

*Full Length Research Paper*

# Conditioning factors of nascent entrepreneurs in higher education

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## Abstract

The current conjuncture is characterized by technological, economic, political, social and cultural, transformations affecting relations between countries and companies. In this environment, innovation becomes the main competitive differential and entrepreneurial personality is associated with perception capabilities of opportunities. According to various authors the nascent entrepreneur has features that provide business creation, but according to recent studies Entrepreneurship is not only innate, it can be taught. Therefore, higher education institutions have a central role in the reflection on the importance of entrepreneurship education. This article aims to foresee the role of higher education for the development of the entrepreneurial potential of individuals, through the construction of a conceptual model of research which will aim to assess whether the individual will become nascent entrepreneur driven by the characteristics identified in the systematic literature review.

**Keywords:** Entrepreneurship, Nascent Entrepreneur, Age, Gender, Training.

## Introduction

The concept of entrepreneurship is characterized by its polysemy. Entrepreneurship is a key feature in today's society, which should be supported by their impact on the economics of the countries, through the creation of jobs and sources of wealth. Most authors, by the studies carried out, or even by experience, refute the fact that entrepreneurship is an innate gift, emphasizing the influence of various factors (personal, contextual / social, family) in the development of this feature, and, the various points of view converge to the influence that education can play in promoting this aspect.

## Theoretical background

### **Entrepreneurship**

In the mid- eighteenth century, Richard Cantillon, according Hisrich (1986) defined entrepreneurship as the term self-employment of any sort. Certain Entrepreneurs buy at prices in the present and sell at uncertain prices in

the future. The entrepreneur is a bearer of uncertainty. Especially, Cantillon emphasized the role of the entrepreneur and not your personality, highlighting its economic function above the social status of the person. Say (1816) defined the concept through a combination of factors of production, stating that the entrepreneur is an individual who unites all means of production and who finds in the value of the products ... the re -establishment of the entire capital he employs, and the value of the wages, the interest, and the rent which he pays, as well as the profits Belonging to himself. The first authors that examine the theme of entrepreneurship had an academic education ranging between Economics and Psychology (Roberts, 1991). Among the economists, Schumpeter pointed up, responsible for the publication, in 1911, of the book Theory of Economic Development. For Schumpeter, the entrepreneur is one who creates innovations that allows making profits, assuming the risks involved. Schumpeter associated entrepreneurs not only to innovation, but also stressed the importance for the promotion of sustainable, responsible for creating new products and exploring new markets (Schumpeter, 1934).

## **Entrepreneur**

Who first gave utility to the term, was the French economist Jean-Baptiste Say, in the XVII century, using the concept to define the individual who was able to increase the productivity of an economic resource ( Bruyat and Julien , 2000). Over the years many different approaches have been taken to the entrepreneur term (Moreira and Silva, 2008). For Drucker (1985), entrepreneurs are those who take the opportunity to create change with something innovative. Sarkar (2007) mentions Joseph Schumpeter, who states that the entrepreneur is who applies an innovation in the business context, and may take various forms, including: introduction of a new product, introducing a new method of production, opening a new market, the acquisition of a new source of supply of materials and the creation of a new company. Since entrepreneurship is a basic skill that can be acquired through learning, according to Kirby (2002), to the universities puts up the challenge of responding to the growing demand for training in this area. In this regard, entrepreneurship should be seen as a process that can be managed and learned (Gartner, 1985; Morris and Kuratko, 2001; Wheat, 2003). According to the Portuguese Society of Innovation, in GEM Project 2004, entrepreneurship is at the center of economic and industrial policy, covering both the creation of new businesses and the development of opportunities in existing organizations. In other words, the definition of entrepreneurship used is as follows: any attempt to create a new business or new initiative, as self-employment, a new business organization or expansion of an existing business, by an individual, team of individuals, or established businesses (Portuguese Society of Innovation, 2004).

## **Potential Factors for Entrepreneurship**

The nascent entrepreneurs are the people involved in creating new businesses (Reynolds and White, 1997; Wagner 2004). The nascent entrepreneur will, following this, the person who is interested in starting a new business, hoping to be the owner of the new business, or part of it, and was active in trying to start a new business in the last 12 months (Shaver et al., 2001 ; Gartner and Carter , 2003; Reynolds et al., 2004a ; Wagner, 2004; Bilau, 2007). According to Hoang and Antončič (2003), Cristobal (2006), Schiller (2006), Muller (2006) and Veciana (2006, 2008), the educational level of entrepreneurs have a positive side when the use of professional advice issued by the innovation network. The authors began by looking for the existence of certain personality traits that could be associated with entrepreneurial activity (McClelland, 1961). Later, other studies have pointed to the importance of different characteristics such as age, gender, origin, religion, level of education, work experience, among others (Reynolds et al., 1994, Storey, 1994). These are often called demographic variables (Robinson et al., 1991). Espiritu and Sastre (2007) analyzed the characteristics that have a

