CREATION OF SUSTAINABLE BUSINESS: A HOLISTIC STUDY IN YOUNG ENTREPRENEURS

Abstract

For governments and for society, the creation of companies that not only generate economic

wealth, but also contribute to development without compromising future generations, has

become a necessity. That is why the study of sustainable business has gained relevance, since

birth, to the way they evolve and interact in a globalized environment. Therefore, the present

study shows an exploratory and descriptive analysis of entrepreneurs who have developed

business projects during their college studies that contribute to one or more sustainable

development goals. The results allow to deepen the knowledge of those young people who seek

to develop business models with social impact.

Keywords: sustainable business; entrepreneur profile; college entrepreneurs.

THEORETICAL BACKGROUND

Entrepreneurship and innovation

For most economies, the creation of companies is one of the most important pillars of their development, being the company a particular economic activity, which requires prior evaluation of production and its equivalent in money (Rodríguez, 2009). Thereby, the mission of an entrepreneur is to provide a product or service that is needed in a certain demand by the market that will be consumed in increasing numbers (O'Brien, 2003).

Entrepreneurship is related to the action of generating value through the identification and exploitation of new products, processes or markets. This behavior can occur within a small, medium or large company, as well as in a recently created one (Dosal, Gutiérrez and Saracho 2011). However, the challenge of creating value in the nascent company is of greater dimensions since the entrepreneur in this stage seldom knows the market as deep as companies that have started operations.

When trying to solve an unattended problem, the entrepreneur is a natural innovator. Innovation can be defined as "a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)" (OECD, 2018), and can be evaluated considering its contribution to knowledge and geographic impact, being relevant because it can create important benefits and advantages for a society such as facilitating the generation of attractive returns on investment, promoting the creation of jobs and marking trends in the behavior of markets (Dosal, Gutiérrez and Saracho, 2011).

As observed, the sum of entrepreneurship plus innovation seems to be a key piece for development, but in recent years, an element has been added to the equation, which over time has acquired greater strength: sustainability.

Sustainable Entrepreneurship

According to Burns (2016), the term 'sustainability development' was intended to build bridges between the economic, ecological and social areas of concern. Sustainable entrepreneurship represents the development of a sustainable innovation aimed at a mass market that through this innovation receives benefits that impact on the improvement of the quality of life. Sustainable entrepreneurship implies a process whose purpose is to achieve development, through the discovery of opportunities, evaluation and exploitation of these and the creation of value that impacts on economic prosperity, social cohesion and the protection of the environment (Rodriguéz, 2016).

The concept sustainability was defines in 1987 by United Nations (UN) through the report Our Common Future (Ibarra, 2018) and was meant to refer to development that meets the needs of the present generation without compromising the ability of future generations to meet their needs (World Commission, 1987 in Gomez, 2019). Arise also the triple bottom line concept, introduced by John Elkington in 1994, as a framework to measuring corporate performance, been economic, environmental and social issues as the the pillars of sustainability (Wallace, 2005).

As a result, in 2015, the UN approved the 2030 Agenda on Sustainable Development. The Agenda has 17 Sustainable Development Goals (SDG), which address global challenges, including those related to poverty, inequality, climate, environmental degradation, prosperity, and peace and justice. The objective is to achieve each Goal by 2030 (United Nations, 2019).

These objectives have become the axis of many organizations to try to generate a positive change in the world, and for many companies have been a guide to contribution. The challenge of a sustainable entrepreneur is to achieve the "triple bottom line" with a perfect balance between economic health, social equity and environmental resilience through their business behavior (Kuckertz & Marcus, 2010).

However, the question remains whether these changes in the companies are to increase utility by obtaining consumer acceptance that demands companies with greater environmental and social awareness, or it is a real awareness of the entrepreneur, which lead him to create businesses models that have as essence sustainability. In a study carried out by Wach, Sthepan and Gorgievski (2016) concludes that entrepreneurial success is 'more than money', where entrepreneurs hold multi-faceted views of success structured along five factors: firm performance, workplace relationships, personal fulfilment, personal financial reward and community impact.

