

Attitudes and entrepreneurial intention of Portuguese secondary students

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Abstract:

Entrepreneurship emerges as a key factor in job creation and is crucial for socioeconomic balance in the region or the country. Entrepreneurship is an effective alternative, either through the development of existing businesses or by creating new ones. It should also emphasize that the entrepreneurial ability of a society is a collective well that should be preserved and cultivated. The situation of global economic crisis has been reflected in the different economies, particularly in the declined of employment to unimaginable heights. In order to counteract this negative cycle, it becomes imperative to stimulate, maintain and cultivate an entrepreneurial attitude cross, from the youngest to the current managers, to promote the creation of new business and develop existing yet. Looking for answers about the policies and mechanisms available for the creation of new businesses and the existence of an entrepreneurial attitude in a given region are of vital importance in promoting entrepreneurship.

Portugal has experienced troubled times, with marked destruction of jobs and businesses affected by the economic and financial crisis, as well as by restructuring undertaken by the government, especially after the financial rescue that Portugal was subjected. Faced with a strong future scenario of high unemployment, what attitudes and entrepreneurial intentions reveal young Portuguese students? This research work focuses on secondary students from Oliveira de Azemeis, a city and municipality in northern Portugal, heavily industrialized in several business areas and with important references on employment size and internationalization capability.

Taking as a starting point a survey with 308 students, all pre-university students, the paper presents and discusses the results obtained on various issues such as entrepreneurial behavior of students' parents, the attitude towards self-employment and perceptions of entrepreneurial intention. Results indicate a moderate entrepreneurial behavior of student's parents. In general, the attitudes towards self-employment are lower and the analysis identified differences considering the attitudes items. The data analysis also tested and identified differences considering gender, age, course type (regular or professional), school and self-employed parents. The analysis of intention identified 48.4% of students with entrepreneurial intention, and 51.6% with no intention. Statistical tests identified an association between intention and school and between intention and self-employed parents. Finally, the analysis identified significant differences concerning attitudes by intention group. The results give a contribution to the theme of Entrepreneurship through the investigation of the entrepreneurial attitudes and intention of young adults (pre-university).

Keywords: Entrepreneurship, Secondary students, Attitudes, Intention, Portugal

1. Introduction

Portugal is currently involved in a major global economic crisis, with deep reflection on its economy. The side effects of such situation, especially in unemployment numbers, makes it imperative to stimulate, maintain and cultivate an entrepreneurial culture shared by all, from the youngest to current managers, to create new business and developing existing ones. Given this economic context, entrepreneurship emerges as a key to creating jobs and wealth and socio-economic balance of the country. The priority should be the stimulus and encouragement of knowledge and behaviors of individuals. Depending on the nature of their location or organization, it is important to take advantage of existing opportunities or strengths, converting each individual in an entrepreneur.

At the World Economic Forum (European Commission, 2009) many politicians argued that the promotion of entrepreneurship should happen early in the life of individuals and governments should direct their efforts to develop the education of entrepreneurial skills in young people. Since Portugal has sought to implement programs to encourage entrepreneurship in different educational degrees, how the young Portuguese realize the theme of entrepreneurship? What attitudes have and what is the entrepreneurial intention of the Portuguese young people who are entering adulthood?

This research work focuses on Portugal, specifically in Oliveira de Azemeis, a city and municipality in northern Portugal, heavily industrialized in several business areas and with important references on employment size and internationalization capability. Being the entrepreneurship an indicator of the potential recovery of an economy, it is important to acknowledge the young entrepreneurship potential. The research aims to analyze the effects of this dynamic among secondary students finalist, especially the strength of their attitudes and entrepreneurial intentions.

This article is organized into five sections, besides the introduction. Section 2 examines the determinants of entrepreneurship. Section 3 presents the results of the study designed to understand the Portuguese secondary students' entrepreneurial attitudes and intention. Finally, Section 4 presents the main conclusions.

2. Determinants of entrepreneurship: some insights

Entrepreneurship is a study area of great importance and relevance to the development of society. Given its great potential is, since the 90s (XX Century), the subject of many scientific, economic and psychological investigations (Obschonka *et al.*, 2010). Currently this relevance is even greater given the steady increase in social and economic challenges faced by today's societies, including the definition of new paradigms, the need for innovation with creative approaches and new ways of operating. Entrepreneurship fosters the creation of new jobs and is critical to economic growth in society, helping to reduce poverty (Amoros and Bosma, 2014). Consequently, its promotion and development is seen perceived as vital to the success of modern societies (Audretsh, 2007).