positive influence on entrepreneurial intentions of students, considering the personality traits, values, socio-demographic factors and academic preparation. In the same line of research, Skudiene, Auruskeviciene and Pundziene (2010) analyzed the psychological and non-psychological characteristics, and environmental factors that influence the entrepreneurial intentions of university students in Lithuania. The result shows that both, the context and the factors, influences the entrepreneurial intentions of students. This information served as support for the design of training programs in entrepreneurship.

Similarly, Mayer (2010) conducted a review of the current state of the support given by universities to business creation, focusing directly on higher education in Mexico, trying to identify the characteristics and factors suitable for an integration plan, developing an effective program of institutional incentives in universities. With regard to demographic variables, with respects to gender, in all studies analyzed it was found that there is a higher rate of entrepreneurs in males than females (Pines, Lerner and Schwartz, 2010; Cohoon, Wadhwa and Mitchell, 2010, Teixeira, 2008; Fischer, Reuber and Dyke, 2003).

The Data relatives to the status of working student indicates that students who have had professional experience have developed characteristics such as autonomy and innovation (Shmidt , 2008) . The results of the report of the Global Entrepreneurship Monitor shows interesting data regarding the age at which the rate of entrepreneurship is more prevalent in Portugal.

Thus, in 2007, the entrepreneurship rate was higher in the population between 35 and 44 years, in 2010 this rate was higher in individuals aged 25 to 34 years. In 2007, 9 out of 100 individuals were entrepreneurs; in 2010 the value drops to 4-5 entrepreneurial individuals per 100 adults. Portugal is among the 10 countries with less entrepreneurial activity in the world.

## **Hypotheses and Model Analysis**

In accordance with the foregoing, the main research question that arises is: will the higher education institutions (HEIs) driving the emergence of nascent entrepreneurs with the factors promoters of entrepreneurial activities?

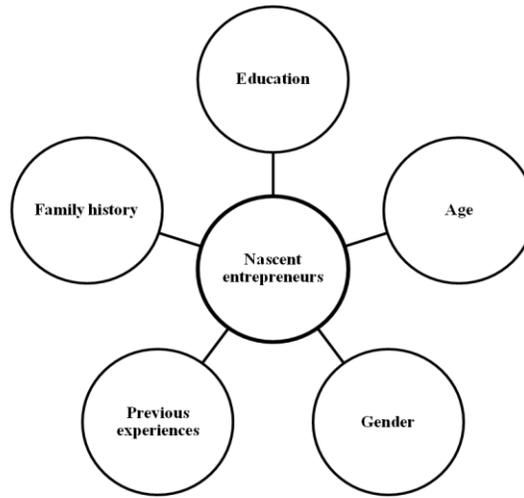
With empirical research seeks to answer the following questions:

- i. What are the general characteristics of nascent entrepreneurs? Identify discrepancies in gender and age, as well as the general characteristics of different entrepreneurs from different scientific areas.
- ii. What factors encourage entrepreneurial activities? The way institutions face the issue of creation of companies, what they know and what attitudes and practices towards the same.

**Model Analysis and Its Layout**

It appears that nascent entrepreneurs are influenced by a wide and complex range of factors, both internal and

external. To examine what factors can boost or limit the entrepreneurial capacity of higher education students; we have made a model (Figure 1).

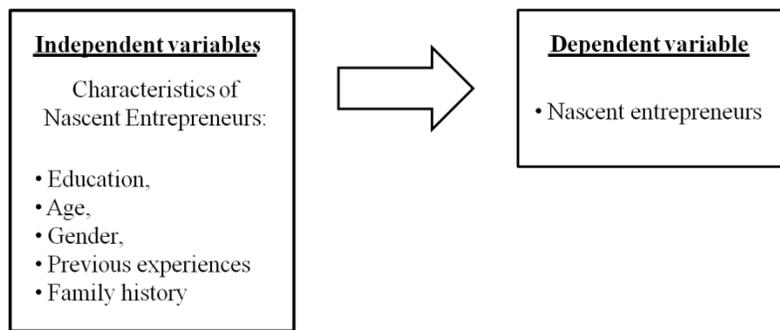


**Figure 1:** Factors that promote and limit the entrepreneurial capacity  
**Source:** Own elaboration

It is considered as the unit of analysis the nascent entrepreneur, seeking to deepen the knowledge about the individual who engages in the process of business creation and it takes, or not, the decision to create a company. Therefore, it becomes important to analyze some of the characteristics that may influence the decision to create companies, namely: education, age, gender, previous experiences and family history.

