Chapter 7 The Importance of Encouraging Entrepreneurship at Secondary School



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Abstract Entrepreneurship is an effective tool to mitigate the impact of the economic crisis and combat youth unemployment. Entrepreneurial education teaches young people to turn ideas into actions and helps acquires necessary skills (critical thinking, problem solving, initiative and collaborative work) for them to improve their employability. Schooling plays an important role in socializing for work. This is easily verified if we look at the analogies between the education system and the productive system, hence the prevalence in recent years of the competencybased training model. This chapter reflects about: 1) the importance of promoting entrepreneurship at school, as a task unavoidable in the twenty-first century, 2) policies to promote entrepreneurship, and 3) initiatives to promote entrepreneurship in Europe and Spain. It also presents an empirical study carried out in the Canary Islands (Spain) that analyzed the entrepreneurial aspirations of 3,987 adolescents regarding self-employment and the influence of gender, age, nationality, type of school, location of the school, educational level and performance. The Logit model is used to analyze the data. The results indicate that the pupils' aspirations to be self-employed increase in the case of foreigners, of studying in a state school, of having a lower educational level and of demonstrating a low academic performance. The results were not statistically significant for the gender and age variables. Differences between those who prefer to start their own business or have a salaried job are observed in multicultural schools. This could be explained in part by the entrepreneurial character of immigrant families and, in part, by the need to create a business for self-employment. In Spain immigrants are more predisposed to being entrepreneurs than the native population as immigrants do not usually have networks of family members and friends who can help them to access the labour market; generally speaking, immigrants have to "fend for themselves" by setting up their own businesses. The curriculum and guidance programmes need to promote a spirit of entrepreneurship and creativity in young people. It is necessary to exploit the synergies of foreign students; these students,

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O. González-Morales e-mail: olgonzal@ull.edu.es as found in the investigation, are more entrepreneurial and want to start their own company in the future.

Keywords Adolescents · Self-employed · Secondary school · Entrepreneurship

7.1 Introduction: The Importance of Entrepreneurial Education

Entrepreneurial education helps people, especially young people, acquire the necessary skills (critical thinking skills, initiative, problem-solving and collaborative work) for them to improve their employability. As stated in a European Commission report (2013a), entrepreneurial education teaches people to turn ideas into actions. But entrepreneurship education and entrepreneurial training should not be confused; the latter is aimed at the creation and management of companies, while the former has a more general and global sense of skills development such as creativity, innovation and employment. Thus, education and training policies should encourage specific knowledge aimed at business creation and development of skills that promote an entrepreneurial spirit. Among the most noteworthy measures proposed by the European Commission for the promotion of entrepreneurship are:

- Incorporating, in education systems, the entrepreneurial spirit at all levels of
 education and training, both formal (from primary education to higher education and training) and informal, and promoting lifelong learning with the aim of
 promoting entrepreneurship and the creation of new companies, particularly in
 the areas women study most such as healthcare, commerce and other services.
- Proposing content and methodologies in schools and universities that serve to promote entrepreneurial culture, integrating subjects and modules containing entrepreneurship competence in their curricula.
- Offering incentives to ensure a more balanced representation of women and men in the business sector, raising awareness among women about the possibilities of existing training in entrepreneurship.
- Collaborating with schools (from an early age) and universities so that students, especially, can carry out development projects based on real business concepts. This also encourages the development of business incubators that aim to train young female entrepreneurs so that they can put their knowledge into practice, especially those related to employment rights.
- Encouraging schools and universities to teach subjects so that girls and women
 can access careers in the world of science, finance and in sectors with strong
 growth and profitability, such as new technologies (including green technology),
 digital environments and computer systems.
- Investing in programs for the permanent training of female workers and businesswomen, guaranteeing continuous updating for quality professional growth, especially in the field of commerce.

