Teaching Entrepreneurship And Entrepreneurial Intention In University Students

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Abstract

The unemployment rate demands a paradigm shift for entrepreneurship and job creation. The objective of the study is to assess the relationship between the variables entrepreneurial intention (EI) and entrepreneurship education (EE). The quantitative method was applied, a survey of 38 items, 20 from Liñán and Chen's EI model. A scale was designed for EE. The results of the sample of 452 university students indicate that the variables have a weak positive relationship. However, the regression analysis indicates that the variables of the EE are not significant in influencing EI, i.e., both the teacher and the

teaching-learning process do not orient their work to create or develop the entrepreneurial intention in the university student. The limitations of the study refer to the possible limitation of the student to understand the items resulting from the electronic application of the survey.

Keywords: entrepreneurial intention; entrepreneurship teaching; undergraduates; careers.

Resumen

La tasa de desempleo demanda un cambio de paradigma para emprender y crear plazas de trabajo. El objetivo del estudio es valorar la relación entre las variables intención emprendedora (IE) y enseñanza del emprendimiento (EE). Se aplicó el método cuantitativo, una encuesta de 38 ítems, 20 del modelo de IE de Liñán y Chen. Para EE se diseñó una escala. Los resultados de la muestra de 452 estudiantes universitarios indican que las variables tienen una relación positiva débil. Sin embargo, el análisis de regresión indica que las variables de la EE no son significativas para incidir en IE, es decir, tanto el docente como el proceso enseñanza aprendizaje no orientan su trabajo para crear o desarrollar la intención por emprender en el estudiante universitario. Las limitaciones del estudio refieren a la posible limitación del estudiante para entender los ítems producto de la aplicación electrónica de la encuesta.

Palabras clave: intención emprendedora; enseñanza del emprendimiento; universitarios; carreras.

Introduction

The unemployment rate in Mexico has been recovering after reaching 5.5% during the Covid-19 pandemic, as of September 2022 it stands at 3.1% (two million people). In addition, the employment rate in the informal sector 1 is 32 million people while the employment rate in the informal sector 2 is 31.2 (INEGI, 2022). These employment and occupation indicators are characteristic of an

underdeveloped economy with low or no economic growth. This scenario may worsen and generate poverty and migration effects.

Unemployment in Mexico has an upward behavior, it is a problem of structural imbalance, it is the result of low economic activity, zero economic growth, levels of liquidity in the economy and interest rates, which is why it has not been possible to incorporate young people into the labor market (Trejo, Rivera and Ríos, 2017; Botello, 2013).

Despite the fact that from 2018 to 2022 the minimum wage has risen 95%, the problem of the so-called ninis, young people with low schooling and no or precarious job opportunities persists (Márquez, 2018; Borunda, 2013), it seems that the program "young people building the future" that grants 5000 pesos per month to ninis has not contributed to reduce unemployment in the 15 to 24 years old group, which during the last year (September 2021-2022) grew by 6.1% (INEGI, 2022). Therefore, in order to promote economic development, it is imperative to create jobs and encourage entrepreneurship among young people.

In addition, data indicate that 33.06% of the employed population earns up to one minimum wage (SM), 33.16% +1 to 2 SM and 10.07% +2 to 3 SM, together representing 76.29% (INEGI, 2022a). Thus, 6 out of every 10 jobs pay low wages, although they comply with the law, it favors the employer more than the worker (Campos, 2015). It is striking that the minimum wage in Mexico is so precarious when a large part of its economy is dollarized, which affects the purchasing power of the population.

Moreno-Brid, Garry and Monroy-Gómez-Franco (2014, p. 92) conducted an in-depth analysis regarding this issue and argue that the wage should be de-indexed as a unit of account for transactions outside the labor world, likewise they point out that it should be raised significantly and immediately:

... to an amount that covers the food basket and, above all, places it on a path of sustained and responsible real recovery, in accordance with the mandates of Article 123 of the Constitution, to cover at least the expanded food basket. This requires a commitment to a

development strategy in which equality and economic growth are not seen as antagonistic or sequential objectives. At the end of the day, the debate for a higher nominal wage in accordance with the Constitution goes beyond being a merely technical matter and is a political question, a question of political economy that reflects the weight that equality has in the society we want and can build.