However, entrepreneurship has many peculiarities; it is not an exact science to be implemented, but rather a way of thinking to be developed. Entrepreneurship as a way of thinking emphasizes the opportunities instead of threats and barriers, and it is this ability to identify opportunities that requires first and foremost the study of entrepreneurial intentions of individuals (Krueger *et al.*, 2000). Much of the complexity and considerable breadth in the study of entrepreneurship is precisely in understanding the motivations that lead an individual to undertake. Several authors (Draghici *et al.*, 2014; Gurel *et al.*, 2010; Morrison, 2000; Obschonka *et al.*, 2010) have studied these motivations, sharing the approach of the study of the relevance of personal characteristics in motivation for entrepreneurship. For example, Gurel *et al.* (2010) studied the influence of these personal characteristics in the intention of creating a new business as well as the influence of the family of individuals and the moderating effect of education.

In the particular case of the family, is recognized the influence of parents in the training and motivation of children, so that is an important factor to consider in the study of entrepreneurship. The literature identifies several studies on the topic of the entrepreneurial family (see for example Gurel *et al.*, 2010; Laspita *et al.*, 2012; Schmitt-Rodermund, 2004; Wang and Wong, 2004). Laspita *et al.* (2012) analyzed the implicit mechanism for transmission of entrepreneurial intentions within families. The transmission of entrepreneurial intentions among generations of families is complex and involves more than just one generation, not limited only to the influence of parents, but also to the grandparents. The duration of the family's influence will depend on the gender of the sons (male children have a greater pressure to follow in the footsteps of their parents).

Another feature that is studied is the parenting style available in the family. Schmitt-Rodermund (2004) argues that the authoritarian parenting style promotes self-efficacy and high expectations to possess entrepreneurial skills. This is because the behavior of authoritarian parenting is associated with autonomy, leadership, self-confidence and locus of control, and this will help young people develop a sense of care and independence, which are very important qualities for a future entrepreneur.

Importantly family is not only a framework for the entrepreneur, but also a concrete help on new business that the entrepreneur wants to open. Rajjman (2011) defines the family as a support network for the entrepreneur who is manifested in at least two ways. The first would be that the family makes up a force of unpaid work, and this would reduce the initial costs when opening a business. The second way would be that as there is a sharing of resources among family members, it would facilitate the survival of the business in its early stages.

Attitudes have been a key concept in explaining human behavior. Attitudes can be defined as beliefs which predispose an individual to respond positively or negatively to something, such an action, a product or even a

job or career. Following the theoretical advances in the research field of attitudes (see for instance the Theory of Planned Behavior of Ajzen) in the entrepreneurship context, attitude research can be a useful basis for the identification of entrepreneurial intention. Liñán *et al.* (2011) concluded that attitudes were formed as a result of socialization processes in younger individuals. The combination of favorable perceptions and work experience obtained will lead a potential entrepreneur to act.

At the World Economic Forum (European Commission, 2009) many politicians argued that the promotion of entrepreneurship should happen early in the life of individuals and governments should direct their efforts to develop the education of entrepreneurial skills in young people. Younger individuals are more likely to have new ideas, greater ease of having to deal with technology and have more education than their parents (Amoros and Bosma, 2014). Moreover, young people tend to have fewer responsibilities as they do not need to pay their own bills and work, giving them specific characteristics of an entrepreneur, such as being less cautious and less risk averse. It is important to business success created by a young entrepreneur. The survival of small businesses in their early years is difficult, and in particular for young entrepreneurs survival rates are still lower compared with the rates from companies controlled by older entrepreneurs (van Praag, 2001). However, the developments of young people who survive the initial phase have a higher growth potential than older individuals. According to Halabisky *et al.* (2012) an analysis of the companies that survived the first three years revealed that those run by individuals less than 30 years had an average growth rate of 206%, while companies run by people with more than 40 years had a rate of 114%, i.e. almost half. It is observed so that young entrepreneurs are subject to greater risk, but also the greatest rewards.

