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## The influence of academic and demographic factors on entrepreneurial intention antecedents among students of a Portuguese higher education institution

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#### **Abstract**

Researchers have previously used the Theory of Planned Behavior as a theoretical framework to investigate entrepreneurial intention (EI). However, there are some studies that suggests that psychological factors such as spirituality (S), emotional intelligence (Emol) and creativity(C) play an essential role in developing alternative EI models. This correlational study explores the relationships between EI antecedents (S, Emol, C, personal attitudes towards entrepreneurship-PA and perceived behaviour control-PBC) and academic and demographic factors (gender, scientific study area, working experience, entrepreneurial family background, student status, entrepreneurial education, among others) of university students. A quantitative approach was used, through a personal questionnaire survey applied to 345 students in a Portuguese higher education institution. Data was analysed using descriptive statistics and correlation analysis. The correlation levels of S, Emol, C, PA, PBC and EI are relatively low to moderate. There are strong positive correlations between EI, PA and PBC. The most creative students have higher levels of PA, PBC and EI. A moderate positive correlation is observed between Emol and C, and between Emol and PBC. S was not correlated to most of the concepts in the analysis. There are several significant associations between EI determinants and some academic and demographic variables, for example, higher EI levels occur with students that have "student-worker" status, with those that have taken part in entrepreneurship education programs, and those who have family members with their own business and have some experience in the labour market. In educational settings due consideration should be given to Emol and C as to promote students' EI. The study has implications for academics involved in entrepreneurship education.

Keywords: Spirituality; emotional intelligence; creativity; theory of planned behavior; higher education institution.

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#### 1. Introduction

An increasing number of studies have used the Theory of Planned Behavior as a background in the study of entrepreneurial intent (Zampetakis, Kafetsios, Bouranta, Dewett & Moustakis, 2011). This theory links intentions to attitudes and behaviours, highlighting three antecedents of entrepreneurial intentions (Ajzen, 1991): attitudes toward behaviour, subjective norm and perceived behavioural control. In addition to personal attitudes towards entrepreneurship (PA) and perceived behavioural control (PBC), the present study explores three characteristics that have received relatively less attention in their association with entrepreneurial intentions: spirituality, emotional intelligence (Emol) and creativity. Understanding the ways in which these psychological characteristics influence entrepreneurial intent may help to increase the knowledge that is held about the entrepreneurial process (Ferreira, Raposo, Rodrigues, Dinis & Paco, 2012) and on the development of entrepreneurship activities.

In recent years, higher education institutions (HEIs) have been considering promoting entrepreneurship as a priority. It is therefore evident that further research is needed in this context so that universities can become structuring places for raising awareness of entrepreneurship issues and for developing psychological and behavioural characteristics that reinforce the entrepreneurial spirit of its students. Through a correlational research, we try to understand the links between some entrepreneurial intention antecedents, having as context of analysis the students of a HEI. Specifically, this study has two objectives: 1) To know students' perceptions about the concepts of spirituality, Emol, creativity, PA, PBC and entrepreneurial intention, determining their degree/level; and 2) Correlate the concepts under study and analyse the existence of differences in the perceptions of students in relation to these concepts, according to certain academic and demographic variables.

#### 2. Literature Review

#### 2.1. Entrepreneurial intention

The intention corresponds, according to Bird (1988), to a state of mind that directs the attention of a person to a certain situation (specific objective), in order to achieve a goal. Usually, the stronger the intention the greater the likelihood of an individual performing a particular behaviour. Entrepreneurial intent is seen as the strongest predictor of entrepreneurial activity. This field of research has been one of the central variables in contemporary research on entrepreneurship (Krueger, Reilly & Carsrud, 2000).

Fayolle and Linan (2014) consider that entrepreneurial intention is a consolidated area of research within the field of entrepreneurship. The authors point out that the entrepreneurial intention models continue to attract the attention of the researchers, however, more research is needed to contribute to the progress in understanding this research area, namely the study of the role of variables that, on a personal level, can influence the intentions of an individual.

#### 2.2. Entrepreneurial intention antecedents

#### 2.2.1. Spirituality

There is a growing recognition that spirituality is a fundamental aspect of human existence for many individuals (Gallup & Lindsay, 1999). There are even those who say that spirituality is something inherent to the human being, so all individuals are spiritual beings (Moberg, 2008). Spirituality and religion are distinct concepts (Hodge, 2003). Spirituality is a vast phenomenon related to inner qualities that are independent of any religion or belief system (Agbim et al., 2014). It is an inner experience of an individual who, through connection with others and with a higher power, discovers meaning and purpose in life (Rust & Gabriels, 2011). In the present study, spirituality corresponds to the relationship that a person establishes with God or whatever the individual perceives to be the transcendent (Hodge, 2003).

