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Article

Entrepreneurship and education in the European Union: Student's perception on the subject

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Table of Contents

1	ORGANIZATIONAL EFFECTIVENESS OF DATA CENTERS - A FOUNDATION FOR EFFECTIVE CLOUD ARCHITECTURES AJAY AHUJA, Indian Institute of Technology (IIT) Delhi, India
16	THE EFFECT OF INFORMATION TECHNOLOGY ON COMPETITIVE ADVANTAGE OF FIRM: THE ROLE OF ENVIRONMENTAL UNCERTAINTY BERRICH ABDELKADER, High School of Commerce , Algeria BENKADDOUR ABED , Faculty of Economic, Commerce, and Management Sciences, Algeria
40	ENTREPRENEURSHIP AND EDUCATION IN THE EUROPEAN UNION - STUDENTS' PERCEPTION ON THE SUBJECT HELENA I. B. SARAIVA , Polytechnic Institute of Guarda , Portugal VÍTOR M. S. GABRIEL , Polytechnic Institute of Guarda , Portugal
59	PROBABILISTIC AND DETERMINISTIC DATA LINKAGE FOR DATA GOALS MODEL IN RELATION TO THE ORGANIZATION GOALS TENGKU ADIL TENGKU IZHAR, Universiti Teknologi MARA , Malaysia TORAB TORABI, La Trobe University, Australia M. ISHAQ BHATTI, La Trobe University, Australia

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ENTREPRENEURSHIP AND EDUCATION IN THE EUROPEAN UNION - STUDENTS' PERCEPTION ON THE SUBJECT

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ABSTRACT

In this study has been tried to found evidence that entrepreneurship education has impact on students' behavior and perception of its effects. As a consequence, entrepreneurship education also impacts the economic development of many European Union (EU) countries. In the first part of the text, a brief characterization on the EU entrepreneurship education system has been presented. Subsequently, an analysis of data from various publications and reports, with relevance in the subject area has been performed, in order to assess if there is a relationship between entrepreneurship education and the results obtained by the same process, in terms of students' perceptions. We found evidence that entrepreneurship education assumes an impact on the entrepreneurial intention on young entrepreneurs.

KEY WORDS

Entrepreneurship; Education; European Union; Perception; Students.

Introduction

The role of entrepreneurship in economic development has been recognized over time by many theorists, including Leibenstein (1968), Kirzner (1997) and Acs *et al.* (2004).

An entrepreneurship definition usually entails a reference to attitudes towards the surrounding environment and responsiveness to this medium in order to build solutions that add value to society. For the European Union (EC, 2012), entrepreneurship is related to one's ability to turn ideas into action. This ability involves creativity, innovation and risk taking, as well as planning and project management in order to achieve goals. The same source considers that this supports the activities of everyday life, either personally or socially, making workers more aware of their work context and better able to seize opportunities, providing a basis for entrepreneurs to establish a social or commercial activity.

Heinonen and Poikkijoki (2006) agree with this concept, by stating that entrepreneurial behavior is widespread, which is related to the call for more and better business skills in order to face increasing challenges and an uncertain future. Also according to these authors, these skills are related to entrepreneurial activity, pointing towards the establishment of viable platforms for the development of societies, a high readiness for change, self-confidence and creativity, as well as an innovative approach to solving problems.

The idea of innovation has been constantly linked to different aspects of entrepreneurship - in the most developed economies, long-term economic growth is based increasingly on business creation and the fact that this generates innovation in terms of products, services and processes. The intensity of innovation differs depending on the company that originates it, since the company's motivation to produce innovations is to create value, thereby increasing their competitiveness and promoting their survival (Meliá, 2011). In this sense, initiatives which are not based solely on innovation, but replication, are also relevant (Kirzner, 1997).

Thus, it is important to establish that there seems to be a relationship between established business activity and new business initiatives, and these issues are connected to the national growth of countries - Reynolds *et al.* (1999).

Thus, the creation of companies is of high relevance and importance. New companies support mechanisms to increase the competitiveness and growth of the economy, hence the European Union boosted the support to public administration for the creation of innovative activities, which is the main objective of the Europe 2020 Strategy.

One of the ways in which public administration acted to achieve this goal is through entrepreneurship education, a practice extended to most countries of the European Union.

The aim of this paper is precisely to conduct an analysis of the evolution of formative experiences in entrepreneurship in the European Union.

In order to answer this research question - how the teaching of entrepreneurship has evolved, especially in European Union countries over the past few years - we conducted a literature review, which included scientific papers and official documents from the European Union entities and international institutions relevant to the subject studied.

According to Levie and Autio (2008), the key issue of the research point of view on entrepreneurship, it is not who are the entrepreneurs, but rather what is their action, under what conditions and with what consequences.

The methodology pursued in this chapter was, therefore, literature review and documental analysis from various databases, including the *Eurydice* database, the *Global Entrepreneurship Monitor* (GEM) database and the Amway report data. Our purpose was to identify the main educational practices present, in general terms, in the identified regions, and their results. We also resorted to the Eurobarometer data base.

Thus, this work is structured according to the following key points: initially we essentially address the issue of education for entrepreneurship and its appropriate framework, then we summarize the evolution of this type of education in the European Union and later an analysis of the role of education in entrepreneurship at an international level is held. Finally, we identify the main results, and subsequently set out the conclusions and suggestions for future work to develop in the area.