- Facilitating access for female entrepreneurs to train in social skills and basic legislative issues concerning the creation and management of a company.
- Providing information on legislation and regulations affecting entrepreneurs (intellectual property and data protection, tax regulations, electronic commerce, public subsidies available, new information and communication technologies, use of social networks, online commerce).
- Offering motivation and psychological support programs to reinforce self-confidence in women entrepreneurs, so that their possible negative perception in relation to their abilities can be eliminated. This negative perception is probably rooted in social stereotypes. The social stereotypes generated around the female figure have limited their professional expectations and shaped the way in which women perceive themselves. In the subject that concerns us here, women generally believe that they lack entrepreneurial skills, and show low self-confidence, assertiveness, and willingness to take risks when creating a company. But the number of female entrepreneurs is growing, which is why young women see their future horizon along the lines of an entrepreneurial path.

7.2 Policies to Promote Entrepreneurship

Entrepreneurship is an effective tool to mitigate the impact of the economic crisis and combat youth unemployment. Education and training policies and, ultimately, educational centers, perform a fundamental task in creating the conditions to generate the necessary knowledge, skills, and attitudes to be an entrepreneur (Rodríguez & Vega-Serrano, 2015). The Action Plan on Entrepreneurship 2020 (Comisión Europea, 2013b) and the Communication of the Commission, "A new concept of education: Investing in competences to achieve better socioeconomic result" (Comisión Europea, 2012), were a bet on education and training entrepreneurs as a powerful tool to stimulate creativity, innovation, and entrepreneurship at all educational levels.

The Law 14/2013, of September 27, 2013 on Support for Entrepreneurs and its Internationalization paid great attention to the promotion of entrepreneurship in the different stages of the system. In Article 4 on entrepreneurship in primary and secondary education, it pointed out that the curricula of Primary Education, Compulsory Secondary Education, Baccalaureate, and Vocational Training should incorporate objectives, competences, content, and evaluation criteria for training aimed at the development and strengthening of the entrepreneurial spirit, the acquisition of competences for the creation and development of the different models of companies, and the promotion of equal opportunities and respect for the entrepreneur and the businessperson, as well as for business ethics. At the same time, the different educational administrations have to promote measures so that the students participate in activities that allow them to strengthen their entrepreneurial spirit and business initiative. In Spain, education for entrepreneurship is integrated into the curriculum through three modalities: (1) transversal integration; (2) integration in curricular subjects; and (3) creation of specific subjects. In Compulsory Secondary Education, the subject in

the specific subjects block of "Initiation in entrepreneurial and business activity" is aimed at developing a "sense of entrepreneurial initiative and entrepreneurial spirit" competence through three large content blocks: personal autonomy; leadership and innovation; and business and finance projects.

There are numerous studies on entrepreneurship policies; of all of them, the Global Entrepreneurship Monitor (GEM) is the one that conducts a more systematic and continuous analysis collecting disaggregated information on different levels and variables worldwide. GEM (2017) understands that policies aimed at promoting entrepreneurial education should have an impact on the availability of human capital in countries starting and running businesses. They should also influence the degree to which training in business creation or management is incorporated into the education and training system at all levels. To successfully meet these objectives, the GEM analyzes the following three lines of action:

- (1) Entrepreneurial education in the schooling stage (primary and secondary). Education in the primary and secondary stages contributes to: (1) stimulating creativity, self-sufficiency and personal initiative; (2) providing knowledge about the functioning of markets; and (3) encouraging entrepreneurship. The entrepreneurial spirit can be enhanced through the different subjects in the curriculum, or through specific entrepreneurship programs worked on in tutoring.
- (2) Entrepreneurial education in the post-school stage (higher education: technical training, university, and business schools). Universities and higher education institutions can provide suitable and quality training for the creation of companies and their growth in higher education, degrees and master's degrees in administration, management, and business management, among others.
- (3) When analyzing the set of public action lines that configure the conditions of the entrepreneurial framework for the population as a whole, some interesting differences can be found between the total number of countries in the world, Europe and Spain. Table 7.1 shows the evaluation (between 1 and 9) of the experts on the effects that these policies are having on the promotion of entrepreneurship. The results suggest that entrepreneurial education in the school stage is the worst valued, especially in Spain (2.7 out of 9). These results point to the need to reformulate educational policies if we really want them to have the desired effect.

