Education, Gender, and Entrepreneurial Intention: The Case of Mexico

Lizette Huezo-Ponce and José Manuel Saiz-Álvarez

Abstract The objective of this chapter is to study how quality education influences entrepreneurial intention and to achieve sustainable human capital management. *Methodology*: We apply an ANOVA and the Levene's test of homogeneity of variances in a sample composed of 1025 students from the 6 main faculty departments of Tecnológico de Monterrey in Guadalajara, Mexico, to study how gender, the level of studies, and parents' schooling determine the entrepreneurial intention of students. *Findings*: (1) The type of studies chosen by studies affect to their entrepreneurial intention; (2) for the sample analyzed, women have a similar entrepreneurial intention than men, so gender is not a crucial factor for entrepreneurial intention; and (3) parents' occupation and their higher level of studies positively determine the entrepreneurial intention on their children and allow reaching a sustainable human capital management.

Keywords Education · Sustainability · Management · Gender · Capital · Entrepreneurial intention · Study

1 Introduction

Sustainable human capital management (HCM) is an emerging research theme (Kimbu et al. 2018). In this chapter, we connect HCM with education, as acquiring good educational standards guided by excellence is crucial for future success in both managing a firm and human capital (Arman 2017). According to Matherly and Al Nahyan (2015), two strategic enablers optimize HCM: first, senior entrepreneurship

L. Huezo-Ponce (✉)
Tecnológico de Monterrey, Guadalajara, Jalisco, Mexico
e-mail: lhuezo@tec.mx

J. M. Saiz-Álvarez
EGADE Business School, Tecnológico de Monterrey, Guadalajara, Jalisco, Mexico
e-mail: jmsaiz@tec.mx

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as a tool for promoting transparency and fostering a culture of trust among stakeholders and, second, knowledge management because it impulses corporate growth with the setting of economic incentives to benefit the human resources of the firm.

These enablers are reinforced with the introduction of environmental-related issues, as the combination of collaborative networks and green skills (Hasan et al. 2017) related to environmental protection affects HCM positively (Kimbu et al. 2018), while supporting entrepreneurship increases GDP (gross domestic product) growth, especially when social entrepreneurship is impulsed in developing countries and intrapreneurship in nations endowed with highly educated population.

Education has a direct role in fostering economic development, and this fact is crucial in developing countries. In this sense, educational initiatives rooted in e-learning and blended learning (b-learning) are important to educate people located in remote and distant areas. As a result, lifelong learning (LLL)-related practices increase competitiveness (Pisal et al. 2015) and efficiency in firms, which is crucial for corporations competing in "glocalized" markets and for nations to grow.

Previous literature on this topic has highlighted the lack of research on the relationship between gender and entrepreneurial intention (EI) (Davidsson 1995; Yordanova and Tarrazon 2010) and career expectations in adults when their intentions begin to be formed in their adolescent stage (Low et al. 2005; Wilson et al. 2007). This is why our study focuses on variables related to family space and gender by following the suggestions made by Sonnenfelt and Kotter (1982). Likewise, some intention models have been used, which have proven useful in understanding startups creation and offer a coherent, highly generalizable, and robust theoretical framework to understand and predict the entrepreneurial activity from an interactionist perspective between entrepreneurs and stakeholders (Krueger et al. 2000).

The objective of this chapter is to analyze how the educational level achieved in a country optimizes HCM and positively influences on EI. An optimization process directly linked to educational quality, values, and entrepreneurship. We will analyze this relationship in the next section.

2 Quality, Entrepreneurial Intention, and Value in Education

2.1 The Asset of Education as a Value

Latin America is a region that suffers from insufficient and unequal access to education, which means that only 30% of the students from the poorest quintile, and also 30% of the students living in rural areas, complete their primary education. This situation contrasts with students from richer families, where 83% of them belonging to the richest quintile, and 60% living in urban areas, complete secondary education (Eide and Rösler 2015).

