



# Entrepreneurial capacities in population of the base of the pyramid in Cúcuta, Colombia

## *Capacidades emprendedoras en población de la base de la pirámide en Cúcuta, Colombia*

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### Abstract

This article studies the entrepreneurial skills in population of the Pyramid Base (BoP) in Cúcuta, Norte de Santander, Colombia. The objective was to determine the relationship between the perception of the ability to detect and take advantage of opportunities for improving results (dependent variable) and independent variables: gender, age, educational level, occupational profile, passion, vision, learning capacity, achievement of results, determination, creativity and innovation, persistence, teamwork, leadership, self-esteem, taking risks and organization. It was developed under the positivist paradigm, quantitative approach, using non-probabilistic sampling. The sample consisted of 197 entrepreneurs between the ages of 18 and 60. A structured survey was used in the data collection and then a multivariate analysis was performed through a categorical regression with optimal scaling (CatReg). Pratt's measures of relative importance show the importance of predictors: 1) persistence; 2) vision; 3) organization and 4) achievement of results, contribute 86.4% of the model to explain the dependent variable. We observe the absence of creativity and innovations variables, indispensable for an entrepreneurship for opportunity, sustainable over time; as well as other variables.

*JEL Code:* L26, M13, P42

*Keywords:* entrepreneurship; entrepreneurial skills; base of the pyramid; inclusive businesses

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## Resumen

El presente artículo estudia las capacidades emprendedoras en población de la Base de la Pirámide (BoP) en Cúcuta, Norte de Santander, Colombia. El objetivo fue determinar la relación entre la percepción de la habilidad para detectar y aprovechar oportunidades para la mejora de los resultados (variable dependiente) y las variables independientes: género, edad, nivel educativo, perfil ocupacional, pasión, visión, capacidad de aprendizaje, logro de resultados, determinación, creatividad e innovación, persistencia, trabajo en equipo, liderazgo, autoestima, asumir riesgos y organización. Se desarrolló bajo el paradigma positivista, enfoque cuantitativo, utilizando un muestreo no probabilístico. La muestra estuvo conformada por 197 emprendedores con edades entre 18 y 60 años. En la recolección de datos se empleó una encuesta estructurada y luego se hizo un análisis multivariante a través de una regresión categórica con escalamiento óptimo (CatReg). Las medidas de importancia relativa de Pratt, muestran la importancia de los predictores: 1) persistencia; 2) visión; 3) organización y 4) logro de resultados, aportan el 86.4 % del modelo para explicar la variable dependiente. Se observa la ausencia de la variable creatividad e innovación, indispensable para un emprendimiento por oportunidad, sostenible en el tiempo; así como otras variables.

*Código JEL:* L26, M13, P42

*Palabras clave:* emprendimiento; capacidades emprendedoras; base de la pirámide; negocios inclusivos

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## Introduction

The population at the base of the pyramid (BoP) comprises households with lower socioeconomic levels or poor people in each country. They are consumers and entrepreneurs with the ability to start their own businesses in the private sector. The strengths of this sector are, on the one hand, the large number of people who are ingenious entrepreneurs oriented by low costs and, on the other hand, the existence of a significant proportion of low-income people willing to demand goods and services (technology, health, food, housing, credit, among others) offered by entrepreneurs in this sector (Prahalad, 2005). The BoP is neglected in terms of stable solutions over time (Contreras, Wilches, Delgado, & Cerda, 2016), and welfarist policies and programs are commonly useless in bringing the poor into the middle class.

From a consumer perspective, the BoP is represented by approximately four billion people and represents five trillion dollars of the global consumer market. In Latin America, it includes 360 million people, or seventy percent of the population, according to Hammond *et al.* (2007). Meanwhile, Azevedo *et al.* (2015) indicate that by 2010, that figure stood at 400 million people. They considered national household income and expenditure surveys to make that estimate, also noting that the number of people living on less than 10 dollars a day increased by 22% between 2000 and 2010, increasing from 623 billion dollars a year in 2000 to 759 billion dollars in 2010; and that BoP consumers in Latin America and the Caribbean have improved their living conditions in terms of income, urbanization, education, and access to information and communication technologies, due to the region's economic growth between 2000 and

2010. Similarly, 63% of BoP consumption falls within the food (US\$209 billion per year), housing (US\$184 billion per year), and transportation sectors (US\$82 billion per year).