Another relevant scenario is the one that shows that of the two million unemployed in Mexico, 1,164,643 people have a high school and higher education degree (INEGI, 2022). From 2013 to 2021 on average 54.17% of unemployed Mexicans studied high school or a bachelor's degree, are professionals, but cannot find a job in the economic structure of the country, it stands out that during the Covid-19 pandemic this phenomenon was enhanced.

In this sense, Ovalles-Toledo, et. al, 2018, mention that governments support entrepreneurship, as a way to remedy the lags and demands that society demands in terms of jobs and occupation, using them as a mechanism to combat poverty. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), education must adapt its structures and teaching methods to the new needs, for Mexico's conditions it is urgent to move from the paradigm centered on teaching as transmission of knowledge to that centered on learning as development of transferable competencies to different contexts in time and space (UNESCO, 1998).

The 21st century urgently demands this adaptation, which in the area of entrepreneurship should be given in all vocations, not only in the typical business degrees, since entrepreneurship and/or self-employment are an inherent characteristic in many disciplines, such as doctors, psychologists and lawyers, whose coincidence is that they are professions whose practice is usually in an office or practice independently or in association with colleagues.

For this, it is necessary that the student is an active person in the learning process, considering that learning is a construction process through which concepts, principles, procedures, values and attitudes are acquired (Escamilla-Martínez and Muriel-Amezcua, 2022; Zapata, 2015), an active methodology, based on the constructivist paradigm

that aims to promote the construction of knowledge through inquiry, reflection, creativity and problem solving (Guamán Gómez and Espinoza Freire, 2022; Solórzano-López et al, 2020). Variables that together represent competency-based education. In this sense, the Green Paper of the Commission of the European Communities (2003, p. 15) points out that "The education system can provide both competencies and an approach to business that will contribute to fostering entrepreneurship... In universities, entrepreneurship education should not be reserved exclusively for MBA students, but should also be offered to other students".

Sánchez-Tomé (2021) mentions that in recent years universities have not only developed actions in the educational field, but have also implemented other types of actions aimed at improving the employability of graduates. But, what does it mean to educate or teach entrepreneurship, Pertuz et al. (2016, p. 32) refer to the Colombian Congress to state that training for entrepreneurship seeks to develop "basic skills, labor skills, citizenship skills and business skills within the formal and non-formal education system and its articulation with the productive sector".

Entrepreneurship education (EE) can be defined as a strategy to prepare new generations with a high degree of creativity and innovation, whose objective is to develop personal attributes and a set of transversal competencies, as well as to systematize experiences that allow the development of content in the classroom, develop skills and competencies focused on know-how (Simón and Cobos, 2022; Acosta, 2021; Simón, 2013). For Toca (2010), the teaching of entrepreneurship should be holistic, focused on developing skills regardless of their field of performance -whether social, political or public-. Whose "challenge is the formation of individuals capable of taking moderate and calculated risks, of initiating projects of different kinds, of promoting change and the growth of collective benefits" (p. 57).

Following Toca (2010), it can be summarized that entrepreneurship education trains individuals specialized in making critical decisions on

the correct use of resources (increasingly scarce) to create and offer value. Acting with ethics and social responsibility.

The teaching of entrepreneurship should make it possible to train young people to enhance their entrepreneurial intention (EI), considering the employment statistics described above, the option of being employed is becoming less and less attractive, so it is important that the education system is oriented to train entrepreneurs, businessmen. In this sense, it is pertinent to define entrepreneurial intention, particularly in young people whose inherent qualities (creativity, non-adversity to risk, physically able to increase productivity) allow assuming a direct relationship between young people and economic growth (López-Sánchez et. al, 2021; Canales et. al, 2017; Fuentes and Sánchez, 2010, Abdala, 2004).

