

Entrepreneur behavior as individual and organizational competence in a territory of Matanzas province

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Abstract

Objective: To evaluate the entrepreneur behavior of people and organizations in the Perico municipality, of Matanzas province, Cuba.

Materials and Methods: Qualitative methods of descriptive type were used, mainly. Inquiries were made, through surveys with focal groups, about the initiatives implemented by the local administration to improve their functions and the provision of public services. Questions were also asked, about the entrepreneur vocation of people and local institutions, and the quantity and type of entrepreneurial initiatives developed.

Results: The promotion of local productive and innovative arrangements and systems, such as the Management Multi-Actor Platform and the biodigester construction brigade, was observed at institutional level. The entrepreneurial sector recorded a limited capacity of generation of economic-productive activities. It was observed, particularly, that in the management process of the enterprises no incentives are offered that promote entrepreneurial activities inside them. When studying the entrepreneurial capacity index, the People's Council 2 reported 15 activities for every 1 000 inhabitants between 17 and 65 years old, although they were, mostly, little knowledge-intensive. When exploring the personal abilities and motivations for the achievement of an entrepreneurship, tenacity and solidarity were indicated as acceptable and adequate elements in all the People's Councils.

Conclusions: The entrepreneur vocation in the municipality is limited. The initiatives implemented from the local administration show the existing potential at this level. Tenacity and solidarity constitute the determinant attributes of the entrepreneur behavior of people.

Keywords: economic competence, community development, management

Introduction

Over the course of history, the positive changes that have influenced the most the development of mankind have not emerged casually. They are the result of considerable efforts by human beings who search permanently for the improvement of their living conditions and of their surroundings. Lanzas-Duque *et al.* (2009) defines the pioneers of these transformations as entrepreneurs, word that comes from the French.

The theories linked to entrepreneurship originated in the 17th century, when the concepts that with time would be further defined and enriched were introduced. Richard Cantillon (1680-1734), for example, defines the entrepreneur individual as the one who assumes risks under uncertainty conditions. Nevertheless, with the flourishing of the American economy, the entrepreneur spirit was treated in multiple forms, by authors like Francis Walter (1840-1897) and Frank Knight (1885-1897),

who acknowledged decision-making and leadership as vital for this particular (Terán-Yépez and Guerrero-Mora, 2020).

Regarding the term entrepreneur (a), it is mandatory reference to cite the concept by Schumpeter (1928), for whom the entrepreneur is the person with the idea of the business, the innovator, the one that sets the ideas in movement, making them powerful and potentially profitable. He/she is, in turn, intuitive, with will of transformation, breaks routines, is capable of maintaining uncertainty situations, attracts the economic activity and obtains important benefits through a competition that is not based on prices but on innovation (Quevedo, 2019).

Kirzner (1986), another classical author associated to entrepreneurship, identifies it as the entrepreneurial element that makes human action to be something active, creative and humane. He/she is the person capable of turning an opportunity into a business, in a certain environment, moment

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and place. It is seen as a dynamizer of the national and global economy, as social development alternative and as source of technological innovation (Díaz-Fernández, 2020).

In order to generate and maintain vigorous entrepreneurship processes public policies are required, which commit, sustainably, the efforts of public and private sectors in an articulated way, regarding the promotion and execution of a set of actions that, promoted from the territory, increase the creation of value, improve incomes, increase the employment opportunities and quality of life of the inhabitants of a locality (Guarnizo-Vargas *et al.*, 2019).

The entrepreneurship of territorial character raises broad interest in academic literature, because it represents an important part of the local economic activity. The creation of enterprises is the result of a process of relations and interdependence among the different local agents in the so-called innovation systems (Gómez-González *et al.*, 2018). In this sense, and to promote development at this scale, the existence of trained human capital, the construction of social networks, the presence of institutions that promote the creation of new enterprises and the promotion of innovative environments, where entrepreneurs find the required spaces for their development, are essential (Marulanda-Valencia *et al.*, 2019).

Entrepreneurship in Cuba is not a totally new topic, even though its use is common to refer to self-employment in the Island (Díaz-Fernández and Echeverría, 2016). On a more practical plane, the popular and official imagination identifies entrepreneurship with the creation of new private businesses, and is not focused on the existing state, mixed or cooperative enterprises, not even on agricultural private farmers (Díaz-Fernández, 2020).

