

Clío América/ Vol. 13, No. 26 - 2019 / X – X

DOI: <http://dx.doi.org/10.21676/23897848.3429>

## SUCCESS FACTORS OF MSMES ENTREPRENEURSHIPS IN COLOMBIA

## FACTORES DE ÉXITO EN EMPRENDIMIENTOS DE MIPYMES EN COLOMBIA

Hugo Fernando Castro-Silva<sup>1</sup>, Fernando Rodríguez-Fonseca<sup>2</sup> y Yamith Alfonso Martínez-Chaparro<sup>3</sup><sup>1</sup>Universidad Pedagógica y Tecnológica de Colombia. *Email:* [hugofernando.castro@uptc.edu.co](mailto:hugofernando.castro@uptc.edu.co)<sup>2</sup>Universidad Pedagógica y Tecnológica de Colombia. *Email:* [fernando.rodriguez@uptc.edu.co](mailto:fernando.rodriguez@uptc.edu.co)<sup>3</sup>Universidad Pedagógica y Tecnológica de Colombia. *Email:* [yamith.martinez@uptc.edu.co](mailto:yamith.martinez@uptc.edu.co)**Para citar este artículo:** Castro-Silva. H.F., Rodríguez F. F., Martínez Ch. Y. (2019). Success factors of Msmes entrepreneurships in Colombia. *Clío América*, 13(26), XX. doi: <http://dx.doi.org/10.21676/23897848.3429>

Recibido: 25 junio de 2019

Aceptado: 01 de octubre de 2019

Publicado en línea: noviembre 28 de 2019

## ABSTRACT

.....  
**Keywords:**  
 Entrepreneurship; general business administration; social entrepreneurship; business and economics.

The importance of the micro, small and medium enterprises (MSMEs) sector in the economic and social development of a country is increasingly evident. Despite the promotion of MSMEs entrepreneurships, the startup failure rates during the first years of operation are high. This empirical and descriptive study aims to develop a clearer understanding of the influencing factors in the success of startups including those favored with seed capital of the national government, according to the perception of the owners-managers of these companies. The methodological design of the research contemplates a systematic review of the literature and two stages that incorporate quantitative and qualitative approaches. The results indicate that the relationship between finances and business networks, strategic planning, innovation of products and services, supply chain management and financing decisions significantly influence the enterprise success beyond the first two years of operation. The main contribution of this work is that it is one of the few that focuses on the entrepreneur's direct perceptions and not on aggregate economic data.

## RESUMEN

.....  
**Palabras clave:**  
 emprendimiento; administración de negocios, emprendimiento social, economía y negocios.

La importancia del sector de la micro, pequeña y mediana empresa (MIPYME) en el desarrollo económico y social de un país, es cada vez más evidente. A pesar del fomento a los emprendimientos de MIPYMEs, las tasas de fracaso durante los primeros años de funcionamiento son elevadas. Este estudio empírico y de corte descriptivo tiene como objetivo desarrollar una comprensión más clara de los factores que influyen en el éxito emprendimientos incluyendo los favorecidos con capital semilla del gobierno nacional, según la percepción de los propietarios-gerentes de estas empresas. El diseño metodológico de la investigación, contempla una revisión sistemática de la literatura y dos etapas que incorporan enfoques cuantitativos y cualitativos. Los resultados indican que la relación entre finanzas y redes de negocios, la planificación estratégica, la innovación de productos y servicios, la gestión de la cadena de suministros y las decisiones de financiación influyen significativamente en el éxito del emprendimiento más allá de los dos primeros años de funcionamiento. El aporte principal de este trabajo es que es uno de los pocos que se orientan a las percepciones directas del emprendedor y no en datos económicos agregado.

**JEL:** L26; L31; M10; M20.



## INTRODUCTION

The positive impact of the creation of new businesses in the economic and social development of nations, especially in the employment generation, is well established and the importance of entrepreneurship is becoming increasingly important in the government agendas of developing countries (Audretsch & Keilbach, 2004; Schaper, 2006; Global Entrepreneurship Monitor - GEM, 2016). In the case of Colombia, the rate of entrepreneurial activity during the last ten years has been located at levels above 20 %, placing it in the first eight places worldwide and with respect to Latin America in places below only Chile and Ecuador (GEM, 2016), which gives an idea of the importance of creating new companies for the country's economy.