Jackson and Konz (2006) argue that academics are beginning to recognize the role of spirituality in entrepreneurship and have adopted a variety of approaches to investigate this phenomenon. In 1997,

Bandura argued that recent results show that spirituality should be an essential part of understanding entrepreneurship. Balog, Bakerb and Walker (2013) consider that spirituality in the field of entrepreneurship has gained increasing attention since the intersection of these concepts provides an understanding of how the increased awareness of an entrepreneur, in terms of his personal values and beliefs, can influence business activities and crucial characteristics of the entrepreneurial process.

#### 2.2.2. Emotional intelligence

Emol is, in the definition proposed by Salovey and Meyer (1990), a part of social intelligence, being understood as the ability of individuals to recognize their own emotions and those of others, using this information to guide the thinking and behaviour. In the present study we use the conceptualization of Wong and Law (2003) in which Emol is understood as a set of interrelated abilities that individuals have in order to deal with emotions. Based on the model of Mayer and Salovey (1997), Wong and Law (2003) develop a four-dimensional scale of Emol that relates to: the ability to understand one's own emotions as well as to express them naturally, the ability to perceive, recognizing and understanding the emotions of others, the ability to regulate emotions for faster recovery, and the ability to use one's own emotions, guiding them toward constructive activities and personal performance.

Given that emotions can affect thinking processes and behaviours, their potential role in entrepreneurship becomes evident (Cross & Travaglione, 2003). Some studies that apply Emol to the area of entrepreneurship research (Cross & Travaglione, 2003; Rhee & White, 2007); Zampetakis, Gotsi, Andriopoulos & Moustakis, 2009) and, more specifically, with entrepreneurial intent (Zampetakis et al., 2009) have been developed.

#### 2.2.3. Creativity

Creativity is widely regarded as a vital component of human behaviour (Hughes, Furnham & Batey, 2013). It is a complex and multifaceted phenomenon, covering aspects such as: the person, the process, the product and the creative environment (Puhakka, 2011). In this study, creativity will be understood as the capacity of an individual to expand and overcome existing realities (Puhakka, 2011). Therefore, according to the author, creativity refers to original, new and unexpected results. It is capacity and strength that creates something better (Henry, 1991 in Puhakka, 2011).

The study of the role of creativity in intention-based models has not been so extensively explored (Hamidi, Wennberg & Berglund, 2008). However, creativity has been identified as an essential component of entrepreneurship and has been proposed as an antecedent of entrepreneurial intent (Zampetakis et al., 2011; Hamidi et al., 2008). More creative individuals are more likely to be involved in entrepreneurial activities.

#### 2.2.4. Personal attitudes towards entrepreneurship and perceived behavioural control

The use of the Theory of Planned Behavior as a conceptual framework to study entrepreneurial intentions and the choice of an entrepreneurial career has been made by a growing number of studies (Autio, Keeley, Klofsten, Parker & Hay, 2001; Linán & Chen, 2009). This theory, in its application to the field of entrepreneurship, proposes that the entrepreneurial intention is determined by the attitude towards entrepreneurship, by the subjective norm and by the perception of control of the behaviour. In the present study, only two of the predictive variables of entrepreneurial intention are analysed: PA and PBC. Some studies have concluded that attitudes play the most important role in explaining intentions (Paço, Ferreira, Raposo, Rodrigues & Dinis, 2011). The results of other investigations point to a weak influence of subjective norms on models of intention (Autio et al., 2001; Linán & Chen, 2009; Krueger et al., 2000).

For Linán and Chen (2009), the PA refers to the degree to which the individual has a positive or negative personal evaluation about being an entrepreneur, including not only affective considerations (I like), but also evaluative considerations (It has advantages). The PBC concept is defined as the perception of ease or difficulty associated with being an entrepreneur, including not only the feeling of

being able, but also the perception of the extent to which one can control the behaviour (Linán & Chen, 2009).