1 – Education for entrepreneurship

Education and training for entrepreneurship have been the most used means to leverage business activity (Levie and Autio, 2008). Education and training activities specifically tailored for entrepreneurship are usually aimed at increasing the supply through different mechanisms, which normally involve the transmission of necessary instrumental skills to start and grow a new company (Honig, 2004), as well as enhancing cognitive ability to manage the complexity involved in the recognition and evaluation of business opportunities (Détienne and Chandler, 2004), and also via cultural effects on people, such as attitudes and behavioral dispositions (Peterman and Kennedy, 2003).

As for the models that have been followed to frame the idea of entrepreneurship, of its teaching and its results, one of the most publicized and accepted is from Heinonen & Poikkijoki (2006), which has been used by the Education, Audiovisual and Culture Executive Agency – EACEA. This model uses three perspectives of what an entrepreneurial activity should have: attitudes, knowledge and the ability to act.

Although some authors, such as Béchard and Grégoire (2005), signal the fact that even with education being one of the most discussed topics in entrepreneurship literature, its effects in terms of entrepreneurial activity of the population have not yet been clearly demonstrated, there are others, however, who claim the exact opposite (Levie and Autio, 2008): the real impact of entrepreneurship training and education is checked either via the influence exerted on the population of a country, by

recognizing and taking advantage of business economic opportunities, either by the fact that this type of training instills in individuals the skills and expertise required to support the start-up of companies.

Other authors (Audretsch et al., 2007) consider that there is a general consensus on the fact that entrepreneurship consists in a phenomenon that, at a national and regional level, can be influenced by policy makers, with the attention and the knowledge conferred by those responding positively associated with the allocation of dedicated efforts to increase entrepreneurship. In this sense, Leibenstein (1968) says that, at this level, we should take into account not only the barriers to entrepreneurial activity, but also that policies should be focused on strengthening the market efficiency, as well as the promotion of an environment (external medium) able to motivate entrepreneurs.

In our view, beyond creating the necessary conditions to promote entrepreneurship, it will therefore be essential to also create an entrepreneurial culture, that is, to enhance the development of individual skills to recognize opportunities, through the contribution to individuals of the necessary information to identify these opportunities and cognitive properties necessary to value them. According to Shane and Venkataraman (2000), the necessary information input must be grasped on the basis of experience on the user's needs in certain areas; as far as the cognitive properties are concerned, they correspond to the individual ability to process information from social interactions that occur in the market.

Whether the entrepreneur will be able to realize the opportunity at a given time or situation, depends on his ability to understand, analyze and perceive the market responses. The processing of these mechanisms is essential, even before any market response, leading to facilitation and guided action, providing perception of how to take advantage of a situation, recourse or unmet need. Thus, education for entrepreneurship should enhance the development of cognitive skills required to find market opportunities. The training and education for this theme should provide contact with stories and cases of discovery and exploration of business opportunities, providing examples of individuals that they can use as a reference when they themselves struggle with unmet or not valued resource needs.

According to Fiet (2000), this type of examples makes one more aware of the opportunities, as well as making one more able to notice such opportunities, by providing the understanding of what is possible and what is achievable or feasible - for this last aspect the financial component in entrepreneurship education can contribute greatly, as it gives individuals the ability to assess the possibility of realizing of identified opportunities.

Thus, the aim of this study is to assess the role of education in entrepreneurship, taking the perspective of the school population.

2 – Education for entrepreneurship in the European Union

The model currently accepted and implemented in the EU to frame the notion of teaching for entrepreneurship is based on the one proposed by Heinonen and Poikkijoki (2006), and takes on the

main objective of providing students with the attitudes, knowledge and skills to act entrepreneurially. The different dimensions of education for entrepreneurship have to be broken down into several categories, which constitute the framework of the various learning outcomes implemented and achieved by European Union countries, namely:

Attitudes:

Category 1 - Self-awareness and self-confidence - they constitute the basic attitudes necessary for all other aspects related to entrepreneurship - involve the discovery and confidence in individual capacities that later allow one to turn creative ideas into actions. In many countries these attitudes are pursued as goals of general education.

Category 2 - Initiative, risk-taking, critical thinking, creativity and problem solving, are also key aspects for an entrepreneurial attitude.

Knowledge:

Category 1 - Knowledge of career and the world of work opportunities are learning outcomes that are not exclusively related to entrepreneurship and are part of the overall groundwork of students to prepare their future careers. Students need this knowledge to understand what being an entrepreneur is, because it involves the knowledge of the nature of work and the different types of work, contributing to the evaluation of opportunities and threats.

Category 2 - Economic and financial literacy, including knowledge of concepts and procedures applicable to entrepreneurship.

Category 3 – Knowledge of corporate organization and processes - seen in relation to the specific environment in which entrepreneurship is developed.

Skills:

Category 1 - Communication, presentation and planning, as well as the ability to work in a group - considered transversal skills for entrepreneurs.