**Dimensions and model variables**

The conceptual model of the research aims to assess if the individual becomes nascent entrepreneur driven by the characteristics identified in Figure 2, contemplating the nascent entrepreneurs as the dependent variable and the characteristics of entrepreneurs mentioned above, as explanatory variables (independent).



**Figure 2:** Conceptual Model  
**Source:** Own elaboration

The characteristics of nascent entrepreneurs are represented by variables related to the characteristics that influence the emergence of nascent entrepreneurs, as the level of education, age, gender, previous experiences and family history. This conceptual model presented assumes that the characteristics identified influence the individual to become a nascent entrepreneur.

**Research Methodology**

The research methodology adopted was the case study, according to Yin (2005), wherein each search strategy represents a different way to gather and analyze data, following its own logic, with each advantages and disadvantages.

**Population and sample**

In the research work in analysis, the population consists of students from the School of Management of Institute Polytechnic de Tomar (Portugal), attending courses that provide training in the area of entrepreneurship in the academic year 2012/2013 and the sample was based on convenience criteria. According to the data, the population consists of pupils 185 and the sample 149 which constitutes 81% of the study population.

**Instruments for data collection**

As an instrument of data collection, a questionnaire was used, these being introduced in numbers and existing prior decisions (descriptive statistics and factor analysis) on the future presentation of the same. Thus, sets of questionnaires were conducted for the various courses of the School of Management oriented entrepreneurship education.

**Assessment Questionnaire Training Entrepreneurship**

For this study a questionnaire was used to apply to students, which had been used in the study of Simões (2010).

**Descriptive Analysis**

The total number of 149 questionnaires received, 54 were from the course of GE (Business Management), 46 the course GRHCO (Human Resource Management and Organizational Behavior), 24 of course GASS (Management and Administration of Health Services) and the remaining 25 the other courses, respectively. As to gender 58.4% of the questionnaires were answered by female and 41.6% for men. With regard to age it appears that most respondents have aged 20-25 years regardless of the course they attend, and 31 from the course GE , of course GRHCO 26 , and 12 of course GASS . With regard to the class age 31-40 years, appear in the course of from

10 GRHCO. Given that the total number of students who completed the questionnaire MGRS (Master of Health Resource Management) was 9, it is important to verify that the class 3 are from 41-60 years. Please note that the majority of respondents do not have any family with their own business (58.3%), and the majority, 104, presents studies primary / secondary, and 20 have a Bachelor's degree. It is noteworthy that 87.8% of students do not have experience in creating new businesses or the industry. 87.1% of respondents assumed that played no management functions. When asked about the intention of starting a new business and be the owner of all or part of it, the majority (70%) said yes. With regard to industry to conduct this business and how long have they had tried to start, most answered no more than 24 months in the service sector.

Training arrangements, understood as the most attractive for the future of the school will be the postgraduate courses and specialization courses, with 45.5% of respondents selecting them. Note that in total, the answers were confused between short courses (27.8%) and master's (25.7%). Respondents, in general, understand that training must have duration greater than 75 hours (62.7%). It is concluded that this response was considered as that having the optimum length for the respondents to the extent that the longer the period of training and better the larger amount of knowledge transferred , having been selected in this action , training with a duration exceeding 75 hours. It appears that the best place to deliver specific training, to support the creation of companies, is a school zone where they belong or belonged respondents (52.8%).

**Factor Analysis**

A primary objective of this research is to examine whether the educational institutions favored ways to promote entrepreneurial activities. Two factors have been identified explanatory 55.37% of the variance, Table 1, showing the main components of the array factor after rotation.

**Table 1:** Factors to foster entrepreneurial activities

VARIABLE	Commonality	FACTOR	VALUE P.	% VAR.	% VAR. AC.
Conferences and seminars	0,263	1	3,189	39,868	39,868
Featured Author Disclosure	0,733	2	1,240	15,500	55,368
Publication of educational material	0,691				
Integrated disciplines	0,529				
Entrepreneurship courses	0,459				
Contests	0,688				
Partnerships	0,676				
Masters	0,390				

Measure of sample adequacy Kaiser - Meyer - Olkin KMO = 0.800  
 Test Bartlett = 631.879, significance level  $\alpha = 0$

Following this two factors that have been identified, the variables are grouped as follows, discriminated in Table 2.