#### 3. Methodology

To achieve the stated objectives, a descriptive-correlational and cross-sectional study was carried out. This being a descriptive research, we chose to use a questionnaire survey, applied personally during the classes. The population/universe was constituted by the students of a Portuguese HEI, distributed by its five schools/faculties: Humanities and Social Sciences School; Technological Sciences School; Agricultural and Veterinary Sciences School; Life Sciences and Environment School; Nursing School. For reasons of convenience, a minimum of 300 responses was defined as an acceptable limit, and it was sought to maintain the quotas for each school. Of the total number of students per school, the questionnaire was only applied to third year undergraduates and to master students, because it is understood that they are more likely to carry out entrepreneurial activities in the near future. 345 valid questionnaires were obtained.

All the six constructs included in the analysis were assessed with multi-item scales whose psychometric properties are well-established. Responses to all items were made on 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with the exception of spirituality, which was measured from a 10-point scale.

The concept of spirituality was operationalised from the Hodge scale (2003), with six items. This scale assesses the extent to which spirituality functions as the primary motive of an individual for both theistic and non-theistic populations, both within and outside religious structures. Respondents are asked to read an incomplete statement (e.g., "Spirituality is ...") and response options range from 0 to 10, with 0 indicating low levels of spirituality (e.g., "It is not part of my life") and 10 indicating high levels of spirituality (e.g., "The main motive of my life, directing all other aspects of my life"). Three statements were reverse-coded.

The Wong Law Emotional Intelligence Scale (WLEIS, Wong and Law, 2002) was used to measure Emol. The WLEIS comprises 16 items and intents to measure the knowledge that individuals have about their own emotional abilities rather than their actual abilities. The scale consists of four subscales, with four items each: Self Emotional Appraisal - SEA ("I have good understanding of my own emotions"), Others Emotional Appraisal- OEA ("I am a good observer of others" emotions"), regulation of emotions – ROE ("I am quite capable of controlling my own emotions") and Use of emotions – UOE ("I am a self-motivated person").

Creativity was measured by the Puhakka scale (2011), with five items, and is understood as the capacity of an individual to extend and go beyond existing realities. Similar to the study by Zampetakis et al. (2011), a self-perceived measure was used.

The scales of PA, PBC and entrepreneurial intention were taken from the study by Linán and Chen (2009). The concept of PA presents five items and the scale of PBC is composed of six items. The concept of entrepreneurial intention was measured from a scale that aggregates six items, in which respondents were asked to indicate whether they intended to start a business, answering questions about their entrepreneurial intention. These are general phrases that indicate different aspects of intention.

Statistical analysis was performed with the Statistical Package for the Social Sciences (SPSS), version 22 for Windows. A significance level of 5% was considered in the statistical tests. The quantitative variables were characterized by mean and standard deviation and qualitative variables by absolute and relative frequencies. The normality of the variables under study (scales scores) was verified through the coefficients of asymmetry and kurtosis. The values obtained close to zero (coefficient of asymmetry <0.65 and coefficient of kurtosis <0.75, both in absolute value) allow us to assume that the variables have a distribution close to normal. Verifying the normality of the data and the homogeneity of the variances (tested with the Levene Test), Student's T tests were used for independent samples and one-way ANOVA (followed by Tukey HSD multiple comparisons tests). To study the association between the

scales we used the Pearson correlation coefficient (R). The study of the association of scales scores with age was done with the Spearman Correlation Coefficient (Rs), since age had no normal distribution. The internal consistency analysis of each construct was performed through Cronbach's Alpha.

#### 4. Results

#### 4.1. Respondents' profile

Table 1 shows the respondents' profile.

Table 1. Demographic and academic profile (N=345)

Variable	Categories   N   %
Gender	Female (214; 62.0%); Male (131; 38%)
Age	Minimum: 20; Maximum: 44; Average: 23.23; Standard deviation: 4.16
Study out of hometown	Yes (247; 71.6%); No (98; 28.4%)
Status of student	Full Time student (286; 82.9%); Working student (53; 15.4%); Student with a status of collectivity membership (6; 1.7%)
Entrepreneurial education*	Yes (138; 40%); No (207; 60%)
Study area	Humanities and Social Sciences (128; 37%); Technological Sciences (69; 20%); Agricultural and Veterinary Sciences (53; 15.4%); Life Sciences and Environment (78; 22.6%); Nursing (17; 4.9%)
Cycle of Studies	1º cycle (undergraduate) (245; 71%); 2º cycle (post-graduate) (100; 29%)
Entrepreneurial family background**	Yes (191; 55.4%); No (154; 44.6%)
Work experience	None (95; 27.5%); Some (250; 72.5%)
Own business ownership***	Yes (19; 5.5%); No (326; 94.5%)

