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## ENTREPRENEURIAL INTENT OF PORTUGUESE AGRARIAN HIGH SCHOOL STUDENTS: THE CASE OF THE ALTO TRAS-OS-MONTES REGION

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### **SUMMARY**

Knowing the entrepreneurial intention of students and analyzing their perception of obstacles and difficulties in the entrepreneurship process are the objectives of this research. For this, fa quantitative and transversal study was carried out, which was based on the direct administration of a questionnaire to students, from a higher education school organization, during the month of July 2010. Participated in this study 269 students, which corresponds to a response rate of approximately 34%. Of the total respondents, 69% are female and 30.7% are male. Respondents are aged between 18 and 46 and the overwhelming majority are students on an ordinary basis (83.9%). According to the results, 35.2% of respondents would like to work exclusively on their own. The possibility of the company going bankrupt is the factor that causes the greatest fear in the creation of its own business. The lack of financial support is pointed out as the greatest difficulty in the development of the business. In these aspects, taking into account gender and age groups, it appears that there are statistically significant differences between the female and male gender with regard to fears related to job instability, the possibility of failure and the possibility company goes bankrupt, the woman being the most afraid. Regarding age, there are differences in the possibility of failing, with younger students being the most fearful. On the other hand, there are differences, statistically, significant differences between the gender in the difficulties related to the fact that the administrative process is complex, the lack of skills in the management area, the great risk of failure and the unfavorable economic climate for the development of its own business. It should be noted that, once again, it is the female individuals who identify these factors as the most difficult to overcome. As for the age groups, the results proved that regardless of age, difficulties are seen in the same way by respondents, it is the female individuals who identify these factors as the most difficult to overcome. Regarding age groups, the results proved that regardless of age, difficulties are seen in the same way by respondents. it is the female individuals who identify these factors as the most difficult to overcome. As for the age groups, the results proved that regardless of age, difficulties are seen in the same way by respondents. Finally, the quality of both the management team and the technical team stands out as factors of success in the development of its own business.

Key words: Entrepreneurship, Students, Higher education.

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## **1. INTRODUCTION**

The liberalization of jobs, making a large number of professionals in surplus and not absorbing a significant portion of those who make themselves available to organizations annually, has demanded a change in behavior from society in general and higher education organizations in particular. competences, facing the traditional view of employment (Bronosky, 2008). It is up to higher education institutions, in fulfilling their role of training students, to train and encourage them to entrepreneurial initiatives, stimulating future creation of companies that will generate employment and economic development. For Hull et al. (1980), the identification of the potential to undertake and its subsequent encouragement will bring benefits to the Society. In this context, an investigation was carried out which aimed to find out the students' entrepreneurial intention and analyze their perception regarding obstacles and difficulties in the entrepreneurship process. To this end, a quantitative and transversal study was developed based on the direct administration of a questionnaire to students of a higher education school organization, during the month of July 2010. The communication is divided into five sections. Thus, in addition to this introduction, the second section presents a brief theoretical foundation looking forhighlight the importance and contributions of entrepreneurship to the economy and society. The third section constitutes the empirical part of the work itself, with the methodology used. Later, in the fourth section, the results are presented and discussed in two sections. The first presents the descriptive analysis of the results and the second makes the comparative analysis. Finally, in the fifth section, the final remarks are made.

## 2. THEORETICAL FOUNDATION

According to Binotto et al. (2004) no one is born an entrepreneur, entrepreneurial skills can be learned, developed and improved. In the opinion of these researchers, entrepreneurship is a cultural phenomenon strongly related to the educational process, capable of boosting the creation of companies focused on local and regional development, with the role of higher education institutions standing out in this process. There is a lot of evidence that establishes a direct relationship between a community's degree of entrepreneurship and economic developmentplace. Martens & Freitas (2008), Mazzarol et al. (1999) and Kristiansen & Indarti (2004) claim that any economic development process is associated with innovations generated by entrepreneurs. PairPaço et al. (2010), entrepreneurship education promotes the growth of new businesses, triggering the entrepreneurial spirit. An entrepreneurial attitude results in the creation and innovation of businesses, new processes, new services that, together with knowledge management, can contribute to a development strategy that combines the growth of job opportunities and the increase in productivity (Castillo et al., 2008). Wang & Wong (2004) demonstrated that schooling has a great influence on the attitude and aspirations of individuals. According to Lima et al. (2006), considering the possibility of forming an entrepreneurial personality through education is fundamental for the promotion of entrepreneurship education and, consequently, for social development. Gaspar (2009) summarizes the importance of entrepreneurship, in four items. According to this researcher, entrepreneurship is: a) an important source of job creation; b) it plays a fundamental role in the introduction of innovations in the economy and constitutes itself as the mechanism that leads the economy to society itself to evolve and make progress; c) a career option for an important part of the workforce; and, d) it has a very important impact on regional development and the growth of economies. On the other hand, according to Kolvereid (1996), university students, in general, find the idea of creating and developing their own business very attractive and very attractive. As a result of all this, international organizations, increase entrepreneurial skills in individuals on how to create and develop a business (Paco et al., 2010). According to Minuzzi et al. (2007), the promotion

