly (with a maximum signification level of 10%) were men, those who were accepted into university via the vocational training and those who did sport. Regarding the assessment of current social skills, those who assessed themselves most highly were individuals who combined studying with paid work, those who came from vocational training and those who did sport. Contrarily, the relationship between the different profiles and creative tension shows that women perceived a greater need for improvement in their personal skills and those who did not speak English voiced a need to improve their social skills, while students coming from baccalaureate expressed the need to improve in both groups of entrepreneurial skills (personal and social) (Table 2).

Table 3 shows the assessment of current personal and social skills according to the grouping in 6 levels with respect to the different students' profile. The profile with the most perceived self-knowledge were men and those who did sport; those who that expressed a greater capacity for self-control were men, those who combined studying and working, those who spoke English, those who did sport and those who came from vocational training; the highest assessment of cognitive capacity also came from men, those who did sport and those who came from vocational training; and those with the highest perceived self-motivation were those who spoke English, those who did sport and those who came from vocational training. On the other hand, women who combined studying and working, those who spoke English, those who did sport and those who came from vocational training had the highest values for empathy, while who assessed their social ability highest were those who did sport and likewise those who came from vocational training.

Variables		Personal skills		Social Skills	
		Current assessment	Creative tension	Current assessment	Creative tension
Sex	Man	65.05	17.47		
	Woman	62.56	30.63		
	<i>pvalue</i>	0.045	0.001		
Employment Status	Only studying			62.06	
	Study and work			64.73	
	<i>pvalue</i>			0.047	
Speaks English	No				18.34
	Yes				16.48
	<i>pvalue</i>				0.079

Variables		Personal skills		Social Skills	
		Current assessment	Creative tension	Current assessment	Creative tension
Does Sport	No	61.62		60.92	
	Yes	66.12		65.37	
	<i>pvalue</i>	0.001		0.001	
Access pathway	Baccalaureate	63.34	19.48	62.59	17.47
	CFGS	67.92	15.33	67.43	13.65
	<i>pvalue</i>	0.011	0.002	0.014	0.005

Table 2. Averages of Current assessment and creative tension – grouping level 2

Variables		Personal Skills				Social Skills	
		Self-Knowledge	Self-Control	Cognitive capacity	Self-Motivation	Empathy	Social abilities
Sex	Man	67.76	64.99	63.23		64.27	
	Woman	65.13	62.72	60.11		66.91	
	<i>pvalue</i>	0.067	0.097	0.039		0.085	
Employment Status	Only studying		62.95			63.70	
	Study and work		65.33			67.67	
	<i>pvalue</i>		0.084			0.010	
Speaks English	No		62.11		61.38	62.41	
	Yes		64.59		64.04	66.45	
	<i>pvalue</i>		0.109		0.094	0.003	
Does Sport	No	64.06	61.87	59.75	60.79	63.12	58.71
	Yes	68.92	65.96	63.81	65.75	67.57	63.17
	<i>pvalue</i>	0.001	0.003	0.007	0.000	0.003	0.002
Access pathway	Baccalaureate		63.05	61.05	62.87	64.60	60.58
	CFGS		69.87	67.01	66.47	70.67	64.19
	<i>pvalue</i>		0.001	0.007	0.080	0.007	0.091

Table 3. Averages of current personal and social skills assessment – grouping level 6

Regarding the assessment of the need for improvement (creative tension) according to the trouping in 6 levels, we observe that women and those who did not do sport considered that they needed to improve in self-knowledge; it was the women who only studied, those who did not speak English and those who came from baccalaureate who perceived the greatest need to improve in self-control; it was also the women and those who came from baccalaureate who perceived the greatest need to improve in cognitive capacity and those coming from baccalaureate perceived a need to improve in self-motivation. Regarding empathy, those who did not speak English perceived the greatest need for improvement, while the women expressed a need to improve social skills. Those students coming from baccalaureate manifesting a need to improve in both levels (Table 4).

Variables		Personal Skills				Social Skills	
		Self-Knowledge	Self-Control	Cognitive capacity	Self-Motivation	Empathy	Social abilities
Sex	Man	14.40	18.98	21.03			16.23
	Woman	17.07	23.42	24.82			18.61
	<i>pvalue</i>	0.020	0.000	0.039			0.035
Employment Status	Only studying		21.79				
	Study and work		19.82				
	<i>pvalue</i>		0.080				
Speaks English	No		22.74			18.98	
	Yes		20.32			15.87	
	<i>pvalue</i>		0.062			0.014	
Does Sport	No	17.24					
	Yes	14.07					
	<i>pvalue</i>	0.005					
Access pathway	Baccalaureate		21.77	23.55	16.77	17.27	17.67
	CFGS		15.82	17.17	14.04	12.87	14.42
	<i>pvalue</i>		0.000	0.001	0.074	0.006	0.048

Table 4. Averages of creative tension of personal and social skills assessment – grouping level 6

In summary, we can generally say that being a man, doing sport, having done higher level vocational training and combining studying and working are indicators of higher skills assessment, whereas being a woman, gaining entry to university via baccalaureate and not speaking English indicate a greater need for skills improvement.