The objectives of entrepreneurial education do not seem to be met in the schooling stage, so it is necessary to reformulate the exiting policy measures. To do this, it is necessary to conduct previous research to gather information from both the business community and the students. The information obtained from the companies can guide the educational system about the demands of the employment market and help it to adapt educational competences to the competences demanded by the companies.

Furthermore, it is necessary to know about the business structure to act on those characteristics requiring greater public support (Table 7.2).

In the case of Spain, according to the Central Directory of Companies (DIRCE Spanish anachronism), prepared by the National Institute of Statistics (INE Spanish

Table 7.1 Policies aimed at promoting entrepreneurship, 2016

Item (1 = very insufficient and 9 = highly sufficient)	Total number of countries GEM	Europe	Spain
1 Funding	4.2	4.4	4.0
2a Government policies: support and importance	4.2	4.0	3.0
2b Government policies: tax and bureaucracy	4.0	4.0	3.2
3 Government entrepreneurship programs	4.3	4.5	5.1
4a Entrepreneurial education in the schooling stage	3.1	3.3	2.7
4b Entrepreneurial education in the post-school stage	4.6	4.6	3.5
5 R&D Transfers	3.8	4.1	4.4
6 Commercial and legal infrastructure	4.9	5.2	5.4
7a Internal market dynamics	4.9	4.9	4.5
7b Internal market burdens or entry regulation	4.2	4.5	4.6
8 Physical infrastructure	6.5	6.8	5.7
9 Cultural and social norms	4.7	4.3	4.5

Source GEM (2017). Prepared by the authors themselves

Table 7.2 Self-employed population in Spain according to age

Age of the self-employed person	No.	%
Under 25	38,260	1.9
25–39	504,749	25.3
40–54	913,882	45.8
Over 55	538,799	27.0
Total	1,995,690	100.0

2019 Source Data on the self-employed population from the Department of Social Security in Spain, 03/31/2019

anachronism), in 2018 there were 3,337,646 active companies, with 55.3% of the companies not having any employed workers, which indicates a small size of company. Self-employed affiliates registered in the Department of Social Security in Spain according to age show that only about a quarter were under 40 years of age.

7.3 Promoting Entrepreneurship: An Unavoidable Task in the Twenty-First Century

Schooling plays an important role in socializing for work. This is easily verified if we look at the analogies between the education system and the productive system (Santana-Vega, 2013, 2015; Santana-Vega & del Castillo; 2016), hence the prevalence in recent years of the competency-based training model. One stands out because of its relevance for the creation of employment and for socio-labor insertion: entrepreneurial competition. The educational system, in general, does not train the students of secondary stage in this competence. However, the policy on education and social and employment guidance in Europe has been emphasizing for several decades now the need to inculcate the *initiative* and entrepreneurship spirit in young people, in a way which the intention is to promote self-employment as well as to fill the gaps in an employment market that is 'lazy' when it comes to generating employment. Self-employment, learning to be an entrepreneur, or to 'become your own boss, by being an entrepreneur', is not the panacea to the structural problems of youth unemployment, and can aggravate the situation of young people who invest money, their own or someone else's, in the creation of companies. If a market study is not done, many of the companies may be unprofitable in the short term; this further aggravates the economic outlook for young people.

The educational system should not only promote the entrepreneurial spirit, but also the spirit of initiative, in all its stages. This is the best way to inculcate responsible behavior in the citizens regarding their potential contribution to the overall improvement of society, and not only to the development of the business fabric.

The reports drawn up at the end of the eighties and the beginning of the nineties on guidance in different European Union countries pointed to a series of common tendencies, with special emphasis on promoting the spirit of initiative (Watts, Dartois, & Plant, 1987; Watts, Guichard, Plant, & Rodríguez, 1994; Watts, 2001).

The European Commission (2012) considers that the education system should prioritize "education for initiative", that is, it should try to promote the entrepreneurial spirit, which requires:

- Planning, organizing, analyzing, communicating, performing, reporting, evaluating, and recording skills.
- Skills for the development and implementation of projects.
- Ability to work cooperatively and flexibly in a team.
- Ability to identify one's own strengths and weaknesses.
- Ability to act decisively and positively in the face of change.
- Ability to evaluate risks and assume them in the best possible way and at the right time.

