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## Universities' Contributions to Entrepreneurship and Social Innovation

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### ABSTRACT

The general objective of this research work is to know if the university context, attitudes, norms, and perception of behaviour control influence the intention of social entrepreneurship and social innovation in undergraduate students from the areas of economics, administrative and social. The methodology was based on the Global Survey of University Entrepreneurship Students -GUESS- in which 34 countries have participated since 2011, with a sample of more than 150,000 students per year. The results by lineal regression and R show that the university context, attitude towards behaviour and subjective norms have a low influence on entrepreneurial intentions. However, they should not be neglected since they generate an effect on entrepreneurial intentions, which is important to highlight in the perceived behavioural control of the ease or difficulty of becoming an entrepreneur.

**Keywords:** *Entrepreneurship, Enterprise Policy, Social Entrepreneurship, Higher Education*

### Introduction

A knowledge-based economy allows the development of social aspects in different parts of the community (Schmitt, 2015; Julien & Molina, 2012; Contreras Soto, 2001), both in the concepts of social innovation and in those of social entrepreneurship, both highly related (Drucker, 1985), whose tendency towards them has made it possible to propose solutions to current problems faced by several countries in the world (Kliksberg, 2012), in addition, the knowledge economy generates innovation with social impact on leaders, giving them special abilities and characteristics (Schmitt, 2015; Bayad et al., 2005).

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Social entrepreneurship requires the participation of multiple actors, individually or collectively, providing various operational, financial, and organizational support. In this context, it is the universities that encourage these actors to participate in the change, improvement, and development of skills for entrepreneurs, mainly students, with new ideas, innovations and capable of substantially improving the environment (Bayad et al., 2005). Therefore, undergraduate study plans must be aligned with the principles of the university, as well as human values such as freedom, equality, equity, and citizenship, which form the citizen model of the 21st century (UN, 2030). On the other hand, the universities implement support programs for new entrepreneurs, as well as support in innovation, focused mainly on students and supported by professors and staff in general they are also implementing support services for entrepreneurs and innovators (Marin et al., 2012).

There are various models of competency education that were implemented in several countries during the eighties and nineties, which belong to the Organization for Economic Cooperation and Development -OECD- (Mertens, 1992). The incorporation of learning spaces in which students and teachers can get to know the professional reality, can interact, and enhance social innovation processes, which allow them to have a global vision, in addition to training future competent citizens committed to public benefit, social welfare and all this using new technologies. Farías (2010) established that university degree programs should be oriented towards entrepreneurship and innovation. There is a challenge in higher education, such as the incorporation of learning spaces to have an approach to the professional and innovative reality, to train future professionals, capable of generating benefit to the community and social well-being, committed to social causes and supported by new technologies to generate better results.

Educational competencies are a challenge for social responsibility, social innovation, social entrepreneurship, and sustainability, all of them with a solidarity approach, with a tendency to the full development of human capacity and with a focus on well-being, to improve quality people's lives. In addition to training students who have autonomy, as well as other skills such as collaboration, interaction, multidisciplinary approach and experience (Julien & Molina, 2012).

In the last ten years, a great interest in entrepreneurship education (EE) has been observed in the market, as well as an increase in entrepreneurship academic programs; this growth worldwide is widely recognized (Morris & Liguori, 2016); however, the support or scholarships for entrepreneurship education have not been maintained at the level that the practice requires. On the other hand, Neck and Corbett (2018) have argued the need to generate knowledge in the teaching of entrepreneurship showing the how, what, why and for what, and from research it has been shown that individual and environmental characteristics of students generate entrepreneurial behavior (Shirokova et al., 2016).

On the other hand, the pioneering studies on the entrepreneurial intention of university students are those of Sieger et al. (2016) and Sieger et al. (2016), in a worldwide and validated survey, to measure the entrepreneurship with the students in recent years, the university has acquired an increasingly important role as a strategic focus of innovation, creativity and entrepreneurship, both in societies in developed countries and in developing regions, where it is necessary to promote the establishment of a commercial network that generates employment and well-being (Alonso-Gómez et al., 2016). For such growth in entrepreneurship to happen, students need to have a

stimulated interest in business issues, which falls to governments and institutions of higher education (Davey et al., 2016).

There is little information on the role of universities in the development of new entrepreneurs; specifically in the contribution to entrepreneurship education in students (Davey et al., 2016). Lackéus (2015) affirms that entrepreneurship is a way of seeing things and a process to create and develop economic activities based on risk, creativity, and innovation when managing a new or existing organization.

The university has acquired an increasingly important role as a strategic focus of innovation, creativity, and entrepreneurship, both in societies in developed countries and in developing regions, where it is necessary to promote the establishment of a commercial network that generates employment and well-being (Alonso-Gómez et al., 2016). The general objective of this research work is to know if the university context, attitudes, norms and perception of behaviour control influence the intention of social entrepreneurship and social innovation in undergraduate students from the areas of economics, administrative and social. According to this, the most important practice for entrepreneurs start in the universities, so for this way it is necessary to work on activities for developing the competences and abilities necessities for this, and that support the enterprises or small companies making new companies.