Orientation towards sustainability

Considering the relevance of the term sustainability in the field of business, more and more researchers have studied the social entrepreneur, in order to know and create a framework to develop strategies that promote the creation of sustainable businesses.

According to Portuguez, Valenzuela and Navarro (2018), the orientation towards sustainability is the entrepreneur's conviction to develop his business in a ecologically and socially responsible way. However, the characteristics required by this type of entrepreneur are not observable in all people. There are already some instruments that can help measure these behaviors, such as the General Ecological Behavior Scale, the Sustainability Orientation and the Evaluation Test of Social Entrepreneurship, which recognizes the characteristics of the social entrepreneur in three dimensions: passion towards entrepreneurship, orientation towards sustainability and identification of opportunities.

Authors such as Ploum, Blok, Lans and Omta (2018), have focused on the study of competencies needed for future change agents in the field of sustainable development, concluding that the seven factor competence framework for sustainable entrepreneurs developed by Lans in 2014 were confirmed, but reducing it to six when compound Strategic management competence and action competence:

- 1. Systems thinking competence.
- 2. Embracing diversity and interdisciplinary competence.
- 3. Foresighted thinking competence.
- 4. Normative competence.
- 5. Action competence.
- 6. Interpersonal competence.

7. Strategic management competence.

As noted, significant contributions have been made to the knowledge of the social entrepreneur in his person, but it is also necessary to know the influence of the context in his or her decision to create sustainable businesses. This research, in addition to inquire the personal profile, contributes to the generation of a framework that allows knowing the social entrepreneur from a holistic point of view.

RESEARCH METHOD

Sampling and participants

Data was obtained from the crossing of two sources: the first is a database where the collection took place during the years 2012 to 2018 among new students from a private university in Mexico. This database contains results regarding the entrepreneurial profile of the student and data concerning their family business, if any.

From this base, 72 cases were selected, which have as a common characteristic to have studied, during their stay in the university, an intensive academic program of entrepreneurship during a semester, where all the modules had as one of the main objectives, to develop the entrepreneur project of the student. Table 1 shows the general characteristics of the sample.

Table 1. General characteristics of the sample

Sample (students with business project)	Gender (%)		Family business (%)		Year of data collection corresponding to entrepreneurial profile and family business (%)				
	Male	Female	Yes	Not	2012	2013	2014	2015	2016
72	64%	36%	51%	49%	44%	19%	19%	13%	5%

Source: own elaboration based on data analysis.

Measures

An analysis of each of the enterprises developed by the students was carried out, analyzing if their business model was based on sustainability, determining in which SDG the enterprise contributes. This information was crossed with the entrepreneur profile declared when he/she enrolled in college, as well as the characteristics of his family business (father, mother or both, owners of a company), to determine internal and external patterns of social entrepreneurs.

Analyses

The study presents an exploratory and descriptive approach. A systematic data analysis was carried out, creating categories that allow interpreting the content. Categories were precise and non-overlapping, relevant to the knowledge of the social entrepreneur and on a comparable abstraction level.

RESULTS

The information was analyzed comparing those cases that developed sustainable entrepreneurial projects aligned to some objective of sustainable development, versus projects whose primary objective is exclusively the generation of wealth. As can be seen in Figure 1, of the total number of students who developed entrepreneurial projects, 49% developed a wealth orientated business; of the 51% who developed sustainable projects, 49% have projects aligned to SDG 3 (good health and well-being), 16% related to SDG 13 (climate action) and 11% contribute to SDG 8 (decent work and economic growth) (See Figure 2).