The attitudes that are part of this competence are: (1) willingness to show initiative; (2) positive attitude towards change and innovation; and (3) disposition to identify areas in which one can demonstrate entrepreneurial skills (in the family, workplace and community).

The promotion of the skills and attitudes required for the development of the spirit of initiative are in line with the competences required by European companies in the future: (1) learning to learn; (2) knowing how to manage information according to situations and contexts); (3) capacity for deduction, analysis, and strategic reasoning; (4) ability to make decisions in complex and multicultural societies; (5) ability to communicate and master several languages; (6) ability to work in a team in collaborative environments; (7) imaginative and creative capacity to give alternative and innovative answers to old and new problems; and (8) capacity for self-management, self-development, and flexibility.

However, as Marina (2010) points out, the traditional view of the school, focused more on cultural transmission than on cultural innovation, does not favor the entrepreneurial spirit, but neither does the purely economic approach of this competence. It is necessary to create entrepreneurial schools and entrepreneurial teachers to educate entrepreneurial students; 'autonomy' should necessarily be the objective of this type of teaching, and 'self-employment' should be understood as only one of its many applications.

The Action Plan on entrepreneurship 2020 prepared by the European Commission (2013a) set out different lines of action for the promotion of entrepreneurship. Among the proposals for measures affecting entrepreneurial education are the following:

- 1. Educate and train in entrepreneurship to promote growth and business creation:
 - The development of a pan-European entrepreneurship learning initiative that brings together and makes European and national knowledge available for impact analysis, knowledge, methodological development, and peer support of professionals in the Member States.
 - The setting up, together with the Organization for Economic Cooperation and Development, of a guidance framework to encourage the development of entrepreneurship schools and vocational training centers.
 - The dissemination of a guidance framework for the entrepreneurial university; facilitation of exchanges between universities interested in applying the framework; the gradual promotion of the framework in higher education institutions of the European Union.
 - The support of suitable mechanisms for the creation of companies driven by the university (such as nursery companies) and ecosystems between universities and companies that support this creation.
- 2. Defining models and reaching specific groups: entrepreneurs as a model. Establishing, within the framework of the Small and Medium Sized Enterprises Week, 'EU Entrepreneurship Day' throughout Europe, aimed at students in the last year of secondary school.

7.4 Initiatives to Promote Entrepreneurship in Europe and Spain

This section is a review of European and Spanish initiatives designed to promote entrepreneurship. They are of interest in the European context:

- Entrepreneurial Skill Pass (ESP). This is an international qualification for students who participate in mini-companies. They must complete two self-assessment questionnaires and a final examination on business skills. The ESP certifies that the student has had real experience in entrepreneurship and has acquired the knowledge, skills, and competencies necessary to start their own business (http://entrepreneurialskillspass.eu/).
- The Entrepreneurial School. This is a virtual guide on entrepreneurial learning that serves as a practical resource for teachers of primary, secondary, baccalaureate, and vocational training. It offers educational material for the implementation of entrepreneurial training in any subject and in any course (see http://theentrepreneurialschool.eu/).
- Innovation & Research Entrepreneurship Education. This is the new Erasmus + project whose objective is to analyze the impact of entrepreneurial education and ensure that young people have entrepreneurial experience when they finish secondary education (see http://icee-eu.eu/)
- European Entrepreneurship Education NETwork. This is a network of experts committed to entrepreneurial learning. The network promotes and drives the development of competences, and recommends educational policies that promote entrepreneurial training in Europe, as set out in the 2020 entrepreneurship action plan (http://www.ee-hub.eu/).