### **The Literature review**

Social entrepreneurship is a type of company that adapts well to current times, due to the need for society to have companies with a social impact rather than a commercial company, which are normally founded and run by women (Meda Chipeta, Kruse, & Surujlal, 2020). The importance of knowing the impact that perceived creativity has on an entrepreneurial attitude and intention, through university support, is receiving greater attention, given that they are potential sources of job creation, hence the need to investigate the factors that predict entrepreneurial attitude and intention and how the business process is supported by practice and theory (Anjum, Farrukh, Heidler, & Díaz Tautiva, 2021).

In addition, the global spread of COVID-19, challenged the educational landscape, modifying face-to-face tools for online education, so that more than ever scholarships and the development of additional resources for online entrepreneurship education are required, modifying with this is pedagogy, learning and entrepreneurship practices (Liguori & Winkler, 2020).

As part of this necessity, the Global Entrepreneurship Monitor (GEM, 2017) is a study on the state of entrepreneurship worldwide. Its main objective is to measure the levels of entrepreneurship in countries and to test their relationship with local economic development. The GEM describes the entrepreneur and his environment; and helps to identify the factors that increase the levels of entrepreneurship (GEM, 2017).

Universities have played an important role in terms of human capital formation and in creating new knowledge that can be applied to create new technology products and services. As a result, university-based business ecosystems have emerged as promising triggers for sustainable development in the regions in which they are located (Rodríguez-Aceves, 2017). University-based entrepreneurship has been around since the 1980s, although its early stages have focused more on the process of technology transfer through patents and licenses (Siegel & Wright, 2015). The

university must support youth entrepreneurship with the teaching of innovative methods, skills development, adequate infrastructure, becoming open systems and integrating the economic, political and administrative environment to guarantee the economic development of the community (Diaconu, & Dutu, 2015).

On the other hand, universities invest large amounts of resources in analyzing and improving their business ecosystems, which Jansen et al. (2015) define how universities support their students so that they can build a successful company just as there is an increasing number of universities that incorporate entrepreneurship programs in the universities (Jansen et al., 2015; Siegel & Wright, 2015). Considering also that the characteristics of an entrepreneur are trust, results orientation, the ability to take risks, leadership, originality and future orientation, and all of them can be developed in the university stage (Del Río Cortina, 2017). Knowledge in the market, the development of new collaborative structures, innovation conditions and adequate management of resources are the basis for creating a solid education in entrepreneurship, thereby improving the performance of educational systems, achieving the insertion of graduates in the market. working as employers (Diaconu, & Dutu, 2015).

According to Siegel and Wright (2015), universities have evolved from a traditional perspective that focused merely on the commercialization of ideas and research through spin-offs, licenses, and patents. In this sense, the role that the universities played was to facilitate the transfer of technology and knowledge with an agency and a resource-based approach. Social entrepreneurship supported by the formal process of the educational system and supported by private companies, under the protection of Corporate Social Responsibility initiatives, takes as an alternative the achievement of objectives jointly between the government, the market and society, with in order to support the community (Del Río Cortina, 2017).

As Mandel and Noyes (2015) pointed out in their study of the 25 best entrepreneurship undergraduate schools in the US, the most prominent in terms of business education is in environments conducive to innovation and entrepreneurship, but They also prioritize the following actions: encouraging students to create new companies with a technological component; provide mentors to students who are or have been entrepreneurs, who consequently provide the student with relational capital; accompany students in the process of protecting intellectual property; create favourable spaces for financing; provide students with innovative and open spaces as well as prototyping equipment.

The theory of social identity offers an important lens to improve the understanding of university students as entrepreneurs, the business creation process, and its results. However, further progress is hampered by the lack of valid scales to measure the social identities of entrepreneurs (Sieger et al., 2016).

For Spigel and Harrison (2017), entrepreneurial ecosystems emerge as an economic development strategy that is based on the creation of support for the environment and that encourages new innovative companies—represented by cultural, social, economic, and political environments within a region that supports high growth entrepreneurship. Several studies have been carried out around the world, where the activities carried out in the field of entrepreneurship are evaluated (Alonso-Gómez et al., 2016). It can then be affirmed that today, there is an increasing number of

universities that incorporate entrepreneurship programs in their universities (Jansen et al., 2015; Siegel & Wright, 2015).

Universities are the main generators of change agents, educating, promoting and including within their programs the contents to train students with innovative skills and ideas (Bayad et al., 2005), thereby providing formal education with the characteristics required by private companies and public organizations (Marin et al., 2012), under a scheme that commonly ignores the social aspect within their curricular plans (Contreras Soto, 2001), but that includes the development of skills and social innovation in the process of training students, thereby endowing them with special characteristics, and with social innovation competencies (Julien & Schmitt, 2008).

The general objective of this research work is to know if the university context, attitudes, norms and perception of behaviour control influence the intention of social entrepreneurship and social innovation in undergraduate students from the areas of economics, administrative and social, the importance of this research is to contribute on the improvement of the academic capacities at the target university by maintaining and enhancing its performance indicators, which would impact on quality and competitiveness of its programs of study as well as its tutoring programs.