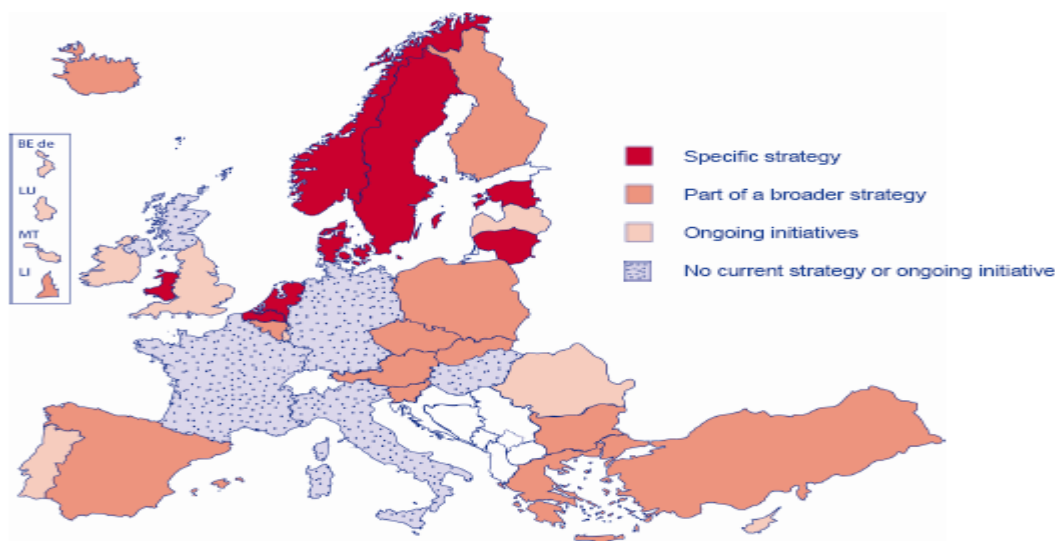
Category 2 - entrepreneurship opportunities for exploration - including the various stages of setting up a business - including the design and implementation of a business plan.

Adapted from: Eurydice network, Entrepreneurship Education at School in Europe - National Strategies, Curricula and Learning Outcomes, March 2012, p.19.

These dimensions and categories have been applied in entrepreneurship education in EU countries, in whole or in part, at the level of either primary or secondary school, or both simultaneously. In the reference years 2011 and 2012, in terms of primary education, about half of European countries defined learning objectives related to entrepreneurship at a curriculum level; in terms of secondary education, the number of countries that do this for all levels of this type of education increased. At the primary level, we can also see that learning objectives are integrated into compulsory subjects, while in secondary education precisely the opposite happens - that is, at this level education for entrepreneurship is usually an option.

Based on the Eurydice survey, conducted in 2011 under the theme Education for Entrepreneurship, which covered national strategies, initiatives and ongoing reforms on the education situation for entrepreneurship, with the participation of thirty-one European countries, it appears that most of them includes teaching for entrepreneurship in their systems and strategies. This seems to reflect the recognition of the importance of education for entrepreneurship in Europe, where about half of the countries developed goals by connecting them to promote this type of integrated education in broader strategies - education throughout life, education and youth, as well as growth - while other countries, particularly in northern Europe, have developed specific strategies, as seen in figure 1.

Figure 1 – Strategies and implementation initiatives of education for entrepreneurship

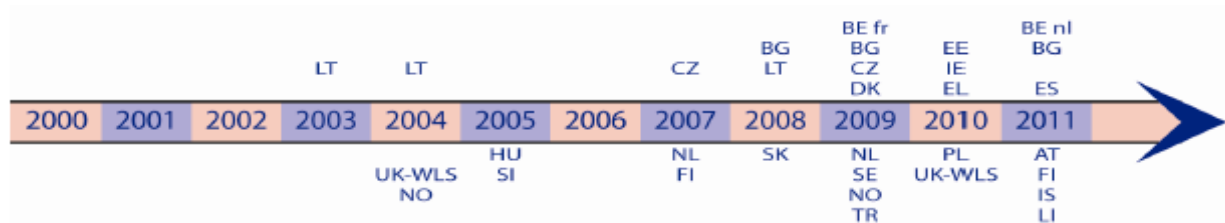


Source: Eurydice (2012), Entrepreneurship Education at School in Europe - National Strategies, Curricula and Learning Outcomes, March, Eurydice network.

According to the same source, two-thirds of European countries explicitly recognize entrepreneurship on the basis of documentation on the primary system; in secondary school, the theme is integrated in almost

all countries. Figure 2 shows the release dates or start-up national strategies for the teaching of entrepreneurship.

Figure 2 - Start-up of national strategies in Education for Entrepreneurship - levels 1-3 ISCED



Source: Eurydice (2012), Entrepreneurship Education at School in Europe - National Strategies, Curricula and Learning Outcomes, March, Eurydice network.

Many European countries define specific results for the learning and teaching process for entrepreneurship, and these results, in general, take on different aspects of the three dimensions: attitudes, knowledge and skills. At an initial level, half of the countries define results primarily related to attitudes, but also transversal skills; at this level no country sets skills related to opportunities for entrepreneurship. With regard to secondary education, almost all of the countries defined results for education for entrepreneurship; many countries considered the three dimensions and most of them, at least two dimensions; however, no country presented definition results only for exploring entrepreneurship opportunities. This seems to indicate that the other dimensions are required to support this - particularly in countries where this category was considered, knowledge of the business activity was also introduced at the same level of education.