In Spain, a number of interesting initiatives have taken place with different degrees of success, such as the design of optional subject and entrepreneurship programs to promote entrepreneurial experiences (Marina, 2010). The most noteworthy initiatives are the following:

- Young Entrepreneurs. The program is aimed at students in the last two years of Compulsory Secondary Education, Baccalaureate, and Vocational Training. The students can choose how to approach each project according to their particular interests. All the projects can be entered for the *Reto-Emprende* prize, be selected to participate in a four-day entrepreneurship campus in Barcelona, and have the opportunity to win the final prize of a training trip to Silicon Valley (https://www.educaixa.com/es/-/programa-jovenes-emprendedor-1).
- European Youth Enterprise. This is an educational project designed by Valnalón
 for the development of entrepreneurial skills in different stages of the education system; it is aimed at students in the third and fourth year of Compulsory
 Secondary Education, Baccalaureate, and Vocational Training so that they can
 create and manage their own mini-company in the classroom in the legal form
 of a cooperative society. This will build commercial relationships with minicompanies from other autonomous communities in Spain or other countries with

the goal of 'importing' and 'exporting' products to and from each other. The imported products will be marketed in the local market and the results are analyzed afterwards, with the profits made then shared out, the same as any real company. The Project facilitates the acquisition of all basic skills (http://www.valnaloneduca.com/eje/).

- Young Social Entrepreneurs. This initiative is aimed at Secondary School students. The students create an association whose activity teaches them about the social realities and the situation of people from other less developed countries. They also contact school associations in other countries to learn about how their peers live in the country in question, and collaborate in NGO projects. The initiative is open to youths between 13 and 15 years of age. The students have to create the association, manage it and get results; they collaborate with the Red Cross and Entreculturas, among other NGOs, while having teaching materials at their disposal (http://www.valnaloneduca.com/jes/).
- Entrepreneurship Workshop. This educational program is framed within the Program for the Promotion of Entrepreneurial Culture and is aimed at students of Vocational Training, Baccalaureate, and Occupational Training. It takes place in all the centers of the Principality of Asturias. It includes talks, training courses, business ideas competitions, business project development and business plans that can be put into practice. The program consists of a Motivation Day to show entrepreneurship opportunities, Entrepreneurial Training Courses to enhance entrepreneurship skills and a Business Projects Competition (http://www.valnalon.com/ver_noticia/112/cursos-taller—of-entrepreneurs).
- European Center of Companies and Innovation of Navarra, Government of Navarra. This initiative develops programs in all educational stages. The program is aimed at all schools that wish to promote entrepreneurial spirit in students, from Primary Education to Vocational Training. Being an entrepreneur requires skills and competencies such as creativity, teamwork, observation, analytical and critical thinking, initiative, autonomy, flexibility, and adaptability. The main programs are: 'School goes to the market' (Primary), 'European Youth Enterprise' (Secondary), 'Educating for initiative' (Vocational Training). It includes Ideas Contests for students of Compulsory Secondary Education and Vocational Training as well as teacher training courses (see http://www.cein.es/).
- Educating for entrepreneurship, Regional Government of Andalucía. This initiative has several programs to promote entrepreneurial culture in different educational stages, with a goal of solidarity with and knowledge of other cultures. The main programs are: 'Juventud Emprendedora Solidaria', 'Empresa Joven Europea', 'Emprende joven', 'Gente Emprendedora Solidaria' and 'Emprender en Europa' (see http://www.juntadeandalucia.es/educacion/webportal/web/cultura-emprendedora/presentacion).
- Entrepreneurship at School, Regional Government of Madrid. This initiative
 gives awards to students in all the educational stages ('Dream today to start up
 tomorrow'), while teacher training courses are held, as well as an Entrepreneurs
 Workshop organized for students from eight to 12 years of age with didactic units

- to promote entrepreneurship, where they play simulation games such as 'Play and learn entrepreneurship'.
- Junior Achievement Spain. This initiative includes programs designed for Primary, Secondary, Baccalaureate, and University students. The programs are supported by 'learning by doing' activities. The programs try to improve the student's personal confidence and communication skills, prepare them to position themselves better in the employment market, and teach them solidarity, honest work, leadership, creativity, teamwork etc., which helps them overcome their fear of failure (see http://fundacionjaes.org/).