It is important mentioning that multinational companies influence the local economy by motivating the social aspect within their daily activities, promoting social entrepreneurship and innovation in the main actors in the community, thereby leading to interaction with globalization and collaboration. In innovative aspects, they are promoting the integral formation of people, their identity and respect for culture (Sanchis-Palacio, & Campos-Climent, 2008). Therefore, citizen participation promotes participation in community services with respect to health, housing, food, water use, and other activities to support the management of activities to reduce poverty, with above mentioned, the result is greater citizen participation and less participation of the state, as the main responsible for solving this type of problem (Babu & Pinstrip-Andersen, 2007; Bignetti, 2011).

In recent years, technical innovation has been associated with a change in attitude, behaviour and perception towards social and environmental benefits with a sustainable approach (Klerkx et al., 2010; Howaldt & Schwarz, 2010; Neumeier, 2012), Although there have always been people, groups and associations that carry out social work (Bacq & Jassen, 2008), however, these activities require the support of the government, as well as those actors in society, such as national and international institutions or private companies that contribute resources to cover the social and economic crises they face, in addition, it should be noted that people today seek to carry out ventures with innovative processes, in an increasingly competitive market, and linked to social innovation and social entrepreneurship (Sagasti, 2011). On the other hand, today, companies seek to implement new strategies that allow influencing the creation of civil associations, foundations and initiatives that allow promoting social innovation in order to face current social problems (Bacq & Jassen, 2008), and try to reduce the gap in social inequality despite the efforts that economies are making to reduce it (Meda Chipeta, Kruse, & Surujlal, 2020), also including all those involved to guide and legitimize the objectives with creative processes (Gómez & Marín, 2012; BitemoNdiwulu, 2007).

It is worth mentioning that the main activities are not focused on company profits, but on cost reduction, market penetration, and cost coverage to expand social impact (Coraggio, 2011); therefore, the development of new or improved products must be done with an innovative approach, therefore, social entrepreneurship in order to solve financial and environmental problems, as well

as inequality, poverty, marginalization and all those that affect the community (Bacq & Jassen, 2008). Therefore, innovation with social impact implies the development of new organizational structures, with an altruistic approach, with new styles of reasoning, with divergent thinking, with a diversity approach, supporting vulnerable groups, working on the union of complex and critical problems, combining market resources with public funds, donations, and private sponsorships according to the capacities of social innovation. Based on the above, social innovation is a principle that encompasses the renewal of services through technology and the application of new transformational ideas, with initiatives that seek to satisfy and improve people's quality of life, with complementary health projects and community benefit programs (Mulgan et al., 2007).

The Center for Social Innovation (2009) at Stanford University defines innovation as a novel solution to a social problem in an effective, efficient, sustainable, or simply novel way, creating value for society and also considering that there are three key mechanisms of social innovation: the exchange of ideas and values, the change of roles and relationships in the integration of private capital, and philanthropic support. On the other hand, it also seeks the solution of problems that cannot be understood and solved without involving the public and private sectors, but not for profit, but including the creation of social competencies (Caulier-Grice et al., 2012).

Social innovation is considered as a set of new ideas that lead a type of organization to the achievement of new products, which seek to generate social well-being in a generalized way, with an effect on the economy, society and the environment, seeking to generate an improvement in society, with an innovative focus on product management, and with a strong sense of altruism and social responsibility, with social entrepreneurship projects with the development of innovative skills and with a social focus (Alda-Varas et al., 2012).

Social innovation projects are developed in three phases, and the first shows an intellectual and conceptual effort that ensures the generation of ideas coherent and effective. In this phase, the project defines the purposes and identifies the relevance of the product and its objectives, identifying the relevance of the projects for social actors, also minimizing threats to the environment. The work team must specify the budget, identify the knowledge, personnel, resources, and activities that will be needed.

The second part is the phase that specifies the competencies, the project management, the design and organization of the project, the integration of various actors and the obtaining of funds.

Finally, the last phase of the management of operational competencies and capacities of the administrative process (planning, organization, direction, and control). Some universities have been identified that offer programs to develop managerial competencies, but there is no training in key activities for the development of innovative competencies and social entrepreneurship, focusing on three fundamental characteristics (Kliksberg, 2012):

1. Identify the balance between causes and resources for the transformation of social problems.
2. Identify opportunities to change, inspire, create, take direct action, strengthen, and inspire.
3. Generate new conditions for solving problems in groups relegated by society.

Finally, it is worth mentioning that universities, as institutions that develop the skills of students to integrate as members of the community, with a social, sensitive, values and training approach in social issues, developing relevant social entrepreneurship processes.

## Methods

This research was carried out with the application of the Global Survey of University Entrepreneurship Students-GUESSS (Sieger et al., 2014), in which more than 150,000 students from 34 countries participated since 2011. In this survey, the university had no previous participation and had not done a previous study of the analysis of social innovation and entrepreneurship competencies. Students from the Autonomous University of San Luis Potosí and the Universität St. Gallen in Switzerland collaborated in this study. The survey was applied through a platform that was accessed online. The general objective of this research work is to know if the university context, attitudes, norms and perception of behaviour control influence the intention of social entrepreneurship and social innovation in undergraduate students from the areas of economics, administrative and social.