The GEM 2013 global report (Amoros and Bosma, 2014) confirm the importance of strengthening youth entrepreneurship. In turn, studies of the International Labour Organisation (ILO) indicate that young people are three times more likely to be unemployed compared to adults. Allied to this, in many developing countries, there is a demographic trend of increasing young population, and how many sectors of the economy are stagnant due to the global financial crisis, it is necessary that alternatives to conventional labor market, *i.e.*, work will be encouraged by behalf of others, such as entrepreneurship (Amoros and Bosma, 2014). It also appears that the perception of the viability of self-employment in the European Union decreases with age (European Commission, 2009), which is a factor that strengthens the entrepreneurial potential of young people. From the above we can see the importance of the study of entrepreneurship and the need to identify more amenable and willing to develop this "spirit" enterprising individuals.

3. Data collection and analysis

This paper presents the results from a survey named *Empreende K-12* designed to understand the entrepreneurial attitudes and intentions of secondary students. Questionnaires were administered among Oliveira de Azemeis secondary students enrolled in two different courses. The first, the regular, has a curriculum more oriented to the pursuing of studies at the university level. The second, the professional, has a vocational preparation. Students were approached during classes to respond to the survey. A total of 308 usable questionnaires were returned and used for the data analysis.

The students' genders distribution is balanced, with 57.5% of female students, compared to 42.5% male. Age ranges from 16 to 24 years, with a mean of 17.43 years and a standard deviation of 0.876 years. After, each respondent was classified in one of two age groups: 1) 16-17 years; 2) equal to or greater than 18 years old. During the survey, it was also recorded for each respondent the type of course and school. The type of course considers two categories: 1- regular (it means that it has further study) and 2 - professional (it means that it preferably is a vocational preparation). The summary of respondents' background is presented in Table 1.

Table 1: Respondents profile

Characterization	N	%
Gender		
Female	177	57.5%
Male	131	42.5%
Age group		
16-17 years	209	67.9%
18-... years	99	32.1%
Course Type		
regular secondary school	174	56.5%
secondary vocational education	134	43.5%
School		
Secondary School Ferreira de Castro	154	50.0%
Secondary School Soares Basto	102	33.1%
Basic and Secondary School of Fajões	52	16.9%

The survey included a question about the entrepreneurial behaviour of students' parents: "Do you grew up in an entrepreneurial family?" (Adapted from Laspita *et al.*, 2012). The options presented and the respective results were summarized in Table 2.

Table 2: Entrepreneurial behavior of student's parents

	N	%
No, my parents were never entrepreneurs	199	64.6%
Yes, business still active	76	24.7%
Yes, the business still worked at least until 5 years ago	18	5.8%
Yes, but the business ended more than five years ago	15	4.9%

A new variable was defined to measure the experience of "parents self-employed" by coding the "yes" answers as 1-yes; otherwise 0-no. Thus sample was divided into two groups: students with entrepreneurial parents (35.4%) and no (64.6%).

The following is an analysis of entrepreneurial attitudes and intention of secondary school students. In addition to the descriptive analysis of the responses to each item, was tested the existence of significant relationships or differences considering the characterization variables such as gender, age, type of travel, school and self-employed parents.

The attitude towards self-employment considered ten items adapted from Kuckertz and Wagner (2010) (four statements) and Carayannis *et al.* (2003) (six statements). Each respondent was asked to indicate their level of agreement with the statements presented (Likert scale with 5 levels ranging from 1 – "I totally disagree" to 5 – "I totally agree". The analysis of responses is summarized in Table 3.

The Table 3 presents descriptive statistics of the responses to different statements. The median values between 2 and 3, and the mean values below 3, indicate that students have low levels of agreement (the only exception for mean is the statement 10 ("*Entrepreneurs have a good image...*") with a value higher than 3).

Table 4 and Table 5 present the mean values considering the characterization variables (gender, age group, course type, school) and the existence of self-employed parents. When analyzing the mean value by gender it appears that male respondents tend to agree more than females (even in negative statements). The same trend is identified for age group, with the 18 years or older group agreeing more than the 16-17 years group. The analysis by course type also reveals a higher level of agreement for professional courses (Table 4).