Regarding business experiences in the BoP, they are related to the Corporate Social Responsibility of important companies, meaning that some have taken advantage of this market as a business opportunity, innovating and taking advantage of the increase in their market share through internationalization (Schuster & Holtbrügge, 2012). Worldwide, some multinationals stand out in the BoP markets, such as Smart Communications in the Philippines and Vodafone in Africa through technological innovations, and Nestlé in 2006 with an investment of US\$ 47 million to install a packaging and distribution factory for products with cheaper packaging to be able to supply markets with less purchasing power, a market valued at US\$ 2.8 billion globally (Mutis & Ricart, 2008).

In Colombia, there are also corporate initiatives that have entered the BoP market, such as: Empresas Públicas de Medellín (EPM), oriented toward the universalization of public services; Promigás with a non-bank financing model; Alpina with popular products; and Comfama with a social leasing model supported by the IDB (RedE América, 2013).

These strategies of major companies targeting the BoP market are called first-generation strategies (BoP 1.0) by Simanis & Hart (2009), and are conducive to exploiting these markets commercially. These authors proposed second-generation strategies (BoP 2.0), determined through interaction with local people, to generate the invention and co-creation of business opportunities.

In recent years, Inclusive Businesses (IB) have been promoted through sustainable business models focused on the BoP market, which empower the vulnerable population, associating their socioeconomic needs with the creation of jobs and stable sources of income (Pineda-Escobar, 2014), including the poor as clients and consumers (from the demand side) and as employees, producers and owners of the business (from the supply side) (UNDP, 2010). They contribute positively to business development and the improvement of the living conditions of the local population and the environment (Gradl & Knobloch, 2010).

Using the supply-side approach to NI, this study addressed the entrepreneurial capabilities of the BoP population in Cúcuta, North Santander, Colombia, considering that they involve distinctive qualities of an individual. Therefore, the research question poses the following question: Is the perception of the ability to detect and take advantage of opportunities to improve outcomes related to gender, age, educational level, occupational profile, passion, vision, learning ability, achievement of results, determination, creativity and innovation, persistence, teamwork, leadership, self-esteem, risk-taking, and organization?

Therefore, the objective is to determine the relationship between the dependent variable, the perception of the ability to detect and take advantage of opportunities to improve outcomes, and the

independent variables gender, age, educational level, occupational profile, passion, vision, learning ability, achievement of results, determination, creativity and innovation, persistence, teamwork, leadership, self-esteem, risk-taking, and organization.

The study was developed using the positivist paradigm, a quantitative approach based on non-probabilistic sampling. A purposive type of sampling was used. The sample consisted of 197 entrepreneurs from the BoP market in Cúcuta, North Santander, Colombia, aged between 18 and 60 years old, mainly belonging to socioeconomic strata 1 and 2. A structured survey was used for data collection. Multivariate analysis using categorical regression with optimal scaling (CatReg) was employed to describe, quantify, and determine the relationships between the predictor variables and the dependent variable and the influence or importance of these relationships on the dependent variable.

## **Entrepreneurial skills**

Entrepreneurship is related to economic growth and development in a country involving innovation; in this process, the technical capabilities, intuition, and strategy of the individual and their work team are also necessary. Such an individual is known as an entrepreneur, who is not necessarily an investor, inventor, or manager, but one who exploits an invention, allocates resources, makes decisions, and organizes economic activity in scenarios of uncertainty (Schumpeter, 1961). At the same time, the entrepreneur is motivated by internal and external factors (intrinsic and extrinsic motivation) and combines knowledge, skills, and abilities to materialize a business idea (Marulanda, Montoya, & Vélez, 2014).

Intrinsic motivation is the individual interest that binds the entrepreneur's purpose and action and impels the entrepreneur to strive, be persistent, and make decisions (Eijdenberg & Masurel, 2013). That is, the entrepreneurial individual possesses certain capabilities to be an entrepreneur. Persistence refers to the quality of being persevering, constant, firm, and determined in the development of the entrepreneurial project. Endurance in entrepreneurs must last if they want their business to grow, as it also implies sacrifices to overcome environmental difficulties (Bandura, 1986, 1989) and concern for incorporating innovation throughout their economic process and for the quality standards of the service and product, as well as client service (Barrera, 2012).

Passion is possessed by a person who loves what they do, and to love what they do, the person must feel the impulse of the spirit and find it easy to do the project activities with pleasure and confidence (Freire, 2005). The entrepreneur with a vision possesses a proactive quality manifested in a forward-looking perspective, motivating them to develop new products or services or improve the current ones, intervening in advance in the face of opportunities or changes (Hughes & Morgan, 2007).