Fig. 1 Main gaps in developing countries. Source: Authors

As a result, only 12% of the Latin American workforce reaches higher education, well below the average (24%) of the OECD (Organization for Economic Cooperation and Development). Also, the percentage of young people who enroll in science and technology is particularly low, contrary to social sciences and humanities where the percentage of students is much higher. This low concentration in technical studies does incentivize the creation of industrial processes, which does impulse economic growth.

The distribution of students differs in most of the OECD countries, where there is a bigger concentration in developed countries of scholars in engineering, science, and technology-related studies. Moreover, students entering tertiary education overwhelmingly choose social sciences, business, and law as their fields of education in all countries, except Finland and Korea. Besides, international students prefer social sciences, business, and law programs, and students in eastern European countries, Belgium, Italy, and Spain tend to prefer health programs (OECD 2018).

As a result, sustainable human capital management (HCM) is crucial for business success.

Opposite to the threefold gaps existing in Latin America in education, innovation, and society (Fig. 1), sustainable HCM can be defined as the set of business-related strategies focused on achieving the "triple bottom line of sustainability," by seeking to simultaneously create economic, ecological, and social value to ensure sustainability (Slaper and Hall 2011). As a result, when this triple equilibrium is achieved, nations will achieve higher levels of GDP growth and economic development and the increase in social welfare. These achievements, however, can vanish if young generations abandon their studies, especially when it occurs in primary and secondary levels.

This fact has led to school dropout by 29% of young people between 16 and 19 years of age, which is significantly affecting the skills learned by the workforce in Latin America. This high dropout rate produces two negative effects. First, a large number of those who leave the educational system do not obtain the necessary knowledge and skills to be employed in more sophisticated and high added value industries. Second, as one of the main reasons for school dropout is the need to find work for subsistence, young and low-educated people join the labor market with low-skilled jobs and reduced wages. This fact creates a vicious socio-educational circle that further impoverishes these people who continue belonging to low-income households (Eide and Rösler 2015), so the innovation gap continues in Latin America, as shown in Fig. 1.

2.2 The Quality of Education

Latin America is below the average of the OECD and other developed countries concerning the quality of education (primary, secondary, and tertiary) which causes a threefold gap, as shown in Fig. 1. Results show a bad overall performance, identifying a greater gap between the quality of mathematics and science education. Every Latin American country scores lower than the average of the high-income OECD countries, mainly on the quality of their mathematics and science-related education. Costa Rica is the only country in Latin America with a score above the OECD average in the quality of the education system and the degree of staff training, while Chile and Costa Rica report a score higher than the OECD average in the quality of their business schools.

Educational quality is also measured as the positive difference in wages offered to high-educated workers. While the relationship between education and wage was direct and positive during the 1990 decade, in the next decade, the wage gap between educated and non-educated workers has decreased. This reduction is mainly caused by the following: (1) the supply of workers with higher education has exceeded the labor demand; therefore, there is a reduction in the value of tertiary education, and (2) working skills obtained by workers are different from what employers need (Eide and Rösler 2015).

As shown in Fig. 2, entrepreneurial ecosystems are affected by the 5G or the five gaps (finance gap, market gap, physical capital gap, policy gap, and talent gap). Only when these gaps disappear, nations will be prepared to achieve sustainable HCM by fostering EI.