This study focuses on identifying the motivations for starting a new business, the entrepreneurship critical success factors and the main problems faced by entrepreneurs in the Colombian context. However, this document includes partial results of this research, focused on a particular geographical context such as the Sugamuxi province, located in one of the most important industrial corridors in Colombia and where entrepreneurship statistics collected by the Chamber of Commerce indicate the creation of 9,933 new companies for the year 2017 and the cancellation of 6,675 companies (Gobernación de Boyacá - Colombia, 2018). This worrying business failure index supports the importance of studies that identify both the problem of the new companies' survival and the key success factors of these startups.

The GEM model determines that strong entrepreneurship systems have seven components (Regele & Neck, 2012): 1) access to business financing, 2) presence of entrepreneurship programs administered by the government, 3) business education, 4) favorable policies for transfer R and D, 5) legal infrastructure 6) commercial infrastructure, and 7) ease of entry rules to start a business. An analysis of these components for the United States concludes that emphasis should be placed on the Education subsystem, developing a program network that is concertedly coupled in order to maximize entrepreneurial attitudes and activity, not only at the higher education level but also in the elementary and high school (Regele & Neck, 2012).

By investigating the individual factors that favor entrepreneurship in emerging economies, Lim, Oh & De Clercq (2016), they managed to identify that the family income of the entrepreneur directly affects their entrepreneurial spirit. In contrast, these same authors

ensure that the institutional factors of emerging economies have no influence on the propensity for entrepreneurship. The educational level of entrepreneurs is significant depending on the institutional factors of each country (Lim *et al.*, 2016). In the case of Turkey, through empirical research, factors that favor entrepreneurship have been found such as: 1) being a man; 2) be young; 3) high family income and; 4) meet an entrepreneur for the past two years. While the factors identified in this same study and that limit entrepreneurship are: 1) high academic level and 2) fear of failure (Tunali & Sener, 2019).

Likewise, the impact of the personal characteristics of the entrepreneur on the success of new companies has also been explored, such is the case of García, Martínez, & Fernández, (2010) who, based on the analysis of statistically significant differences in variables related to personality traits, among the individuals who decide to undertake a business creation activity and those who decide not to do so, elaborate a general profile of the Spanish entrepreneur, which includes: 1) not being afraid of failure, 2) knowing how to identify good business opportunities in the environment, 3) considering owning the knowledge and skills necessary to create and running a new business, and 4) recognizing having personally known some entrepreneur in recent years.

## METHODOLOGY

The objectives of this study are to identify the key success factors associated with Colombian enterprises specifically located in the province of Sugamuxi in Colombia and to establish whether there are significant differences in these enterprises in relation to those identified as enterprises favored with seed capital from the government of Colombia. This research seeks to test hypotheses related to the environmental and personality factors of entrepreneurs, which determine the success of new small businesses in Colombia. To test the hypotheses, a methodology proposed by Hernández, Fernández & Baptista, (2010) for non-experimental quantitative research was implemented, which includes the design of data collection instruments, data collection and statistical analysis. Likewise, the variables derived from the specific objectives proposed in search of an approach to the facts linked and related to the entrepreneurship context in Colombia were analyzed for the present study, locating the methodological design within the causal category considering that it is intended to determine the influence of certain independent variables on another dependent, in this case the startup success (Ouellet & Rodriguez, 2001).

Based on a database provided by the Chamber of

Commerce of the province of Sugamuxi of MSMEs in force in 2018 and created during the period between 2012 and 2016, a simple random sampling is applied to obtain a resulting sample size of 67 companies, based on the recommendations of (Spiegel & Stephens, 2018) for a scenario of maximum variability, that is with  $p = q = 0.5$ , a level of significance of 5 %, and a maximum estimation error of 0.10 (e). As for the businesses favored with seed capital of government funds, a database of 34 companies in force in 2018 is taken, provided by the entity in charge of making this allocation.

With the purpose of favoring the reliability of the results, to the organizations selected to form the sample, this research uses the same methodology used by Benzing, Chu, & Kara, (2009), including the adaptation of the questionnaire to the Colombian context developed by Chu & Katsioloudes (2002) and used in other research

(Benzing, Chu, & Bove, 2005; Chu, Benzing & McGee, 2007) related to success factors where it is argued that the motivations and problems of entrepreneurs are similar in developing countries and in developed countries.

