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Intrapreneurial intentions of undergraduate university students: a comparative study between Spanish and Nicaraguan students

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Abstract: Higher education is currently facing several challenges as a result of an uncertain environment. This has led to a demand from organisations for employees with an entrepreneurial, innovative, and risk-taking profile in a global environment. These traits are characteristic of the so-called intrapreneurs. This paper compares the intrapreneurial intentions of university students in Spain and Nicaragua by analysing the effect of the variables age, gender, previous professional experience and entrepreneurial or intrapreneurial training. Based on a total sample of 474 students, among the main results, we highlight the fact that Nicaraguan students have a higher assessment of innovation and risk-taking than Spanish students. In addition, age and professional experience are common variables that improve innovation and risk-taking for both groups. Although there is no gender gap among Nicaraguan students, in Spanish students women are rated lower than men.

Keywords: intrapreneurship; intrapreneurial intentions; entrepreneurial education; university students; prior professional experience; risk-taking; innovation; Spain; Nicaragua.

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1 Introduction

In recent times, society has witnessed profound changes in different aspects of life that have led to greater uncertainty. This situation is a consequence of the most recent developments related to COVID-19 (Ratten, 2021), together with the acceleration of the phenomenon of globalisation, the advancement of technology as a whole, and the important economic, social, political, and environmental concerns of today's society (Dovey and Rembach, 2015; Soncin and Arnaboldi, 2021).

In this context, it is becoming increasingly important for companies to be able to recognise the entrepreneurial potential of their employees as manifested through intrapreneurial behaviour in the performance of their tasks. Through their actions, employees must encourage entrepreneurial behaviour in the organisation in which they work (Alam et al., 2020; Blanka, 2019; Cox et al., 2018). The intrapreneurial behaviours of the working personnel of an organisation are fundamental for its survival, thanks to the innovative actions of the employees. This will favour the development of new products and services along with the identification of business opportunities in potential new markets (Marques et al., 2019). These actions will allow organisations to improve their competitive position by accessing new forms of knowledge and innovation (Guerrero et al., 2016; Marchiori et al., 2018; Shaikh et al., 2020; Turro et al., 2016).

The new needs of organisations concerning their employees have meant that higher education is facing new challenges for which it does not always have sufficient

information and experience (Liguori and Winkler, 2020). The demand of organisations in which behaviour based on the ability to take risks and a proactive attitude of the employees they recruit and hire, leads to a greater interest on the part of universities to generate among university students an intrapreneurial mentality that they can develop in the development of their tasks once they join the labour market after their formative stage at the university (Kansikas and Murphy, 2010).

The learning, development, and training of university students in fields related to both the generation of innovative ideas and their implementation within organisations take place mainly in universities. Proof of this is the evidence that, in more and more universities, entrepreneurial and intrapreneurial education has become one of the priorities within the objectives of university policies (Stephens, 2020) when it comes to improving the employability of their graduates (Kansikas and Murphy, 2010). These topics are mainly taught through subject and training programs for entrepreneurs. In some way, it can be seen how intra-entrepreneurship education, in the case of university higher education, can be considered a special case within entrepreneurship education (Frank et al., 2016).

This article compares the intrapreneurial intention (IIN) of Spanish and Nicaraguan university students. To this end and according to the scale of IIN proposed by González-Serrano et al. (2019) undergraduate Business Administration students from both countries are compared in terms of the potential influence of the variables gender, age, whether or not they have previous professional experience, and whether or not they have participated in entrepreneurship or intrapreneurship training activities at their university or elsewhere.

Both for the theoretical implications of this work, as it is the first to address comparatively the IIN of students from both countries, identifying similarities and differential elements to the tendency towards intrapreneurial behaviours of university students, and for its practical implications for universities and other public actors responsible for the design and implementation of public policies to promote intrapreneurship. Today, universities have an increasingly active role to play in fostering the development of competencies and skills to improve the employability of their students. Improving IIN through innovative behaviours and risk-taking will improve the employability of university students.

Although the comparison of the same reality in different territories or countries can be complicated in some cases as a consequence of the different social, political and economic contexts, the fact that it is carried out among a sample of students with the same university degree establishes a certain degree of homogeneity in their concerns and trends beyond the geographical location itself. On the other hand, in today's increasingly globalised world, many of the challenges in the educational and business sphere are of special relevance beyond the administrative and political borders of countries.