Sieger et al. (2014) explain the entrepreneurial intention and the determination of social innovation within an entrepreneurship paradigm based on the proposal of the hypothetical framework for entrepreneurial intention presented in Figure 1 and with the proposal of Ajzen (1991) shown in Figure 2, which represents the original initial theory.

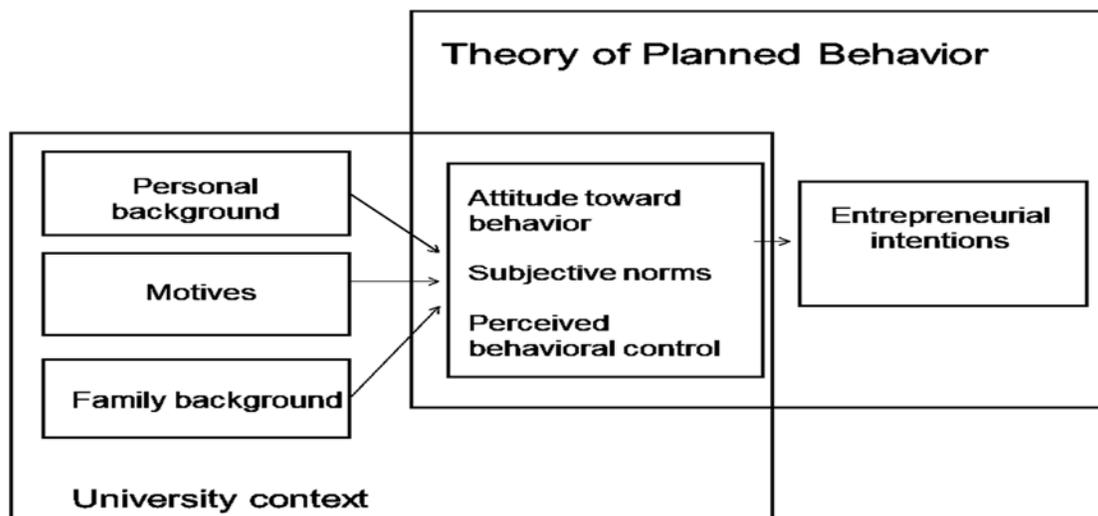


Figure 1. Hypothetical framework for entrepreneurial intention.

Source. Sieger, P., Fueglistaller, U., & Zellweger, T. (2014). Student Entrepreneurship across the globe: a look at intention and activities. Global University Entrepreneurial Spirit Students' Survey. Swiss Research Institute of Small Business and Entrepreneurship. University of St. Gallen and its adaptation to social innovation.

This research is considered an exploratory research work for the intention of knowing the current situation of the people under study; it is longitudinal because a response was obtained in a single moment and quantitative because a statistical analysis was carried out to verify the hypothesis. The questionnaire was accessed via the web and through email, and the target population of the survey was made up of students from the Division of Social and Administrative Sciences, the University of Guanajuato Campus Celaya-Salvatierra and the Autonomous University of San Luis Potosí at the Faculty of Accounting and Administration. To measure the validity and reliability in the diagnosis of competences, analysis with Cronbach's Alpha was applied.

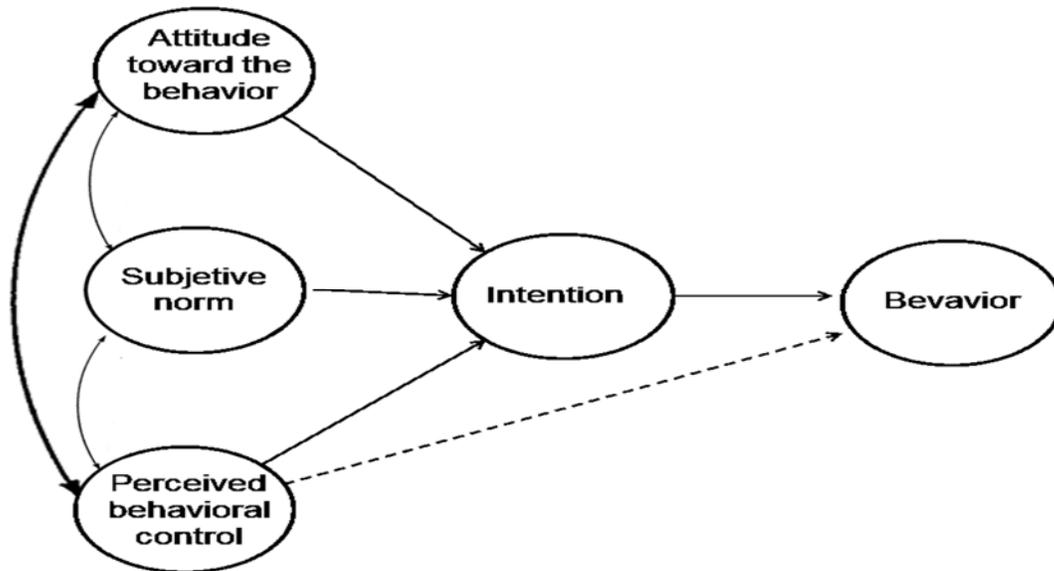


Figure 2. Taken from the Theory of Planned Behaviour

Source. Ajzen, I. (1991). *The Theory of Planned Behaviour on Organizational Behaviour and decision processes.*