The questionnaire comprises four sections: the first contains entrepreneur's sociodemographic data; the second, consisting of 11 questions, is devoted to identifying the motivations for entrepreneurship, the third section composed of 17 questions evaluates the key success factors, and the fourth section identifies the main problems faced by entrepreneurs. Three variables were considered for the design of the information collection instrument: 1) the entrepreneur's motivation; 2) success perceived by the entrepreneur and 3) problems faced by the entrepreneur. These three variables were assessed by the entrepreneur according to a measurement scale of 1 to 5 points, similar to a Likert scale, as presented in table 1.

**Table 1.** Rating scale of the variables.

Assessment	Variable		
	Motivation to create a company.	Key success factors of the enterprise.	Problems faced by the entrepreneur.
1	It's not important	It's not important	It is not a problem
2	It is unimportant	It is unimportant	It is a minor problem
3	Is something important	Is something important	It is a common problem
4	It's very important	It's very important	it is a serious problem
5	It's essential	It's essential	It is a very serious problem

**Source:** Own elaboration based on Benzing *et al.* (2009).

The reliability of the information collection instrument was considered satisfactory, taking into account that the Cronbach's coefficient alpha and the Guttman split-half coefficient were high (between 0.751 and 0.895) for items of the motivation, perceived success variables and faced problems sections. Considering a non-response rate, 80 surveys were sent to MSME managers and to the 32 managers of companies favored with seed capital, obtaining responses from 64 MSMEs and 12 from the second group of companies.

For the data analysis, the R® software was used, considering the ordinal nature of the variables and that are not distributed according to a normal distribution, the Wilcoxon rank sum test was used to determine significant differences among the variable scores. After performing a descriptive analysis of each variable in each of the questionnaire sections, a principal component analysis was applied in order to determine the existence of significant groups within the motivation, success criteria and the faced problems sections. In the next section of this document, the

results of these analyses are presented.

## RESULTS

In this section, the results of the statistical analyses performed on the data set are analyzed; first, a demographic description of the sample is presented and then the descriptive and main component analyses are emphasized for the variables that make up the sections motivation, key success criteria and problems faced by the entrepreneurial managers of the MSMEs participating in the study.

### Sample demographic analysis

All the managers of the sample run MSMEs with more than two years of operation in the province of Sugamuxi, and with demographic variables summarized as follows: 1) 84.21 % of the companies have not been beneficiaries of seed capital from funds of the Colombian State; 2) 55.26 % of the participants correspond to the male gender; 3) Regarding educational level, 2.7 % correspond to

elementary studies, 18.9 % have obtained the high school or technologist's degree; 47.3 % have obtained a university degree, 25 % have done postgraduate studies and the remaining 5.4 % did not answer the question; 4) the age distribution of entrepreneurial managers is as follows, 6.8 % are under 25 years old, 28.4 % are between the ages of 25 and 34 years old, 37.4 % are between 35 and 44 years old, 14.9 % are between 45 and 55 years old and the remaining 12.2 % are over 55 years old and; 5) 33.8 % corresponds to transformation companies, while the remaining 66.2 % are service companies.

### Entrepreneurs' motivations

Entrepreneurial managers were asked to evaluate the motivations that led them to set up a company. In the instrument for gathering information, 11 different causes were considered, which were evaluated by the entrepreneurs on a 1-5 Likert scale. The evaluation results are presented in Table 2, where it can be seen that the two

better evaluated causes were "increase income" and "ensure long-term job stability". The results show that at 95 % confidence, it can be affirmed that the average scores of these two motivations are significantly higher than the average scores of the other causes of entrepreneurship.

In the study of entrepreneurial activity in Colombia conducted by the GEM, two categories of motivations for the creation of companies are identified, by chance and by necessity. In the GEM (2016) report, it is concluded that entrepreneurship by necessity is significantly higher in Colombia than in other Latin American countries, likewise, entrepreneurship motivated by necessity is higher compared to economies driven by factors, efficiency and innovation (GEM, 2016). In this order of ideas, the results of this study, product of the entrepreneurs' perception, are coherent with the results of the 2016 GEM report for Colombia. These results can be explained by considering the high rates of unemployment and underemployment in Colombia and the job stability uncertainty in this country.