As for education for Entrepreneurship at the level of Higher Education in the European Union, the assessment provided by the European Union (EC, 2012) on its impact in terms of the objectives set and the justification of the resources sacrificed in this activity is well known. The mentioned objectives consist mainly in:

- improving the capabilities and entrepreneurial spirit in young people, so that they possess greater creativity and self-confidence, as well as to enhance their appeal to employers;
- encouraging the emergence and creation of new innovative businesses;
- leveraging the role of youth in society and in the economy.

Thus, the impact of education outcomes for entrepreneurship was in the following dimensions: impact on key skills, impact on intentions related to entrepreneurship, impact on the employability of individuals and impact on society and economy. The aforementioned study (European Union, 2012) stated that entrepreneurship education has a positive impact on the key skills of students; that education for entrepreneurship stimulates the individual intentions of students to become entrepreneurs and in particular to create self-employment; globally, this type of education seems to have a positive effect both in employment and in terms of employability of time, creativity in the workplace, as well as the achieved level of income.

Hofstede *et al.* (2004) report that the terms "self-employed", "businessperson" and "entrepreneur" are commonly used interchangeably. Although these authors do not consider the term self-employment as the ideal measure to explain entrepreneurship, there are many studies that used this concept, because it is useful and has the advantage of being available to a large group of countries for a long time .

Regarding the creation of self-employment, the most obvious reasons for this phenomenon are: the desire for professional independence, freedom in choosing the time and place of work and the possibility of conducting business opportunities. As for aspects related to gender, it was found that the existing trend is that among male students there is a greater propensity for becoming entrepreneurs; this trend was also observed as the preference for creating your own job. Another interesting aspect is that the preference for the creation of self-employment tends to evolve inversely to the increasing age of the students.

It seems to be easier for students who have had an education for entrepreneurship to find a job more quickly after the completion of their graduate training and the chance to remain unemployed during the early years is lower, and the rate of people with one or more periods of unemployment is lower among such students.

3 – Education for entrepreneurship and student's perception of its effects

The Global Entrepreneurship Monitor model (GEM) assumes the existence of a relationship between new business activity and established business activity and economic growth at a national level (Levie and Autio, 2008).

In order to understand the international effort on training students for entrepreneurship, we built table 1. This table shows the percentages of students by country who, throughout their academic career, participated in any related activity or course with the theme of entrepreneurship, obtained from the Flash Eurobarometer 354 results, especially the data from EU countries.

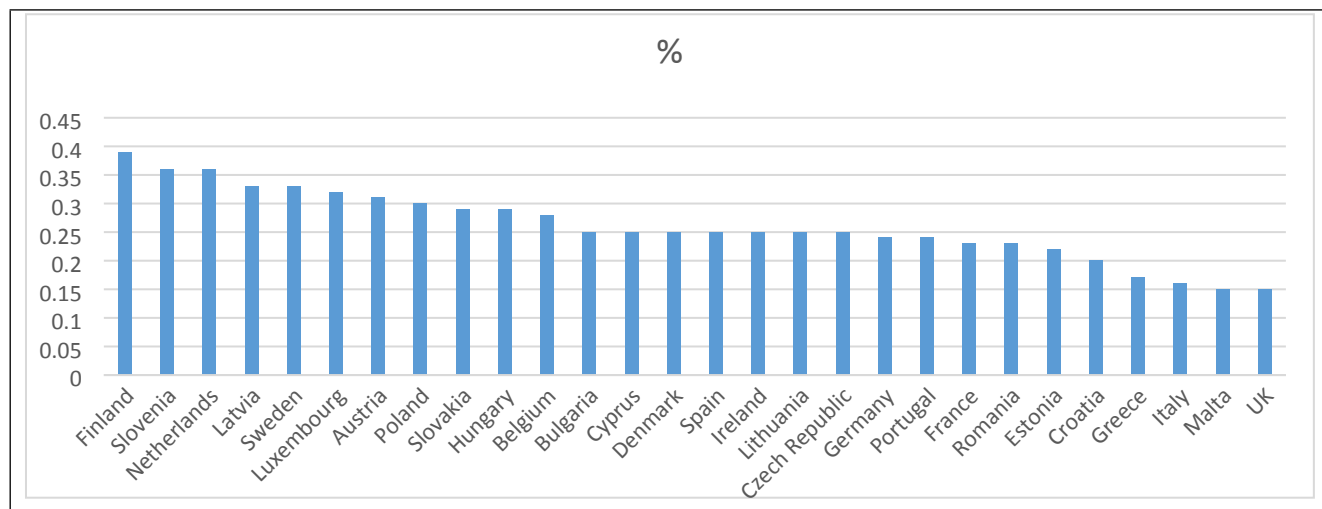
Table 1 - Percentage of students involved in entrepreneurship activities or degrees - EU countries

Country	%	Country	%
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Germany	0,24	Netherlands	0,36
Austria	0,31	Hungary	0,29
Belgium	0,28	Ireland	0,25
Bulgaria	0,25	Italy	0,16
Cyprus	0,25	Latvia	0,33
Croatia	0,2	Lithuania	0,25
Denmark	0,25	Luxembourg	0,32
Slovakia	0,29	Malta	0,15
Slovenia	0,36	Poland	0,3
Spain	0,25	Portugal	0,24
Estonia	0,22	UK	0,15
Finland	0,39	Czech Republic	0,25
France	0,23	Romania	0,23
Greece	0,17	Sweden	0,33

Source: adapted from Flash Eurobarometer 354, "Entrepreneurship in the EU and beyond".