of entrepreneurship has been highlighted by entities that understand the dissemination of entrepreneurial culture for the progress of a nation, namely, higher education institutions. The bet of universities and polytechnic institutes in promoting entrepreneurship appears as an opportunity of great potential, given the current situation of the economy, since qualified entrepreneurship presents itself, according to Leite & Oliveira (20079 as a professional outlet that can guarantee a promising future. As advocated by Castillo et al (2008), entrepreneurship is not a new profession, but it is the construction of a new meaning for professional insertion, as it combines the need to integrate knowledge from different areas with experience and practice. Entrepreneurship is heralded by these researchers as an important employment alternative.

### 3. METHOD

As its name indicates, this point is dedicated to the presentation of the methodology used to carry out this investigation, namely, participants, material and procedure. For this, reference is made to the way the sample was collected, the data collection instrument and the statistical treatment of the same.

#### **Participants**

Bearing in mind that the universe under study is constituted by about 800 students who attend the degree courses of the school organization that is the object of this study. The sample is considered representative in quantitative terms if, according to Cohen et al. (2000), consists of at least 260 individuals. Therefore, a sample of 269 individuals attending the 1st cycle of the 8 courses taught. In order for the sample to be representative, in qualitative terms, some exclusion criteria were defined. Questionnaires that were not properly filled out were excluded. It is a simple random sample since, each of the sampling units that make up the universe is equally likely to be selected and, consequently, to be part of the sample. As shown in Table 1, the sample consists of about 69% of females and 31% of males. Despite the disproportion, the results are not skewed as, in the universe under study, the proportion of males and females is similar. The surveyed students are between 18 and 46 years old, with an average age of  $21.9 \pm 3.7$ . The overwhelming majority is an ordinary student (83.9%).

Groups	Frequency	8		
-	Relative (%)	Absolute (N)		
Genre				
Feminine	69.3	186		
Male	30.7	83		
Age groups				
18-21 years	62.7	169		
$\geq$ 22 years	37.3	100		
Regime				
Ordinary	83.9	226		
Student worker	5.1	14		
Associative leader	10.2	27		
Other	0.7	2		

Table 1 - Gender.	age and frequency	regime
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## <u>Material</u>

For data collection, the Survey on the propensity to entrepreneurship elaborated was used as an instrument by Rosário (2007) which is constituted for 17 issues namely performance of activities in associations / organizations, frequency of international mobility programs, performance of paid activity, existence of a close business owner, type of job he would like to perform, sector of activity in which the respondent would like to perform his profession, main fears in creating a business of its own, main difficulties in starting a business, success factors in the creation and development of a business, sex, age, student status and average expected at the end of the course the respondent is attending.

# **Procedure**

The data were collected, in a single moment (July 2010), after obtaining authorization to apply the questionnaire from the Director of the school organization. It is, therefore, a cross-sectional study since, according to Polit & Hungler (1995), this type of study involves the study of phenomena that all take place on a certain date and that have occurred in the past or in the present. Participants were contacted by a collaborator in this research in the classroom. The students were informed about the nature and objectives of the investigation and after guaranteeing the anonymity and confidentiality of the data, they were asked to participate voluntarily. The total time taken to complete the questionnaire was, on average, 10 minutes.

The computer program used to edit and process the data was SPSS 16.0 (Statistical Package for Social Sciences). Descriptive statistics were used to characterize the sample, namely, the calculation of absolute and relative frequencies whenever the variables were nominal; and, the calculation of measures of central tendency (mean and median) and measures of dispersion (standard deviation) whenever the variables were ordinal or higher. To compare the aspects that raise the greatest fears in the development of the business itself as well as the difficulties in starting a business between two independent groups (Gender: male and female; Age group: 18-21 and  $\geq$ 22 years old) the Mann-Whitney-Wilcoxon test (non-parametric test) was used. This test was used to the detriment of the parametric test, T-Student for independent samples, since, when tested the conditions of applicability of these tests, namely, the normality of the data and the homogeneity of the variances through the Kolmogorov-Smirnov test with the correction of Lilliefors and Levene's test, respectively, it was found that, at the 5% significance level, the data did not follow the normal

distribution. In this situation, it is advisable to use non-parametric alternatives since, in the absence of one of the conditions for applying parametric tests, non-parametric tests are, according to Maroco (2007), more potent.