Table 3: Entrepreneurial attitudes

	Min	Max	Median	Mean	SD
1. I would rather be my own boss to have a secure job;	1	5	3	2.83	1.13
2. I prefer to form a new company to be the manager of an existing one;	1	5	2	2.22	1.13
3. I can only make good money if I am my own boss;	1	5	3	2.72	1.02
4. In business, it is preferable to someone having the initiative to create their own employment (be an entrepreneur) than being an employee in a large company or state company;	1	5	3	2.84	0.94
5. The success of someone who creates their own job (an entrepreneur) is strongly determined by "luck" (-);	1	5	3	2.63	1.09
6. Entrepreneurs are egotistical (-);	1	5	2	1.98	1.03
7. The initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed (-);	1	4	2	1.97	1.00
8. Entrepreneurship deteriorates family life (-);	1	5	2	2.40	1.14
9. The training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship);	1	5	3	2.72	0.97
10. Entrepreneurs have a positive image in society.	1	5	3	3.22	0.92

Table 4: Entrepreneurial attitudes (mean) by gender, age group and course type

	Gender		Age group		Course type	
	Male Mean	Female Mean	16-17 years Mean	18 years or more Mean	Regular Mean	Professional Mean
1. I would rather be my own boss to have a secure job;	2.96	2.74	2.71	3.09	2.70	3.01
2. I prefer to form a new company to be the manager of an existing one;	2.28	2.18	2.13	2.40	2.11	2.37
3. I can only make good money if I am my own boss;	2.74	2.71	2.69	2.78	2.69	2.76
4. In business, it is preferable to someone having the initiative to create their own employment (be an entrepreneur) than being an employee in a large company or state company;	2.98	2.75	2.80	2.93	2.74	2.99
5. The success of someone who creates their own job (an entrepreneur) is strongly determined by "luck" (-);	2.68	2.59	2.61	2.67	2.56	2.71
6. Entrepreneurs are egotistical (-);	2.07	1.92	1.89	2.18	1.90	2.08
7. The initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed (-);	2.03	1.93	1.96	2.01	1.95	2.01
8. Entrepreneurship deteriorates family life (-);	2.53	2.31	2.28	2.65	2.26	2.57
9. The training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship);	2.82	2.65	2.63	2.92	2.66	2.81
10. Entrepreneurs have a positive image in society.	3.36	3.12	3.18	3.31	3.19	3.27

Table 5: Entrepreneurial attitudes (mean) by school and self-employed parents

	School			Self-employed Parents	
	Fajões Mean	Ferreira de Castro Mean	Soares Basto Mean	No Mean	Yes Mean
1. I would rather be my own boss to have a secure job;	2.85	2.83	2.83	2.86	2.78
2. I prefer to form a new company to be the manager of an existing one;	2.33	2.20	2.20	2.22	2.23
3. I can only make good money if I am my own boss;	2.73	2.77	2.64	2.72	2.72
4. In business, it is preferable to someone having the initiative to create their own employment (be an entrepreneur) than being an employee in a large company or state company;	3.06	2.77	2.85	2.88	2.77
5. The success of someone who creates their own job (an entrepreneur) is strongly determined by "luck" (-);	2.60	2.50	2.83	2.54	2.78
6. Entrepreneurs are egotistical (-);	2.12	1.94	1.98	2.04	1.87
7. The initiative to create their own employment (entrepreneurship) is basically an exit and resource for people who have failed (-);	1.96	1.94	2.03	2.02	1.90
8. Entrepreneurship deteriorates family life (-);	2.33	2.38	2.47	2.32	2.54
9. The training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship);	2.58	2.73	2.79	2.73	2.72
10. Entrepreneurs have a positive image in society.	3.21	3.26	3.18	3.17	3.33

Among the three schools is more difficult to identify a trend of responses, although it appears that the Secondary School Ferreira de Castro presents a lower level of agreement than the other two schools. At the level of self-employed parents, the analysis suggests that students without entrepreneur parents are those with higher levels of agreement, except in the negative statements 5, 8 and in the positive statement 10 (Table 5).