On the other hand, Durán and Arias (2015, p. 322-323) define entrepreneurial intention "as a planned behavior, oriented to the creation of a new company, where business opportunities are identified and risks are taken with the idea of generating profits". These authors conducted a study with 159 university students, where they applied binary logistic regression in order to predict entrepreneurial intention based on cognitive and socio-personal factors, among the findings it stands out to have determined the existence of a relationship between entrepreneurial intention and the variables having work experience and being currently working, in addition to the fact that entrepreneurial intention is multicausal, explained by entrepreneurial self-efficacy, this work was contrasted in 2022, by Valencia-Arias et. al, under the context of the pandemic, affirming that aspects such as social support, context and individual beliefs should be more important when it comes to entrepreneurship.

Camelo, Diánez and Ruiz (2016, p. 266) "measured entrepreneurial intention by whether respondents thought about the possibility of starting a new business in the next three years". A variable that has been used in previous research based on the GEM survey. Soria, Zúñiga and Ruiz (2015, p. 26) refer to Ajzen (1991) and his theory of planned behavior or behavior to point out that the determinants of

entrepreneurial intention "are the favorable or unfavorable opinion that the person has towards him or herself (attitude), a subjective norm of social pressure to carry out a behavior, and the degree of perceived behavioral control (CPC)".

Yardanova (2021) and Ruiz et al. (2014) describe the entrepreneurial event model proposed by Shapero, Shapero and Sokol and Krueger and Brazeal as one where perceived desire, perceived feasibility and propensity to act are assumed to determine an individual's entrepreneurial potential, stating that perceived desirability of entrepreneurship is a key determinant of entrepreneurial intentions, which precipitates attitudinal change.

Ruiz et al. (2014) conducted a study with students from the University of La Laguna, among the results obtained it is highlighted that no gender differences were found in entrepreneurial intention. The students participating in the research had attended an EE program, so the authors refer to Wilson et al. (2007) to argue that this fact may have acted as an equalizing element for possible gender differences in entrepreneurial intention and its antecedents.

Entrepreneurial intention is a topic that is understood as the state of mind that directs and guides the entrepreneur's actions towards business development and implementation, the same that can be concretized in an entrepreneurial decision to create and manage (Shafie and Isa, 2022; Yustian and Astuti, 2021; Bilgiseven and Kasimoglu, 2019; Chen, et al., 1998).

Soria, Zúñiga and Ruiz (2015) analyzed how a university entrepreneurship course can affect students' entrepreneurial intention, postulating that demographic variables, perceived entrepreneurial ability and entrepreneurial education help explain entrepreneurial intention. The authors found that entrepreneurial intention was negatively affected by the entrepreneurship course in a global way. They therefore conclude that university entrepreneurship education may have significant effects on EI but in students who possess certain characteristics.

Mortana, et al. (2014) rely on Krueger, Reilly and Carsrud, 2000; and Sanchez, 2009, to measure the entrepreneurial intention variable in 394 volunteer students from the University of Valencia in Spain and the University of Coimbra in Portugal, among the results obtained it stands out that demographic variables explain 7% of the variance in the model, while personality traits only 0.7%. Gender shows a significant positive relationship with EI and men show a slightly higher intention to become an entrepreneur; this same work by Mortana is used in Bauman and Lucy (2021) to support that risk tolerance leads to the ability to overcome challenges and face uncertainties; emotional intelligence is related to success in entrepreneurial activities.

This study takes up the proposal of Liñán and Chen (2009) to analyze entrepreneurial intention based on the variables personal attitude (PA), subjective norm (SN) and perceived behavioral control (PBC). Table 1 illustrates the definitions of these variables.

