

Entrepreneurial Education: The Case of South American Countries

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ABSTRACT

The interest in the development of an entrepreneurial culture has acquired special importance, both in the academic and social spheres, since it is considered as the engine of growth and economic development of countries, particularly, those that are in the process of development. The objective of the article is to analyze the level of education and its role in entrepreneurial activity from a comparative point of view in South American countries. From a theoretical point of view, a review of the different contributions regarding education, academic and business training in the generation of entrepreneurship is carried out. Methodologically, the research is approached from a descriptive and correlational perspective, based on the data obtained from the Global Entrepreneurship Monitor, for the case of 5 South American countries during the 2010 – 2016 period. The results suggest that education of entrepreneurs should be oriented to the development of skills to face the challenges of today's society.

Keywords: Entrepreneurship, Education, South America

INTRODUCTION

In recent years, the interest in the development of an entrepreneurial culture has acquired special importance, both in the academic and social fields, since it is considered a means that motivates the change of mentality that today's society requires to face the different challenges that arise (General Assembly of the United Nations, 2015). In this sense, entrepreneurship is shown as an alternative that allows to boost the economic development of society, through the stimulation of innovation incubators, increase in economic efficiency, generation of jobs and improvement of inhabitants' quality of life (Audretsch, 2018).

In this context, a large part of the countries worldwide have paid special attention to entrepreneurial education (Hasan et al., 2017; Hornsby et al., 2018), through the generation and application of public policies applied on the educational programs of different levels (primary, secondary and higher

education), which aim to create an entrepreneurial culture and develop different capacities and skills in future entrepreneurs (Saldarriaga and Guzmán, 2018), so that they can contribute to economic growth and the creation of companies (Jones, Maas and Pittaway, 2017; Bernal Guerrero and Cárdenas, 2017).

The investment that has been made in the application of education for entrepreneurship in the medium and long term will allow the productive sectors to have highly qualified staff who contribute to business growth and development. Likewise, the introduction of different types of innovations comes from human creativity, knowledge and skills that are acquired directly from formal education. Therefore, current governments have considered it appropriate, through the educational system, to translate into competency-based training the link presented by existing social and labor demands with the needs of the market (Martínez Clares and González Morga, 2018), with the ultimate aim of training potential entrepreneurs, qualified to face the challenges of the economic sector.

Education and Entrepreneurship

Entrepreneurship, as such, is an activity that involves the right combination of different factors that generate some influence on people when launching a business idea. In this regard, the difference that entrepreneurs present from what they are not, lies in the fact that each of them has specific competencies and skills aligned with business intentions (Davis and Shaver, 2012), which can be present intrinsically or that they have acquired through formal training throughout their lives.

Education is one of the important factors to generate a business idea. In this regard, in the study carried out by Acs and Szerb (2009) they observed that entrepreneurs with high levels of formal education felt more capable and willing to start a business with projections of business success. In the same line of argument, Autio and Acs (2010) agree that, through higher education, future entrepreneurs acquire a certain degree of confidence regarding the skills they possess to develop an economic activity.

In recent decades, some countries have considered the methodology of how to ensure that children's and young people's education allows them to face challenges related to entrepreneurship, seen from a competency development approach, understood by these as all those types of knowledge, skills, and attitudes that are necessary for individuals to perform efficiently as productive beings (MEN, 2006, p. 5). Incidentally, authors such as (Bagheri & Lope, 2013) show that entrepreneurial education should have a more comprehensive scope, that is, it is not limited only to the business development (knowledge, competencies and skills) of students, but should also be responsible for developing and enhancing specific skills such as thinking, leading, and acting, so that potential entrepreneurs can apply them in their lives, communities, jobs, etc. (Gideon, 2014).

In the same lines, Campos and Méndez (2013) consider that entrepreneurship education is aimed at all types of people without any distinction, who show the interest and desire to carry out a business idea, but also, take into

account what their duties and rights are, their contribution to the resolution of economic problems, social and environmental, through the sustained development of creative and innovative alternatives.

Cornella (2014) mentions that current educational models have assumed an important challenge in teaching, since education must consider the introduction of constant changes that are the result of globalization the world is facing. In this regard, the model used should be more comprehensive and focus on solving problems and project proposals, with the aim of promoting in students the entrepreneurial spirit that leads them to the generation and implementation of their own initiatives (Orozco et al., 2016).