Graph 1A - Percentage of students involved in entrepreneurship activities or degrees - EU countries



Source: based on the Flash Eurobarometer 354 data.

The values shown in table 1 highlight Finland as the country that, among the 28 analyzed, has more focus on the involvement of students in issues of entrepreneurship. On the other hand, UK and Malta stand out as the countries that least promote this kind of initiatives, with 15% in both cases. In the case of Portugal, less than ¼ of the students had the opportunity to experience this kind of initiative. In any case, it seems clear that there is great room for improvement in the various countries in terms of developing

initiatives and academic scope of activities that allow students to have direct contact with entrepreneurship themes.

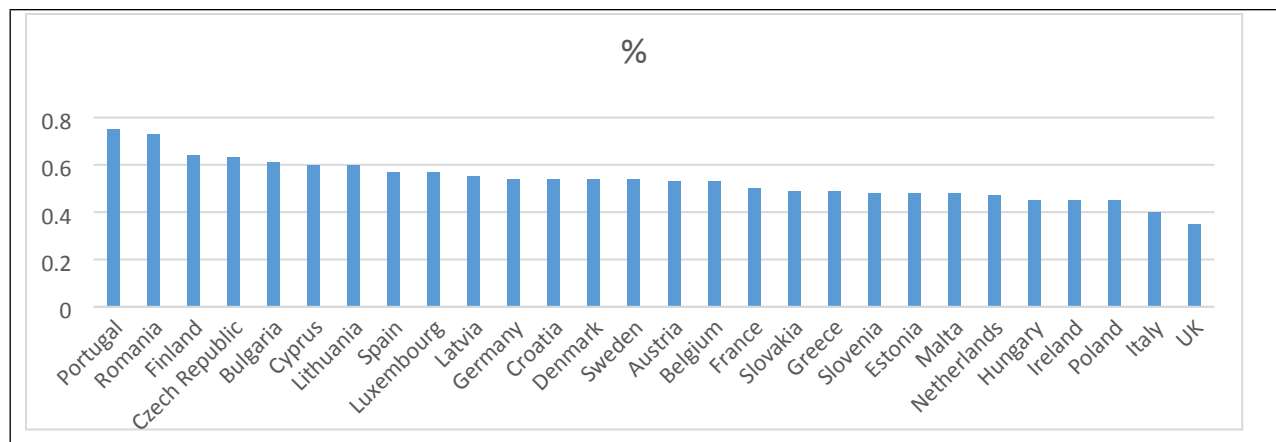
In order to try to understand if, somehow, the school career of students contributed to help create their sense of initiative and entrepreneurial spirit, table 2 was built.

Table 2 – Perception of school contribution to develop a sense of initiative and entrepreneurial attitude – EU countries

Country	%	Country	%
Germany	0,54	Netherlands	0,47
Austria	0,53	Hungary	0,45
Belgium	0,53	Ireland	0,45
Bulgaria	0,61	Italy	0,4
Cyprus	0,6	Latvia	0,55
Croatia	0,54	Lithuania	0,6
Denmark	0,54	Luxembourg	0,57
Slovakia	0,49	Malta	0,48
Slovenia	0,48	Poland	0,45
Spain	0,57	Portugal	0,75
Estonia	0,48	UK	0,35
Finland	0,64	Czech Republic	0,63
France	0,5	Romania	0,73
Greece	0,49	Sweden	0,54

Source: adapted from Flash Eurobarometer 354, “Entrepreneurship in the EU and beyond”.

Graph 2A – Perception of school contribution to develop a sense of initiative and entrepreneurial attitude– EU countries



Source: based on the Flash Eurobarometer 354 data.

The results support the conclusion that more than half of students perceive the importance of their schooling as a stimulating factor for their initiative and entrepreneurial attitude, especially in Portugal, Romania and Finland, with 75%, 73% and 64%, respectively. On the other hand, students of the UK (35%), Italy (40%), Poland, Ireland and Hungary (all with 45%), have a less positive perception about the importance of their schooling in this theme, which allows a great room for improvement of school curricula as far as entrepreneurship is concerned.

Table 3 shows the percentages per country on the answers given by the students about the role played by education in their decision of becoming entrepreneurs. Again, the results revealed high heterogeneity, with some countries showing a great weight of schooling in that decision, as were Portugal (65%) Romania (59%) and Bulgaria (43%), while countries such as the Netherlands (21%), Germany (17%) and the UK (17%) showed that this decision depends on other factors, not included in the Eurobarometer survey. On average, only 36% of respondents expressed the school's role in the student's decision to become an entrepreneur, and only 3 of the 28 countries considered in this study, presented values around 40%, a reason to believe that the student's decision to become an entrepreneur will depend on a wide variety of factors, not referenced in the study, immediately related to the attitudes and the ability to act.