Entrepreneurship is a process whose outcome and success are determined by the conception and execution of learning mechanisms, which is nothing more than control over culture containing symbolic rules (Ries, 2011; Sarasvathy, 2001). Another entrepreneurial quality is the need for achievement, which is linked to the drive to excel compared to a standard (Mc Clelland, 1961). The individual is driven to work for excellence (Robbins, 1999), which implies the perseverance to work daily to achieve the established objectives (López, Montilla, & Briceño, 2007).

The entrepreneur acts with determination when an inner motivation drives them to achieve a goal or objective voluntarily, with perseverance and passion; this comprises the sum of intention, ambition, and discipline (Grant-Halvorson, 2012), where the person acts in a planned manner, designing an organized plan with established objectives when initiating the business plan (Martínez-Caro & Cegarra-Navarro, 2012). The entrepreneur's tendency toward creativity and innovation is observed when the willingness to creatively support new, novel ideas to create new products or services is manifested (Schumpeter, 1961; Lumpkin & Dess, 1996).

Initiatives to increase the rate of entrepreneurial activity can be successful through education (Oosterbeek, van Praag, & IJsselstein, 2008), since entrepreneurship training fosters self-esteem and confidence in the entrepreneur, and also provides them with the tools to interact with the context and start their business. Self-esteem refers to how a person feels about himself; how the thoughts and feelings of valuation and acceptance that each person has of himself change and are improvable, although they are influenced by his motivation (Carreño et al., 2018; Rodríguez & Caño, 2012; Ferkany, 2008), a concept that suggests that the entrepreneur is a mature person, loves himself and is flexible enough to adapt to changes in a situation that he considers favorable for himself.

The entrepreneur must have the ability to be part of a collective and work in collaboration with others, focusing on achieving common goals that benefit some (Duarte & Tibana, 2009). It is essential that the entrepreneur be a leader, who can influence other people to perform their tasks and achieve a common goal (Castellanos, Chávez, & Jiménez, 2003). They have leadership qualities, which imply the ability to group and organize groups of people, whose cooperation may be necessary for the creation of working groups and alliances (Achig et al., 2018). They also observe and take advantage of opportunities at all times (Recalde, Villota, & Flores, 2017).

The entrepreneur's task of exploring and discovering new business opportunities involves adopting risky behaviors (ranging from losing capital to psychological damage such as frustration, disappointment, and pessimism), especially when greater rewards are desired (Lumpkin & Dess, 1996; López, Montilla, & Briceño, 2007).

The development and possession of the entrepreneurial skills previously referred to correspond to the concept of entrepreneurial orientation (EO), understood as the generation of entrepreneurial strategy

that involves vision and management of competitive advantages in the short, medium, and long term; with capacity for innovation, risk-taking, being proactive and aggressive with competitors, and taking advantage of opportunities. Therefore, these are people with the ability to carry out a business venture when presented with an opportunity (Rodrigo-Alarcón, Parra-Requena, & García-Villaverde, 2014).

## **Methodology**

The study was developed according to the positivist paradigm, focusing on similarities and nomothetic statements (Ricoy, 2006). The empirical-analytical phase was carried out through the collection of information provided by entrepreneurs in the BoP market in the city of Cúcuta, North Santander, Colombia. These people were between 18 and 60 years of age and mainly belonged to socioeconomic strata 1 and 2. According to the National Administrative Department of Statistics (DANE), Colombia has six socioeconomic strata. Strata 1 (extremely low) and 2 (low) are those that include the population with the least resources and that are beneficiaries of subsidies for residential utilities.

The quantitative approach was employed. Given that the population size was unknown, a non-probabilistic sample was used, which allows the selection of the cases that provide the best information on the object of study, where the researcher selects the cases that are most available to him (Alaminos & Castejón, 2006). Purposive sampling was applied, allowing the testing of newly designed questionnaires without making any inference about the population, and the conclusions refer to the same sample (Alaminos & Castejón, 2006). The sample consisted of 197 people; 77.66% were women and 22.34% were men.

The technique used to collect the data was the structured survey, which allowed standardizing the interaction between the interviewer and the interviewee. The instrument is divided into two parts, the first containing ten questions on sociodemographic data and the second part with seventeen sections related to the entrepreneurial skills items. A Likert scale was employed; subjects could be scaled on their entrepreneurial capabilities, assuming an ordinal level of measurement and considering the following response alternatives: 1-Never, 2-Seldom, 3-Usually, 4-Very often, 5-Always (Alaminos & Castejón, 2006).