It is worth mentioning that the focus of this research is to develop the skills required to identify social innovation and entrepreneurship with the application of the GUESSS tests, with the support of the university authorities to obtain the emails to send the survey, both in the outreach office and in the institutional entrepreneurship program of the University of Guanajuato. A database was created using IBM SPSS Statistics for Windows, Version 21.0, to perform the corresponding statistical analysis and hypothesis verification based on the model.

Once the data was recovered, an executive report with descriptive analysis of the main statistical indicators was presented to the corresponding authorities with the results of the development of skills in entrepreneurship and social innovation. Finally, an empirical model was presented to analyze the results of the universities. Based on several previous theoretical studies - Ajzen (1991) and Sieger et al. (2014); Méndez et al. (2015) and Centro Editorial UNIMINUTO, Bogotá, Colombia- the variables chosen in this study were: a) university context (business environment, business learning); b) personal and family experiences (attitudes, autonomous parents); c) entrepreneurial motivations (perception of self-control and norms; entrepreneurial intention, intention to launch a startup); and d) social innovation (quality of life, empowerment, social ownership, sustainability, replicability and scalability).

## Hypothesis

H1. The university context influences the entrepreneurship and social innovation intention in students of economic administrative and social sciences.

H2. The entrepreneurship and social innovation intention are measured by the attitudes, norms and perceptions of university students of economic administrative and social sciences.

H3. The perception of behavioural control has a direct and indirect effect on social innovation, and the indirect effects are measured by the entrepreneurial intention of students of economic administrative and social sciences.

## General objective

The general objective of this research work is to know if the university context, attitudes, norms and perception of behaviour control influence the intention of social entrepreneurship and social innovation in undergraduate students from the areas of economics, administrative and social.

The Cronbach's Alpha values, for the validation of the research questionnaire, for all the factors included in the study, result in acceptable stability and consistency of the scale. The values of Cronbach's Alpha results for University context is 0.945, for attitude towards behaviour 0.925, for subjective norms 0.667, for perceived behavioural control 0.981, for entrepreneurial intentions 0.926; all of them have acceptable levels of validation.

## Results

The sample was composed of 1,207 students from three universities, two of them public and the other one private, who was 22 years old on average, 61% of respondents were women. 98% of respondents were Mexican, and 97% over the total were born in Mexico. 91% of the sample were students from 16 to 25years-old and were living in México. According to the respondents' university, 31% belonged to the Monterrey Institute of Technology and Higher Studies, 40% to the Autonomous University of San de San Luis Potosí, and 28% studied at the Guanajuato University 99% of the respondents were undergraduate students. In addition, 66% of respondents were studying law and economics, followed by 12% in engineering. 54% of the respondents started their studies in 2013, 22% in 2014 and 23% in 2015, and 99% of the respondents studied between 2013 and 2015. 34% of respondents planned to complete their studies in 2019, followed by 28% who wanted to finish in 2018 and finally those that could end in 2017 in an amount that constitutes 26% of the sample, implying that 88% of respondents would complete their degree between 2017 and 2019. 99% of those surveyed were not exchange students.

### *Statistical analysis*

To confirm hypothesis 1 that seeks to identify if the university context influences the entrepreneurship and social innovation intention in students of economic administrative and social sciences, which means that Entrepreneurial intentions = f (University context).

Observing the behaviour of entrepreneurial intentions graphically is a function of the university context. Figure 3 shows the scatter graph, in which a high level of entrepreneurial intentions can be observed, being in general a function of the university context. However, it is necessary to know how much the university context influences entrepreneurial intentions. Entrepreneurial intentions = f (University context).

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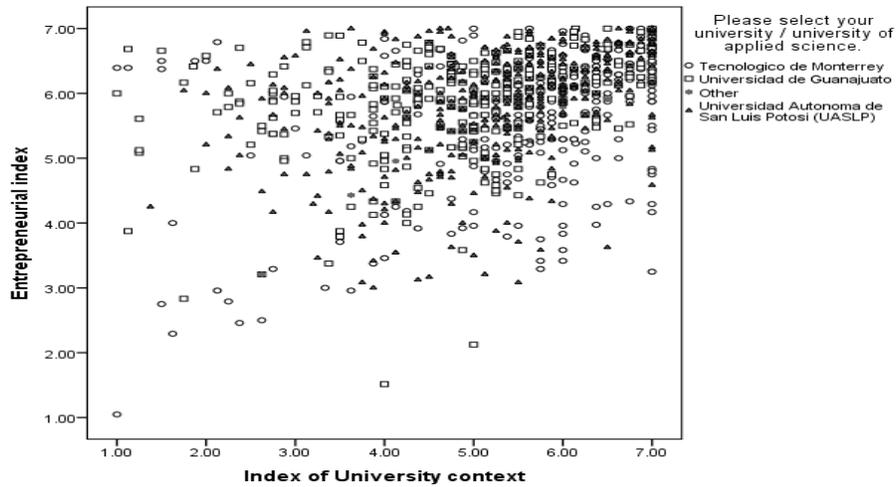


Figure 3. Entrepreneurial intentions and university context.  
Source: authors.