Latin America is very different when it comes to training its human resources. At this respect, Maldonado-Maldonado (2002) ranked countries concerning their HEI based on the number of research centers, specialists, professional associations, journals, government agencies, and networks of experts. Differences in research related to different social and economic impacts occurred in the region, HEIs, and the entrepreneurial ecosystem of the country given by entrepreneurial gaps that are affected by a lack of formal academic formation and weak professional experience,

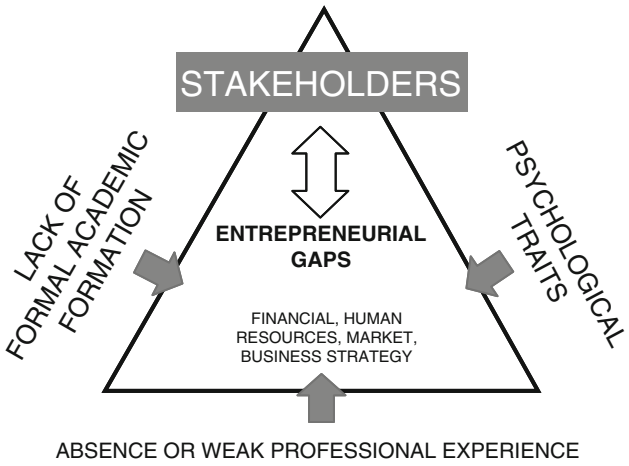

Fig. 2 Entrepreneurial gaps and factors affecting entrepreneurship. Source: Authors

as defined in Fig. 2. At this respect, Maldonado-Maldonado (2002) distinguish four groups of nations in Latin America and the Caribbean: (1) Argentina, Brazil, Chile, and Mexico endowed with strong HEIs; (2) Colombia, Venezuela, and Cuba, whose research systems must be consolidated; (3) Bolivia, Costa Rica, Ecuador, and Peru with a research in an early stage of development; and (4) Central America, Uruguay, Venezuela, Dominican Republic, Paraguay, and the rest of the Caribbean islands (except Cuba) with a very weak research system.

Better linked quality-based HEIs to their ecosystems will maximize their impact in the nation. As Mexico is an efficiency-based economy from an entrepreneurial perspective (Naranjo et al. 2015), entrepreneurship is reinforced with the organization of some entrepreneurial-based associations, such as CLADEA (Latin American Council of Management Schools), National Association of Universities and Higher Education Institutions (ANUIES), Latin American Network of Universities for Social Entrepreneurship, RedEmprendia, Ashoka (Changemaker Campus, Ashoka U Commons, and Ashoka U Exchange), business incubators and accelerators, scientific and technological parks, and entrepreneurship education. The conjunction of these organizations incentivizes the creation and strengthening of EI in the country (Alexei and Kolvereid 1999; Audet 2002; Crant 1996; Douglas and Shepherd 2002; Krueger et al. 2000). The EI, as the dependent variable, is the best predictor for behavior (Ajzen 1991; Liñán et al. 2005). We will analyze the EI in the next section.

3 Gender and Entrepreneurial Intention

The study of entrepreneurial behavior is defined by being a field of plural and multidisciplinary research, which studies personal characteristics and business activities, economic and social effects, and even cultural aspects. Research in Psychology has been centered mainly in the analysis of the individual differences between entrepreneurs and non-entrepreneurs to elaborate a descriptive profile of the typical personality of the entrepreneur to detect people with the innate potential to become a successful entrepreneur. However, this line of research has poor results, both methodological and theoretical, which have revealed the inadequacy of the personality trait to predict entrepreneurial behavior (Gartner 1988; Robinson et al. 1991; Shaver and Scott 1991; Shane and Venkataraman 2000; Baron 2002).

This fact has led many researchers in this area to study more dynamic variables and models that take into account personal and social aspects, and the interaction between both, to explain and predict entrepreneurial behavior. Consequently, the line of research that is having the greatest relevance is the study of EI (Liñan and Fayolle 2015; Alexei and Kolvereid 1999; Audet 2002; Crant 1996; Douglas and Shepherd 2002; Krueger et al. 2000). This approach is based mainly on the analysis of the choice of occupational career, that is, why some people but not others choose to develop their professional career through self-employment. The EI, as a dependent variable, is the simplest predictor of behavior (Ajzen 1991; Liñan et al. 2011) towards entrepreneurship, which we will define as the discovery, evaluation, and exploitation of an opportunity (Shane and Venkataraman 2000). These ideas are especially important in the model of the Theory of Planned Behavior (Liñán et al. 2005).