The primary data collection was carried out in the city of Cúcuta, capital of the Department of North Santander, Colombia. This Department has a population of 1 346 806 inhabitants, and the city of Cúcuta has 703 000 inhabitants, representing 52.1% of the total population of the Department. 56% of the population belongs to socioeconomic strata 1 and 2 (DANE, 2018).

Three experts validated the instrument (one statistician and two entrepreneurship experts). Before the application, five interviewers were trained to support the collection of primary information. The instrument was applied when the community living in commune 7 of the Simon Bolivar neighborhood in the city of Cúcuta, Colombia, was summoned for a social management activity of the Simon Bolivar University, Cúcuta branch.

The perception of an ability to detect and take advantage of opportunities to improve outcomes is defined as the dependent variable. According to Osorio, Gálvez, & Murillo (2010), the entrepreneur constantly faces various forces in the entrepreneurial process that come from the environment, such as the opportunities that can be seized in an entrepreneurial process. The individual can generate economic and social value, where the entrepreneurial process consists of the search for a central opportunity or desirable future state, by incorporating goods, raw materials, and services, among other elements (Van der Veen & Wakkee, 2002). Table 1 shows the variables considered in the study and their respective measurement scales.

Table 1  
 Characteristics of the original study variables

Dependent Variable		Measurement Scale	%	95.0% lower CL for %	95.0% higher CL for %
Do you have the ability to detect and take advantage of opportunities to improve outcomes? (Sense of Opportunity)	Categorical Ordinal	1-Never	0	0	0
		2-Seldom	5.58	3.00	9.45
		3-Usually	11.68	7.76	16.71
		4-Very Often	49.75	42.81	56.69
		5-Always	32.99	26.71	39.77
Explanatory variables					
Gender	Categorical Nominal	1-Female	77.66	71.47	83.05
		2-Male	22.34	16.95	28.53
Age	Categorical Ordinal	18 to 25 years old	65.48	58.66	71.86
		26 to 35 years old	22.84	17.40	29.07
		36 to 50 years old	11.68	7.76	16.71
Educational level	Categorical Ordinal	Elementary	3.05	1.28	6.17
		Baccalaureate	45.69	38.83	52.66

		Labor technician/ Professional	46.19	39.33	53.17
		University student	5.08	2.64	8.82
Occupational profile	Categorical Nominal	Plant and machine operators and assemblers	4.57	2.28	8.17
		Management, service, and commercial personnel	6.09	3.37	10.09
		Technicians and mid-level professionals	29.95	23.88	36.60
		Other	8.63	5.31	13.16
		None	16.24	11.60	21.87
		DK/NA	19.80	14.70	25.78
Passion	Categorical Ordinal	1-Never	14.72	10.30	20.17
		2-Seldom	7.61	4.52	11.94
		3-Usually	14.21	9.87	19.60
		4-Very Often	34.52	28.14	41.34
		5-Always	42.64	35.88	49.61
		1-Never	3.05	1.28	6.17
Vision	Categorical Ordinal	2-Seldom	10.15	6.52	14.95
		3-Usually	18.27	13.36	24.11
		4-Very Often	40.61	33.93	47.56
		5-Always	27.92	22.01	34.47
		1-Never	1.52	0.43	4.01
Learning Capacity	Categorical Ordinal	2-Seldom	5.08	2.64	8.82
		3-Usually	14.21	9.87	19.60
		4-Very Often	40.61	33.93	47.56
		5-Always	38.58	31.99	45.50
Achievement of results	Categorical Ordinal	1-Never	1.02	0.21	3.22
		2-Seldom	4.57	2.28	8.17
		3-Usually	15.74	11.17	21.30
		4-Very Often	43.15	36.37	50.12
		5-Always	35.53	29.10	42.39
Determination	Categorical Ordinal	1-Never	1.52	0.43	4.01
		2-Seldom	10.15	6.52	14.95
		3-Usually	22.34	16.95	28.53
		4-Very Often	43.65	36.86	50.63
		5-Always	22.34	16.95	28.53
Creativity and Innovation	Categorical Ordinal	1-Never	7.11	4.13	11.33
		2-Seldom	11.17	7.34	16.13
		3-Usually	19.80	14.70	25.78
		4-Very Often	45.18	38.34	52.16
		5-Always	16.75	12.04	22.43
Persistence	Categorical Ordinal	1-Never			
		2-Seldom	3.55	1.60	6.85
		3-Usually	15.23	10.73	20.74
		4-Very Often	36.55	30.06	43.43
		5-Always	44.67	37.85	51.65
Teamwork	Categorical Ordinal	1-Never	6.09	3.37	10.09
		2-Seldom	12.18	8.17	17.29
		3-Usually	19.29	14.25	25.22
		4-Very Often	43.15	36.37	50.12