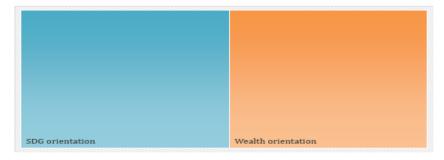


Figure 1. Sustainable business versus wealth orientation



Figure 2. Alignment of projects to Sustainable Development Goals

Analysis of the individual

In this section, the profile of the students and the relationship that may exist in the creation of sustainable companies is reviewed, based on aspects such as entrepreneurial profile, gender, birth order, academic program that studies and if he or she has a family business.

- Entrepreneurial profile

In order to analyze the entrepreneurial profile of the students, the results that obtained high scores in the following aspects were registered:

- a) Power: having material possessions, money, respect, approval of others.
- b) Achievement: have high aspirations, achieve goals, be competent, effective.
- c) Hedonism: satisfy desires, enjoy food, sex and leisure.
- d) Stimulation: having a life full of challenges, novelty and changes, stimulating experiences, looking for adventures and risks.
- e) Self-direction: select my goals, trusting in myself, self-sufficient.
- f) Do business every time you have a chance.
- g) Leadership: ability to create teams and organize people.
- h) Institutional support: motivation of the university to start a business.
- i) Family support: support of the nuclear family to start a business

The first results indicated in Figure 3, allow to show that entrepreneurs where more than 50% have developed a sustainable business, are those that have support from their school to launch a business, are leaders, take advantage of any opportunity to do business, are self-directed, are oriented towards achievement and identify with power.

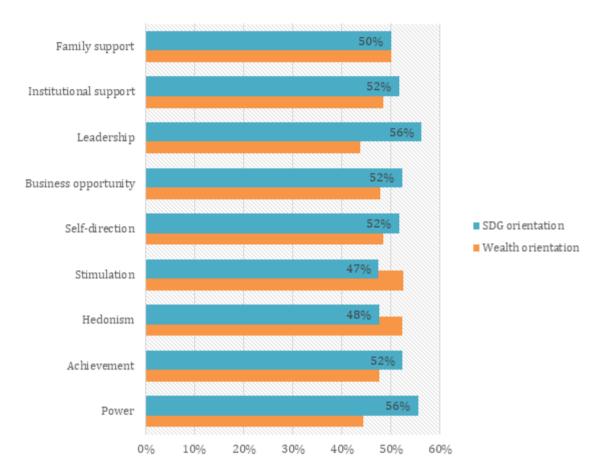


Figure 3. Variables of entrepreneurial profile

Demographics

Two aspects were analyzed: gender and birth order. As it can be seen in Figure 4, it is observed that in the case of women, of the total of entrepreneurship created, 69% have an orientation toward sustainability, while in men, the remaining 41% have this approach. Regarding the order of birth, it is observed that the only child is more oriented towards the creation of businesses with exclusive orientation to wealth. Those who have up to two brothers, focus more on sustainability, being the born third the one with this orientation accentuated (see Figure 5).

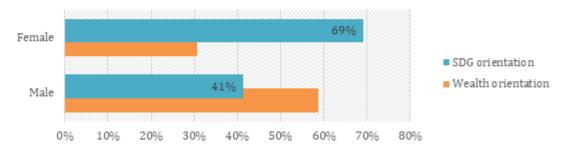


Figure 4. Gender

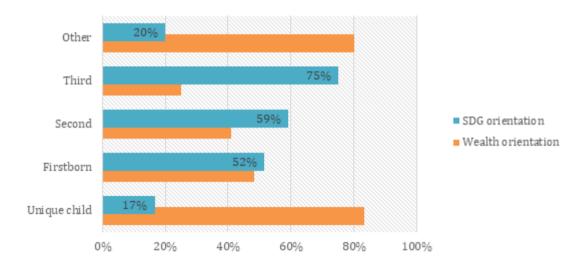


Figure 5. Birth order

- Academic program

As mentioned, the students analyzed studied an intensive academic program for the development of their entrepreneurial project during a semester. In this program, students of all careers are accepted. Those who study engineering areas, in percentage terms, develop more sustainable projects than those in the business area, who are slightly inclined towards an orientation based on obtaining of wealth (see Figure 6).