To evaluate differences between respondents, the analysis used two nonparametric tests. The Mann-Whitney U-test was used to test differences related with gender, age group, course type and self-employed parents. The Kruskal-Wallis test was used to evaluate differences among the three schools. Test results reveal that:

- statement 1 (*"I would rather be my own boss to have a secure job"*) presents differences for age (U=8450.0, p<0.01) and group course (U=9790.5, p<0.05);
- statement 2 (*"I prefer to form a new company to be the manager of an existing one"*) has differences for age (U=8874.0, p<0.05) and course (U=9915.5, p<0.05);
- statement 4 (*"In business, it is preferable to someone having the initiative..."*) showed significant differences for gender (U=10130.0, p<0.05) and course (U=9780.0, p<0.05);
- statement 5 (*"The success of someone who creates their own job (an entrepreneur) is strongly determined by "luck" (-)"*) has significant differences for self-employed parents (U=9646.0, p<0.10) and schools (Qui-square=5.780, p<0.10);
- statement 6 (*"Entrepreneur are egotistical"*) showed significant differences for gender (U=10280.5, p<0.10) and age (U=8599.0, p<0.05);
- statement 8 (*"Entrepreneurship deteriorates family life"*) showed significant differences between gender (U=10202.0, p<0.10), age (U=8518.0, p<0.05), course (U=9821.5, p<0.05);
- statement 9 (*"The training is more important than personality as a success factor in the initiative to create their own employment (entrepreneurship)"*) presents differences for age (U=8592.5, p<0.05);
- statement 10 (*"Entrepreneurs have a positive image in society"*) showed significant differences for gender (U=10187.0, p<0.10) and self-employed parents (U=9547.5, p<0.10).

The intention was measured by two questions. The first asked students *"What you intend to do after you finish secondary school?"*. The second was adapted from Laspita *et al.* (2012) and asked respondents *"Have you ever*

considered seriously starting your own business?”. Interestingly, 61.4% of respondents assume that intend to continue studies against a total of 38.6% that intends to enter into active life, whether in search of employment, creation of an own business or help in the family business. Nevertheless, 51.9% of respondents assume never having thought about creating their own job and only 1.9% is already starting the process of creating an own job. Results are presented in Table 6.

Table 6: Entrepreneurial intention of students

	N	%
What you intend to do after you finish secondary school?		
Continue my studies	189	61.4%
Look for a job	107	34.7%
Create my own job	7	2.3%
Help my parents in their business	5	1.6%
Have you ever considered seriously starting your own business?		
No, never	160	51.9%
Yes, but abandoned the idea	71	23.1%
Yes, I intend to be my own boss in future	71	23.1%
Yes, I'm already starting the process	6	1.9%

After a cross-analysis of the responses to the two questions, we identified 98 students who answered never having thought about creating their own job and intend to continue their studies and 61 students who answered never having thought about creating their own job and intend to look for a job. Thus, we defined a new measure of intention encoding these responses as 0-No; otherwise 1-Yes. Thus sample was divided into two groups: students with no entrepreneurial intention (51.6%) and students with entrepreneurial intention (48.4%). To determine whether there was an association between intention and the characterization variables such as gender, age, type of travel, school and self-employed parents, the analysis included Qui-Square Tests which found a dependency between intention and school ($X^2(2)=7.197$, $p<0.05$) and between intention and self-employed parents ($X^2(1)=4.885$, $p<0.05$).

In addition it was decided to use the intention to explore the existence of differences in attitudes. Figure 1 illustrates the mean value of the attitudes statement for the two entrepreneurial intention groups (students with entrepreneurial intention and students with no entrepreneurial intention).