Likewise, Megias (2013) argues that entrepreneurial education plays a special role in the training of children and young people, since it promotes the development of the entrepreneurial potential that they carry inside, helps them to face fears and doubts, and gives them the necessary tools to face obstacles and reach the desired business goal.

However, despite the important contributions of the educational field through entrepreneurial education, Gideon (2014) asserts that there is still a long way to go in this regard. It is necessary to establish a common or standard framework that improves this process and that the same language and similar practices on entrepreneurship are handled worldwide, so that all countries can train qualified, motivated entrepreneurs with a high entrepreneurial spirit that allows them to achieve personal and social goals and that, above all, are a contribution to the growth of their communities, and to economic development.

METHODOLOGY

This research takes data from secondary sources such as the Global Entrepreneurship Monitor for the years 2012-2017 from five countries in South America (Colombia, Chile, Peru, Brazil and Ecuador). The variables considered for the analysis are: Total Entrepreneurial Activity (TEA) (X1), knowledge/skills to start business (X8), teaching in primary and secondary education provides adequate attention to entrepreneurship and new business creation (X4) and colleges and universities provide good and adequate preparation for starting up and growing new businesses (X5). The method applied was multiple regression with forced input for both models. Multiple regression analysis allows to establish the relationship that occurs between a dependent variable (Y) and the set of independent variables (X1, X2, ... XK) (Rodríguez-Jaume and Mora Catalá, 2001).

The equation of the linear regression model is detailed below:

$$Y = a + b * X1 + b * X8 + b * X4 + b * X5 + e$$

Where:

Y is the response variable that you want to predict.

b1, b2..., b5 are unknown constants.

X1, X2..., X5 are independent predictive variables that are measured without error.

e is the mistake we make in predicting the parameters

Table 1. Descriptive statistics (GEM, 2012-2017).

	Mean	Deviation	N
X1	22,8525	6,34519	36
X8	62,4928	7,24923	36
X4	2,2878	,61570	36
X5	3,6189	1,06994	36

Table 2. Model Summary (GEM, 2012-2017).

Model	R	R square	Adjusted R square	Standard estimation error	Change statisticians				
					Change in R square	Change in F	gl1	gl2	Sig. Change in F
1	,818 ^a	,670	,660	3,70085	,670	68,885	1	34	,000
2	,841 ^b	,707	,679	3,59503	,037	2,015	2	32	,150

a. Predictors: (Constant), X8

b. Predictors: (Constant), X8, X5, X4

Table 3. ANOVA (GEM, 2012-2017).

Model		Sum of squares	Gl	Quadratic mean	F	Gis.
1	Regression	943,475	1	943,475	68,885	,000 ^b
	Residue	465,674	34	13,696		
	Total	1409,149	35			
2	Regression	995,573	3	331,858	25,677	,000 ^c
	Residue	413,577	32	12,924		
	Total	1409,149	35			

a. Dependent variable: X1

b. Predictors: (Constant), X8

c. Predictors: (Constant), X8, X5, X4

RESULTS AND DISCUSSION

Table 1 presents the basic descriptive statistics related to the variables considered. Thus, the average rate of business creation per 1000 people of working age is approximately 22.85%. The average value of knowledge and skills represents 62.49%, that is, to start a company it is required that the entrepreneur considers accessing a type of training related to entrepreneurship. Primary and secondary education oriented to start a business represents an average of 6%.

Regarding the models presented, three explanatory variables have been considered, corresponding to factors related to education. The results show an R square with acceptable values of the observed variability of the correlation between the rate of entrepreneurship and the knowledge, skills and education to start an economic activity, in this case they represent 0.82 and 0.84 respectively for each model. One of the models is shown to be statistically significant with an error probability of less than 0.01.

The ANOVA analysis shows that the model is significantly better at predicting the outcome, while the first model is significant ($F > 1$ $p < 0.05$) when measuring the ratio of entrepreneurship with the training and knowledge necessary to undertake.

CONCLUSION

Entrepreneurial education is presented as an educational trend at a global level that has attracted special attention by state governments; it has been included in the academic programs of the different educational levels. Its importance lies in the development of an entrepreneurial mentality that promotes transcendental changes, through the generation of new and innovative ideas as well as the application of knowledge, skills, and abilities acquired and developed at different levels of training.

In general, entrepreneurship as such has become a dynamic engine of economy through the generation of sources of employment, and improvement of individuals' quality of life by constantly and sustainably promoting development and economic growth of the most vulnerable groups of society, over time.

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