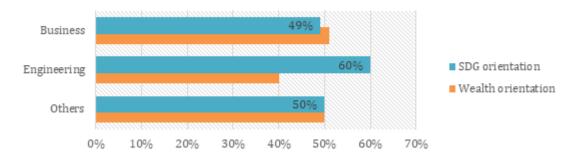


Figure 6. Academic program

Analysis of the context: family business

The environment in which a person develops plays a very important role in their professional development. In the present study, the role of the family business in the student is analyzed. In Figure 7 it can be seen that those who come from family businesses develop more sustainable businesses than those where their parents do not own a company. The following sections detail specific aspects of the student's family business, and the possible relationship in the development of social enterprises.

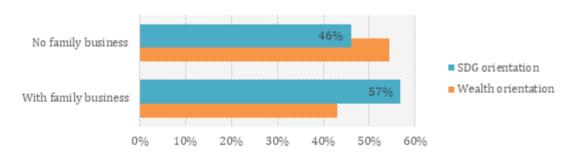


Figure 7. Family business

- Generational stage

More students who are part of families of second generation companies, develop, in percentage terms, sustainable projects (See Figure 8). Two students belong to a third-generation family company, but none of them developed a sustainable project.

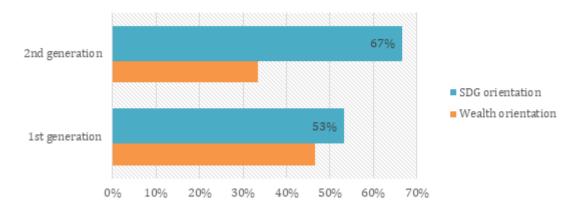


Figure 8. Generation of the family business

Years of foundation

Figure 9 shows that descendants with parents who are owners of newborn family businesses (0 to 5 years old) and 21 to 30 years old are the ones who developed the most projects related to sustainable development goals. There was only one student from a company over 50 years old, who also developed a sustainable project.

- Number of employees

It is observed that the descendants of the owners of large companies with more than 100 employees, create projects whose main focus is the creation of wealth, not the orientation towards sustainability (see Figure 10).

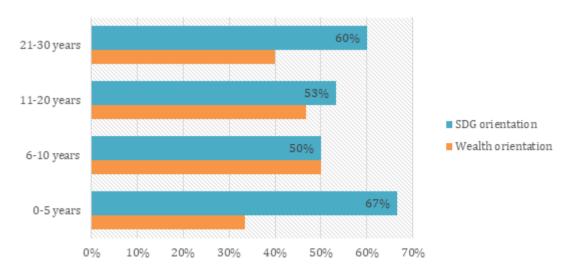


Figure 9. Years of foundation of the family business

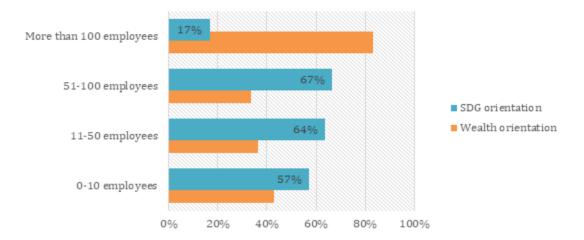


Figure 10. Number of employees of the family business

- Socially responsible company

According Figure 11, those descendants of family businesses that are socially responsible, in percentage terms, generate more sustainable businesses than those that come from family businesses that are not (two companies) or they do not know if the company is socially responsible.