Further initiatives are being developed in Aragon, in the Basque Country (Basque Association of Development Agencies), and in the Canary Islands, both of which are examples of the interest the authorities have in this competence. In the case of the Canary Islands, there is no specific overall regional strategy, although various public and private institutions are involved in the design and implementation of education programs for entrepreneurship, and their integration into the curriculum complies with all the legal requirements. The provision of practical experiences is concentrated in Primary Education, Compulsory Secondary Education, and Baccalaureate. The experiences 'Enseñar para Emprender', 'Método Oreoh' and 'Jóvenes Creactivos' have a common goal of fostering young people's interest in entrepreneurship, creativity, and innovation. As for the teachers, they receive specific training and have access to material for work in the classroom, receiving support and advice from the coordinators during the development of the activity (Ministry of Education, Culture and Sports, 2015).

The research project *The academic and socio-professional transition of young people: Design of a computerized educational and career guidance program for Compulsory Secondary Education* collected information from 292 companies on competencies and characteristics concerning employment. It found that demand was not only focused on skills associated with entrepreneurship (initiative, ability to adapt to change, teamwork), but mainly on proactive attitudes (Santana-Vega, González-Morales, & Feliciano, 2016a; Santana-Vega, Feliciano, & Jiménez, 2016). Further research was conducted in the same project with the aim of detecting the entrepreneurial spirit of students in the school stage. The study by Santana-Vega, González-Morales, and Feliciano (2016b) analyzed the characteristics of students in compulsory secondary education and their aspirations to work for themselves.

7.5 Why to Research About Entrepreneurship: Our Investigation

7.5.1 Background

The educational system plays a fundamental role in promoting the attitudes and skills associated with entrepreneurship. The European Union has designed different strategies and action plans for the promotion of entrepreneurship. An entrepreneurial system of education that promotes creativity, innovation, and self-employment needs to be enhanced at all education levels.

There is a discussion in the literature about whether the educational system should encourage entrepreneurship in students (Lourenço & Jayawarna, 2011). Supporters of introducing entrepreneurial knowledge and skills into the curriculum argue that this should begin at the infant stage and continue throughout compulsory schooling. The research work of Peterman and Kennedy (2003), which used a sample of 200 students of different ages, shows how the formation of autonomy skills and personal initiative at an early age helps students define their career.

In Spain, as in other countries, educational policies are oriented more towards the uniformity of thought than fostering imagination, creativity, or divergent thinking at an early age (Sternberg, 2002; Sobrado-Fernández & Fernández-Rey, 2010). The Spanish education system has generated measures of attention for diversity to preferentially support failing students, but students with a high level of initiative or creativity are usually neglected.

Education systems should develop creative abilities in students, which allow them to develop complex cognitive processes: imagining, speculating about innovative hypotheses, discovering, and inventing (Schleicher, 2003). These capabilities are essential in order to make vital decisions in a calm and prudent way (Santana-Vega, Feliciano, & Jiménez, 2012; Santana-Vega & Feliciano, 2011; Santana-Vega, Feliciano, & Cruz, 2010).

Self-employment is becoming increasingly important because of its relevance in the global processes of job creation and economic growth (Baumol, 2010). Policymakers have to find ways to maintain and generate entrepreneurship in countries (Sanyang & Huang, 2010). The development of policies to promote entrepreneurship and self-employment among young people requires knowledge of the characteristics of students who aspire to become self-employed.

This study analyzes: (1) the aspirations of young people to become self-employed; and (2) the characteristics of compulsory secondary school adolescent pupils according to their desire to start their own company.

7.5.2 Methodology

This research studied 3,987 adolescent pupils in the Canary Islands in 2011. The secondary schools were specifically selected as they had to fulfil the following criteria: (a) be located in the larger or smaller islands; (b) be located in rural, urban, or periphery areas or be a multicultural school; and (c) to be a state or privately owned school.

The Academic and Career Guidance Questionnaire was designed for the study. The questionnaire collects information on students' academic, family, and personal characteristics, and on their academic-employment decision process.