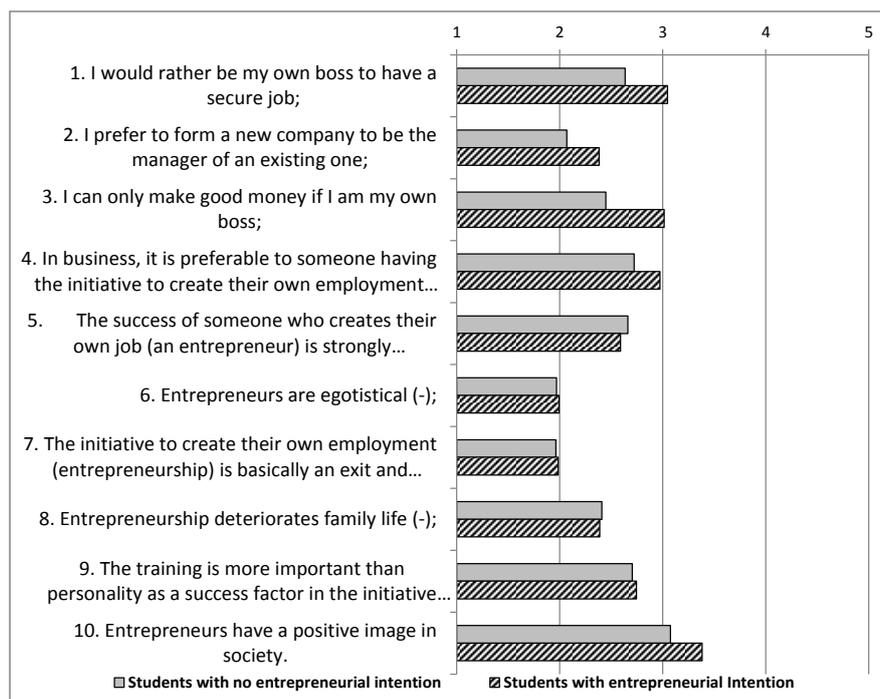


Figure 1: Attitudes mean profile by entrepreneurial intention

The Mann-Whitney U-test identity significant differences for the two intention groups concerning:

- statement 1 (*"I would rather be my own boss to have a secure job"*) (U=9329.5, $p<0.01$);
- statement 2 (*"I prefer to form a new company to be the manager of an existing one"*) (U=9830.5, $p<0.01$);
- statement 3 (*"I can only make good money if I am my own boss"*)(U=8349.5, $p=0.000$);
- statement 4 (*"In business, it is preferable to someone having the initiative..."*) (U=10076.5, $p<0.01$);
- statement 10 (*"Entrepreneurs have a positive image in society"*) (U=9711.5, $p<0.01$).

4. Conclusions

Since entrepreneurship is a key factor in promoting innovation, productivity and employment opportunities, the theme has a prominent place on the political agenda of many countries. Research has demonstrated that adolescence is a critical time for the entrepreneurial trajectory of an individual and therefore it is important that the issue is being debated and presented to young people before they enter adulthood.

The relevance of this work is the result of the massive destruction of employment and Portugal, affected by the economic and financial crisis companies, as well as by the recent restructuring carried out by the Portuguese Government in the light of the bailout that Portugal was subjected. The current crisis in Portugal has side effects in Oliveira de Azemeis a very industrialized Portuguese city. The increase of unemployment requires special attention to entrepreneurial attitudes of younger, especially the students who are now finishing their secondary studies. How entrepreneurship is perceived? What entrepreneurial attitudes and intentions these young people have?

Taking as a starting point the survey with 308 secondary students, attending a regular or professional and with an average age of 17.43 years progress, the results identify the existence of some critical factors. On the one hand, 35.4% of students claimed to have entrepreneurial parents, which is a number that seems moderate. However, the analysis of attitudes reveals disturbing results, with similar concordance levels for the positive and the negative statements. It was expected that the positive statements lead to higher concordance levels and the negative statements lead to lower agreement, which did not happen. One possible explanation may be the youth of the students. Being the majority with less than 18 years, self-employment is not an immediate concern. The school has one important voice for the formation of attitudes and should promote the relevance of entrepreneurship.

Tests to the attitude mean by gender, age group, course type, school and self-employed parents. Results identified differences concerning all variables. For example, the three schools revealed differences among them, which may corroborate the role of the school in the attitude formation. These differences may be explored in future research.

In turn, the entrepreneurial intention was measured by integration of two questions and allowed to divide the sample into two groups: students with entrepreneurial intention and entrepreneurial students without intention. It was found that the intention depends on the school and the existence of entrepreneurial parents. In addition, it was decided to use the intention to explore the existence of differences in attitudes. Results confirmed that there were significant differences in positive statements.

The results presented require careful interpretation. The low levels of attitude enrolled in the study may not display the effort that has been made by the Portuguese government in creating entrepreneurship promotion programs among the student population. One possible explanation may be related to the youth of the respondents, and the existence of a culture that causes parents to unfold in care in ensuring young people the best possible conditions. As a result, this protection may be contributing to these young adults become careless and unconcerned with the actual situation of the country and its future. This investigation is still at an early stage, but in future it might be interesting to include in the survey a variable that measures the students' desire for independence and its effect on attitudes and entrepreneurial intentions.