This book chapter aims to expand the study of the entrepreneurial profile using variables born from Social Psychology to explain and predict the intention of developing a professional career through self-employment. To fulfill this objective, we use the development model of the professional career settled by Sonnenfelt and Kotter (1982) that has also been used by Sánchez-Almagro (2003). This model classifies all the psychosocial variables affecting an entrepreneur in three spaces: family, socio-labor, and personal; although we focus on the family space only, the age and gender are included. The sample used in this study is limited to university students, so participants are young and the variability in age is very low. As a result, we cannot analyze the variable age to study EI.

Regarding gender, the role of women plays a substantial role in entrepreneurship worldwide (Wilson et al. 2007), and data have been found to suggest large gaps in average-income nations where men are 75% more likely than women to be active entrepreneurs, compared to 33% in high-income countries and 41% in low-income countries (Minniti et al. 2005; Wilson et al. 2007). At this respect, Wang and Wong (2004) find that the effect of gender on entrepreneurship is partially mediated by the lack of entrepreneurial knowledge (Yordanova and Tarrazon 2010). Besides, research on career interest in adolescents has revealed less interest in women related

to men in the choice of entrepreneurship-based careers (Kourilsky and Walstad 1998; Marlino and Wilson 2003; Wilson et al. 2007).

Research in entrepreneurship has repeatedly pointed out that the social models provided by the family environment positively influence on the development of professional career through self-employment (Brockhaus 1982; Shapero and Sokol 1982; Hisrich and Brush 1986; Scherer et al. 1989; Katz 1992; Andreu 1998; Sánchez-Almagro 2003). Coming from an entrepreneurial family, the individual is gradually introduced into the business world. So, the son of an independent professional, after observing the example of his/her father or mother, tends to find more attractive an occupation with a high degree of independence and flexibility (Brockhaus 1982; Hisrich and Brush 1986). At this respect, several authors suggest that EI is inherent to the genetic disposition for entrepreneurship (Nicolaou and Shane 2010) linked to parents' status (Wang and Wong 2004; Schmitt-Rodermund 2004) and family business (Laspita et al. 2012).

Regarding EI, there is a lack of agreement on the factors that determine the individual decision to create startups, and much attention has been focused on EI (Kolvereid 1996; Autio et al. 2001; Liñan et al. 2011), and the ability to explain personality traits or demographic characteristics is still considered important (Mazzarol et al. 1999; Wagner and Sternberg 2004; Rauch and Frese 2007), but it is still unclear linked to entrepreneurship (Liñan et al. 2011).

Intentions are the antecedents of current behavior (Armitage and Conner 2001) and capture the degree to which people demonstrate the motivating factors and desire to make an effort to execute a behavior (Ajzen 1991). According to Crant (1996), the EI refers to the desire of becoming an entrepreneur and is a most powerful predictor for entrepreneurship compared to attitudes, beliefs, demographics, or personality traits (Krueger et al. 2000).

Three conceptually independent attitudinal constructs determine intentions: (1) the perceived attractiveness of behavior (attitude towards behavior); (2) the perceived subjective norm about behavior; and (3) the control of perceived behavior (Ajzen 1991; Yordanova and Tarrazon 2010). Widely supported by many empirical studies in different contexts (Zhang et al. 2015), the Theory of Planned Behavior provides a general guide for the design of interventions leading to the improvement of intentions and behavior (Yordanova and Tarrazon 2010; Liñan et al. 2011).