**Table 2.** Descriptors of the motivation variables to undertake.

Motivation to undertake	Mean	Standard deviation
1. Be my own boss	3.71	1.04
2. Be able to use my previous experience and training	3.21	1.52
3. Prove that I can do it	2.98	1.33
4. Increase my income	4.61	0.96
5. Provide jobs for family members	3.94	1.15
6. For my own satisfaction and growth	3.43	1.37
7. Ensure long-term job stability	4.16	1.11
8. To build a business to transcend	3.93	1.44
9. Have flexible scheduling and maintain my personal freedom	3.80	1.12
10. Have more time and be closer to the family	3.21	1.19
11. For fun	2.02	1.31

**Source:** Own elaboration based on Benzing *et al.* (2009).

When performing the principal component statistical procedure, the result related to the eigenvalues associated to the number of factors to explain the total variability of the data for the variable motivation to create companies, we have that for a factor the eigenvalue is 4.64 and explains a total of 42.25 % of the data variability, while for a total of

4 factors, the eigenvalue is 0.782 providing an explanation of 78.06 % of the total data, so we decided to group the motivation variables in 3 components. To locate each of the motivation variables within the resulting components, we considered the communalities and the square cosines that are presented in Table 3.

**Table 3.** Results of the principal components for the motivation variables to create a company.

<b>Motivation to undertake</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>
1. Be my own boss	0.205	0.001	0.951
2. Be able to use my previous experience and training	0.147	0.002	0.755
3. Prove that I can do it	0.129	0.009	0.886
4. Increase my income	0.016	0.689	0.312
5. Provide jobs for family members	0.906	0.102	0.001
6. For my own satisfaction and growth	0.736	0.010	0.601
7. Ensure long-term job stability	0.486	0.013	0.034
8. To build a business to transcend	0.322	0.736	0.067
9. Have flexible scheduling and maintain my personal freedom	0.104	0.222	0.765
10. Have more time and be closer to the family	0.636	0.469	0.266
11. For fun	0.160	0.212	0.025

**Source:** Own elaboration based on Benzing *et al.* (2009).

As evidenced in Table 3, in component 1 (C1) called "income" motivation, the motivations to create a company to increase income and to build a business that transcends time are grouped. Component 2 (C2), called "security", groups motivations aimed at achieving work autonomy such as to provide jobs for the family, to ensure long-term job stability, and having more time for the family. In the last identified component (C3), the other variables related to "labor independence" are grouped, such as having a flexible schedule, to be my own boss, to use the acquired experience and training, and proving to be capable of undertaking.

### Critical success factors of the enterprise

In this section, we also considered the 17 critical success factors of the enterprise established by Chu & Katsioloudes (2002). Table 4 summarizes the descriptors associated with each of these factors according to the perception of the participating entrepreneurial managers in the study. These

factors are associated to environmental factors of the new company as well as entrepreneur's personal characteristics. As evidenced in Table 4, the critical success factors associated with the organization's environment with a higher average rating, were relying on a good product or service at a competitive price, financial and business network management, supply chain management and perform good strategic planning. Regarding the factors associated with personal characteristics, the highest rating is related to the entrepreneur's reputation and honesty. At 95 % confidence, it can be affirmed that the average scores of these five factors are significantly higher than the ratings of the other considered critical success factors. It is also worth highlighting the low average rating of factors associated with government support and access to capital, which is consistent with the results of the 2016 GEM, which concludes that financial support for entrepreneurship is a major weakness at the national level (GEM, 2016).

**Table 4.** Descriptors of key success factors of the enterprise.

<b>Key success factor of the enterprise</b>	<b>Mean</b>	<b>Standard deviation</b>
1. Good management and leadership skills	3.37	0.77
2. Good financial and business network management	4.28	1.33
3. Satisfactory government support	2.97	0.82
4. Appropriate training	4.00	1.18
5. Access to Capital	3.02	0.75
6. Previous business experience	3.78	0.83
7. Support from family and friends	3.15	0.78
8. Marketing / Sales promotion	3.46	1.21
9. Good product / service at a competitive price	4.32	1.15



10. Good supply chain management	4.15	0.75
11. Hard work	3.76	1.12
12. Position in society	3.35	0.72
13. Maintenance of accurate records	3.38	0.86
14. Ability to manage personnel	3.81	0.88
15. Strategic planning	4.23	1.43
16. Political involvement	3.60	0.85
17. Reputation for honesty	4.26	0.92