To achieve the proposed objective, this document is structured as follows. After this first introduction, the theoretical framework section deals with the fundamental concepts on which the reality of IIN in the context of university education is based, both individually and in a connected way. Subsequently, in the methodology section, the key methodological aspects are presented when collecting, processing, and analysing the data from which the results obtained will be shown. From the study and analysis of the data, the discussion of the results and the presentation of the most relevant conclusions of this work are subsequently derived.

2 Theoretical framework

The phenomenon of intrapreneurship is a reality that has come into focus more recently (Baena-Luna and García-Río, 2021; Kuratko, 2017; Tucker et al., 2017) than in the case of entrepreneurship as a phenomenon that generates new companies. However, in recent years, there has been an increase in academic interest in this reality, as evidenced by the increase in the number of scientific publications related to entrepreneurship (Alam et al., 2020; Farrukh et al., 2016).

In the scientific literature related to intrapreneurship, there is a high consensus in establishing the following three dimensions of the behaviours carried out by intrapreneurs: innovation, based on the propensity and tendency of people to use creativity when generating new ideas, risk-taking, based on the tendency of people to take risks (individual and group) to benefit the organisation to which they belong, and finally, proactivity. This refers to people's attitude based on anticipation and determination to act in the face of future needs, challenges, and changes that may generate potential opportunities (Baena-Luna et al., 2022; Covin and Slevin, 1991; Farrukh et al., 2016; Kuratko et al., 2014; Lumpkin and Dess, 1996).

Intrapreneurs can be defined as individuals who can excel in their centres or organisations by taking risks in a shared manner and developing new products or services that increase the profitability of the organisations (Ağca et al., 2012; Arslanagic-Kalajdzic et al., 2019; Shaikh et al., 2020). The behaviours of these intrapreneurs will bring added value to the organisation and will have a dynamic effect on the organisations' ability to adapt to new environments (Gawke et al., 2017; Marchiori et al., 2018).

Traditionally, intrapreneurs and entrepreneurs have been considered to share a large number of traits and characteristics, although, in the case of intrapreneurs, they do not abandon their businesses or risk their money (Moriano et al., 2009). Among the traits that can be considered common among entrepreneurs and intrapreneurs, the following can be highlighted: achievement orientation, action orientation, ability to take individual and shared risks, initiative, creativity, ability to innovate, autonomy, and leadership (Coduras et al., 2011; González-Serrano et al., 2019; Moriano et al., 2014).

Academic literature has many works that address entrepreneurial intentions, but this is not the case for IIN (González-Serrano et al., 2019), especially in the case of university students. In this case, the number of papers addressing this reality is even lower. Despite the shared traits between entrepreneurs and intrapreneurs when analysing the potential IIN of a person, this is based on elements of innovation and risk-taking (Douglas and Fitzsimmons, 2013; González-Serrano et al., 2019).

Therefore, IIN can be defined as the tendency of the person to have intrapreneurial behaviour based on their predisposition to develop innovative behaviours and actions in the development of their tasks and the ability to take risks in their work (Douglas and Fitzsimmons, 2013; González-Serrano et al., 2019; Marchiori et al., 2018; Stull and Singh, 2005). These elements will be moderated according to a series of variables such as gender, age, being currently working or having worked before, and having participated in training activities related to entrepreneurship or intrapreneurship.(Fashami et al., 2021; González-Serrano et al., 2019; Marchiori et al., 2018).

Based on the above, the following research questions can be established in this paper:

Q1 Are there differences from a gender perspective in intrapreneurial intention between university students in Spain and Nicaragua?

Q2 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students according to their age?

Q3 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students based on whether they are working or have prior professional experience?

Q4 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students depending on whether they have received education and training for entrepreneurship/intrapreneurship?

3 Sample and research methodology

3.1 Instrument

To provide answers to the questions formulated in this research the analysis focused on students of the Business Administration and Management degree at the University of Seville in Spain (US) and the Redemptoris Mater University of Nicaragua (UNICA), an online survey was provided in the last quarter of 2020 and first quarter of 2021. This was structured in three blocks:

1 control questions (age, gender, degree, university, nationality, and international mobility scholarship)

2 background to intrapreneurship (professional experience, entrepreneurial/intrapreneurial training, intention to start a business)

3 assessment of intrapreneurial intention through a set of statements (rated on a Likert scale from 1 to 7, with one being the lowest value and seven being the highest) that measure the innovation and risk-taking attitude of individuals.