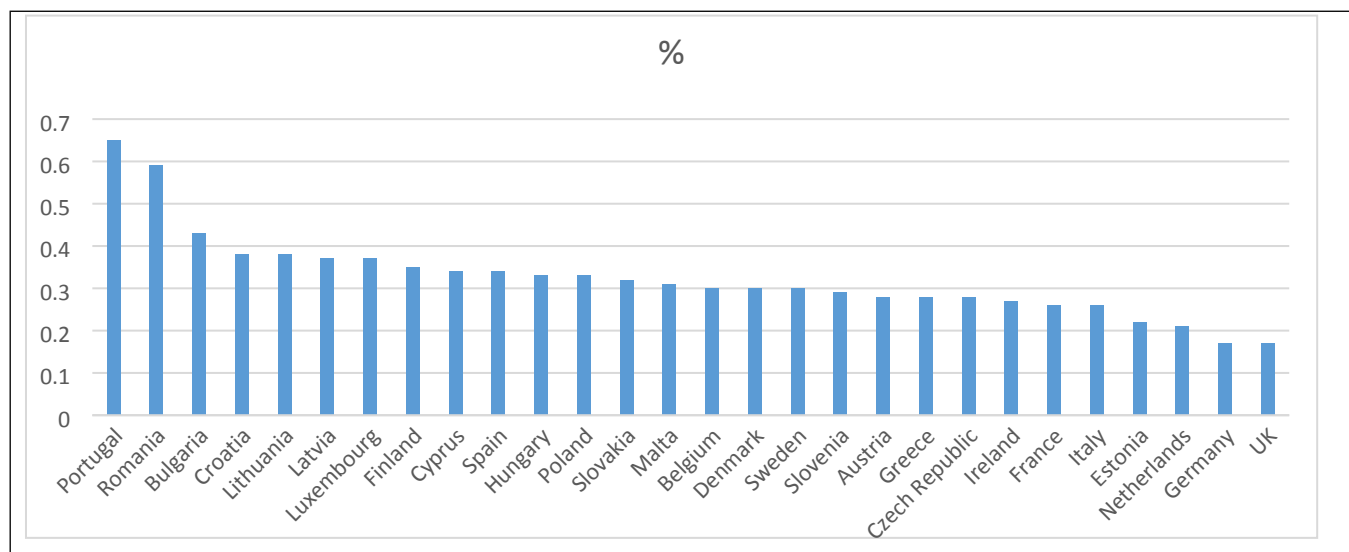
Table 3 – Perception of the school role in the decision of the entrepreneur

Country	%	Country	%
Germany	0,17	Netherlands	0,21
Austria	0,28	Hungary	0,33
Belgium	0,3	Ireland	0,27
Bulgaria	0,43	Italy	0,26

Cyprus	0,34	Latvia	0,37
Croatia	0,38	Lithuania	0,38
Denmark	0,3	Luxembourg	0,37
Slovakia	0,32	Malta	0,31
Slovenia	0,29	Poland	0,33
Spain	0,34	Portugal	0,65
Estonia	0,22	UK	0,17
Finland	0,35	Czech Republic	0,28
France	0,26	Romania	0,59
Greece	0,28	Sweden	0,3

Source: adapted from Flash Eurobarometer 354, "Entrepreneurship in the EU and beyond".

Graph 3A – Perception of the school role in the decision of the entrepreneur



Source: based on the Flash Eurobarometer 354 data.

In table 4 we present a summary of the students' responses regarding their perception of the role played by the school in the development of skills and the acquisition of specific knowledge to enable them to manage future business.

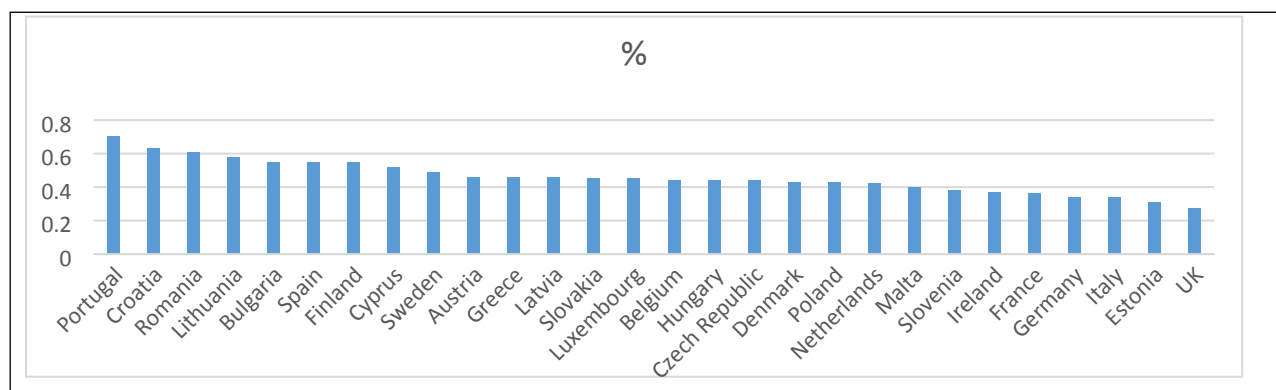
Table 4: Perception of the school's role in the acquisition of management skills - EU countries

Country	%	Country	%
Germany	0,34	Netherlands	0,42
Austria	0,46	Hungary	0,44
Belgium	0,44	Ireland	0,37
Bulgaria	0,55	Italy	0,34

Cyprus	0,52	Latvia	0,46
Croatia	0,63	Lithuania	0,58
Denmark	0,43	Luxembourg	0,45
Slovakia	0,45	Malta	0,4
Slovenia	0,38	Poland	0,43
Spain	0,55	Portugal	0,7
Estonia	0,31	UK	0,27
Finland	0,55	Czech Republic	0,44
France	0,36	Romania	0,61
Greece	0,46	Sweden	0,49

Source: adapted from Flash Eurobarometer 354, "Entrepreneurship in the EU and beyond".