**Table 2:** Factors to foster entrepreneurial activities (Factorial analysis of the variables)

Variable	FACTOR 1	FACTOR 2
Integrated disciplines	0,671	
Entrepreneurship courses	0,599	
Contests	0,828	
Partnerships	0,822	
Masters	0,524	
Conferences and Seminars		0,511
Publications Articles disclosure		0,835
Publications Teaching		0,768

Procedure rotation: varimax

The interpretation of the results shows that there are two main factors in the reference of the best ways to foster entrepreneurial activities, referred to by the respondents.

Cooperation and development (factor 1) - one of the main factors in the reference of the best ways to stimulate the creation of nascent entrepreneurs is related to the forms of cooperation with other organizations, in which these forms aim to encourage entrepreneurial activities through formations with and no degree, and consulting, targeted to the specific needs of nascent entrepreneurs.

The variables that make up this factor are: partnerships with higher education institutions recognized with innovative capacity, the courses without graduate degree, masters degrees and partnerships.

Scientific research (factor 2) - another major factor in the reference of the best ways to stimulate the creation of nascent entrepreneurs is the result of scientific research and subsequent publication of scientific papers, constituting the variables that make up this factor a way to foster entrepreneurial activities. The variables that make up this factor are: conferences and seminars, publishing articles dissemination and publication of educational material.

### Conclusions, limitations and suggestions for future research

After the investigation developed, the first major conclusion to be made is that the topic under study has a number of specialties that make their analysis relevant and necessary. The study of the factors influencing the emergence of nascent entrepreneurs, proved to be important to most societies and economies, but about which there is still much to discover. To develop measures that allows forward concrete action in relation to entrepreneurship. This research sought to examine in depth the factors influencing the emergence of nascent entrepreneurs and tried to obtain evidence to answer this question. The literature review demonstrated that it is an extensive and complex work because of the heterogeneity

of their origin, the different approaches used in the studies.

Considering that the objective sought to identify the general characteristics of entrepreneurs, it can be concluded that, regardless of college, attending mostly have the academic degree of primary / secondary. Another characteristic of entrepreneurs, regardless of the course they belong / belonged, is not having previous experience either in business creation, whether in business sector where they develop entrepreneurship and previously played or management functions. Another finding, target research on the general aspects of entrepreneurs is that they consider that the training should be inserted free on education. Entrepreneurs are mostly feminine gender, age presenting as majority between 20 and 25 years. Another finding gauged based on the responses is that entrepreneurs do not have family members with business / company itself. To achieve the objective of identifying the factors that the Polytechnic Institute of Tomar could encourage awakening nascent entrepreneurs:

- 1) Entrepreneurs generally take courses in postgraduate and specialization courses as the best training modalities. Respondents claim that the formation must have a duration exceeding 75 hours. As for the best place to deliver specific training will be the area of the school where they belong or belonged to the respondents;
- 2) Identify the ways and activities that enhance the appearance of nascent entrepreneurs: respondents assume that the forms of entrepreneurial activities used by the Polytechnic Institute of Tomar, in order of importance, are betting more in conferences and seminars, entrepreneurship, publishing dissemination of articles and partnerships, however, the results are different depending on the courses.

The main results achieved through factor analysis, took into account the objectives of the research mentioned

above, by the factors present at the Polytechnic Institute of Tomar that foster entrepreneurial activities, are cooperation and development, encompassing various forms of cooperation with other and consulting organizations, are seen as the best way. Respondents saw scientific research as the best way to foster entrepreneurial activities, compared with the formations.

Thus, one can consider the Polytechnic Institute of Tomar, an institution that supports the awakening of nascent entrepreneurs, since, presents a number of factors enhancers' entrepreneurial activities, taking as an example, the various partnerships with the business world that features and offer a wide range in terms of training regarding the level of undergraduate and master's degrees.

### Limitations of research

As a limitation of the research developed, we can refer that only have been studied students of the School of Management of Tomar, training in management and economics, and within the same sample was made to allow the extraction of results. Thus, one of the limitations was the use of a sample of the universe, and this situation is held exclusively with the size of the universe that was very broad, so we cannot generalize the results. Another important limitation of the research comes from the own theoretical model. Since this is a model limited to certain characteristics of nascent entrepreneurs, it is considered that the incorporation of new factors and new variables will improve the work.

### Suggestions for future research

We recognizes that it will be extremely important that further work should focus on the study of all institutions that can boost business creation or analysis other activities that can support companies organized to become more competitive , and even emerging in European and international markets .

It is still great interest in new opportunities, work and study separately different ways to foster entrepreneurial activities, in educational institutions in public and private educational institutions.

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