Díaz-Fernández and Echeverría (2016) stated that this figure was introduced since 1979, as part of the economy direction and planning system. It was reanimated in the 1990's with the opening derived from the crisis, and it was not until 2010 that the intention of sustaining this type of non-state activity was really proven. However, although diverse authors have demonstrated that the increase of the entrepreneur activity is related to high rates of economic growth, the conception about self-employment in Cuba does not stop being a safety valve in the face of certain events, and not as an actor for the economic growth and development of the country (Díaz-Fernández, 2020).

From the above-exposed facts, and due to the importance of this topic in development processes, the objective of this study was to evaluate the entrepreneur behavior in people and organizations in the Perico municipality, located in Matanzas province, Cuba.

Materials and Methods

Location. The study was conducted in the Perico municipality, at the center of Matanzas province, Cuba. Its total extension is 278,3 km², with 31 148 inhabitants, distributed in 32 settlements (four urban and 28 rural ones). Its fundamental economic activity is agriculture.

Information collection. Since 2017, in this territory a process of diagnosis and revision of the strategic plan was developed, in which the entrepreneur attitude of the people and organizations of the municipality was studied. For the work, qualitative methods were utilized, of descriptive type, usually used in the description of social or educational phenomena, which occur under certain temporary and special circumstances. These methods were combined with others of quantitative character, which allowed to synthesize the obtained results as complement to the study. In addition, appreciative research procedures were followed, in order to focus the search and use of the new knowledge on the positive, on those elements and factors of the communities, as well as on the productive systems, organizations and institutions that served as support to them when they worked better (Whitney and Trosten-Bloom, 2010).

For collecting the information a group of inquirers was selected and made up. It was considered as criterion that they were people from the territory with high commitment, high professionalism and training on the topics to be inquired. Basically, actors from the local government, the municipal university campus, the Pastures and Forages Research Station Indio Hatuey (EPPFIH, for its initial in Spanish) and the advisory team, were integrated.

Focal groups were formed with 10 inhabitants of the three People's Councils of the municipality, named I, II and III for their identification during the research, and to whom a questionnaire elaborated for the study was applied. In addition, the work was agreed upon with 29 municipal entities, 11 entrepreneurial and 18 institutional ones, which committed themselves to put all the effort into the success of the development strategy of the territory.

The year 2017 was taken for the evaluation and inquiry, which was subdivided into three thematic areas: a) research about initiatives developed by the local administration to improve their functions and public services, b) inquiry about the entrepreneur vocation of the people, entrepreneurial organizations and local institutions, translated into new services and products; and c) evaluation of the quantity and type of entrepreneurial initiatives developed. For obtaining the information surveys were applied, which allowed to obtain the number of initiatives developed by state organizations from the modification of their social objective, as well as regarding the generation and survival of new businesses in the non-state sector. In addition, per People's Council the information related to the number of inhabitants in economically active age and its working location per sector, scientific production and innovations turned into products and services, as well as the number and quality of the initiatives developed by the government, was recovered, in order to increase the implementation of new economic activities and consolidation of the existing ones (table 1).

The last topic was evaluated through the determination of the entrepreneurial capacity, considered by many economists as a production factor, along with land, capital and work (Romer, 1990). This capacity has been indicated as key variable for the connection of the three above-mentioned factors. Its calculation is expressed in the following fraction (Banco Mundial, 2021):

$$\text{Density index of new enterprises} = \frac{\text{Implemented entrepreneurial activity} \times 1\,000}{\text{Inhabitants in working age (17-65 years old)}}$$

The study was complemented with the evaluation of the entrepreneur behavior of people. For the elaboration of the instrument applied to the focal groups, the guidelines proposed by Audretsch *et al.* (2006) were taken as reference and the formulations were adapted to the interests of the studied variables. It was relevant to identify to what extent the attitude or predisposition, favorable or unfavorable, in the face of entrepreneurial competence, were present in the actors (table 2). The interviewees corresponded to the People's Councils of the municipality and to a rural community, included due to the interest

it raises for the study. During the research the evaluation level of the statements was specified in a Likert scale, where the values go from 1 to 5: 1) very incipient, 2) incipient, 3) acceptable, 4) adequate and 5) very adequate.