Table 1 Definition of variables from Liñán and Chen (2009, p. 596)

Personal attitude, PA	Subjective standard, SN	Perceived behavioral control, PBC
Attitude towards start-up or new entrepreneurial creation refers to the degree to which the individual has a positive or negative personal appraisal of being an entrepreneur (Ajzen, 2001, Koutereid, 1996b). Including not only affective (I like it, it is attractive), but also evaluative	It measures the perceived social pressure to carry out or not to carry out entrepreneurial behaviors. In particular, it refers to the perception of whether reference persons would approve of the decision to become an entrepreneur or not (Ajzen, 2001).	It is defined as the perception of the ease or difficulty of becoming an entrepreneur. It includes not only the feeling of being capable, but also the perception of the ability to control behavior.

considerations (it has advantages).

Considering the economic scenario of the country and the state of the art on entrepreneurship in young people, the purpose of this study is to determine the relationship between entrepreneurial intention and entrepreneurship teaching in university students and to determine whether the career in which the student is trained has an impact on entrepreneurial intention.

Method

In correspondence with the described purpose, the present research is based on the quantitative paradigm. Theoretical (inductive-deductive and analytical-synthetic) and statistical (descriptive and inferential) methods were used. For this purpose, the information gathering technique used was the survey.

According to the Statistical Yearbook of School Population in Higher Education (ANUIES, 2021), the population of higher education students was 149,726, of which 23,311 were located in the municipality of Ensenada, Baja California, the context of this research. Based on this, the sample was estimated, considering it as finite because the size of the population was known. A certainty of 95% and an error of 5% was considered, using the formula:

$$n = \frac{(z^2 * p * q * N)}{d^2(N-1) + (z^2 * p * q)}$$

Where:

Z= Confidence level

N= Total population

p= Probability of success

q= Probability of failure

d= Estimation error

n= Sample size

Based on the above, an acceptable sample of 378 students was established; however, it was decided to increase the sample to a total of 452 questionnaires.

Instrument

As an instrument for collecting information, and given the quantitative approach of the study, a structured questionnaire was used, with the two study variables described above; entrepreneurship education and entrepreneurial intention. The latter was measured with the model of Liñán and Chen (2009), the 20 items were translated and adapted (Table 2), which yielded a level of reliability with a Cronbach's alpha of 0.954 and a Kaiser-Meyer-Olkin validity of 0.956.

Table 2 Model translated from Liñán and Chen (2009, p.612-613)

Items	Variable
Setting up a business and keeping it running would be easy for me.	PBC
A career in business is very attractive to me	PA
My friends would approve of my decision to start a company.	SN
I am willing to do anything to be an entrepreneur.	EI
I believe I would be fully capable of creating a viable business.	PBC
I will strive to create and run my own company.	EI
I can keep the process of setting up a company under control.	PBC
My immediate family would approve of my decision to start a company.	SN
I am determined to start a company someday	EI
If I had the opportunity and the resources, I would love to start a company.	PA
My peers would approve of my decision to start a company.	SN
Among several options, I would prefer to be an entrepreneur rather than something else.	PA
I am determined to start a company in the future	EI

If I were to try to start a company, I would have a high probability of success.	PBC
Being an entrepreneur would give me great satisfaction.	PA
It would be very easy for me to carry out a business project.	PBC
My career goal is to be an entrepreneur	EI
Being an entrepreneur would bring me more advantages than disadvantages.	PA
I have every intention of starting a company someday.	EI
I know the practical details necessary to create a company	PBC

Based on the review of the state of the art, considering the relevance of entrepreneurship education, which in recent years has been enhanced, supported by a search in Emerald, which yielded 4236 articles or chapters and 188 case studies, 21% of the articles published in the last year. A scale was designed to measure EE (Table 3), the base authors are: Seikkula-Leino, Satuvuori, Ruskovaara & Hannula (2015), Robinson, Neergaard, Tanggaard & Krueger (2016), Capella, Gil, Martí & Ruiz (2016). The variable EE is measured considering two dimensions: the teacher as promoter of competencies for entrepreneurship (DPCE) and teaching-learning process (PE-A). The reliability level with a Cronbach's alpha of 0.977 and a Kaiser-Meyer-Olkin validity of 0.965.

Table 3 Items of the EE scale, prepared by the authors.