Graph 4A: Perception of the school's role in the acquisition of management skills - EU countries



Source: based on the Flash Eurobarometer 354 data.

Responses were rather heterogeneous, just as with the issues previously assessed. More than half of the students, namely 57% of them, thinks that school does not transmit them the appropriate skills to manage a business.

Once again, Portugal (70%), as well as Croatia (63%) and Romania (61%), presented the highest percentages in relation to the perception of the students about the school's role in the acquisition of management skills.

In the opposite sense, students in the UK (27%), Estonia (30%) and Italy and Germany (both 34%) showed the lowest percentages. Anyway, it seems to be a path to develop, in order to provide the students with the appropriate means, in the form of skills and knowledge, to assist them in handling their own business when they decide to start an entrepreneurial activity.

In table 5, is shown a summary of the students' answers about the possibility of launching, in the five years immediately following the survey, an independent activity, giving expression to self-employment,

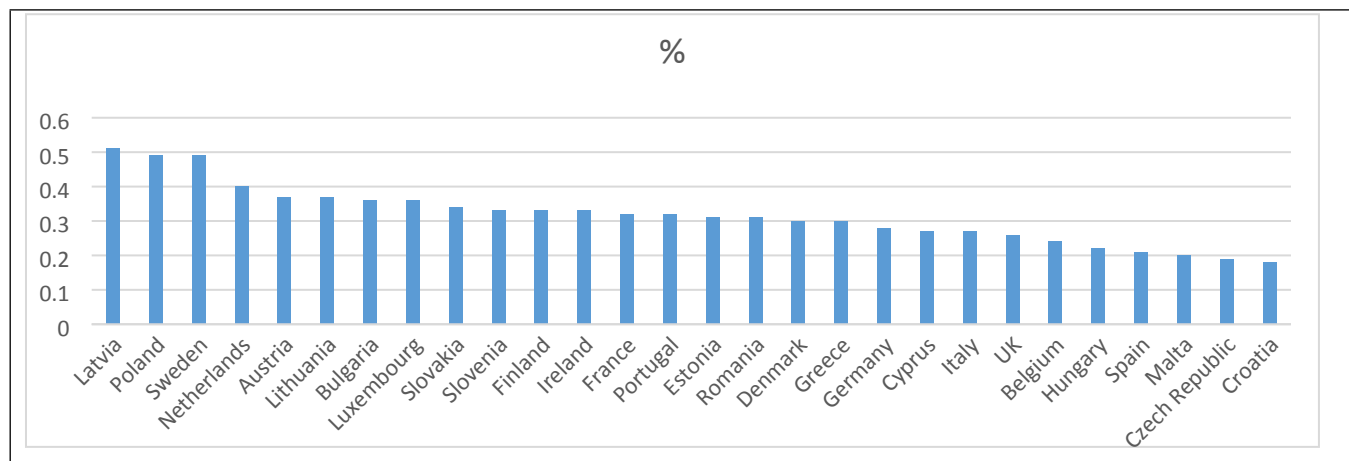
considered in this analysis as an entrepreneur synonymous, taking into account the perspective of Hofstede *et al.* (2004).

Table 5: Self-employment perspective – EU countries

Country	%	Country	%
Germany	0,28	Netherlands	0,40
Austria	0,37	Hungary	0,22
Belgium	0,24	Ireland	0,33
Bulgaria	0,36	Italy	0,27
Cyprus	0,27	Latvia	0,51
Croatia	0,18	Lithuania	0,37
Denmark	0,30	Luxembourg	0,36
Slovakia	0,34	Malta	0,20
Slovenia	0,33	Poland	0,49
Spain	0,21	Portugal	0,32
Estonia	0,31	UK	0,26
Finland	0,33	Czech Republic	0,19
France	0,32	Romania	0,31
Greece	0,30	Sweden	0,49

Source: adapted from Flash Eurobarometer 354, “Entrepreneurship in the EU and beyond”.

Graph 5A: Self-employment perspective – EU countries



Source: based on the Flash Eurobarometer 354 data.

From the set of 28 countries analyzed, we highlight Latvia (51%), Poland (49%) and Sweden (49%), due to the higher rates of entrepreneurial intention. In the opposite direction Croatia, Czech Republic and in

Spain evidenced 18%, 19% and 21%, respectively, reporting entrepreneurial expected rate below the average of the European Union, which was set at 30%.

The responses and perceptions reported by the 28 countries to the issues considered previously, permit the conclusion that the common thread among them is the increased diversity resulting from different cultures, interests, political stakes and investments.

In order to find determinants of the entrepreneurial expectancy or perspective to begin entrepreneurial activity, as measured by self-employment, is applied a multiple linear regression analysis to investigate the cause and effect relationship between the variables described above. More particularly we aim to explore the link between the entrepreneur goal and the variables' "participation in business or entrepreneurship courses", "School's contribution to build a sense of initiative and entrepreneurial attitude", "the role played by school in the decision of the entrepreneur" and the "school's role in the acquisition of management skills".