Statistical analysis. The data were analyzed through descriptive statistics, with the use of frequency distribution tables. For each one of the evaluated variables, the class mark (CM), absolute frequency (AF), accumulated absolute frequency (AAF), relative frequency (RF) and accumulated relative frequency (ARF), were considered.

Results and Discussion

Initiatives developed by the local administration to improve its functions and public services. For the case of institutions, inquiry was made about the functions or services implemented by local initiative in the last year and that, somehow, will contribute to local development from the territorial administration.

In the institutional environment four findings were recorded:

- Creation and starting up of the platform for innovation management.
- Training offer, aimed at masons specialized in biodigester installations for the treatment of animal excreta.
- Information center of the Municipal University Campus.
- Incorporation of criteria that consider the optimum location of businesses in urban arrangement plans.

The Multiactoral Management Platform (MMP)¹ emerges as proposal of the Local Agricultural Innovation Project (PIAL, for its initials in Spanish) for incorporating the institutional tissue of municipalities, a practice that, essentially, intends to consolidate the strategic alliances and integration among the network of actors at municipal level. This MMP is consolidated during the implementation process of the Integral Development Program (approved for Perico in December, 2012), because in this framework it contributed to facilitate the conduction of programs, projects and development strategies by the municipal government.

Among the important functions assumed by this structure, the promotion of local productive and

¹The MMP is made up by farmers, municipal directions of the State Administration Organs (OACE, for their initials in Spanish), the Municipal Agricultural Enterprise Máximo Gómez Báez, the National Tax Office (ONAT), the National Association of Small Farmers (ANAP) and other beneficiaries of local innovation.

Table 1. Initiatives developed to promote the economic activities in the Perico municipality.

Promotion actions	Type of property of the entrepreneurial organizations		
	Cooperative	Non-state	State
Training			
Tax incentives			
Support with portfolio of suppliers			
Market studies			
Business rounds			
Promotion of networks among entrepreneurs			
Improvement of the public-private articulation			
Improvement of the connectivity of entrepreneurs			

Table 2. Guidelines per competences defined for the study.

Competence	Guidelines to define statements	Evaluated variable in the study
Orientation towards achievement	Fixes objectives. Assumes responsibilities.	Tenacity
Empathy	Listens to and observes his/her surroundings. Identifies, analyzes and understands the emotions and lifestyle of the others.	Not evaluated
Flexibility	Adapts to change. Has agility to replace objectives.	Creativity
Self-confidence	Transmits safety and maturity to his/her work team.	Leadership. Personal interest-collective benefit relation
Decision-making	Prioritizes alternatives. Is responsible in view of the results.	Initiative
Social sensitivity	Searches for progress and welfare for everybody.	Solidarity
Vision of entrepreneurial career	Has working independence.	Personal organization
Construction of entrepreneurial networks	Propitiates teamwork. Encourages participation and cooperation.	Team work

innovative arrangements and systems (ASPIL) to boost the economic and social development of the municipality, stands out.

A very particular case is the creation of a biogestor construction brigade in a self-employment (SE) scheme, in order to respond through innovation to a local challenge: the treatment of solid waste from pig rearing. Its creation was preceded by a training and formation process, aimed at students graduated from the polytechnic school, as a training offer to guarantee their future professional development (Alfonso-Llanes, 2020).

Alfonso-Llanes (2020) indicates that in Cuba there is pressing need of mobilizing productive potentials, of utilizing the human capital and knowledge and

innovation, as well as diversifying the productive forms at moments in which in the territorial/local area a progressive process of decentralization of decision and resources occurs, as alternative to reach higher degrees of development.

Entrepreneurvocation of the local entrepreneurial organizations, translated into new services and products. In the case of enterprises, new productive or service activities were identified that constituted modifications (in positive) of their social object, started up by initiative of their managers, specialists and workers. However, the local entrepreneurial records limited capacity for the generation of new economic-productive activities. In the last year, only in three of the evaluated enterprises entrepreneurial

activity of new creation or developed by initiative of the work collectives, was recorded.

Particularly, it was observed that in the enterprise management process no incentives are provided that boost the promotion of entrepreneurial activities inside them. The expectation culture, promoted by the verticality that characterized for years the national economic model, configures until the present, and at all levels, the way in which the enterprises are developed. Boettke and Coyne (2006) acknowledge that while the institutions provide the appropriate field for economic growth to occur, entrepreneurship is the mechanism that causes this growth.