Regarding gender and entrepreneurship, many studies include gender as an independent variable, but gender differences in the EI are not studied. Some studies examine the relationship between gender and EI without being controlled by other variables that could mediate their relationship (Routamaa et al. 2004; Veciana et al. 2005), as with Routamaa and Mäki-Tarkka (2003) who mention that men show higher EI and make more efforts to start a business. Kourilsky and Walstad (1998) identify that female high school students are less likely to create startups and have less knowledge about entrepreneurship than male students. Wilson et al. (2004) compare adolescent women and men regarding their interest and motivation to become entrepreneurs. In short, these studies reveal that entrepreneurship is less prone for women than for men.

Other studies introduce other control variables and report that the gender effect is mediated by attitudes, subjective norms and control of perceived behavior (Kolvereid 1996), and risk disposition (Raijman 2001).

A third group of studies has found that women continue to show reduce EI after being controlled by education, entrepreneurial parents, and proactive personality (Crant 1996); personal background, attitudes, and continuous employment status (Davidsson 1995); and education, experience, family, status, motivation to work, compensation, industrial sector, functional areas, and career history (Kolvereid and Moen 1997).

Concerning the parent-children relationship, the influence of the family is crucial for the development of the occupation or career intentions of young people (Jodl et al. 2001), as the entrepreneurial status of parents leads to the development of EI in younger generations (Matthews and Moser 1996; Scherer et al. 1989; Laspita et al. 2012; Hoffmann et al. 2015).

A small number of works find the effect of parents' education on their children's EI. At this respect, Constant and Zimmermann (2003) show that education in parents directly influences on their children, as they tend to excel in mathematics, and in adult life, it is reflected in higher income (Tsukahara 2007). Aldrich and Kim (2007) show a weak influence of parents during the childhood of their children if they are only entrepreneurs, but they have a significant impact if they are entrepreneurs during the adolescent stage of their children (Laspita et al. 2012).

Consistent with research in entrepreneurship, Nicolaou and Shane (2010) propose three ways to analyze how EI is transmitted between generations. First, the tendency to develop EI can be influenced by genetic factors that are inherent in the children of entrepreneurial parents, and/or people may have a genetic predisposition to make them more sensitive to environmental stimuli representing entrepreneurial opportunities. Second, there are different types of financial and non-financial resources that wealthy parents can provide to their descendants (Aldrich et al. 1998; Dunn and Holtz-Eakin 2000; Laspita et al. 2012), so the descendants with access to all these resources can perceive that entrepreneurship is a feasible task, which triggers the development of their EI. Third, enterprising parents can unleash the EI of their children through education/socialization, that is, through the conscious or unconscious transmission of business values, knowledge, and skills across generations (Spera and Matto 2007). Specific rearing practices and exposure to business models can influence the entrepreneurial values of the descendants and create attitudes in the children to make them embark on a desirable business career (Kuratko and Hodgetts 2001; Mauer et al. 2009). Self-sufficient and autonomous parents prefer parenting practices linked to self-control and independence (Aldrich et al. 1998). Children can observe how their parents work in the family business (and may help them after school or during vacations), leading to internalize their parents' work behaviors as values and norms for their behavior (Menaghan and Parcel 1995; Carr and Sequeira 2007). Therefore, education and socialization in entrepreneurship being the family members as models can trigger the perception that entrepreneurship is a feasible and desirable career to achieve for young generations (Krueger et al. 2000; Laspita et al. 2012).

4 Methodology

The Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), better known as Tecnológico de Monterrey, was founded on Sep 6, 1943, in the city of Monterrey (Mexico), based on the initiative of a group of entrepreneurs in the region. It was created with a business vision and entrepreneurship-based processes (Elizondo 1993), so the first entrepreneurship program began in 1978, and in 1985 the entrepreneurial program was formally structured in all 26 TEC de Monterrey campuses in Mexico and 18 international offices abroad (Tecnológico de Monterrey 2014; Esquivel 2011). In January 2019, Tecnológico de Monterrey has 91,200 students enrolled at a professional level and almost 10,000 professors. The sample was taken in the Guadalajara Campus, in the Mexican state of Jalisco, the second biggest campus in the number of students and university degrees (23) offered.