## 4. ANALYSIS AND DISCUSSION OF RESULTS

At this point, the results obtained following the treatment of the data collected through the questionnaire applied to students attending the 1st cycle of a higher education school organization are presented and analyzed. This point is divided into two sections, the first presents the descriptive analysis of the results and the second makes the comparative analysis.

### **Descriptive analysis**

Taking into account the type of job that the respondent would like to perform, it can be seen that 35.2% of the respondents would like to work exclusively on their own. However, it should be noted that the vast majority (55.6%) chose to combine self-employment and work for others. Similar results were found by Gaspar (2008). According to this researcher, the phenomenon of entrepreneurship in Portugal presents worrying low levels, explained in large part by the historical evolution of Economy and Society but also due to the low level of innovation and access to knowledge.

The intention to undertake is present in greater numbers in the female gender when compared to the male gender (69.4% against 30.6%), in the youngest (67.4% against 32.6) and in the respondents who would like to develop his professional career in the private sector (44%) (see table 2).

Comparing potential entrepreneurs (TCP) with those who wish to work exclusively for others (TCO), it appears that potential entrepreneurs are present in greater numbers when taking into account, namely, the development of associative activities (32.7 % against 30.8%), the practice of a paid professional activity (40.8% against 38.5%), close family members who are entrepreneurs (49% against 23.1%) and school performance (35.3 % against 2.9%). In a study carried out in several countries in Latin America, Dolabela et al. (2008) concluded that the family has great influence in choosing a profession as an entrepreneur or employee. In the opinion of Faleiro et al. (2006), the influence of family education and the social environment represent a significant portion in the training of entrepreneurs. For Bohnenberger et al. (2007), people who have family entrepreneurs differ in their performance from people who do not have family entrepreneurs. The existence of family businessmen influences, according to Olmos & Castillo (2008), the entrepreneurial attitude in a positive way. On the other hand, Carvalho & González (2006) argue that students who are worker-students manifest a greater propensity to create companies.

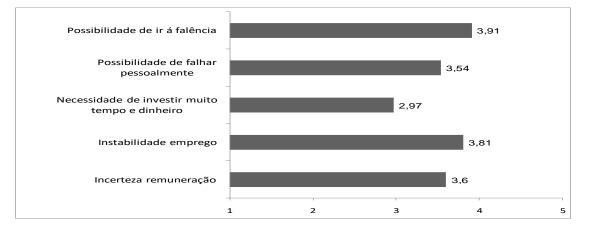
However, contrary to what is reported in the literature, it is the potential entrepreneurs who least participated in international mobility programs (2% against 15.4%). These results, in general, are in line with the findings of Gaspar (2008). However, most of the investigations developed point out that the potential entrepreneurs are mostly male (Scott & Twomey, 1988; Olmos & Castillo, 2008) and have lower academic performance (Gaspar, 2008).

Table 2 - Intention to entrepreneur					
Groups	Entrepreneurial Capacity				
	Exclusively TCO	Exclusively	TCO and TCP (%)		
	(%)	<b>TCP</b> (%)			

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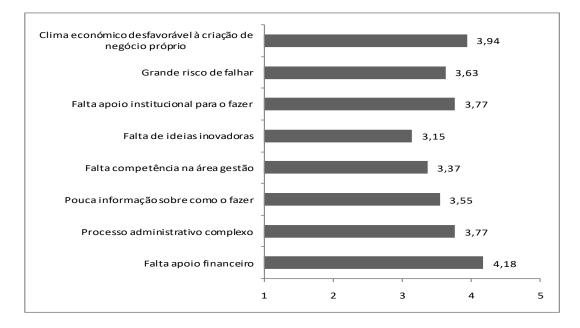
Genre			
Feminine	61.5	69.4	70.5
Male	38.5	30.6	29.5
Age groups			
18 to 21 years	58.3	67.4	60.5
$\geq$ 22 years	41.7	32.6	39.5
Association / organization activity			
Yes	30.8	32.7	45.6
No	69.2	67.3	54.4
International mobility program			
Yes	15.4	2	5.1
No	84.6	98	94.9
Paid activity			
Yes	38.5	40.8	38.5
No	61.5	59.2	61.5
Have family businessmen			
Yes	23.1	49	64.6
No	76.9	51	35.4
Sector where they would like to			
work	12	44	44
Private	8.2	32.9	58.9
Public	5.9	23.5	70.6
Indifferent			
Expected final average			
Enough	12.9	37.6	49.4
Good very good	2.9	35.3	61.8
Total	9.2	35.2	55.6