Varela and Bedoya-Arturo (2006) state that there are two fundamental aspects for new enterprises to appear, of which there is still much to do and legislate in the local context in Cuba:

- a. The appearance of new entrepreneurs or people who know when, how, where and with what to start new enterprises with growth potential, people capable of leading an entrepreneurial career, creative and innovative, capable of facing the variations of the economic and social environment.
- b. The development of circumstances favorable to the process, for which the existence of support entities that facilitate the entrepreneur's work is necessary. For example, incubation mechanisms, technological parks, specialized professionals to advise, funding lines, seed capitals, investment groups, tax incentives, work policies, among others. These circumstances should be given in an adequate environment, so that the public and private sectors have opportunities to develop.

Cuban entrepreneurs as a whole and, especially, those of the agricultural sector, have developed in a context where decisions are not made in the productive basis, but in the technobureaucracy strata. This includes the acquisition of productive inputs, decisions about production plans, distribution and commercialization; all of which discourages the entrepreneur management

and managerial capacity of those who execute the activity in the basis (Miranda-Tortoló *et al.*, 2016)

In agreement with the above-stated facts, entrepreneurship and the capacity to promote and manage enterprises becomes a highly important topic in the Cuban current times, which is expressed in the specific objectives, number 5 and 6 of the strategic axis «Human potential, science, technology and innovation» of the national economic and social plan until 2030.

Quantity and type of entrepreneurial initiatives developed by natural people. The study of the entrepreneurial capacity –activities implemented in the territory in one year–, with regards to the quantity of working-age inhabitants (male population, from 17 to 65 years old, and female from 17 to 60) showed potentialities of creation of different enterprises in the studied People's Councils (table 3).

When studying the entrepreneurial capacity index, the People's Council II reached the best result, with 15 activities for every 1 000 inhabitants between 17 and 65 years old; while I and III obtained 10 and 12, respectively. In addition, it was known that in the studied cases the profile of the implemented economic activities was characterized by being little intensive in the use of knowledge and were inscribed, mostly, in the sector of gastronomic services and of agricultural production.

These values are similar to the ones reported in 2018 by the World Bank, for such countries as Iceland, Georgia, Singapore, South Africa, with values that vary between 9,9 and 10,4. Meanwhile nations with more dynamic economies, like the United Kingdom and Hong Kong, reached index values of 15 and 28,6, respectively. This could be disquieting, if it is contrasted with the economic development levels of these countries and Cuba (Banco Mundial, 2021).

For understanding these phenomena, it is essential to consider that the entrepreneurial capacity in a territory is linked, among other issues, to the existence of an

Table 3. Entrepreneurial capacity per People's Councils.

People's Council	Number of inhabitants per People's Council at working age (a)	Implemented entrepreneurial activities (b)		Entrepreneurial capacity index ((b*1000)/a)
		State and cooperative environment Self-employment activities Active usufructuaries		
I	10 492	105		10
II	3 125	47		15
III	7 897	95		12

affirmative and functional policy, which outlines the lines, priorities and ways for the concretion of the initiatives that emerge in these contexts. All this should consider the logistic support and backing of the institutions in the territory, as well as the approval and implementation of the norms that rule the entrepreneur practice.

For the case of Cuba, in this stage, measures were promoted to make the activity more flexible, from the implementation of guidelines and their later updating in 2016, when a movement started to improve and recognize the “quality and validity” of self-employment in the economy of the Island.²

Along with the above-stated facts, in mid-2016, the progress of the negotiations between Cuba and the United States was announced, which presumably resulted in encouragement for the inscription of many economic activities in the face of the national context that was taking shape.³ In this period the commercial flights were approved, the entrance of cruises to the Havana port increased and the paperwork started for the first American investments in Mariel (Gómez, 2016). These circumstances possibly suggested that opportunities would be given to many economic initiatives in the service sector and their respective linkings, with the increase of the arrival to the capital of tourists with historical-political interests, and of Cubans who reside in the United States that would involve the rest of the country. Macias-García *et al.* (2018) indicate that there are three particular approaches to study the determinants of entrepreneurship. First, the economic approach, in which the aspects that relate entrepreneurship to economic development are exposed, and define that entrepreneurship is performed with merely economic purposes. Secondly, the behavioral approach defends that the personal characteristics of the entrepreneur are the ones that determine entrepreneur activity; while the third approach, called sociological or institutional, states that the context is what motivates the intention to create an enterprise, aspect of high relevance in the case of Cuba.