4.1 Sample

The sample is composed of 1025 Mexican and foreign students (57% men, 43% women) coming from all the 23 university courses offered, which are grouped into 6 main faculty departments (Architecture and Design, Business, Engineering, Entrepreneurship, Humanities, Medicine, and Other Careers) and students (national and international) coming from other campuses. Students' average age is 18 years old, with a minimum age of 16 years old and a maximum age of 24 years old. Tecnológico de Monterrey's students in Guadalajara show high EI in a 1–7 Likert scale, as all faculty departments have averages higher than 5, especially in business (mean = 5.91) and entrepreneurship (mean = 6.32). Regarding their parents' occupation, in the sample 62.1% are entrepreneurs, 23.2% work in the private sector, 11.2% are employed in the public sector, 2.4% are retired, 1.1% are unemployed, and 7.1% work in other activities.

4.2 Data Collection

Based on Mueller (2011), a survey was designed and replicated in Spain (pilot group) and corrected to be finally applied in Mexico. The instrument was tested simultaneously in a 5-hour massive event to 42 groups formed by a maximum of 25 students with an instructor previously trained for the survey application. These groups were designed heterogeneously, both in the gender and in the origin of the career department they studied to avoid biases in the application and future analysis.

5 Results and Discussion

The first question to answer is if the EI's variance within and between these groups, related to the six faculties (Architecture and Design, Business, Engineering, Entrepreneurship, Humanities, Medicine, and Other Careers) analyzed at Tecnológico de Monterrey, is homogeneous (H_0) or not (H_1). Statistically,

$$H_0 : \mu_1 = \mu_2 = \ldots = \mu_K = \mu$$
$$H_1 : \exists \mu_j \neq \mu \, j = 1, 2, \ldots, K$$

Hypothesis 1 The type of studies chosen by students does not affect their EI.

To test hypothesis 1, we applied an ANOVA to calculate if there are differences in variances between and within the groups. Results show that the ANOVA is significant (Table 1) and there is a difference between the groups, both between and within the groups, as the p-value is less than 0.05. As a result, we reject hypothesis 1, as the type of study chosen by students does affect EI (Fig. 3).

Hypothesis 2 Men have a stronger EI than women.

To test hypothesis 2, we use and analyze the answers obtained from 997 respondents (28 answers were not valid) and study the corresponding descriptive analysis by linking gender and EI. As shown in Table 2 related to the descriptive analysis of

Table 1 ANOVA on EI and faculty departments

	Sum of squares	Gl	Quadratic mean	F	Sig.
Between groups	119,762	6	19,960	11,539	0.000
Within groups	1712,561	990	1.730		
Total	1832,322	996			

Source: Authors

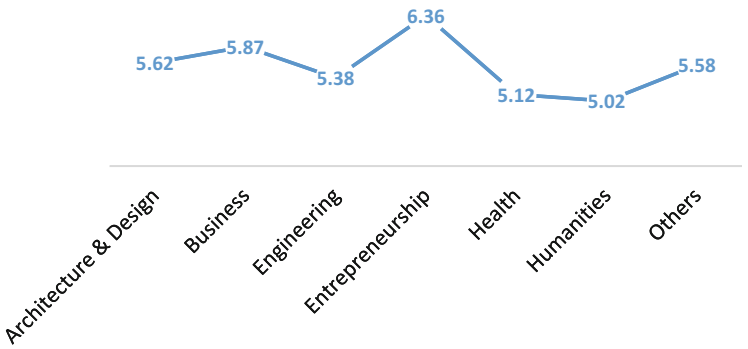

Fig. 3 EI average in faculty departments. Source: Authors

Table 2 Descriptive analysis of gender and EI

					95% Confidence interval for the mean			
	N	Mean	St Dev	SE	Lower limit	Upper limit	Min	Max
Male	571	5.5722	1.34592	0.05632	5.4615	5.6828	1	7
Female	426	5.4762	1.36986	0.06637	5.3457	5.6066	1	7
Total	*997*	*5.5312*	*1.35635*	*0.04296*	*5.4469*	*5.6155*	*1*	*7*