As for the respondents' opinion on the aspects that raise the greatest fears in the development of their own business, responses ranged from 1 (no fear) to 5 (very fear), with the midpoint of the response range being 3.As can be seen in Graph 1, aspects such as the possibility of going bankrupt (3.91), job instability (3.81), uncertainty in pay (3.60) and the possibility of personally failing (3, 54) have a high or very high relative fear for most respondents. On the contrary, the need to invest a lot of time and money with an average of 2.97 was the only aspect that registered a below-moderate level of fear. In the opinion of Leite & Oliveira (2007), although the conditions for entrepreneurship have been progressively improving, the psychological factor and culture remains, namely, risk aversion and fear of failure. The Portuguese prefer stability working for others rather than opting for a business on their own.



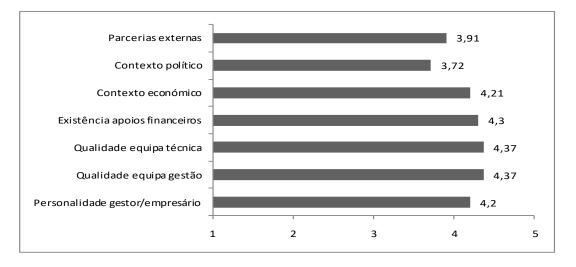
Graph 1 - Main fears associated with the creation of own business (weighted average)

Regarding the degree of agreement with the statements that refer to the difficulties in starting a business, the responses ranged from 1 (strongly disagree) to 5 (strongly agree). As can be seen in Graph 2, all statements registered a high level of agreement, with emphasis on "the lack of financial support", which registered the highest level of agreement, with an average of 4.18. In fact, according to Leite & Oliveira (2007), moving from idea to business requires means of financing that make it viable and, therefore, one of the main difficulties to overcome.



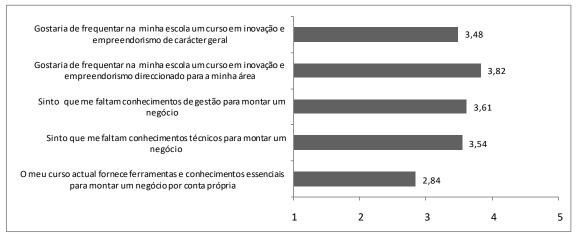
Graph 2 - Main difficulties encountered in starting a business (weighted average)

As for the factors that the respondent considers important for the success of a new company, the answers ranged from 1 (not at all important) to 5 (very important). By reading Graph 3, it can be seen that all of them were assigned a high or very high degree of importance. Factors such as the quality of the management team and the quality of the technical team stand out, both averaging 4.37.



Graph 3 - Importance of factors for the success of a company (weighted average)

Bearing in mind that one of the objectives of higher education organizations is to develop educational programs that promote the entrepreneurial spirit as well as to equip students with skills for the creation and development of their own business, several statements were put forward for students to give an opinion attributing a degree of agreement to each statement about your current and future training in entrepreneurship. The responses ranged from 1 (strongly disagree) to 5 (strongly agree). Graph 4 shows the results related to this issue and, as can be seen, students have a lower degree of agreement with the statement in which the current course is considered to provide the essential tools and knowledge for creation and development of the business itself. Fundamentally, the surveyed students are willing to attend, at the school itself, a course in innovation and entrepreneurship aimed at their area of training. These results are consistent with the thesis defended by Leite & Oliveira (2007) that, in Portugal, higher education institutions have not yet adopted a clear strategy that focuses on qualified entrepreneurship. In the opinion of Castillo et al. (2008) higher education must equip itself with new pedagogical tools. It is not enough to motivate a new attitude or to promote and equip students with entrepreneurial skills. It is essential to move from theory to practice, that is, to implement good and new ideas. Oliveira (2007) that, in Portugal, higher education institutions have not yet adopted a clear strategy that focuses on qualified entrepreneurship. In the opinion of Castillo et al. (2008) higher education must equip itself with new pedagogical tools. It is not enough to motivate a new attitude or to promote and equip students with entrepreneurial skills. It is essential to move from theory to practice, that is, to implement good and new ideas. Oliveira (2007) that, in Portugal, higher education institutions have not yet adopted a clear strategy that focuses on qualified entrepreneurship. In the opinion of Castillo et al. (2008) higher education must equip itself with new pedagogical tools. It is not enough to motivate a new attitude or to promote and equip students with entrepreneurial skills. It is essential to move from theory to practice, that is, to implement good and new ideas.