Code	Item
DPCE1	Teachers work with a competency-based curriculum
DPCE2	Teachers develop students' critical ability to understand and manage standards and self-assess with explicit criteria and examples.
DPCE3	Teachers ask relevant questions that guide and stimulate student reflection.
DPCE4	Teachers use educational strategies that foster creativity
DPCE5	Teachers use educational strategies that foster innovation
DPCE6	Teachers promote comprehension over memorization

DPCE7	Teachers use educational strategies that encourage teamwork.
DPCE8	Teachers promote entrepreneurship
DPCE9	Teachers encourage reflection on the use of money
DPCE10	Teachers promote the development of entrepreneurial projects
DPCE11	Teachers use business simulators
DPCE12	Teachers coordinate so that final projects are globalized and interdisciplinary.
DPCE13	Teachers design learning activities to promote justice through the equitable organization of tasks, where each student assumes his or her responsibilities, prioritizing the common good over his or her own interests.
PE-A1	The teaching-learning process promotes reflection on the positive and negative consequences of actions on the lives of others.
PE-A2	The teaching and learning process has allowed me to learn from my colleagues and to accept working with different people from an attitude of respect and active collaboration.
PE-A3	The teaching and learning process has allowed me to assess the profitability of an activity and how to benefit from it to improve and respond to needs that arise in daily life.
PE-A4	The learning process has helped me to carry out creative ideas with realism and efficiency, planning how to do one thing after another and being constant in spite of the difficulties.
PE-A5	The learning process has allowed me to recognize my mistakes and successes and to identify ways to do things better next time.

Data collection and analysis procedure

Using the Google Forms electronic form, the survey was distributed among the teaching staff of three institutions of higher education so that they could take their students to fill it out, after which the statistical analysis of the data was carried out. Reliability analysis was carried out using Cronbach's Alpha index. Data processing was carried out using SPSS/Windows 20.0.

Data were analyzed with descriptive statistics, Spearman's correlation coefficient and regression analysis.

Results

A total of 452 surveys were administered to university students whose age range is 18 to 46 years, with a mean of 22.52 and standard deviation of 4.96 years. Forty-four percent were male and 56% female. Eighty-two percent are single, 11% are married and 7% live in a common-law relationship. The sample includes students from 13 different careers, with 43% in Accounting, 28% in Administration and 10% in Agronomy. It is noteworthy that 65% of the students work and study.

Students were asked about their medium-term vision, 23% see themselves as employed, 46% self-employed and 31% as entrepreneurs owning a business.

Figure 1 illustrates the results by variables according to an index designed to obtain the results according to intervals from low to high level. It is noteworthy that 63.5% of the sample is located in the high level for the IE variable, but only 50% is located in the high level within the EE variable.

This indicates that the student's perception of whether the teacher and the teaching-learning process contribute to the development of competencies that favor their EI is not entirely positive, in this sense Seikkula, Satuvuori, Ruskovaara & Hannula (2015) argue that in Finland EE begins with teacher training, i.e., teachers must first be prepared on the subject. Also, the authors point out that EE is both a method and a learning content.

The study evaluated seven variables; to determine their possible relationship, Spearman's Rho correlation coefficient was used to determine the ordinal scale; according to the results, all the variables are linearly related, explaining the variation in EI at 12.46% by the linear relationship between these variables. In addition, it should be noted that the EI variable is also linearly related to the PA and PBC variables, where their relationship is explained in a higher proportion, 68.55% and 55.80% respectively (Table 4).