Legend: Max (maximum), Min (minimum), St Dev (standard deviation), SE (standard error)
Source: Authors

Table 3 Levene's test of homogeneity of variances

Levene statistic	df1	df2	Sig.
0.781	1	995	0.377

Legend: df (degrees of freedom), Sig (significance)
Source: Authors

Table 4 ANOVA on gender and EI

	Sum of squares	Gl	Quadratic mean	*F*	Sig.
Between groups	2.248	1	2.248	1.222	0.269
Within groups	1830.075	995	1.839		
Total	1832.322	996			

Source: Authors

the relationship in the sample between gender and EI, given a 1–7 Likert scale, men (mean = 5.57) show higher EI than women (mean = 5.48), and both genders show high and similar EI. This lower dispersion on the EI results is given by education, so that higher educational level, the EI in both men and women, is stronger.

To know if both groups are different, we apply the Levene's test for equality of variances. As seen in Table 3, the *p*-value (significance) is 0.377, greater than 0.05, so we accept the homogeneity of the variances between groups. As a result, the Levene statistic can be resumed as

$$F(1995) = 0.781, p = 0.377$$

As a result, we reject hypothesis 2.

Hypothesis 3 Gender is a key factor to impulse EI.

As seen in Table 4, the *p*-value is 0.269, so a significant ANOVA is not obtained. However, as the sample complies with the Levene's test of homogeneity of variances (significance (*p*-value) = 0.377 > 0.05), it shows homoscedasticity (not significant differences) between the groups. As a result, we reject hypothesis 3.

Hypothesis 4 Parents' occupation and their higher level of studies positively determine the EI on their children.

Table 5 ANOVA on father's work and EI

	Sum of squares	Gl	Quadratic mean	*F*	Sig.
Between groups	60.329	5	12.066	6.679	0.000
Within groups	1761.471	975	1.807		
Total	1821.800	980			
1–7 Likert scale	Mean			Mean	
Entrepreneur	5.77		Non-entrepreneur	5.31	

Source: Authors

Table 6 Parents' schooling

		N	%
	No studies	2	0.20
School	Primary school	20	1.96
	Secondary school	37	3.63
HEI	Mid-graduate (3 years)	129	12.65
	Graduate	536	52.55
	Postgraduate	287	28.14
	No data	9	0.88

Source: Authors

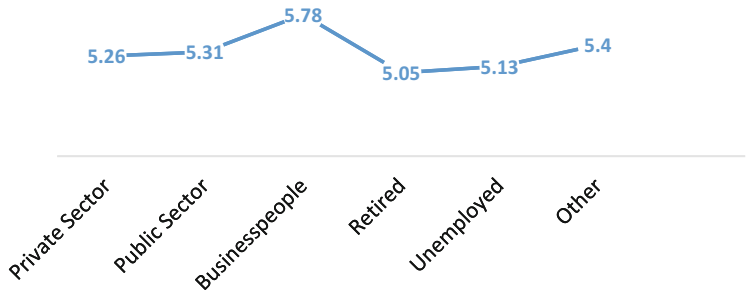

Fig. 4 EI average and work occupation. Source: Authors

Results in Tables 5 and 6 show that the EI's average in a 1–7 Likert scale is higher when the father is an entrepreneur (mean = 5.77) that non-entrepreneur (mean = 5.31) being significant the results in Table 5. In the descriptive analysis, 55% of the parents in the sample are entrepreneurs, and regarding the level of studies (Table 6), there is a predominance of educated parents, as 952 (93.34%) have a university level of studies (Fig. 4). As a result, we accept hypothesis 4. Our results agree with Naranjo et al. (2016) who affirm that a higher educational level incentivizes entrepreneurship.