The questions used were based on the studies by González-Serrano et al. (2019), which showed that the survey has a high degree of validity. In this case, Cronbach's alpha was higher than 0.7 (0.905 for the Innovation construct and 0.867 for the risk-taking construct).

3.2 Sample

The sample consisted of students in the Business Administration and Management degree programme at the US and UNICA in the 2020–2021 academic year. A high response rate was achieved, which allowed obtaining a representative sample with 95% confidence and an error of 5%, as can be seen in Table 1.

Table 1 Population and sample of the University of Seville and the Redemptoris Mater University of Nicaragua

University	*Population*	*Confidence level*	*Error*	*Sample*
US	2,160	95%	5%	335
UNICA	202	95%	5%	139

The use of the university student population is supported by various studies (Caro-González et al., 2017; Cui et al., 2021). As Harrison and List (2004) point out, university students are a group with high entrepreneurial potential and as a group they are representative. This makes it a valid group for studying human behaviour.

The sample analysed from both universities showed interesting differences between the two territories (Table 2). Business Administration and Management students in the US and UNICA have a very similar age distribution. However, the percentage of women is higher in UNICA (62.59%). On the other hand, 75.82% of the US students have professional experience, while in UNICA the number is lower (61.87%). Half of the people have received entrepreneurial education, although the percentage is significantly higher in the US (65.37%). The number of students participating in international mobility programmes is low in both universities, but slightly higher in the US (13.13%).

Table 2 Descriptive statistics survey

Variables		*UNICA*	*US*
Gender	Men	37.41%*	74.33%*
	Women	62.59%*	25.67%*
Age	17–25 years old	74.82%	79.70%
	26–35 years old	17.99%	20.30%
	36–50 years old	7.19%	0.00%
Professional experience	No prior experience	38.13%*	24.18%*
	Less than 6 months	15.11%*	28.06%*
	Between 6 and 24 months	16.55%	22.39%
	More than 24 months	30.22%	25.37%
Entrepreneurship education	Yes	51.80%*	65.37%*
	No	48.20%*	32.54%*
Participated in international exchange programs	Yes	0.72%*	13.13%*
	No	99.28%*	86.87%*

Note: *p-level < 0.05.

3.3 Statistical analysis

The information obtained from the survey was analysed using a descriptive and inference technique. In both cases, blank answers or Ns/Nc were not taken into account. The Statistical Package for the Social Sciences (SPSS) version 26 was used to develop and calculate these techniques.

First, the average percentages or ratings (as appropriate) of the responses for each university and by groups (gender, age, professional experience and entrepreneurial/intrapreneurial training) were calculated. Inferential analysis was then carried out to detect possible significant differences in the results between individuals in each university, as well as gender, age, professional experience and entrepreneurial/intrapreneurial training. This inference analysis is characterised by a confidence level of 95% and an error of 5%.

In the case of contrasting population proportions, the Z test for independent samples was used to verify hypotheses referring to whether or not there are differences between two proportions of independent samples, which are those examined individually.

This test tests the following hypotheses:

- H0 (null hypothesis) = the percentages of both populations are equal.
- H1 (alternative hypothesis) = the percentages of both populations are not equal.

For the inference analysis of the Likert scale rating questions, the non-parametric Mann-Whitney U test was used to differ the population means and to determine the existence of significant differences in the mean ratings. It was decided to select this test because the sample did not conform to a normal distribution. To perform the Mann-Whitney test, it is verified that:

1 the observations of both groups are independent

2 the observations are ordinal or continuous variables.

Thus, the hypotheses are defined as follows:

$$H0 = P(X > Y) = P(Y > X)$$

$$H1 = P(X > Y) + 0.5P(X = Y) > 0.5.$$

In both inference analyses, when the test yields a result of less than 0.05 (p-level < 0.05), the null hypothesis is rejected. This means that there are significant differences between the two populations in the variable analysed.