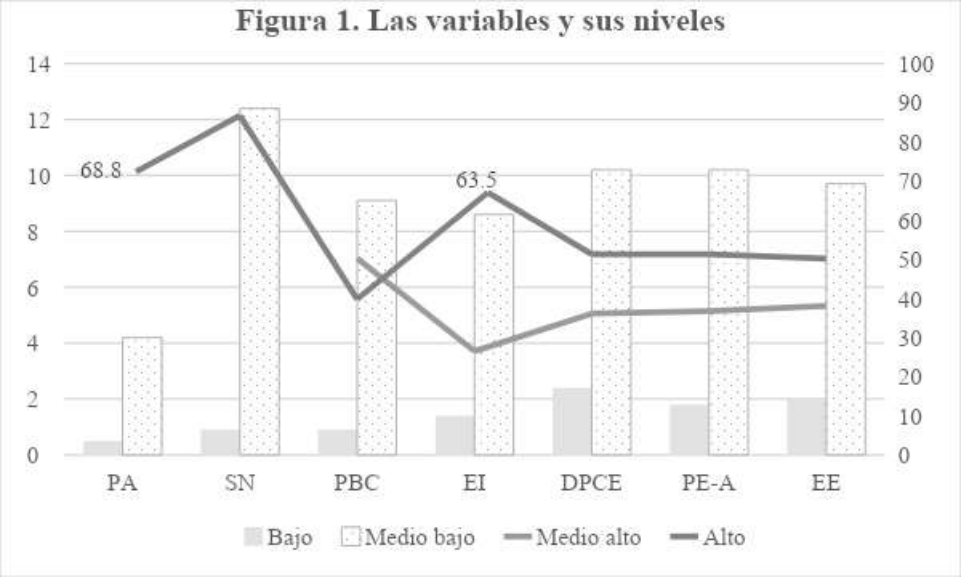

Figure 1. Results of the variables, expressed in levels.
Source: Own elaboration.

Table 4 Results of the correlations, prepared by the authors based on the results.

Variables	PA	SN	PBC	IE	DPCE	PE-A	EE
PA	1						
SN	0.505	1					
PBC	0.707	0.505	1				
IE	0.828	0.482	0.747	1			
DPCE	0.331	0.286	0.381	0.344	1		
PE-A	0.330	0.330	0.395	0.349	0.876	1	
EE	0.337	0.303	0.392	0.353	0.991	0.930	1
The correlation is significant at the 0.01 level (bilateral).							

In addition, cross-table analysis was applied to assess the dependence between the variables sex and IE, based on the result of the critical level (asymptotic sig.), the null hypothesis of independence is accepted, inferring that the variables are not related

(Table 5). This same test was applied with the variables career and IE, but in this case the result of the critical level (asymptotic sig.) leads to rejecting the null hypothesis of independence, inferring that the variables are related (Table 6).

Table 5 Chi-square tests, prepared by the authors from the results.

	Value	gl	Asymptotic sign (bilateral)
Pearson's Chi-square	3.102a		.376
Likelihood ratio	3.335		.343
Linear by linear association	1.820	1	.177
N of valid cases	452		

a. 2 cells (25.0%) have an expected frequency less than 5. The minimur expected frequency is 2.64.

Table 6 Chi-square tests, prepared by the authors from the results.

	Value	gl	Asymptotic sign (bilateral)
Pearson's Chi-square	224.930a		.000
Likelihood ratio	84.870		.000
N of valid cases	452		

a. 42 cells (75.0%) have an expected frequency of less than 5. Th minimum expected frequency is .01.

According to Alea et al. (2005), from the directional analysis (Table 7) it can be deduced that:

- Taking the career variable as the dependent variable, λ career = 0.000, which indicates that the level of EI allows predicting the behavior of the career variable.
- Taking the EI variable as dependent, λ EI=0.024 with an asymptotic standard error equal to 0.028. Thus, the race variable allows us to reduce the uncertainty in the prediction of the behavior of the EI

variable by 2.4%. This estimate of λ EI is significant for significance levels above 0.393.

Table 7 Directional measures, prepared by the authors based on results

Medidas direccionales

			Valor	Error típ. asint.[a]	T aproximada[b]	Sig. aproximada
Nominal por nominal	Lambda	Simétrica	.010	.015	.617	.537
		Carrera en que esta inscrito dependiente	.000	.017	.000	1.000
		Nivel EI dependiente	.024	.028	.853	.393
	Tau de Goodman y Kruskal	Carrera en que esta inscrito dependiente	.026	.008		.000[c]
		Nivel EI dependiente	.077	.017		.000[c]
	Coeficiente de incertidumbre	Simétrica	.074	.016	4.353	.000[d]
		Carrera en que esta inscrito dependiente	.057	.013	4.353	.000[d]
		Nivel EI dependiente	.103	.022	4.353	.000[d]

a. Asumiendo la hipótesis alternativa.
b. Empleando el error típico asintótico basado en la hipótesis nula.
c. Basado en la aproximación chi-cuadrado.
d. Probabilidad del chi-cuadrado de la razón de verosimilitudes.