Using a regression (see table 2), a university effect of only 0.126 in explanation of entrepreneurial intentions.

Table 2. Regression for seeking the effect of the university context in entrepreneurial intentions.

Summary of the model <sup>b</sup>

Model	R	R square	R square adjusted	Standard error of estimate
1	.354 <sup>a</sup>	.126	.125	.85512

a. Predictors (constant), Index of University context; b. Dependent Variable: Entrepreneurial index

Table 3 shows the existing relationship between the variables of university context and entrepreneurial intentions; the intention is to know which of the two variables has a greater influence in the company if the weather or the courses of the university, which is again linear regression with both variables, in which it is observed that university courses have the greatest impact on the entrepreneurial intentions since it shows an R of 0.131.

Table 3. Regression for the effect of university climate and university courses in entrepreneurial intentions.

Summary of the model <sup>c</sup>

Model	R	R square	R square adjusted	Standard error of estimate
1	.362 <sup>a</sup>	.131	.129	.84333
2	.362 <sup>b</sup>	.131	.130	.84295

a. Predictors (constant), Univercourse, Univerenviroment; b. Predictors (constant), Univercourse; c. Dependent Variable: Entrepreneurial index

Analyzing the coefficients, it can be seen that the university climate has a low impact in explaining entrepreneurial intention with a beta of 0.007, as can be seen in Table 4. It is, therefore, better to continue with the model of university courses.

Table 4. Coefficients for the effect of Climate University and university courses in entrepreneurship.

Model	non-standardized	standardized	t	Sig.	collinearity
	coefficients	coefficients			
	B	standard error	Beta		statistics
(Constante)	4.583	.104		43.902	.000
1 Univerenviroment	.007	.024	.013	.303	.762
Univercourse	.223	.026	.353	8.439	.000
2 (Constante)	4.591	.101		45.313	.000
Univercourse	.229	.019	.362	12.241	.000

a. Dependent variable: Entrepreneurial index

The second hypothesis analyzed entrepreneurial and social innovation intention are measured by the attitudes, norms and perceptions of university students of economic administrative and social sciences, in which seeks:

Entrepreneurial intentions = f (Attitude toward behaviour + Subjective norms + Perceived behavioural control).

With the intention to observe in graphical form the relationship between entrepreneurial intentions with attitude towards behaviour, subjective norms, and perceived behavioural control, shown in figure 4. The results show a high level of being enterprising but dispersed as to the attitudes of respondents because it does not show a strong relationship between them.

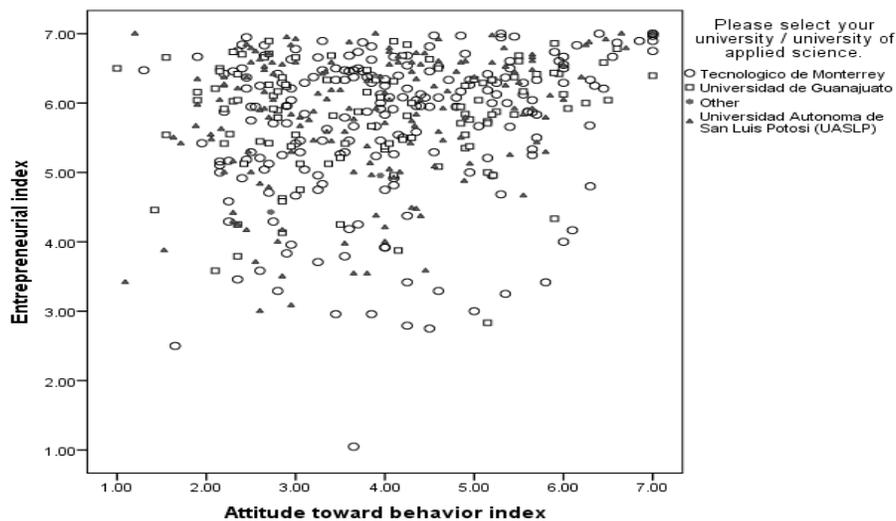


Figure 4. Entrepreneurial intentions and attitude toward behaviour.

Source: authors.

Figure 5 shows that the respondents from the three universities go from a level of 5 to 7, which means that they agree very much about the entrepreneurial intentions and the acceptance or approval by reference people.