Leadership	Categorical Ordinal	5-Always	19.29	14.25	25.22
		1-Never	1.02	0.21	3.22
		2-Seldom	7.61	4.52	11.94
		3-Usually	16.24	11.60	21.87
		4-Very Often	46.19	39.33	53.17
		5-Always	28.93	22.94	35.54
Self-esteem	Categorical Ordinal	1-Never	2.54	0.97	5.47
		2-Seldom	5.58	3.00	9.45
		3-Usually	13.20	9.02	18.45
		4-Very Often	34.52	28.14	41.34
		5-Always	44.16	37.36	51.14
Assumes Risks	Categorical Ordinal	1-Never	3.55	1.60	6.85
		2-Seldom	16.75	12.04	22.43
		3-Usually	18.27	13.36	24.11
		4-Very Often	40.10	33.44	47.05
		5-Always	21.32	16.04	27.43
Organization	Categorical Ordinal	1-Never	1.52	0.43	4.01
		2-Seldom	4.57	2.28	8.17
		3-Usually	20.81	15.59	26.88
		4-Very Often	50.76	43.81	57.69
		5-Always	22.34	16.95	28.53

Size n=197 Interviews

Source: created by the author

The reliability assessment of the measurement instrument was performed using the method based on Cronbach's alpha statistic, presenting a high internal consistency of Cronbach's alpha scale of .839 in 12 items (Table 2).

To describe, quantify, and determine the relationships between the predictor variables and the dependent variable and to determine the influence of these relationships on the dependent variable, the statistical technique of multivariate analysis was applied: categorical regression with optimal scaling (CatReg), which makes it possible to transform the original categorical variables by assigning numerical quantifications to the categories, obtaining an optimal linear regression for the transformed variables (Van der Kooij, 2007; De Leeuw, 2005; Haber, Strickland, & Guth, 2001).

Figure 1 shows the graph of the residuals, which indicates that most of the observed values are close to the diagonal line representing the values expected if the distribution were normal.

Table 2  
Total element statistics

	Scale mean if the element has been suppressed	Scale variance if the element has been suppressed	Total correlation of corrected elements	Cronbach's alpha if the item has been suppressed
Passion	42.59	43.437	.476	.829
Vision	42.89	41.936	.550	.823
Learning Capacity	42.59	43.151	.535	.825
Achievement of results	42.61	42.922	.589	.821
Determination	42.94	42.945	.526	.825
Creativity and Innovation	43.16	44.582	.317	.843
Persistence	42.47	43.934	.535	.826
Teamwork	43.12	42.216	.488	.829
Leadership	42.75	42.945	.559	.823
Self-esteem	42.57	42.685	.519	.826
Assumes Risks	43.10	43.112	.427	.834
Organization	42.81	43.204	.583	.822

Source: created by the author

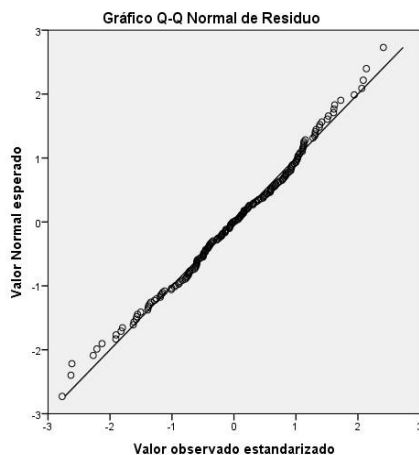


Figure 1. Q-Q chart of transformed variables  
Source: created by the author

## Results and discussion

The results of the proposed initial CatReg model are significant in the ANOVA analysis ( $F = 7.772$ ,  $p < .05$ ) (see Table 3), presenting an adjusted coefficient of determination, which means that 56.80% of the variability of the dependent variable "ability to detect and take advantage of opportunities to improve outcomes" is explained by all the variables included in the initial model.