Graph 4 - Agreement with statements about current and future entrepreneurship training (weighted average)

### **Comparative analysis**

When comparing the aspects that raise the greatest fears in the development of the business itself, it appears that there are statistically significant differences between the female and male gender with regard to job instability, the possibility of failure and the possibility of the company going bankrupt. In fact, the output of the Mann-Whitney-Wilcoxon test produced proof values or probabilities of significance (p-value) below the level of significance, which is why the null hypothesis (H0:  $\eta 1 = \eta 2$ ) must be rejected, concluding the alternative hypothesis (H1:  $\eta 1 \neq \eta 2$ ), that is, the difference between medians. The results also show that it is the woman who shows greater fears when compared to the man, as can be seen in table 3

Regarding the comparison of the medians of the main fears in the creation of the business itself, taking into account age groups, the output of the Mann-Whitney-Wilcoxon test revealed that, at the 5% significance level, only the possibility of failure registered differences, statistically significant, (p-value = 0.041 < 0.05). This result highlights the fact that younger respondents are more afraid of failing (see table 3).

Table 3 - Comparison of the medians of the main fears in the creation of the business itself, taking into account gender and age groups

Main fears	Genre		p-value	Age		p-value
	Feminine	Male		18 to 21	≥22	
Uncertainty of remuneration	3.70	3.35	0.081	3.71	3.42	0.152
Job instability	3.96	3.44	0.013 *	3.92	3.68	0.152
Need to invest a lot of time and	2.90	3.14	0.262	2.99	2.94	0.812
money	3.71	3.14	0.004 *	3.73	3.24	0.041 *
Possibility of failure	4.19	3.28	0.000 *	4	3.74	0.303
Possibility of going bankrupt						

\* There are statistically significant differences for a 5% significance level

When comparing the medians of the main difficulties in creating the business itself, taking into account gender and age groups, the results of the Mann-Whitney-Wilcoxon test prove that there are statistically significant differences between genders in aspects that concern the administrative process complex, the lack of management skills, the high risk of failure and the unfavorable economic climate for the development of its own business. As can be seen in table 4, it is the female

gender that registers higher medians in the difficulties that can be encountered when creating the business itself.

Main difficulties	Genre		p-value	Age		p-value
	Feminine	Male		18 to 21	≥22	
Lack of financial support	4.23	4.09	0.366	4.11	4.36	0.066
Complex administrative procedure	3.89	3.51	0.049 *	3.77	3.74	0.885
Little information on how to do it	3.56	3.51	0.762	3.55	3.58	0.781
Lack of management skills	3.48	3.12	0.032 *	3.37	3.29	0.535
Lack of innovative ideas	3.24	2.93	0.115	3.21	3.04	0.413
Lack of institutional support to do so	3.89	3.49	0.086	3.77	3.82	0.872
Great risk of failure	3.90	3.05	0.000 *	3.65	3.66	0.871
Unfavorable economic climate for the	4.08	3.58	0.014 *	4.08	3.69	0.096
development of own business						

Table 4 - Comparison of the medians of the main difficulties in creating the business itself, taking into account gender and age groups

\* There are statistically significant differences for a 5% significance level

When comparing the medians of the main difficulties in creating the business itself, taking into account the age groups, the output of the Mann-Whitney-Wilcoxon test revealed that, regardless of age, difficulties are faced in the same way by respondents (see table 4).

# **5. FINAL CONSIDERATIONS**

The students surveyed are aged between 18 and 46 and the overwhelming majority are students on an ordinary basis (83.9%). According to the results, 35.2% of respondents would like to work exclusively on their own. The possibility of the business going bankrupt is the factor that causes the greatest fear in the creation of its own business. On the other hand, the lack of financial support is pointed out as the greatest difficulty in the development of the business.

Comparing the aspects that give rise to the greatest fears in the creation of the business itself and the difficulties in the development of the same, taking into account the gender and the age groups, it is verified that there are statistically significant differences between the female and male gender with regard to , fears related to job instability, the possibility of failing and the possibility of going bankrupt, with women being the most fearful.

Regarding age, there are statistically significant differences regarding the possibility of failing, with younger students being the most fearful. On the other hand, there are statistically significant differences between genders in the difficulties related to the complex administrative process, the lack of skills in the area of management, the great risk of failure and the unfavorable economic climate for the development of its own business. It is the female gender that considers these factors as major difficulties.

As for the age groups, the results proved that, regardless of age, difficulties are seen in the same way by respondents. Finally, the quality of both the management team and the technical team stands out as factors of success in the development of its own business.

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