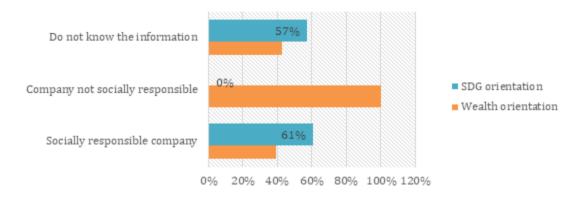


Figure 11. Socially responsible family business

- Level of innovation

As part of the aspects to analyze in the family businesses of the students, the innovation construct was considered, which include aspects such as the introduction of new or improved products and/or services, development of innovations by the company, economic impact on sales of innovations in goods and/or services of the company, introduction of methods of production of new and improved goods and/or services, research by the company for

innovation and influence of financial factors in the innovation activities of the company. It is notable that, as it can be see in Figure 12, those descendants of family businesses that obtained higher innovation scores, developed fewer sustainable businesses, in percentage terms.

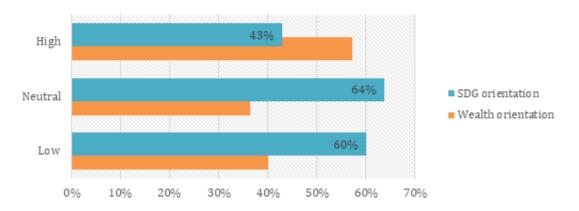


Figure 12. Innovation of the family business

DISCUSSION

This contribution focused on linking the emerging literature of sustainable entrepreneurship to serve as a frame of reference for the results presented on the relationship of the profile of college students who took a semester of total immersion entrepreneurship program, with a sustainable business project.

The empirical results indicate that certain characteristics of the entrepreneur have an impact on the type of company to be developed. Based on the results obtained, the following model is proposed (see Figure 13), which groups the variables studied in three constructs: entrepreneur profile, demographics and family business context.

Regarding entrepreneur profile, students who develop sustainable companies in college, have as common characteristics to have business support from the institution where they study, they are leaders, whenever they have the opportunity to do a business they do it, and they score high on variables like self-direction, achievement and power. Furthermore, as can be seen in the demographic analysis, those entrepreneurs who are more likely to develop sustainable ventures are female, have siblings, were born first, seconds or third, and study an engineering program.

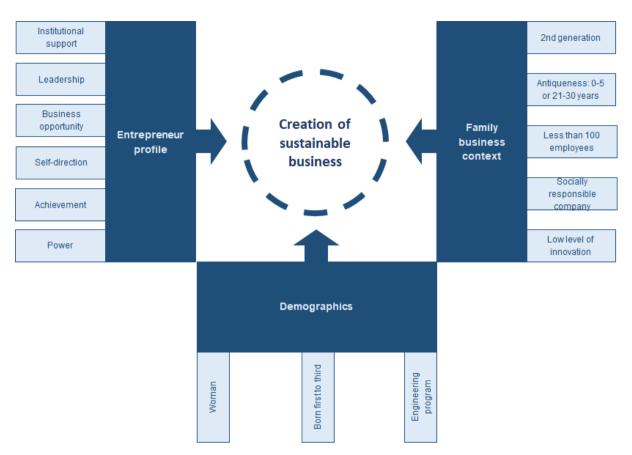


Figure 13. Model of support variables for the creation of sustainable business

It was also observed that those students with parents which are owners of a company, were more inclined to develop a business project oriented towards sustainability. It was also identified that of these students, the ones who developed sustainable enterprises were those with family businesses with the following characteristics: second generation companies, recent creation (0 to 5 years) or 21 to 30 years old, with less than 100 employees, socially responsible companies and with low levels of innovation.

The results are significant for researchers interested in the background of sustainable ventures, a field of research little studied yet. For the academic area, when identifying students' characteristics, it could represent an opportunity to design a follow-up strategy to guide students in the creation of proposals for sustainable ventures.

It is recommended to deepen the analysis of variables using statistical methods, in order to propose several models that allow to have a more accurate knowledge of the existing relationship of the entrepreneur, the context and the development of sustainable ventures. For future research, it is also recommended to extend this analysis to different regions of the world to determine the differences and similarities that allow the establishment of patterns and thus develop programs that encourage the creation of companies that have a positive impact on society.

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