Referred to the entrepreneur behavior of people. When exploring the personal abilities and motivations for the achievement of an entrepreneurship, the results coincide with the analysis of the entrepreneur behavior.

The elements tenacity and solidarity were qualified as acceptable and adequate in all the People’s Councils. Tenacity expresses the competences linked to the capacity of aiming at the achievement of goals through the identification of objectives and the assumption of responsibilities. Meanwhile, solidarity is linked to social sensitivity, expressed in the desire of progress and welfare of the collective, proven by the interviewees. Only the People’s Council I stood out for having, in all the cases, acceptable and adequate values, in which the studied variables coincide with the citizens’ entrepreneur profile (table 4).

When evaluating the variables creativity, personal function and solidarity, in 40, 35 and 48 % of the interviewees, respectively, the ability of adaptation to change and the capacity to achieve independence in economic and working terms, so that it provides progress and welfare for them and for the collectivity, stood out as present elements (table 4).

This issue proves the systematic practice in the face of complex and problematic situations and the management of individual and collective solutions, with support on cooperation, mutual help and solidarity, aspects that promote and condition the consolidation of confidence networks and of the social capital in specific contexts.

Nevertheless, when studying the competences linked to leadership, initiatives and teamwork 38, 45 and 48 % of the interviewees, respectively, qualified as incipient their capacity to lead and transmit responsibilities to a collective, as well as to encourage the participation and cooperation among its members. At the same time, their competences to assume functions and manage creatively alternatives that allow to have several responses to daily challenges, are perceived as rudimentary (table 4).

This result, in particular, showed a clear limitation in the capacities of the interviewees to promote work under more flexible and less hierarchical schemes, which propitiate different and creative ways of thinking and acting.

When studying tenacity, understood as the capacity to fix objectives and assume the responsibilities that their achievement implies, only 45 % of the interviewees considered as acceptable their capacity to set objectives that allow them to orientate themselves in the achievement of the

²Castro, R. Discurso de clausura del IX Período Ordinario de Sesiones de la VIII Legislatura de la ANPP, 14 de julio. La Habana: Palacio de Convenciones, 2017.

³ONEI (2019) reports in Cuba 483,4 thousand self-employed workers in 2014 and 580,8 thousand self-employed workers in 2018.

Table 4. Average value of the variables in the People's Councils, scale from 1 to 5, from very incipient to very adequate, respectively.

People's Council	Average values of the variables						
	Tenacity	Creativity	Team work	Personal function	Leadership	Initiative	Solidarity
I	3	4	3	4	3	3	4
II	3.5	2.5	2.5	3	3	2.5	4
III	3	4	3	4	2	4	3
Rural community [‡]	4	3	2	2	4	2	4.5

[‡]Rural community of the PC I

results they expect (fig. 1). This represents for McClelland (1967) one of the main characteristics the entrepreneur must have, who states that the "high need of achievement" positions them with more possibilities compared with other members of society, regarding the fact of utilizing the opportunities offered by the market.

The characteristics found in this research coincide with those described by De-Pablo-López *et al.* (2004), when evaluating the qualities, capacities and conditions of 80 Spanish entrepreneurs. The above-cited authors identified perseverance and commitment, leadership, tolerance to changes, need and recognition of achievement, perception of economic benefit and capacity of environment analysis/reflection and personal capacity, as the traits that most identified an entrepreneur.

In general, this research relates to the profile of the entrepreneur that is acknowledged in the current studies. Unlike the profile described

by the first scholars (classical, neoclassical, Schumpeter's followers), social responsibility is considered today as essential element. From this perspective, the entrepreneur is analyzed in his/her environment and context, with a holistic, systemic and complex view and, in this measure, is considered as a creative, persistent, innovative, flexible, dynamic person, capable of assuming risks, employment generator, transformative of resources into economic, social, environmental and political activities (Herrera-Guerra and Montoya-Restrepo, 2013). This determines that a society with progress aspirations requires to be nourished from entrepreneurs, and to guarantee this condition it must carry out educational activities that promote this culture through competence building, which coincides with the report by Cuesta-Santos (2021).