Note: \*: Corresponds to having attended to a curricular unit associated with entrepreneurship. \*\*: Someone in the immediate family, you have their own business / company. \*\*\* If he/she ever was owner of a business/company Source: Elaborated by the author

From the 345 students included in the sample, 62% were female and 38% were male, with ages between 20 and 44 years old (M = 23.23; SD = 4.16). The majority (72%) are studying outsider their hometown and during the course of study, the majority (60%) did not attend to a curricular unit related to entrepreneurship. Most participants, 82.9%, were only studying and 15.4% were both studying and working. 37% of the surveyed students were attending degrees in the humanities and social sciences, followed by the area of life sciences and environment (22.6%). There are 71% of the participants in undergraduate degrees (1st cycle) and 29% in postgraduate degrees (2nd cycles). Data was gathered among 27 different courses/degrees: in the undergraduate degrees, for example, Multimedia Communication; Computer Engineering; Mechanical Engineering; Economy; Management; Social service; Tourism; Languages and Business Relations; Biology and Geology; Sport Sciences; Genetics and Biotechnology; Oenology; Nursing. In the postgraduate, for example: Basic education; Teaching Physical Education; Communication Sciences; Gerontology; Oenology; Health Services Management; Economics and Business Studies; Veterinary Medicine. 55.4% of respondents have in the immediate family, someone who owns their own business/company; the majority (73%) have some work experience and 95% have never been an owner of a business/company.

### 4.2. Levels of perception about spirituality, emotional intelligence, creativity, personal attitudes towards entrepreneurship, perceived behavioural control and entrepreneurial intention

Descriptive statistics and Cronbach alpha of all measured variables are presented in Table 2.

Table 2. Descriptive analysis of the scales (N = 345)

	%			Cronbach
Constructs	(>	Mean	SD	alpha
	midpoint) <sup>(3)</sup>			
Spirituality <sup>(2)</sup>	48.1	4.62	2,44	0.949
Emotional intelligence <sup>(1)</sup>	93.0	3.74	0.52	0.867
SEA – Self-emotion appraisal	88.4	3.84	0.63	0.754
OEA – Others' emotion appraisal	87.0	3.85	0.62	0.724
UOE – Use of emotion	88.4	3.90	0.65	0.772
ROE – Regulation of emotion	69.0	3.45	0.78	0.857
Creativity <sup>(1)</sup>	82.3	3.64	0.60	0.796
Personal attitudes towards entrepreneurship <sup>(1)</sup>	68.7	3.44	0.94	0.885
Perceived behavioural control (1)	39.1	2.80	0.81	0.881
Entrepreneurial intention <sup>(1)</sup>	49.3	3.05	1.00	0.914

<sup>(1)</sup> Measured on a five-point scale from 1 = 'strongly disagree' to 5 = 'strongly agree'; (2) Likert scale responses from zero to 10 points; (3) Percentage of students with scores higher than 5 in the Spirituality variable and higher than 3 in the other variables.

Source: Elaborated by the author

It can be seen that the mean of all the indicators of the spirituality scale is 4.62, being below the midpoint of the scale (5.5), that is, the students who participated in this study do not have high levels of spirituality. The Emol scale has a total mean value of 3.74, with the "Use of Emotion" dimension contributing the most to this result. This mean value is not much higher than the midpoint of the scale (3), showing that student respondents present moderate levels of Emol. The creativity scale, with five items, displays a mean value of 3.64. Students, according to their perception, show moderate levels of creativity. Concepts related to entrepreneurship (PA, PBC, and entrepreneurial intent) exhibit relatively low mean values. The lowest mean value occurs in PBC (2.8), that is, students who answered the questionnaire have low levels of PBC. Entrepreneurial intent of participants is not high (3.05); However, students have favourable PA (3.44).

#### 4.3. Correlation analysis

Table 3 shows the results of the correlation analysis. Strong positive correlations (R> 0.57; p <0.01) were observed between entrepreneurial intention, PA and PBC. With the exception of spirituality, all correlations with creativity are moderate positive. More creative students have higher levels of entrepreneurial intent (R = 0.330, p <0.01), have better PA (R = 0.270, p <0.01), and more PBC (R = 0.422, p <0.01). There was a moderate correlation between Emol (Total) and creativity (R = 0.473; p <0.01) and between Emol (Total) and PBC (R= 0.262; p <0.01).