Acknowledgements

The authors wish to acknowledge the support of CGIT and Algoritmi Centre, two research centres at the University of Minho, Portugal. This work is supported by FEDER Funds through the Operational Programme Competitiveness Factors – COMPETE, and National Funds through FCT - Foundation for Science and Technology under the Projects PEst- OE/EME/UI0252/2014 and Pest-OE/EEI/UI0319/2014.

References

- Amoros, J.E. and Bosma, N. (2014) "Global Entrepreneurship Monitor. 2013 Global Report. Fifteen years of assessing entrepreneurship across the globe". (ISBN: 978-1-939242-04-4).
- Audretsch, D. B. (2007) "The entrepreneurial society. Oxford", England: Oxford University Press.
- Carayannis, E. G., Evans, D. and Hanson, M. (2003) "A cross-cultural learning strategy for entrepreneurship education: outline of key concepts and lessons learned from a comparative study of entrepreneurship students in France and the US", *Technovation*, Vol 23, pp 757–771.
- Draghici, A., Albulescu, C. T. and Tamasila, M. (2014) "Entrepreneurial Attitude as Knowledge Asset: Its Impact on the Entrepreneurial Activity in Europe", *Procedia - Social and Behavioral Sciences*, Vol. 109, pp 205-209.
- European Commission (2009) "Entrepreneurship in the EU and beyond — A survey in the EU, EFTA countries, Croatia, Turkey, the US, Japan, South Korea and China", *Flash Eurobarometer 283*.
- Gurel, E., Altinay, L. and Daniele, R. (2010) "Tourism students' entrepreneurial intentions", *Annals of Tourism Research*, Vol. 37, No. 3, pp 646–669.
- Halabisky, D., Potter, J., Greene, F. (2012) European Commission, & Organisation for Economic Co-operation and Development (Paris, France), "Policy brief on youth entrepreneurship: Entrepreneurial activities in Europe". Luxembourg: Publications Office.
- Krueger J.R., N.F., Reilly, M.D. and Carsrud, A.L. (2000) "Competing models of entrepreneurial intentions", *Journal of Business Venturing*, Vol. 15, No. 5-6, pp 411–432.
- Kuckertz, A. and Wagner, M. (2010) "The influence of sustainability orientation on entrepreneurial intentions - Investigating the role of business experience", *Journal of Business Venturing*, Vol. 25, 524–539.
- Laspita, S., Breugst, N., Heblich, S. and Patzelt, H. (2012) "Intergenerational transmission of entrepreneurial intentions", *Journal of Business Venturing*, Vol. 27, No. 4, pp 414–435.
- Liñán, F., Rodríguez-Cohard, J. C. and Guzmán, J. (2011) "Temporal stability of entrepreneurial intentions: a longitudinal study", In O. J. Borch, A. Fayolle, P. Kyrö & E. Ljunggren (Eds.), *Entrepreneurship Research in Europe: Evolving Concepts and Processes*. Cheltenham, UK: Edward Elgar.
- Morrison, A. (2000) "Entrepreneurship: what triggers it?", *International Journal of Entrepreneurial Behaviour & Research*, Vol. 6, No. 2, pp 59-71.
- Obschonka, M., Silbereisen, R. K. and Schmitt-Rodermund, E. (2010) "Entrepreneurial intention as developmental outcome", *Journal of Vocational Behavior*, Vol. 77, No. 1, pp 63–72.
- Raijman, R. (2001) "Determinants of entrepreneurial intentions: Mexican immigrants in Chicago", *Journal of Socio-Economics*, Vol. 30, pp 393–411.
- Schmitt-Rodermund, E. (2004) "Pathways to successful entrepreneurship: Parenting, personality, early entrepreneurial competence, and interests", *Journal of Vocational Behavior*, Vol. 65, No. 3, pp 498–518.
- van Praag, M. (2001) "Business Survival and Success of Young Small Business Owners: An Empirical Analysis", *SSRN Electronic Journal*.
- Wang, C. K. and Wong, P. (2004) "Entrepreneurial interest of university students in Singapore", *Technovation*, Vol. 24, No. 2, pp 163-172.