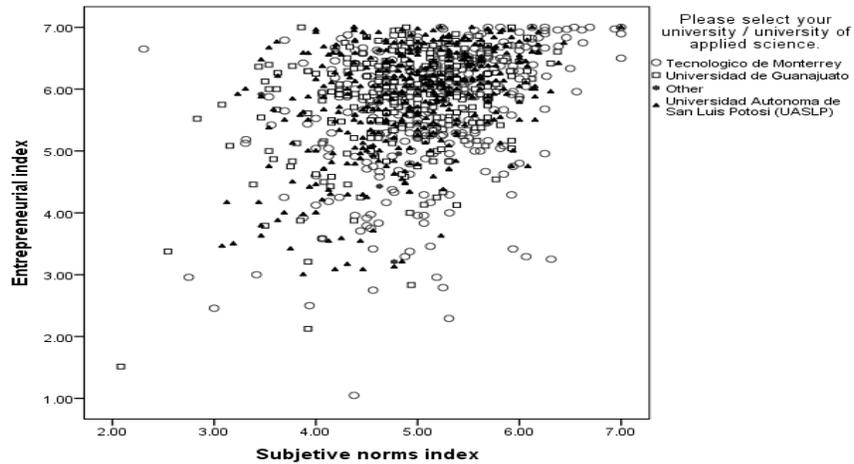


Figure 5. Correlation of entrepreneurial and subjective norms.  
Source: authors.

Once the data is analyzed, it is necessary to establish the relationship between entrepreneurial intentions and social innovation with attitude toward behaviour, subjective norms statistically, and perceived behavioural control of university students of economic administrative and social sciences. Making a regression, we obtain an R factor of 0.395 that best explains the relationship between these three variables with the entrepreneurial intention, as can be seen in table 5. In this way, the model that best fits the relationship indicates show that only the subjective norms index variable explains the entrepreneurial intention.

Table 5. Regression for the effect of attitudes, norms, and perceptions in entrepreneurship.

Summary of the model

Model	R	R square	R square adjusted	standard error of estimate
1	.399 <sup>a</sup>	.159	.156	.89375
2	.395 <sup>b</sup>	.156	.154	.89470

a. Predictors (constant), Subjective norms index, Attitude toward behaviour index; b. Predictors (constant), Subjective norms index; c. Dependent variable: Entrepreneurial index.

To confirm the results of table 5, which shows the direct relationship between the attitude variable and the behavior variable, a beta of 0.065 is obtained with a level of significance greater than 0.05, as observed in table 6

Table 6. Exclusion of the variable attitude toward behaviour in linear regression models.  
variables excluded

Model	In beta	t	Sig.	partial correlation	collinearity statistics		
					Tolerance	VIF	Minimum tolerance
2 Attitude toward behaviour index	.065 <sup>b</sup>	1.415	.158	.065	.846	1.182	.846

a. Dependent variable: Entrepreneurial index; b. Predictors: (Constant) Subjective norms index

To confirm the best model results, table 7 shows that the variable of attitude has a level of significance of 0.158, which discards it as an important element for the model.

Table 7. Coefficients for effect attitude and standards in the undertaking

Model	non-standardized	standardized	t	Sig.	collinearity statistics		
	coefficients	coefficients			Tolerance	VIF	
	B	standard error	Beta				
1 (Constante)	2.910	.307		9.492	.000		
Attitude toward behaviour index	.048	.034	.065	1.415	.158	.846	1.182
Subjective norms index	.524	.065	.369	8.040	.000	.846	1.182
2 (Constante)	2.916	.307		9.503	.000		
Subjective norms index	.560	.060	.395	9.336	.000	1.000	1.000

a. Dependent variable: Entrepreneurial index

A correlation analysis is applied to confirm the relationship between the variables (see table 8), where it can be observed that the relationship between entrepreneurial intentions and attitude towards behaviour is positive but low, with a correlation coefficient of 0.205. Similarly, between entrepreneurial intentions and subjective norms, a positive though low correlation coefficient of 0.317 was calculated. However, it is worthy of stressing that between entrepreneurial intentions and perception, there is no correlation.

Table 8. Correlation of attitude, standards, and perception in the undertaking

		Entreprene	Attitude toward	Subjective	Perceived
		urial index	behaviour index	norms index	
Rho de Spearman	Entrepreneurial index	1.000	.205**	.317**	.
	Correlations coefficients				
	Sig. (bilateral)	.	.000	.000	.
	N	1001	474	999	0

Source: authors.

The third hypothesis seeks to know if perceived behavioural control has a direct and indirect effect on social innovation, and the indirect effects are mediated by the entrepreneurial intention of students of economic administrative and social sciences. This is expressed as follows:

Entrepreneurial intentions = f (Perceived behavioural control).

However, we could not find any relationship between the perceived behavioural control of respondents with the intention to the undertaking, so that it is not possible to obtain the scatter graph, matched both variables also show an effect, so is not generated an appropriate regression model, nor is it possible to calculate a correlation between both variables.

Entrepreneurial intentions = f (Attitude toward behaviour + Subjective norms + Perceived behavioural control).