A logistical regression was applied to calculate the probability that a pupil wants to start their own business. This type of model was used when the dependent variable is a categorical variable with two separate and mutually exclusive alternatives. The dependent variable in this analysis is the desire to start a company (alternatives: yes or no). The explicative variables are gender, age (11–16 or over 16), nationality (Spanish or foreign), type of school (privately or state owned), location of the school (peripheral, multicultural, rural, or urban), educational level (first to second year or third to fourth year of Compulsory Secondary School) and performance (low or high according to their academic results). Four models were performed to evaluate the results and to select the most parsimonious model with the greatest predictive capacity. The gender, age, and location variables were discarded. The nationality, type of school, educational level, and performance variables were used to construct the model

7.5.3 Results

The model predicts 57.3% of all the cases. This model has a high explicative capacity for the pupils who want to start their own company because it correctly classifies 89.3% of these pupils. Table 7.1 shows the estimated coefficients of the model and the individual significance of the variables. The statistical tests show the suitability of the model. The Hosmer-Lemeshow test for goodness of fit of the model shows that the overall fit is good (there is no significance Sig. 0.810). The aforementioned test has a high value of predicted probability (p), which is associated with result 1 of the dependent variable.

A detailed observation of the calculations in relation to the characteristics of the pupils studied shows that: (1) a Spanish pupil has less probability of being self-employed; (2) being a pupil at a private school reduces the probability of being self-employed; (3) as regards to educational level, pupils in first and second years of Compulsory Secondary School have a greater probability of being self-employed than those at higher levels in Compulsory Secondary School; and (4) underperforming students are more likely to become self-employed.

7.5.4 Discussion and Conclusion

The decision to be self-employed in adolescent pupils increases in the case of foreigners, of studying in a state school, of being at a lower educational level, and of having a low academic performance.

The absence of gender differences is noteworthy, because of the few differences produced by the percentages obtained from the male pupils and female pupils about their wish to start up a company in the future. This result is similar to results obtained in other studies, which consider that there are no differences between men and women regarding their predisposition to entrepreneurial initiative, above all at early ages; nevertheless, most pupils pointed in the opposite direction when the real data on entrepreneurship was analyzed. A circumstance that may influence these results is that, in recent years, educational authorities have promoted the inclusion of entrepreneurship education, improving knowledge of the company and the employer in the curriculum, as well as the launch of new lines of public action aimed at developing equality policies that appear to have attenuated gender differences.

Differences between those who prefer to start their own business or have a salaried job are observed in multicultural schools with students from over 53 different nationalities. This could be explained in part by the entrepreneurial character of immigrant families and, in part, by the need to create a business for self-employment. Immigrants in Spain are more predisposed to being entrepreneurs than the native population as immigrants do not usually have networks of family members and friends who can help them to access the labor market; generally speaking, immigrants have to 'fend for themselves' by setting up their own businesses.

The results of this study show the need to reflect on the characteristics of the pupils, which affects their attitude towards entrepreneurship. Teachers should take these features into account in order to promote them in the classroom. Those responsible for education policies should design appropriate strategies to enhance the entrepreneurial skills of pupils in schools.

Academic and career guidance should help pupils to reflect on the importance of entrepreneurship. Coordination between the integral parts of the education system and business is essential. Mentoring becomes a fundamental orientation tool if carried out by professionals trained in the coordinates of the information and knowledge society (Castells, 1998).

Mentoring has extended to the mothers and fathers of pupils since their influence is considerable at these ages (Santana-Vega & Feliciano, 2011). The family should consider other training options apart from university, as a means of access to the labor market (professional training and occupational training). Employers should get closer to the world of young people and try to convey entrepreneurial attitudes, through teachers or by any other means. In order to encourage entrepreneurship among adolescents it is necessary to improve the knowledge of the figure of the entrepreneur and the self-employed person in secondary education.

Teachers and counselors training in new skills and updating curricula are prerequisites to respond to the changing realities of post-modernity. Work needs to be done

on entrepreneurial competence in the classroom, defined as the individual's ability to turn ideas into action. Therefore, education should foster the following in students: (1) creativity, innovation, and risk taking; and (2) the skills to plan, manage projects, and achieve the objectives above, taking ethical values into account. The acquisition of such skills and abilities must be useful not only in the pupils' working life but also in their personal life. Acting with autonomy means we have the ability to make and implement our life plans and personal projects. Autonomy competence and personal initiative are relevant to succeed in the social, cultural, economic, employment, political, emotional, or ethical plane. Furthermore, possessing the above skills increases the possibilities of people starting their own business.

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