**Source:** Own elaboration based on Benzing *et al.* (2009).

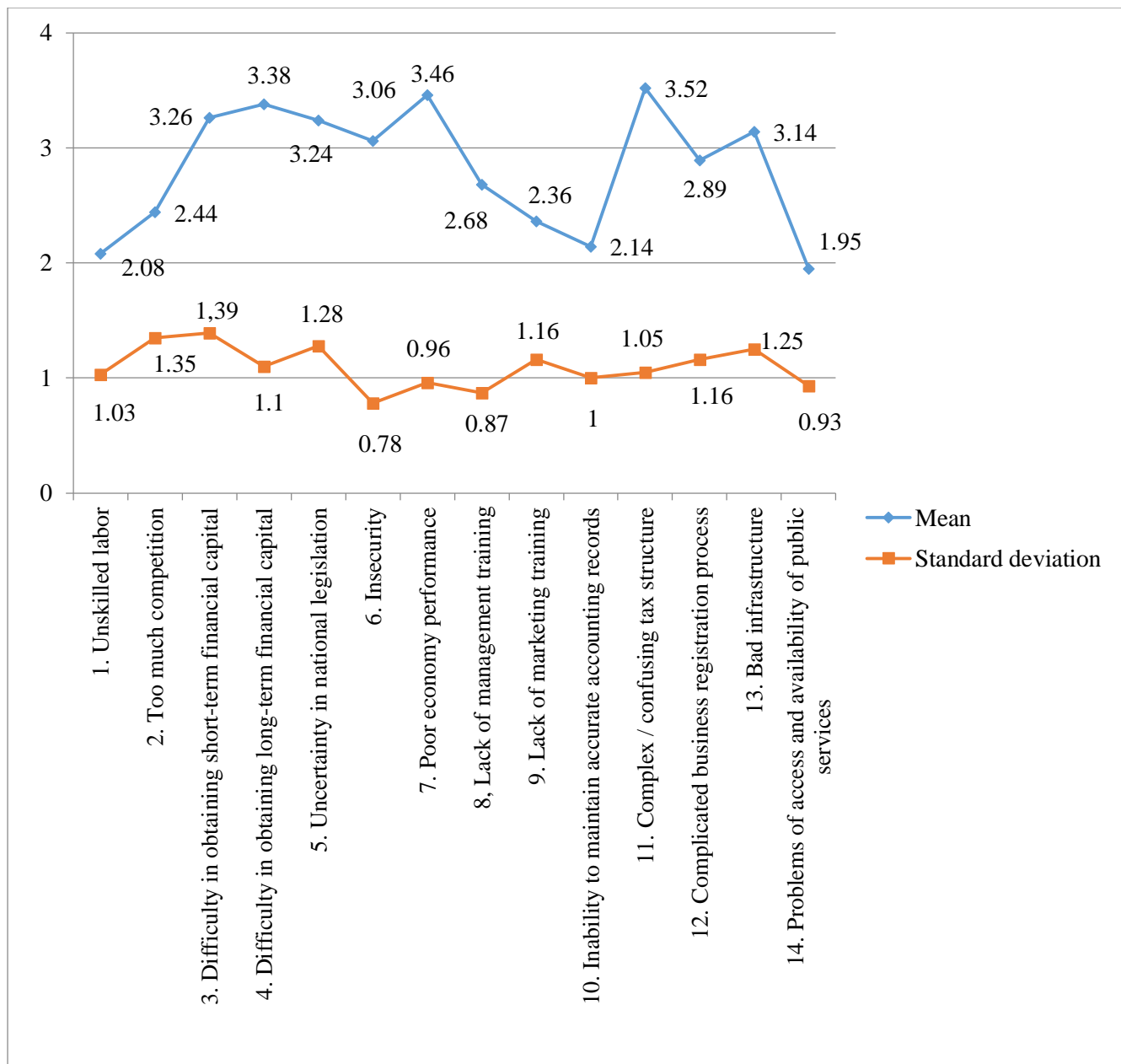
The principal component analysis shows that selecting an association of 15 of the 17 critical success factors in four components, it could explain 78.7 % of the total variability of these variables. By analyzing the square cosines of each of the variables and communalities, it is possible to assign each of them to the resulting component. In the first component, called "organization management", are located key success factors such as good financial management, strategic planning and marketing of the new company. In component 2, called "entrepreneur's personal characteristics", are placed the reputation variables of honesty, hard work, ability to manage personnel and good management and leadership skills. In component 3, called "social relations", are located the variables such as a position in society and political involvement. Finally, in component 4, called "support for the entrepreneur", critical success criteria such as government support, support from relatives and friends and ease of access to capital are located.