6 Conclusions

As shown in our results, and according to Eccles (1994) and Wilson et al. (2007), women are more likely to have lower expectations than men for success in a wide range of occupations. Among the factors to explain the disparity between men and women is due to differences in entrepreneurial self-efficacy or self-confidence in need for skills to be successful in creating companies. It has been shown that self-confidence plays an important role in determining the level of interest to pursue an entrepreneurial career (Wilson et al. 2007).

Some authors affirm that women are more subject than men to limit their career options due to their lack of confidence in their aptitudes (Bandura 1992), so females avoid entrepreneurial actions as they think are lacking of the skills (Chen et al. 1998) and attitude required (Davidsson 1995; Veciana et al. 2005; Yordanova and Tarrazon 2010), because the society tend to relate business activity to men (Bird and Brush 2002; Bruni et al. 2004; Bruin et al. 2006), and women are seen as less able to be successful entrepreneurs than men (Buttner and Rosen 1988). However, our results reveal an opposite trend, as we show that both men and women have a favorable attitude favorable towards EI, so independently from gender, any student has a high probability of becoming a future entrepreneur endowed with a high entrepreneurial self-efficacy as they dispose of a high EI (Chen et al. 1998; DeNoble et al. 1999; Krueger et al. 2000; Scott and Twomey 1988; Segal et al. 2002; Wang et al. 2002; Wilson et al. 2007).

As with Laspita et al. (2012), enterprising parents have a significant influence during the adolescent stage of their children. This fact is crucial because there is little empirical evidence showing the importance and nature of parents as models leading their children to become entrepreneurs (Hoffmann et al. 2015). Therefore, in these students, the influence of the family is critical for their career intentions (Jodl et al. 2001), especially if they are the educated elite of their nations (Mueller 2004; Shinnar et al. 2012), a situation that is especially visible in developing countries. This finding is consistent with Dunn and Holtz-Eakin (2000), who found that children from an entrepreneurial father are often more self-employed. Besides, Chlosta et al. (2012) find that the father, and not the mother, explains the variation in their children's decision to become entrepreneurs (Laspita et al. 2012).

However, as seen in the literature, the level of the father's study does not have a direct impact on the career or occupation chosen by their children. However, according to our results, 93.34% of parents have graduate and postgraduate studies so, as with Constant and Zimmermann (2003) and Tsukahara (2007), better-educated parents will be reflected on children with higher incomes. In other words, parents' schooling has a significant positive effect on the choice of their children's professional occupations.

Finally, although parental education does not affect the children's occupational choice directly, it seems to have an indirect effect on the children's own choice through the education they are given (Tsukahara 2007), as also is shown in our results. As a result, quality parental education focused on entrepreneurship will be

beneficial for achieving sustainable human capital management that will also be beneficial for society.

6.1 Limitations

Our conclusions are limited in scope for various reasons. First, some researchers criticize the use of student as a sample (Robinson et al. 1991), but the use of this type of samples is quite common and convenient in the research on entrepreneurial initiatives (Mueller and Thomas 2001). Second, although Yordanova and Tarrazon (2010) affirm that students are not an adequate substitute for the general population due to their lack of work experience and maturity, we have used students in the sample because many large companies worldwide started when their founders were university students (e.g., FedEx, Dell, Facebook, Microsoft). Also, thousands of startups are being impulsed at HEI's business incubators and accelerators. And third, we have done this research at Tecnológico de Monterrey, so results should be interpreted in a regional context only.

6.2 Future Research

As future research, we aim to expand this analysis to other HEI systems and countries to analyze differences and similitudes between them. Following Gartner (1985), entrepreneurship is a heterogeneous group of people confronting a common definition and common predictors. Therefore, and although the average personality profile of an entrepreneur cannot be determined, we will continue analyzing the psychological, social, and economic variables that influence them.

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