Table 3. Correlation between the constructs (Pearson's Correlation Coefficient) (N = 345)

Constructs	1	2	3	4	5
1-Entrepreneurial intention (EI)	1				
2- Personal attitudes towards entrepreneurship	0.853**	1			
3-Perceived behavioural control	0.658**	0.571**	1		
4-Creativity (C)	0.330**	0.270**	0.422**	1	
5-Spirituality (S)	0.102	0.113*	0.112*	0.085	1
Emotional intelligence (Total)	0.169**	0.168**	0.262**	0.473**	0.103
SEA – Self-emotion appraisal	0.102	0.105	0.169**	0.354**	0.037
OEA – Others' emotion appraisal	0.143**	0.127*	0.213**	0.414**	0.078
UOE – Use of emotion	0.156**	0.151**	0.259**	0.423**	0.164**
ROE – Regulation of emotion	0.107*	0.117*	0.147**	0.231**	0.036

<sup>\*</sup> *p* < 0.05; \*\* *p* < 0.01.

Source: Elaborated by the author

#### 4.4. Comparisons between concepts and academic and demographic variables

To test the existence of statistically significant differences between gender, student status and entrepreneurial education and the constructs under study, the Student's T test was used (Table 4).

Table 4. Comparison of concepts according to gender, student status and entrepreneurship education (N=345)

Constructs		Gender	
	Female (n = 214)	Male (n = 131)	Student's T Test (p)
Entrepreneurial intention	2.89 (1.03)	3.32 (0.91)	< 0.001
Personal attitudes towards entrepreneurship	3.34 (0.99)	3.60 (0.82)	0.012
Perceived behavioural control	2.64 (0.82)	3.06 (0.72)	< 0.001
Creativity	3.52 (0.60)	3.84 (0.55)	< 0.001
Spirituality	4.68 (2.32)	4.55 (2.63)	0.627
Emotional intelligence (Total)	3.70 (0.53)	3.80 (0.49)	0.083
SEA – Self-emotion appraisal	3.80 (0.62)	3.89 (0.65)	0.201
OEA – Others' emotion appraisal	3.87 (0.64)	3.81 (0.59)	0.376
UOE – Use of emotion	3.91 (0.67)	3.88 (0.62)	0.602
ROE – Regulation of emotion	3.35 (0.79)	3.60 (0.73)	0.003
		Working Student	
Constructs	Yes (n = 53)	No (n = 292)	Student's T Test
Entrepreneurial intention	3.33 (1.16)	3.00 (0.97)	0.029
Personal attitudes towards entrepreneurship	3.59 (1.02)	3.41 (0.92)	0.195
Perceived behavioural control	2.94 (0.84)	2.77 (0.80)	0.158
Creativity	3.74 (0.68)	3.62 (0.59)	0.177
Spirituality	4.25 (2.69)	4.70 (2.39)	0.211
Emotional intelligence (Total)	3.87 (0.46)	3.72 (0.52)	0.046
SEA – Self-emotion appraisal	4.01 (0.56)	3.80 (0.64)	0.029
OEA – Others' emotion appraisal	3.82 (0.61)	3.85 (0.62)	0.738
UOE – Use of emotion	4.13 (0.57)	3.86 (0.65)	0.005
ROE – Regulation of emotion	3.57 (0.77)	3.42 (0.78)	0.209
		Entrepreneurial education	
Constructs	Yes (n = 138)	No (n = 207)	Student's T Test
Entrepreneurial intention	3.24 (0.98)	2.92 (1.01)	0.005
Personal attitudes towards entrepreneurship	3.58 (0.89)	3.34 (0.96)	0.020
Perceived behavioural control	3.10 (0.76)	2.60 (0.78)	< 0.001
Creativity	3.70 (0.61)	3.60 (0.59)	0.144
Spirituality	4.66 (2.61)	4.61 (2.33)	0.868
Emotional intelligence (Total)	3.75 (0.51)	3.76 (0.49)	0.847
SEA – Self-emotion appraisal	3.82 (0.65)	3.84 (0.62)	0.755
OEA – Others' emotion appraisal	3.81 (0.61)	3.87 (0.63)	0.412
UOE – Use of emotion	3.94 (0.69)	3.87 (0.62)	0.339
ROE – Regulation of emotion	3.43 (0.80)	3.46 (0.76)	0.703