### Problems faced by entrepreneurs

In this last section of the questionnaire, the perceptions of the entrepreneurial managers are collected with respect to the main problems they have faced in their activity of creating new companies. The Figure 1, summarizes the statistical descriptors associated with the assessment

results by the entrepreneurial managers in relation to the importance of the problems they have had to face in their activity of creation and management of new companies. The results in Figure 1 evidence that the most important problems are those related to the economy uncertainty and complexity, the national legislation and the tax statute, in addition to the problems related to obtaining funding both short and long term. These results are consistent with the findings of the GEM study for Colombia in the period 2015-2016 (GEM, 2016). However, the Wilcoxon rank sum test confirms significant differences only for the variables of poor economy performance and complex and confusing tax structure.

In each of the three sections, we compared the average scores of each of the variables associated with the motivations of starting a startup, critical success factors and problems faced by entrepreneurs in the population of enterprises favored with seed capital from Colombian government funds and the new companies that did not have this benefit. The performed analysis of variance tests allow us to conclude that there is no significant difference in the average scores in the two considered populations. Therefore, it can be concluded that for the case of the province of Sugamuxi, the entrepreneurial managers' perceptions are not affected by access to seed capital from government funds.



**Figure 1.** Descriptors of problems faced by entrepreneurs.

**Source:** Own elaboration based on Benzing *et al.* (2009)

## DISCUSSION

Although the GEM conducts periodic surveys in order to study entrepreneurship in several countries, the scientific literature remains interested in determining the factors that influence entrepreneurship. For example, Mine, Hienkel & Horwitz, (2019) when comparing entrepreneurship factors in Mediterranean countries with African countries, found as differentiators: 1) the entrepreneur's skills and knowledge; 2) the financial and market opportunities that the environment provides to the entrepreneur; 3) the management of failure by the entrepreneur and 4) gender,

because in the African countries studied, women had no participation.

In this same sense, the studies of Castaño, Méndez & Galindo, (2015), when comparing European countries with those of Latin America, concluded that there are significant differences in variables that affect entrepreneurship such as culture, social factors and the economic environment. Also in Japan, it has been concluded that although small cities promote entrepreneurship more, large cities tend to benefit more from entrepreneurship (Nakamura, 2019). On the other hand, the research by Aparicio Urbano & Audretsch (2016), in 43 countries over 9 years, allowed us to identify

that the opportunity venture is favored to a greater extent by informal institutions than by formal ones. This same research concludes that entrepreneurship positively impacts economic growth in Latin America, however, the countries of this region must strengthen their fight against corruption, confidence in entrepreneurs' own skills and opportunities to access private credit.

In the current times characterized by the preoccupation for the preservation of the environment, the study of sustainable entrepreneurship has been having a growing interest on the part of academics. In this field, Koe, Omar & Rizal (2015) identified that the pressure for compliance with environmental laws does not influence the propensity of sustainable entrepreneurship in SMEs. However, the same authors identified that personal factors of entrepreneurs such as the attitude and perception towards caring for the environment have a significant influence on the propensity of sustainable entrepreneurship in SMEs.

The results of this empirical research based on the 2016 GEM study for Colombia include the following most relevant aspects: The critical success factors associated with the organization's environment are 1) having a good product or service; 2) have a competitive price; 3) have a good financial management and business networks; 4) manage the supply chain and; 5) Perform good strategic planning. The success factors associated with the personality of the entrepreneur are: 1) the honesty of the entrepreneur and; 2) the good reputation of the entrepreneur. Regarding the institutional factors that do not favor entrepreneurship in Colombia, there are: 1) low financial support for entrepreneurial activity and; 2) the low support of state entities.