In this regard, the proposed conceptual model includes a dependent variable and four independent variables, as stated:

$$\text{ENTREPRENEUR} = \beta_0 + \beta_1 \text{COURSE} + \beta_2 \text{ATTITUDE} + \beta_3 \text{DECISION} + \beta_4 \text{SKILLS} + \varepsilon$$

where: *ENTREPRENEUR* = entrepreneurial perspective (dependent variable); ε = residuum; β = independent variable coefficients; *COURSE* = participation in business or entrepreneurship courses; *ATTITUDE* = School's contribution to build a sense of initiative and entrepreneurial attitude; *DECISION* = role played by school in the decision of the entrepreneur; *SKILLS* = school's role in the acquisition of management skills.

In table 6 can be found a summary of the estimated Multiple Linear Regression Model.

Table 6: Estimation by Multiple Linear Regression model – EU countries

Variable	Coefficient	Standard deviation	t Statistic	Probability
Course	0,872808	0,232071	3,760957	(0,001)
Attitude	-0,29078	0,288395	-1,008272	(0,3238)
Decision	0,439159	0,276574	1,58785	(0,126)
Skills	-0,251179	0,29647	-0,847235	(0,4056)
Constant	0,216916	0,09986	2,172193	(0,0404)
R^2	0,391499			

F-Statistic	3,699457
Prob. (F-Statistic)	0,018178

By the analysis of the previous table, we can conclude that the model is significant, since Prob. <0.05. That is, considering a 5% significance level, may be stated that there is a linear relationship between the variable "perspective to begin entrepreneurial activity" and the four explanatory or independent variables.

The extent of the effect of independent variables on the dependent variable is given by the coefficient of determination, amounting to 0.39. This result allows us to state that the total variability of entrepreneurial perspective is explained by the independent variables in the model in 39%, verifying that the remaining 61% are due to other variables not included in the model.

From the analysis of results obtained and taking into account the significance level of 5%, it is noted that the coefficient for the independent variable "Participating in activities or course of entrepreneurship" is positive and significantly different from zero and therefore this variable positively influences the entrepreneurial perspective. The remaining independent variables have not demonstrated to be statistically significant, so they present no contribution on to explain the behavior of the dependent variable.

Conclusion

If we consider the European context, characterized by economic stagnation and structural unemployment, the results obtained on the conducted analysis, allows us to realize the need and importance on the fact that European authorities, in close cooperation with member states, conceive public policies and programs that foster the development of particular activities and training, in collaboration with schools and with the various entities connected to training in order to bring young people closer to themes of entrepreneurship as a means to prepare them for further business challenges.

In this study, we sought to determine whether, at the EU level, education positively contributes to entrepreneurship, assuming as a reference the student's point of view, embedded in the education system.

According to the GEM model, the creation of companies occurs when individuals believe to holds the skills, knowledge and motivation to start a business, based on the perception of an opportunity. Herein these skills, knowledge and motivation can be served by the education system, a number of ways and at different times throughout the school education of individuals.

It should also be considered that the question of motivation can and should be worked from a very early age in the education system. This question is advocated by Leibenstein, in the sense that it defines several factors favoring the entrepreneurship, in particular the issue of the response by the potential

entrepreneurs to different motivational states, especially when they are involved in non-traditional activities (Leibenstein, 1968). This also relates to the question of tolerance for frustration and ability to solve problems, thus overcoming difficulties involved in entrepreneurial activity.

Also in this sense Acs *et al.* (2004), invoked the existence of a "filter", that is present in all economies, which prevents the transformation of knowledge into *economic knowledge*, and that the thickness and the blocking power of this filter can be influenced by culture, the policies and the path chosen by societies.

Setting up companies, seen as a way for these organizations to contribute to value, as a guarantee of survival and growth, assumes much greater relevance and importance the more those are based on innovative activities. These new companies should be converted into increased mechanisms of competitiveness and economic growth. The European Union has boosted support for public administration for such companies and innovative activities. However, and because it has been found that this is not an easy task, this remains the main objective of the Europe 2020 Strategy.

The employment crisis in Europe led to the phenomenon of entrepreneurship is regarded as a way for self-employment (AGER, 2013; GEM, 2015), leading to the above phenomenon is seen as an important way to increase employability for European assets. However, a major obstacle to the development of entrepreneurship, relates to the fear of failure and the failure of the consequences (AGER, 2013, GEM 2015).

In this regard, it is worth noting the growing importance and increasingly justified and also supported by empirical evidence, that public policies, especially in education, assume the development and internalization of the entrepreneurial spirit in all the EU countries.

The results of the provided analysis also seems to support the conclusion that the perception of entrepreneurship teaching effects is more positively perceived in the least economically developed countries in the EU. It appears that among the most developed countries within the EU, the perception of the effects of entrepreneurship education is not quite as valued as in the countries of the first group. This might suggest that the effect of entrepreneurship education has a higher impact on least developed countries within the EU than in their economically more advanced counterparts.

If indeed the conclusion concerning the students' perception, assumes practical impact in terms of the development of entrepreneurial attitudes for this group of countries, then public policies pursued within the EU in this context, may actually present a contribution to the reduction of economic imbalances that still prevail in this region.

We also highlight that in the case of Portugal, all perceptions evaluated in this study, have a very significant expression, when compared to the set of EU countries - thus power shall be put the question: will be Portugal a case study to explore in the development of formative experience in entrepreneurship education?

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