Table 3  
Initial model results

	Sum of squares	gl	Quadratic mean	F	Sig.
Regression	128.338	38	3.377	7.772	0.000
Residue	68.662	158	0.435		
Total	197.000	196			

Dependent variable: Do you have the ability to detect and take advantage of opportunities to improve outcomes?

Predictors: Age groups, gender, socioeconomic status, educational level, occupational profile, self-esteem, organization, leadership, teamwork, risk-taking, creativity and innovation, persistence, determination, achievement of results, learning ability, passion, vision

Source: created by the author

Table 4 presents the partial contributions to the explanation of the variance of all the standardized coefficients of the transformed variables, indicating that most of the proposed variables show statistically significant contributions to the model ( $p < .05$ ), with the exception of the variables 1) age, 2) gender, 3) socioeconomic status, 4) educational level, 5) leadership, 6) teamwork, 7) risk-taking, and 8) passion ( $p > .05$ ) in the initial model.

In order to optimize the model, the variables that do not contribute significance are excluded sequentially, a process that is carried out systematically using the criterion of successive steps until obtaining, as a whole, the significant variables that explain the results of the new adjusted model, obtaining an adjusted coefficient of determination of (Table 5), which indicates that approximately 56.1% of the variance of the dependent variable "ability to detect and take advantage of opportunities for the improvement of outcomes" is explained by the regression of the significant predictor variables ( $p < .05$ ).

**Table 4**  
**Standardized regression coefficients for initial transformed variables**

	Standardized coefficients		gl	F	Sig.
	Beta	Bootstrap estimation (1000) of standard error			
Age	-.086	.057	1	2.333	.129
Gender	-.010	.034	1	0.095	.759
Socioeconomic stratum		.040			
		.041			
		2			
		0.957 .386			
Educational level	.110	.088	3	1.566	.200
Occupational profile	-.157	.061	5	6.610	.000
Self-esteem	-.200	.067	2	8.910	.000
Organization	.323	.137	3	5.542	.001
Leadership	.073	.066	3	1.206	.310
Teamwork	.080	.042	1	3.629	.059
Takes risks	-.084	.064	2	1.727	.181
Creativity and Innovation	.133	.062	2	4.567	.012
Persistence	.267	.149	2	3.200	.043
Determination	.170	.090	3	3.558	.016
Achievement of results	.208	.138	2	2.264	.107
Learning capacity	-.359	.189	2	3.627	.029
Passion	.113	.094	2	1.438	.240
Vision	.295	.162	2	3.317	.039

Dependent variable: Sense of Opportunity

Source: created by the author.

**Table 5**  
**New adjusted model results**

R multiple	R square	Adjusted R square	Apparent prediction error	Expected prediction error	Standard error
				Estimate	
.783	.613	.561	.387	.734	.187

Source: created by the author

The new analysis of variance result presents the validity of the new fitted model. The regression variance estimator (5.250) is greater than the residual variance estimator (.441) and the value of the contrast statistic and associated critical level ( $F = 11.909$ ;  $p = .000$ ), indicating that the fit is statistically significant ( $p < .05$ ).

Table 6 presents the standardized partial regression coefficients of the transformed variables associated with the adjusted model, all of which offer significant contributions to the values of the model variable ( $p < 0.05$ ), indicating the change in the quantifications that each independent variable produces in the dependent variable.

Table 6  
Standardized partial regression coefficients of the transformed variables

	Standardized coefficients		gl	F	Sig.
	Beta	Bootstrap estimation (1000) of standard error			
Occupational profile	-.187	.066	5	8.135	.000
Self-esteem	-.183	.061	2	9.060	.000
Organization	.313	.136	3	5.322	.002
Creativity and innovation	.128	.057	1	4.923	.028
Persistence	.276	.140	2	3.890	.022
Determination	.190	.088	3	4.634	.004
Achievement of results	.234	.127	3	3.363	.020
Learning capacity	-.344	.192	2	3.202	.043
Vision	.293	.166	2	3.119	.047

Source: created by the author

In the results in Table 6, changes of negative magnitude were observed of the quantifications on the dependent variable of some independent variables such as: 1) self-esteem, 2) occupational profile (it is nominal) and 3) learning ability. This could indicate a perception of some people consulted that regardless of their occupational profile, of whether or not they have self-esteem or learning capacity, they consider that they have skills to detect and take advantage of opportunities for the improvement of outcomes. In other words, they have the belief that they possess an entrepreneurial attitude in the face of opportunities, that is, they have the three components of the mindset: cognitive (belief), affective (emotions and feelings), and behavioral (intention that directs behavior toward something) (Robbins &

Judge, 2011). This attitude focuses on transforming untapped profit opportunities into marketable services or products (Minniti, 2012; Liñan, Fernández-Serrano, & Romero, 2013).