4 Results

This section first analyses the intention to start one's own business even though the company offers the opportunity to develop and manage ideas, products, or services. Subsequently, the results found when analysing the two key variables in intrapreneurial intention, innovation and risk-taking, are presented. This analysis studies the differences between UNICA and US students by gender, age, professional experience and entrepreneurial/intrapreneurial training.

4.1 Gender

Students from both universities show very similar results when they are presented with the opportunity for setting up their own company, rather than developing their ideas within an employed company. Furthermore, the percentage of men and women is very similar (Table 3).

Table 4 shows the scores for the variables that affect IIN. From the results, it can be inferred that UNICA presents significantly higher results in innovation and risk-taking than the US. Similarly, both men and women in UNICA have significantly higher scores in innovation (men 6.70, women 6.56) and risk-taking (men 5.53, women 5.59). Furthermore, no significant differences by gender are found in this university. In the US there is a difference between genders, with women having a lower rating than men.

Table 3 If the company had a department that encouraged the development and management of ideas, products or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee? (Gender)

Variables	*Total*		*Men*		*Women*	
	N	*%*	*N*	*%*	*N*	*%*
			UNICA			
I would still set up my own business	88	69.29%	30	65.22%	58	71.60%
I would still be part of the company	39	30.71%	16	34.78%	23	28.40%
			US			
I would still set up my own business	142	65.14%	100	67.11%	42	60.87%
I would still be part of the company	76	34.86%	49	32.89%	27	39.13%

Note: *p < 0.05.

Table 4 Elements of intrapreneurial intention (gender)

Variables	*Total*		*Men*		*Women*	
	Mean	*DV*	*Mean*	*DV*	*Mean*	*DV*
			UNICA			
Innovation	6.61*	0.55	6.70	0.45	6.56	0.59
Risk-taking	5.53*	1.12	5.43	1.19	5.59	1.08
			US			
Innovation	5.37*	0.98	5.45*	1.04	5.13*	0.73
Risk-taking	4.87*	1.39	4.97	1.35	4.52	1.48

Note: *p < 0.05.

4.2 Age

Among students aged 17–25, the results are very homogeneous between the two universities. On the other hand, among 26–50 years old, UNICA students show a greater preference than those from the US to develop their ideas, products, or services on their account (Table 5).

UNICA students increase their assessment of innovation and risk-taking with increasing age. On the other hand, the opposite situation is observed in the US. Similarly, the assessment of people at UNICA shows a higher perception in both age brackets compared to the US (Table 6).

Table 5 If the company had a department that encouraged the development and management of ideas, products or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee? (age)

Variables	*17–25 years-old*		*26–50 years-old*	
	N	*%*	*N*	*%*
UNICA				
I would still set up my own business	62	67.39%	26	74.29%
I would still be part of the company	30	32.61%	9	25.71%
US				
I would still set up my own business	117	66.48%	25	59.52%
I would still be part of the company	59	33.52%	17	40.48%

Note: *p < 0.05.

Table 6 Elements of intrapreneurial intention (age)

Variables	*17–25 years-old*		*26–50 years-old*	
	Mean	*DV*	*Mean*	*DV*
UNICA				
Innovation	6.53*	0.58	6.84*	0.33
Risk-taking	5.33*	1.07	6.11*	1.05
US				
Innovation	5.37	1.00	5.38	0.89
Risk-taking	4.98*	1.38	4.44*	1.40

Note: *p < 0.05.

4.3 Analysis based on previous professional experience or not

Table 7 shows that the percentages of students who decide to create their own business are higher than those who decide to develop their idea within their company, both in the population with and without professional experience in both universities.

Table 7 If the company had a department that encouraged the development and management of ideas, products or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee? (previous professional experience)

Variables	*Prior experience*		*No prior experience*	
	N	*%*	*N*	*%*
UNICA				
I would still set up my own business	56	70.00%	32	68.09%
I would still be part of the company	24	30.00%	15	31.91%
US				
I would still set up my own business	110	67.07%	32	59.26%
I would still be part of the company	54	32.93%	22	40.74%

Note: *p < 0.05.