Regarding the most frequent inconveniences that MSMEs entrepreneurs in Colombia have to deal with, this research shows that they are mostly environmental. Most of the MSMEs entrepreneurs identified that the high volatility of the Colombian economy generates greater possibilities of failure in their businesses, mainly during the first five years. Likewise, the entrepreneurs who participated in this research identified that instability in the legislation of the country due to the frequent change in institutional regulations, generate high expenses. Finally, MSMEs entrepreneurs in Colombia highlight as a major problem for the success of their organizations the lack of access to cheap credit both in the long and short term, which is the result of low government support for these small businesses. These results are consistent with the findings of the GEM study for Colombia (GEM, 2016). In general, the results of this research are consistent in part with those obtained in other studies aimed at populations from

different countries (Aparicio *et al.*, 2016; Mine *et al.*, 2019).

## CONCLUSION

The results of this study allow us to conclude that in a manner consistent with the results of the GEM study for Colombia in relation to the motivations for creating companies by taking advantage of opportunity and necessity, the entrepreneurial managers' perceptions indicate that their main motivations are the to improve their income and to ensure long-term job stability, important factors in developing countries characterized by low employment rates and high job uncertainty.

According to the perceptions of the entrepreneurial managers participating in the study, the most important environmental factors to favor the success of their activities have to do with having a good product or service at a competitive price, financial and business network management, supply chain management and good strategic planning; whereas the entrepreneur's personal characteristic with greater incidence in the success in the startup creation and survival was associated with honesty and good reputation. On the other hand, the most relevant problems that affect the entrepreneurship activity and the startup survival in Colombia were associated with the poor economy performance, the uncertainty in the legislation and tax matters, and the difficulties in accessing short and long-term funding.

It is important to clarify that at the time of approaching generalizations of the results of this study we should be prudent, considering limitations such as the sample composition that for now includes only a small geographic space of the Colombian national territory so it is necessary to expand the sample size and include different entrepreneur conglomerates and that the transversal nature of the research implies that the entrepreneurs' perceptions can change over time. As future research lines, we have identified the study of the impact on the startup success beyond the first two years of operation, of factors such as geographical location within Colombia, the entrepreneur's gender, the entrepreneur's age, entrepreneur's educational level and the startup economic sector, so these analyses could be compared with the GEM studies.

### Conflict of Interest Statement

The authors of this paper state that we are independent with respect to financing and support institutions. In addition, the authors state that during the execution of the work or the writing of the manuscript, there have been no interests or values different from those usually carried out by an investigation or an academic work.



## BIBLIOGRAPHIC REFERENCES

- Aparicio, S., Urbano, D. & Audretsch, D. (2016). Institutional factors, opportunity entrepreneurship and economic growth: Panel data evidence. *Technological Forecasting and Social Change*, 102, 45-61. doi: <https://doi.org/10.1016/j.techfore.2015.04.006>
- Audretsch, D. & Keilbach, M. (2004). Entrepreneurship Capital and Economic Performance. *Regional Studies*, 38(8), 949-959. doi: <https://doi.org/10.1080/0034340042000280956>
- Benzing, C., Chu, H. & Kara, O. (2009). Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems. *Journal of Small Business Management*, 47(1), 58-91. doi: <https://doi.org/10.1111/j.1540-627X.2008.00262.x>
- Benzing, C., Chu, H. & Bove, R. (2005). Hungarian and Romanian Entrepreneurs in Romania - Motivation, Problems, and Differences. *Journal of Global Business*, 16, 77-87. Recuperado de [https://www.researchgate.net/publication/308348570\\_The\\_motivation\\_problems\\_and\\_perceived\\_success\\_of\\_entrepreneurs\\_in\\_Romania](https://www.researchgate.net/publication/308348570_The_motivation_problems_and_perceived_success_of_entrepreneurs_in_Romania)
- Castaño, María-Soledad., Méndez, María-Teresa & Galindo, Miguel-Ángel. (2015). The effect of social, cultural, and economic factors on entrepreneurship. *Journal of Business Research*, 68(7), 1496-1500. doi: <https://doi.org/10.1016/j.jbusres.2015.01.040>
- Chu, H. & Katsioloudes, M. (2002). Cultural Context in the Vietnamese-American Entrepreneurial Experience. *Journal of Transnational Management Development*, 7(2), 37-46. doi: [https://doi.org/10.1300/J130v07n02\\_04](https://doi.org/10.1300/J130v07n02_04)
- Chu, H., Benzing, C. & McGee, C. (2007). Ghanaian and Kenyan Entrepreneurs: Comparative Analysis of Their Motivations, Success Characteristics and Problems. *Journal of Developmental Entrepreneurship*, 12(3), 295-322. doi: <https://doi.org/10.1142/S1084946707000691>
- Global Entrepreneurship Monitor - GEM. (2016). *Reporte GEM Colombia 2015 - 2016*. Bogotá: Global Entrepreneurship Monitor (GEM). Recuperado de <http://gemcolombia.org/wp-content/uploads/GEM-Colombia-20165.compressed3.pdf>
- Gobernación de Boyacá - Colombia. (2018). *Boyacá en cifras 2016 - 2017*. Tunja: Camara de comercio de Tunja. Recuperado de <https://cctunja.org.co/boyaca-en-cifras/>
- Hernández, S., Fernández, C. & Baptista, P. (2010). *Metodología de la Investigación*. 5ª Edición. Ciudad de México, México: McGraw-Hill. <http://www.academia.edu/download/38911499/Sampieri.pdf>
- Koe, W.L., Omar, R. & Rizal, S.J. (2015). Factors Influencing Propensity to Sustainable Entrepreneurship of SMEs in Malaysia. *Procedia - Social and Behavioral Sciences*. 172, 570-577. doi: <https://doi.org/10.1016/j.sbspro.2015.01.404>
- Lim, D.S., Oh, Ch. & De Clercq, D. (2016). Engagement in entrepreneurship in emerging economies: Interactive effects of individual-level factors and institutional conditions. *International Business Review*, 2(4), 933-945. doi: <https://doi.org/10.1016/j.ibusrev.2015.12.001>