In Cuba, particularly, the promotion and stimulation of the citizens' initiative and entrepreneur spirit have been hindered by the

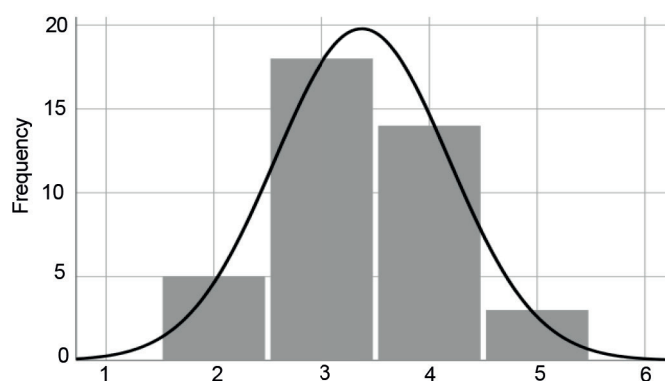


Figure 1. Absolute frequency of the variable tenacity.

centralized and vertical character, which prevailed during years in economy. Reversing this process requires bringing together the efforts of the citizenship and governments to replace the culture of expectation by a culture that allows to overcome the challenges imposed by the development process through the mobilization of productive forces and the utilization of the potentialities of a territory.

Pérez-Zavala *et al.* (2019) state that a government that needs to increase the entrepreneur mentality should have and execute a program aimed at the training of entrepreneurs, which considers:

- a. *Stimulating the entrepreneur culture* through its formation and implementation since early ages and at all educational levels, which should be reflected on school programs. This proposal should have the support of diverse authors: entrepreneurs, university scholars who are experts on the topic and staff from the different government levels, who from their experience are capable of transmitting this vision.
- b. *Persuading people to be entrepreneurs*, by granting the due value to those who have decided to be owners of a productive organization, because the image that is shown of them is that of people who become rich with their enterprises, without appreciating the effort they make to generate jobs and carry on their project.
- c. *Generating favorable regulating schemes* for the creation of enterprises by eliminating the paperwork excess and the response time, in order to motivate new entrepreneurs and prevent that they choose informality.
- d. *Reconsidering failure as learning option*, by giving a positive connotation to failure, because it allows to identify the made mistakes and is part of the process to achieve success.
- e. *Promoting attractive tax schemes* to create small enterprises, which would face one of the largest problems the country has, which is the informality that propitiates tax evasion.
- f. *Enhancing the family enterprise scheme*, knowing the functioning of this type of enterprises, and how to guarantee their survival at a moment of generational transition.

Conclusions

The initiatives implemented from the local administration show the potential there is at this level and the need of structural changes, as support to promote and mobilize the productive potentials, local self-management of social and human capital

and promotion of knowledge and innovation, aiming at territorial-local development.

The entrepreneur vocation of local organizations of the Perico municipality is limited, which is due, to a large extent, to the implications because of uses and customs in the Cuban entrepreneurial sector, characterized by the emission and reception of orientations, ordinances and decisions by intermediate and higher levels, and because of the rigidity of the norms established with regards to the entrepreneurial organizations.

The entrepreneur behavior of people is influenced, mainly, by tenacity and solidarity, attributes that are complemented and remarkably shown in the social daily interactions, issue that has repercussion on the consolidation of personal predisposition to challenge overcoming and problem solution.

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Conflict of interests

The authors declare that there is no conflict of interests among them.

Authors' contribution

- Taymer Miranda-Tortoló. Conceived the ideas and objectives of the research, wrote and coordinated the financial execution of the project that funded the study. Collected the primary information and prepared the work for its publication. Participated in the stage of pre-publication corrections.
- Daniel J. Vela de León. Conceived the ideas and objectives of the research. Collected the primary information. Contributed to the preparation of the work for its publication.
- Hilda Machado-Martínez. Conceived the ideas and objectives of the research. Wrote the project that funded this study. Prepared the work for its publication and participated in the stage of pre-publication corrections.
- Gilberto Blanco-García. Conceived the ideas and objectives of the research. Collected the primary information. Contributed to the preparation of the work for its publication.
- Antonio Suset-Pérez. Conceived the ideas and objectives of the research. Wrote the project that

funded this study. Collected the primary information. Prepared the work for its publication and participated in the stage of pre-publication corrections.

- Katerine Oropesa-Casanova. Conceived the ideas and objectives of the research. Collected the primary information. Coordinated the execution of the project that funded this study. Contributed to the preparation of the work for its publication

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