Table 8 Elements of intrapreneurial intention (previous professional experience)

Variables	*Prior professional experience*		*No prior professional experience*	
	Mean	*DV*	*Mean*	*DV*
		UNICA		
Innovation	6.75*	0.37	6.39*	0.70
Risk-taking	5.71*	1.04	5.23*	1.19
		US		
Innovation	5.40	0.94	5.28	1.08
Risk-taking	4.92*	1.46	4.65*	1.14

Note: *p < 0.05.

Students with prior professional experience in UNICA have a significantly higher rating in innovation (6.75) and risk-taking (5.71) than the students in the US. The same situation occurred within the population without prior professional experience. In UNICA the results show that students with professional experience have been given a higher rating in innovation and risk-taking. In the US, this situation is only found in risk-taking (Table 8).

4.4 Analysis according of students with and without entrepreneurial education

Students without entrepreneurial/intrapreneurial training in UNICA have a higher percentage of students who intend to create a company, rather than develop their idea within the company, compared to the US students. On the other hand, in both countries can be observed that training in entrepreneurship/intrapreneurship boosts the idea of setting up a company (Table 9).

Regardless of whether or not the students have entrepreneurial/intrapreneurial training, those in UNICA have a similar assessment, as well as significantly higher than those in the US. In the US, it can be seen that entrepreneurial education has a positive effect on increasing the assessment of innovation and risk-taking (Table 10).

Table 9 If the company had a department that encouraged the development and management of ideas, products or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee? (entrepreneurial/intrapreneurial training)

Variables	*Entrepreneurial/ intrapreneurial training*		*No entrepreneurial/ intrapreneurial training*	
	N	*%*	*N*	*%*
		UNICA		
I would still set up my own business	40	62.50%*	48	76.19%*
I would still be part of the company	24	37.50%	15	23.81%
		US		
I would still set up my own business	32	47.76%*	110	72.85%*
I would still be part of the company	35	52.24%*	41	27.15%*

Note: *p < 0.05.

Table 10 Elements of Intrapreneurial Intention (entrepreneurial/intrapreneurial training)

Variables	*Entrepreneurial/intrapreneurial training*		*No entrepreneurial/intrapreneurial training*	
	Mean	*DV*	*Mean*	*DV*
		UNICA		
Innovation	6.68	0.46	6.55	0.61
Risk-taking	5.48	1.03	5.57	1.20
		US		
Innovation	5.06*	1.12	5.54*	0.86
Risk-taking	4.50*	1.62	5.12*	1.16

Note: *$p < 0.05$.

Once the data have been processed and analysed, the research questions proposed in this paper can be answered.

Q1 Are there differences from a gender perspective in intrapreneurial intention between university students in Spain and Nicaragua?

The results show that there are gender differences between the students at both universities. On the one hand, Nicaraguan students have a significantly higher score than those of Spanish students in the variables that define intrapreneurship (innovation and risk-taking). Furthermore, there is no gender gap in Nicaraguan students but in Spanish students, there is (women are less innovative).

Q2 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students according to their age?

Among Nicaraguan students, their intention to start their own business increases with age. In Spain, the opposite situation is observed. On the other hand, for both countries, we found a positive relationship between increasing age and increased value of innovation and risk-taking. It should be added that Nicaraguan students show higher results than those expressed by Spanish students.

Q3 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students based on whether they are working or have prior professional experience?

Prior professional experience is a key variable in raising the student assessment of innovation and risk-taking in both countries. It also encourages a higher percentage of students to start their own company than to develop their ideas in-house. Furthermore, previous professional experience brings the results of students from the two countries closer to their intention to start a company, but not in innovation and risk-taking.

Q4 Are there differences in the intrapreneurial intention of Spanish and Nicaraguan university students depending on whether they have received education and training for entrepreneurship/intrapreneurship?

Entrepreneurial/intrapreneurial training increases the intention to create their own company, rather than develop their ideas within their own company, and also brings

the results expressed by the students of both universities closer together. On the other hand, this variable has not been shown to influence Nicaraguan students but does influence Spanish students. Specifically, Spanish students with an entrepreneurial background expressed a significantly higher rating in innovation and risk-taking.

5 Discussion and conclusions

In the case of Nicaraguan and Spanish students, innovation relevance of the elements and the ability to take risks in the future is evident from the results obtained. These elements were already present in previous studies related to INN, e.g., Douglas and Fitzsimmons (2013), González-Serrano et al. (2019), Marchiori et al. (2018) and Stull and Singh (2005).