- Mine, C. E., Hienkel, T. & Horwitz, W. (2019). Comparative entrepreneurship factors between North Mediterranean and North African Countries: A regression tree analysis. *The Quarterly Review of Economics and Finance*, 73, 88-94. doi: <https://doi.org/10.1016/j.qref.2018.07.009>
- Nakamura, H. (2019). Relationship among land price, entrepreneurship, the environment, economics, and social factors in the value assessment of Japanese cities. *Journal of Cleaner Production*, 217, 144-152. doi: <https://doi.org/10.1016/j.jclepro.2019.01.201>
- Ouellet, A. & Rodriguez, H. (2001). *Procesos de investigación: Introducción a la metodología de la investigación y las competencias pedagógicas*. 1ª edición en español. Bogotá, Colombia: Escuela de Administración de Negocios –EAN-. Centro de investigaciones. <https://www.worldcat.org/title/procesos-de-investigacion-introduccion-a-la-metodologia-de-la-investigacion-y-las-competencias-pedagogicas/oclc/991748539>
- García, R. C., Martínez, C. A. & Fernández, G. R. (2010). Características del emprendedor influyentes en el proceso de creación empresarial y en el éxito esperado. *Revista Europea De Dirección y Economía De La Empresa*, 19(2), 31-47. Recuperado de <https://dialnet.unirioja.es/descarga/articulo/3185118.pdf>
- Regele, M. & Neck, H. (2012). The entrepreneurship education subecosystem in the United States: Opportunities to increase entrepreneurial activity. *Journal of Business and Entrepreneurship*, 23(2), 25-47. Recuperado de <https://www.econbiz.de/Record/the-entrepreneurship-education-sub-ecosystem-in-the-united-states-opportunities-to-increase-entrepreneurial-activity-regele-matthew/10009548102>
- Schaper, M. T. (2006). Distribution Patterns of Small Firms in Developed Economies: Is There an Emergent Global Pattern? *International Journal of Entrepreneurship and Small Business*, 3(2), 183-189. Recuperado de <https://econpapers.repec.org/RePEc:ids:ijesbu:v:3:y:2006:i:2:p:183-189>
- Spiegel, M. & Stephens, L. (2018). *Schaum's Outline of Statistics*. Sixth Edition. New York: Mc Graw-Hill Education. Recuperado de <https://www.amazon.com/Schaums-Outline-Statistics-Sixth-Outlines/dp/1260011461>
- Tunali, C.B. & Sener, S. (2019). The Determinants of Entrepreneurship in Turkey. *Procedia Computer Science*, 158, 2019, 648-652. doi: <https://doi.org/10.1016/j.procs.2019.09.099>