Goodman's Tau statistic with dependent IE takes the value λEI = 0.077 with a standard error of 0.017; this result indicates a moderately high degree of association between the variables career and IE. In this sense, it should be noted that the students with the highest level of EI are those enrolled in accounting, administration and agronomy. In the case of the first two, this was to be expected since they are business careers, but the case of agronomy students is noteworthy.

Given that there is a correlation between the variables, regression analysis is applied with the support of SPSS using the input method to determine the equation of the line that best represents the relationship, with EI (Y) as the dependent variable and predictor variables PA (X1), SN (X2), PBC (X3), DPCE (X4) and PE-A (X5). The theoretical model is presented as:

$$Y = \beta 0 + \beta 1\, X1 + \beta 2\, X2 + \beta 3\, X3 + \beta 4\, X4 + \beta 5\, X5 + \xi$$

Based on the results in Table 8, with a significance level of 5%, the variables SN, DPCE and PE-A are not significant, which indicates that

both the subjective norm and the teacher as a promoter of entrepreneurship competencies and the teaching-learning process are not focused on creating and/or strengthening the entrepreneurial intention of the students.

Table 8 Coefficients, prepared by the authors based on results

Model	Unstandardized coefficients		Typified coefficients	t	Sig.
	B	Typical error.	Beta		
1 (Constant)	-2.855	1.102		-2.590	.001
PA	.879	.047	.629	18.859	.000
SN	-.032	.067	-.013	-.479	.632
PBC	.372	.040	.318	9.407	.000
DPCE	.006	.020	.013	.286	.775
PE-A	.007	.051	.007	.145	.885

a. Dependent variable: IE

EI is explained 79.4% by the explanatory variables according to the linear model considered. Given that the Durbin-Watson value is 1.884 (d>1.4), it is inferred that there is no autocorrelation (Table 9), since the Durbin Watson test confirms that the errors in the measurement of the explanatory variables are independent of each other, being considered independent if the statistic is between 1.5 and 2.5 (Vilà et. al, 2019 in González-Rosales, 2021), so the value obtained is considered acceptable.

Table 9 Summary of the model, prepared by the authors based on the results

Model	R	R square	R-squared corrected	Typical estimation error	Durbin-Watson
1	.892	.796	.794	3.48557	1.884

At 5%, according to the results of the analysis of variance (ANOVA), it is inferred that the explanatory variables jointly and linearly influence EI (Table 10), consequently, the regression equation establishes:

Y = -2.855+0.879 X1+ 0.372 X3

Table 10 Model, developed by the authors based on the results

Model	Sum of squares	gl	Root mean square	F	Sig.
1 Regression	21159.019	5	4231.804	348.320	.000
Residual	5418.529	446	12.149		
Total	26577.549	451			

Consequently, and based on the model, the EI of university students depends on personal attitude and the perception of behavioral control. This allows inferring that there is no teaching of entrepreneurship, i.e., the educational sector does not have an impact on training young entrepreneurs, despite living in the knowledge era, the fourth industrial revolution, of applying an educational model by competencies, it seems that the model continues to train employees, young people who seek training to look for a job.

The predictor variables that were found to be significant are personal characteristics that tend to develop in the family environment, i.e., EI is a product of the young person's close environment (family and friends) and not of the educational environment. This is consistent with the findings of Martínez-García et. al (2019) who found in their results that factors, competencies and recommendations that are related to personal characteristics and traits appear more linked to project success than those related to professional knowledge or skills.