Subsequently, Table 7 shows the zero-order correlations, where the highest correlation between the transformed predictor (dependent variable) and the transformed response occurs for the independent variables: 1) persistence; 2) achievement of results; and 3) determination. Pratt's relative importance measures define the importance of the predictors cumulatively. The set of predictors 1) persistence; 2) vision; 3) organization, and 4) achievement of results, contribute 86.4 % of the model to explain the "ability to detect and take advantage of opportunities for the improvement of outcomes" (dependent variable).

Table 7  
Zero-order, partial and Importance correlations (transformed variables)

	Correlations				Tolerance	
	Zero order	Partial	Part	Importance	After transformation	Before transformation
Persistence	.549	.317	.208	.247	.565	.631
Vision	.477	.351	.234	.228	.636	.713
Organization	.385	.361	.241	.197	.592	.665
Achievement of results	.503	.250	.161	.192	.473	.624
Determination	.445	.259	.167	.138	.771	.676
Occupational profile	-.203	-.287	-.186	.062	.995	.971
Creativity and innovation	.223	.196	.124	.046	.948	.895
Self-esteem	.083	-.262	-.169	-.025	.849	.708
Learning capacity	.153	-.365	-.244	-.086	.503	.724

Source: created by the author

The findings in Table 7 show that, out of the capabilities explored in the study, only five predominate and explain the dependent variable. In other words, the people consulted consider that persistence, vision, organization, achievement of results, and determination are necessary for discovering opportunities and improving outcomes. The respondents are people from socioeconomic strata 1 and 2; 65.48% are young people between 18 and 25 years old; 45.69% are high school graduates; 46.19% are labor technicians; and 77.6% are women. These are people who identify with entrepreneurship out of necessity. A relevant finding is the presence of the quality "vision of oneself as an entrepreneur," a powerful factor inherent to the person that drives them to continue participating in entrepreneurial activity and that is also related to self-esteem (Farmer, Yao & Kung-Mcintyre, 2011).

Skills are observed that drive them, not necessarily to have their own independent business, but rather as a means of subsistence. In these cases, innovation is generally absent, among other factors that drive opportunity entrepreneurship. In other words, these are only businesses with a short life cycle, and their impact on the country's economy is irrelevant (Minniti, Bygrave, & Autio, 2006). Similarly, the results reveal that risk is not an important factor for starting and managing a business; however, from the perspective of investors and when it comes to opportunity-based ventures, this factor is important for decision-making, entering new businesses or markets, and for the development of new products, as pointed out by Santillán, Gaona, & Hernández (2015).

A noteworthy absence is the creativity and innovation variable, an indispensable quality for sustainable opportunity entrepreneurship over time, as well as other variables such as leadership, passion, management skills, and risk aversion, among others that have been identified in the study conducted by Quevedo, Izar, & Romo (2010).

The findings show that it is important to provide women with knowledge and tools for the promotion of entrepreneurship, as 77.6% of those consulted are women. The results are contrary to the findings of Mitchelmore & Rowley, (2013) study, which found that women's entrepreneurial competencies when it comes to opportunity entrepreneurship are fourfold: 1) personal and relationship competencies; 2) business ability and managerial competencies; 3) entrepreneurial competencies; and 4) human relations competencies. In general terms, training for entrepreneurship includes areas such as financial and accounting training, as well as in the legal and labor law areas; in other words, the fostering of financial (personal finance, efficient resource management) and business skills (knowledge of the sector where the entrepreneurial activity takes place) (Albornoz *et al.*, 2018).

The process of entrepreneurship also requires incentives and support to motivate this entrepreneurial spirit. For this reason, the incentives for new companies contained in Law 1429 of Colombia are highlighted. Likewise, local, regional, and national policies should encourage programs to promote an entrepreneurial culture in order to foster the entrepreneurial ecosystem that includes education and training, calls for proposals to support new business plans, strengthening programs, and the creation of entrepreneurship units that accompany the development of entrepreneurial projects, as stated by Arias & Giraldo (2011).