## 5. Conclusions

Unlike previous studies, the use of a tool based on a skills model rather than an intentions model enabled us to capture the true entrepreneurial skills level of the bachelor's degree students in the Faculty of Business and Economic Sciences of the University of Girona which, combined with the analysis of social, demographic and/or social economic determinants, enables us to identify which factors have the greatest influence of entrepreneurial talent.

If we consider the fact that attitude to entrepreneurship can be modified through educational interventions (Newbery, Lean, Moizer & Haddoud, 2018), the identification of these factors should help us to develop actions and teaching methods more focused on improving these capacities to improve integration into the job market.

To this effect, accepting the hypotheses formulated in the present work enables us to provide guidelines to improve entrepreneurial capacity among our students. More specifically, and in relation to our first hypothesis, we confirmed the findings of many previous studies in that men assess their skills level much more highly than women do, even when they have similar sociodemographic profiles. Consistent with role stereotype and role congruity theories, women entrepreneur perceive they have lower capabilities than men, underrating their skills and abilities (Nikou, Brännback, Carsrud & Brush, 2019). Therefore, the group of women students must be empowered to perceive their entrepreneurial capacity as higher because, as Nowinski, Haddoud, Lancaric, Egerová and Czeglédi (2019) found, women have lower entrepreneurial intentions, but they benefit more than men from entrepreneurial education.

Iversen, Malchow-Moller and Sorensen (2016) found that the returns to entrepreneurship education were insignificant when entrepreneur had no wage-work experience. According to this previous work and regarding to the second hypothesis, we showed that beyond doing curricular or extra-curricular activities, combining academic education with doing a paid job increases students' skills levels. In fact, in recent years some experts had suggested that skills shared by many successful entrepreneurs are learned in jobs that are usually only done by the collective of university students: cold calling (communicating), au pairs or private teachers (leadership, empathy, people managing) and customer care and telephone support tasks (conflict management, problem solving, empathizing) (Casilda, 2017; Megias, 2013). So, if we accept that entrepreneurial capacity is a skill that can be learned, then we must also accept that this learning process does not only take place in university classrooms. Hence, we must not only make curriculums more flexible to enable students to combine attending class with paid work in companies, but we must also strive to achieve a much more practical education that combines the processes of classroom teaching with a more thorough, extensive learning in companies.

In line with the results of Buschow and Laugemann (2020) who found that vocational education and training (VET) students have a greater entrepreneurship intention than those of baccalaureate, we confirm our third hypothesis that students who gain admission to university through higher vocational training (CFGs) have greater entrepreneurial skills than those who come from baccalaureate. Therefore, the inclusion of specific educational modules on entrepreneurship and the implementation of dual training in CFGs promote entrepreneurial innovation and capacity in more obvious way than do the baccalaureate programs.

Lastly, and in relation to the fourth hypothesis, we corroborated the assumption that doing sporting activities and knowledge of English are factors that indicate a higher assessment of the level of entrepreneurial skills. Steinbrink, Berger and Kuckertz (2020) show that top athletes' personality traits match our detected directions for entrepreneurial intention and success because being an entrepreneur require self-confidence, accepting failure, being persistent, having a winner mentality and being organized, among other qualities: in short, all the skills that doing physical activity and team sports have as the common denominator. Likewise, as Johnstone, Monteiro, Ferreira, Westerlund, Aalto and Marttinen (2018) reveal, the most important global competency for entrepreneurs is the ability to work collaboratively with teams of people from a range of backgrounds and

countries. So, as we have found, understanding foreign languages and having intercultural skills are crucial factors achieving this competency.

Empowering the collective of women, incentivizing doing sporting activities during the university education stage and promoting an educational system that enables university education to be combined with paid work beyond the curricula and/or extra-curricular practices included in current curriculums, must help to reinforce entrepreneurial talent in higher education. Fomenting a more favorable environment for the development of this talent will help us to contribute to more realistic perception of intra entrepreneurial activity and to the identification of models to generate new business.

Although entrepreneurship has historically been narrowly associated with business schools the whole educational system must prepare students to work in a dynamic, rapidly changing and global environment. This requires a complete paradigm shift in teaching methodologies and taking seriously into account the Third mission. Our paper shows which collectives and what activities are more related to a higher entrepreneurial intention. So, taking advantage of this information we should be able to design attractive entrepreneurial courses or activities beyond traditional classroom study to promote entrepreneurship in a wide variety of contexts and disciplines.

## 6. Limitations and future work

The analysis carried out in this work only considers a sample of the population of students enrolled at the FCEE. This means that possible differences between study area are not detected. Analysing these differences between scientific, humanistic, social or health degrees would be an interesting exercise to propose suitable activities and curriculums for each of the bachelor's degrees. Furthermore, and based on knowledge of the level of skill of university students, it would be interesting to analyze the link between these entrepreneurial capacities and the needs of the job market to be able to devise specific educational programs for the different areas of study and to be more efficient in the educational stage to meet the demands of the job market.

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