Given the scenario of economic crisis in recent years in the world, entrepreneurial activity is highlighted as a vehicle to improve the

quality of life of the population, as well as a means to make the economy and the environment sustainable (Vargas-Ramírez et. al, 2020).

But, it is necessary to promote the so-called dynamic ventures, which, for Restrepo, Tapasco & Vidarte (2016) solve or create needs in the market and are characterized by their high potential for rapid, profitable and sustainable growth; based on innovation and with the capacity to generate and capture extraordinary value.

Although the reliability and validity of the Liñán and Chen model had already been tested, it was decided to analyze its validity again due to the modifications made to adapt it to the sample. The analyses performed yielded acceptable reliability and validity indices for the scales of interest in this study.

Although the results of the study indicate that the entrepreneurial intention and entrepreneurship teaching variables have a weak positive relationship, the regression analysis indicated that for the sample the teaching of entrepreneurship is not significant, this may be due to the arguments of Pertuz et al (2016) who propose a particular profile for the teacher trainer of entrepreneurs, which must possess specific characteristics and competencies, articulated in an integral manner for the effective development of the teaching-learning process, these authors based on an extensive review of the state of the art establish 22 characteristics/competencies that the teacher must have (Table 11). In this sense, the lack of significance in teaching learning is congruent with the results found by Cárdenas-Gutiérrez and Montor-Fernández (2017),whose findings indicate that the entrepreneurial education projects on the entrepreneurial potential of the student body are negligible, since there are no interaction effects in any of the variables, suggesting that the programs that were evaluated, have not increased the level of entrepreneurial potential of the participating students, as would be expected after participation in them. Previous studies on the influence of entrepreneurship education on entrepreneurial intention are ambiguous, with some researchers finding a positive relationship and others a negative relationship (Bravo-Bravo, et. al,

2021).

The non-significant results could be the result of teachers who do not correspond to the profile indicated by Pertuz. Consequently, the teaching of entrepreneurship should be the product of a planned process, where first a teaching profile is defined, a training plan is used to prepare current teachers and for future hires, professionals who already have these characteristics and competencies are recruited.

Table 11 Characteristics/competencies of the teacher trainer of entrepreneurs, taken from Pertuz-Peralta, Rojas-Caicedo, Navarro-Rodríguez & Quintero (2016, p. 33-34).

Characteristics/competencies		
Knowledge	Learner-centered teaching	Promoting group work
	Problematizer	Able to adequately
Facilitator	Respectful	identify the student's
Motivator	Tolerant	needs
Innovative	Flexible	Able to learn
Responsible	Adaptable	Promoter
Empathetic	Ability to teach in real	Communicator
Ability to work in a team	contexts	Evaluates and controls
Plan the learning process	Working under systematic	processes and results
	and sustainable	
	approaches	

In Finland, EE starts with teacher training, i.e., teachers must first be prepared on the subject (Seikkula, Satuvuori, Ruskovaara & Hannula, 2015).

In addition, it should be considered that entrepreneurship education programs depend on the teaching method. Taking into account that the choice of teaching style and method should be related to the nature of the learners. Hence, EE should focus on learners and lifelong learning practices (Robinson, Neergaard, Tanggaard &

Krueger, 2016).

For Mandel & Noyes, (2016) the challenge is to find suitable teachers and mentors, create an enabling space for judgment and failure. Working with entrepreneurial opportunities and confronting ambiguity as well as social and professional anxieties in the marketplace are cornerstones of this approach.

Conclusions

The variables that influence students' decision to start a business in the future (entrepreneurial intention) are personal attitude and perceived behavioral control. Likewise, the results show that the degree that the student is studying influences his or her entrepreneurial intention, highlighting the higher level in students who are trained as graduates in accounting, business administration and agronomy. Results that partially coincide with those found by García, Díaz and Melchor (2015), whose finding establishes that students in the administration career have the highest average entrepreneurial intention.

Considering that it is a limitation to have included students from only one city in the sample, it is important in the future to expand the sample to include students from other localities, from both public and private institutions, in order to be able to carry out comparative studies.

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