## Conclusions

The findings in the study reveal that the people surveyed perceive that they have the "ability to detect and take advantage of opportunities to improve outcomes" based on personal traits such as persistence, vision,

organization, achievement of results, and determination, which are not enough for businesses that truly take advantage of opportunities and are sustainable in the short, medium and long term.

The analysis provides a glimpse of those capabilities inherent to the profile of the entrepreneur with which a sample of the population of Cúcuta is equipped, which constitutes a source of information or an input to outline training strategies for the creation of businesses in the missing capabilities such as creativity and innovation, risk-taking, leadership, and business management skills. The findings show that providing women with knowledge and tools to promote entrepreneurship is essential, as 77.6% of those consulted are women.

Certainly, the process of entrepreneurship depends on people's perceptions of their capabilities and their life projects. Therefore, the training and knowledge of the entrepreneur is an important factor so that the companies they create are aligned with opportunity-based ventures that contribute positively to the country's economy. This entrepreneurial knowledge, combined with capital, technology, and human resources, allows the development of an entrepreneurial economy that generates formal employment.

The findings reveal that the capabilities of the entrepreneurs that stand out are typical of necessity entrepreneurship, given that capabilities such as creativity and innovation, leadership, risk-taking, and teamwork, which are indispensable in the profile of opportunity entrepreneurs, do not explain the dependent variable "the perception of the ability to detect and take advantage of opportunities to improve outcomes." These results are not far from the reality of the environment in Cúcuta, where the survey was applied to 197 people belonging to the BoP. The city of Cúcuta is the capital of the North Santander Department, located on the Colombian-Venezuelan border. In this region, there are economic, social, and cultural dynamics characterized by the existence of a formal and legal economy versus an informal, illegal, more lucrative, and more attractive economy based on informal trade, gasoline and merchandise smuggling, as well as the drug trafficking business (Albornoz et al., 2019).

The current unemployment figures cannot be ignored either: 15.5% are unemployed, 5 percentage points above the national unemployment rate; and 70.3% are in the informal sector, 23.4 percentage points above the informality rate of the 13 cities and metropolitan areas of Colombia (June 2019) (DANE, 2019). It should also be borne in mind that in this border area there are municipalities where the Colombian armed conflict continues, illegal armed groups are operating and controlling the territory, and they are also linked to unlawful economic activities. As a result, the internal displacement of Colombians continues, moving from municipalities in conflict to cities such as Cúcuta (Morffe, Albornoz-Arias, & Mazuera-Arias, 2019). Therefore, this context brings together the population displaced by Colombia's internal strife, Venezuelan migrants in transit, the border population that moves back and forth, regular and irregular migrants, Colombian returnees from Venezuela, and the local population.



Given the unemployment and informality indicators mentioned above, it is necessary for the local and regional government to consider in their plans the overcoming of unemployment and informality through policies or initiatives to promote entrepreneurship in the city of Cúcuta and its metropolitan area. To this end, a diagnosis must be made to determine the volume of workers willing to work, considering the local population, as well as Colombian returnees from Venezuela, displaced persons, and migrants (labor supply) relative to the number of companies or employers willing to hire them (labor demand).

Subsequently, the conditions and mechanisms for formal labor inclusion should be fostered and initiatives to create employment and formal self-employment should be encouraged through the promotion of entrepreneurship, which in this border context implies: 1) an awareness campaign where the State, university and media promote awareness of the formal economy and tax culture, and that entrepreneurship can be part of a work-life project (Kirby, 2004), and 2) training for entrepreneurship, which takes into account the perception of the entrepreneurial potential of feeling able to face challenges (self-efficacy), perspectives on what is going to be undertaken (expectations), and goals set (Bandura, 1991, 1989, 1986). This type of education can take three forms: 1) formal and institutionalized and planned by public or private institutions; 2) non-formal conducted outside the formal system, encompassing learning aimed at adults through courses, workshops, congresses, conferences, job training, or distance education; 3) informal and non-institutionalized through non-academic educational services and family education (Formichella, 2008).

Finally, a research proposal that advances the study and analysis of behavior and attitudes concerning entrepreneurial activity in the BoP population has been presented. That is, it should be studied using the Theory of Planned Behavior, which considers the strength of intention as an immediate antecedent of behavior. This mechanism can help discover the motivational factors that influence behavior and the amount of effort to be exerted within entrepreneurial behavior. In this way, it is possible to obtain outcomes allowing governmental and non-governmental entities to make interventions to strengthen planned and sustainable enterprises that generate formal employment.

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