## Intentions

According to the results, it was expected that the universities would be the main creators of the university context that would allow the development of entrepreneurial intentions, but it has been statistically demonstrated that this has not been fulfilled, for which it is necessary that the universities themselves review their intentions of providing students with skills that allow them to

improve and develop their entrepreneurial capacity, thereby fulfilling the main objectives of the institutions.

It should also be noted that prior personal or family experience as an entrepreneur was expected to not generate a predisposition to be an entrepreneur and especially to develop social innovation activities in entrepreneurship; therefore, it is necessary that this issue also be considered by universities, for the development of complementary activities that allow and encourage the development of entrepreneurial activities.

It was also found that there is no relationship between having entrepreneurial attitudes with the intention to undertake; therefore, universities must rethink the teaching, development, monitoring and application of entrepreneurship programs from the origin, in order to achieve a process more efficient and long-term in the creation of companies, which will have a direct impact on society.

### **Discussion**

The development of university students in the field of entrepreneurship will allow them to form their own company, therefore there is a strong need to increase the capacity for innovation, creativity, and organization of all students, in order to increase entrepreneurship, seek business incubator options, and include financing programs for when they graduate.

The current research shows that the university context explains a bit the entrepreneurial intentions, showing that with this it is necessary to have courses, workshops and other curricular elements that allow the student to acquire basic tools for the creation of businesses, at a theoretical and practical level within of a teaching environment, so that you can gain skills, experience, and knowledge before entering the job market.

In addition to the above, the attitude of behavior on subjective norms has little influence on entrepreneurial intentions and social innovation, showing here the need to develop greater skills in students during their professional careers to try to transform the entrepreneurial attitude within order to train within the conditions of the enterprise.

Finally, this research shows the need to make important changes in the curricular programs, and in student practices, since the research shows that few students follow the path of entrepreneurship when they graduate from universities, therefore it is required that both Teachers and administrators look for better teaching-learning options, follow-up, motivation and continuous work so that students can truly be entrepreneurs during their university studies so that upon graduation this process is facilitated for them. It is therefore on the side of the university to analyze whether you want to educate employees or employers, both are necessary in the economy, but the best thing is that any path is simple for students and that upon graduation they are not left with an option due to lack of tools or capabilities.

### **Conclusions**

Universities are considered an important centre of knowledge and generator of human resources for business ecosystems since they are the trainers of students with an entrepreneurial intention to create and develop companies, which can contribute and creating socially responsible objectives. Universities have incorporated into their curricular programs and activities that allow them to

develop these skills in students. Considering that this is also part of the final intention of the students themselves: to open their own companies.

This research work set out to test three hypotheses. According to the results of the first hypothesis, it is concluded that the university context is important for entrepreneurial intentions because it explains or affects it a little. However, it is necessary to consider that, although it does not have a very high value, it must be considered because it represents a value in the relationship of both variables.

In the second hypothesis, the statistical results indicate that it can be concluded that attitude towards behaviour and subjective norms have little influence on entrepreneurial intentions and social innovation. It is important to consider that they explain the low influence, although they have a positive relationship; However, perceived behavioural control does not show a relationship with entrepreneurial intention and social innovation, considering the characteristics of the respondents.

According to the statistical results of the third hypothesis, there is no significant effect between perceived behavioural control and entrepreneurial intentions among the respondents, nor is any effect generated between them. Then, it can be concluded that for this sample, there is no effect or relationship between both variables. According to the statistical results, it can be concluded that the university context, attitude towards behaviour and subjective norms influence entrepreneurial intentions at a low level. However, it is possible to emphasize that they are variables that should not be left aside, since, despite the low level of explanation, not considering them also generates an effect on entrepreneurial intentions, which is important to highlight that the perceived behavioural control of the ease or difficulty of becoming an entrepreneur, so this concept will not be considered for this sample.

Therefore, it can be concluded that the university context does not generate relevant influence for the creation of companies by its students, considering that the universities, in addition to the fact are knowledge trainers, it is important to mention that within their activities, the intention must be included to support students with better tools and resources so that they are capable of generating an important change in the society, that is, creating students who are true agents of change, both in society and in the economy, achieving with This will make a significant difference in society.

Finally, it is important to recognize the need to make an important change in the curricular programs and in their practices so that the students have better support for the creation of productive, innovative companies in accordance with the needs of today's world, especially in the economic situation we are facing today that requires an important contribution to the economic recovery worldwide.

### **Suggestions for further research**

For future lines of research, it is suggested to specifically review the events and subjects that apply or carry out social innovation activities, in universities, as part of the main objectives of the institutions, to confirm that students are not only being taught to work and generate wealth, but they are also strongly encouraged to create internal activities for the development of social enterprises, and the development of social responsibility activities by organizations.

On the other hand, it is important to expand the study sample to include students who are not from the business area, since business careers naturally, if they include topics related to business

creation within their academic training, however, there are other careers that these topics are not common but are necessary for other professions to develop their own businesses.

Finally, it is important to mention that in the current era there is a before and after in educational models, due to the pandemic, implying that students received classes online, with the advantage of access to any knowledge worldwide, but with the disadvantage is that not all students have had access to this type of teaching, so even now in business school, post-pandemic research will generate different results than previous researches.

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