Among the main contributions in the theoretical field is the confirmation, through the results obtained, of the different influences on Nicaraguan and Spanish students of the variables gender, age, whether or not they have previous professional experience and whether or not they have participated in training actions for entrepreneurship or intra-entrepreneurship at their university or elsewhere.

In terms of the theoretical implications of this study, it is of particular relevance because it is the first to address comparatively the IIN of students from both countries, identifying similarities and differential elements about the tendency towards intrapreneurial behaviours of university students, and because of its practical implications for universities and other public actors responsible for the design and implementation of public policies to promote intrapreneurship, the most relevant conclusions derived from this empirical work may be of great use. These potential practical implications are vital for university studies in both countries when planning, designing, and implementing not only actions for entrepreneurship, but also taking advantage of these actions to foster student aspects such as the tendency to innovate and risk-taking. These elements are fundamental for the students' professional future, both for setting up a company and for developing a professional career as an employee. Due to the improvement of their employability levels in line with the demands of the labour market.

A summary table in which the most relevant findings and aspects of this comparative study can be seen in Table 11.

The most relevant conclusions of this research are that Nicaraguan students show a significantly higher rating in innovation and risk-taking than Spanish students. This implies that Nicaraguan students are a potentially more entrepreneurial and intrapreneurial population than Spanish students. This reality increases with increasing age, prior professional experience and entrepreneurial/intrapreneurial training. On the other hand, among the common variables for increasing the capacity for innovation and risk-taking in both territories, age and prior professional experience stand out.

In the case of previous professional experience, this shows the importance of incorporating a dynamic and attractive internship programme for students. This is the first contact of students with the labour market, and so they begin to develop the variables of innovation and risk-taking.

This research is not without possible limitations. An important fact is that the sample analysed. It focuses on students from a single degree programme, Business Administration and Management, which does not allow us to generalise the results to the

total student population of both universities. Despite this, they serve as indicative results and open the door to future research on intrapreneurial intention.

Table 11 Relevant summary findings

Variables	*UNICA*	*US*
If the company had a department that encouraged the development and management of ideas, products, or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee?	69.29%	65.14%
	No significant differences according to gender.	No significant differences according to gender.
	74.29% 26–50 years old	59,52% 26 to 50 years old
	No difference according to professional experience.	No difference according to professional experience
	76.19% entrepreneurial/ intrapreneurial training	72.85% entrepreneurial/ intrapreneurial training
I would still set up my own business		
If the company had a department that encouraged the development and management of ideas, products or services generated by you, which would you prefer: to start your own business or to remain part of the company as an employee?	30.71%	34.86%
	No significant differences according to gender.	No significant differences according to gender.
	25,71% 26–50 years old	40,48% 26–50 years old
	No difference according to professional experience	No difference according to professional experience.
	23.81% entrepreneurial/ intrapreneurial training	27.15% entrepreneurial/ intrapreneurial training
I would still be part of the company		
Innovation (Likert scale 1–7)	6.61	5.37
	No significant differences according to gender.	Men get a higher rating (men 5.45, women 5.13)
	6.84 26–50 years old (increasing with age)	No significant differences according to age
	6.75 prior professional experience (increasing prior professional experience)	No difference according to professional experience
	No influence of training in entrepreneurship/ intrapreneurship	5.54 entrepreneurial/ intrapreneurial training
Risk-taking (Likert scale 1–7)	5.53	4.87
	No significant differences according to gender	No significant differences according to gender
	6.11 26–50 years old (increasing with age)	4.44 26–50 years old (decreases with increasing age)
	5.71 prior professional experience (increasing prior professional experience)	4.92 prior professional experience (increasing prior professional experience)
	No influence of training in entrepreneurship/ intrapreneurship	5.12 entrepreneurial/ intrapreneurial training

There are also limitations concerning the study. In this investigation, only responses from the academic year 2020–2021 were analysed. For this reason, it will be necessary to extend this research and continue to collect data in the following academic years, as well as from other degrees. An important element as a possible future research line could be the analysis of the influence of the different teaching methodologies used at the university on the IIN variables.

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