Results are presented in the form of: mean values (standard deviation)

Source: Elaborated by the author

It is concluded that male students have higher levels of entrepreneurial intention, PA (p= 0.012), PBC (p <0.001), creativity (p<0.001) and the dimension of Emol related to the regulation of emotions (p=0.003). There are no statistically significant differences between genders in spirituality and in the

remaining dimensions of Emol (p> 0.05). Compared with students who only study, working students have more entrepreneurial intention (p = 0.029) and more Emol - considering the total of the scale (p = 0.046) and the dimensions of the self-emotion appraisal (p = 0.029) and use of the emotions (p = 0.005). There are no statistically significant differences in the other concepts (p> 0.05). Students who attended entrepreneurship-related courses during the academic year had more entrepreneurial intent (p = 0.005), PA (p = 0.020), and PBC (p < 0.001). There are no statistically significant differences in creativity (p = 0.144), spirituality (p = 0.868) and Emol (p> 0.05).

In the comparison of the concepts regarding the study area (Table 5), we observed that there are statistically significant differences in PBC (p=0.013) and in creativity (p=0.042). Students in the technological areas have higher levels of PBC compared to those in the human and social areas and those in other areas (there are no significant differences between those in the human and social area and those in other areas). Students in the technological area are also more creative, but in this case the differences are only significant with those of the human and social area. In the remaining concepts there are no statistically significant differences between the students of the different study areas (p> 0.05).

Table 5. Comparison of concepts according to the study area (N = 345)

				ANOVA		
Constructs		HSC (n = 128)	TS (n = 69)	Other (n = 148)	(p)	
Entrepreneuria	al intention		3.08 (0.98)	3.20 (0.95)	2.95 (1.05)	0.210
Personal entrepreneurs	attitudes hip	towards	3.45 (0.94)	3.52 (0.87)	3.39 (0.97)	0.615
Perceived behavioural control		2.79 (0.81) a	3.04 (0.78)	2.69 (0.80) a	0.013	
Creativity			3.55 (0.59) a	3.78 (0.55) b	3.65 (0.63) ab	0.042
Spirituality			4.81 (2.27)	4.20 (2.71)	4.68 (2.45)	0.243
Emotional inte	lligence (Total)		3.74 (0.47)	3.74 (0.50)	3.78 (0.52)	0.798
SEA – Self-emotion appraisal		3.79 (0.58)	3.89 (0.68)	3.85 (0.66)	0.595	
OEA – Others' emotion appraisal		3.88 (0.55)	3.76 (0.63)	3.86 (0.67)	0.379	
UOE – Use of emotion		3.89 (0.64)	3.89 (0.68)	3.92 (0.65)	0.922	
ROE – Regulation of emotion		3.41 (0.74)	3.42 (0.75)	3.49 (0.83)	0.634	

Results are presented in the form of: mean values (standard deviation); HSC: Humanities and Social Sciences; TS: Technological Sciences; Other (Life Sciences and Environment, Agricultural and Veterinary Sciences, Nursing).

Table 6 presents the results of the Student's T test for the comparison of the constructs under study with entrepreneurial family background, work experience, own business ownership. Students with family members who have their own business have higher levels of entrepreneurial intention (p <0.001), PA (p = 0.008), PBC (p = 0.005) and creativity (p = 0.051). There are no statistically significant differences between students with and without relatives with their own business, neither in spirituality (p = 0.142) nor in Emol (p> 0.05). In relation to the work experience, the students with some experience have higher scores in the entrepreneurial intention (p = 0.001), in the PA (p = 0.015), in the PBC (p = 0.002) and in creativity (p=0.027). On the other hand, work experience has no influence on either spirituality (p = 0.143) or Emol (p> 0.05). Students who were once business/company owners have higher levels of PBC (p=0.008) and creativity (p=0.009). As for the other constructs, there are no statistically significant differences between those who were already business/company owners and those who never were.

<sup>&</sup>lt;sup>a,b</sup> There were no significant differences between groups with the same letter (p> 0.05 in Tukey's HSD test) Source: Elaborated by the author

Table 6: Comparison of concepts in relation to entrepreneurial family background, work experience, Own business ownership (N = 345)

Constructs	E	ntrepreneurial family backgroun	d
	Yes (n = 191)	No (n = 154)	Student's T Test (p)
Entrepreneurial intention	3.23 (1.02)	2.83 (0.94)	< 0.001
Personal attitudes towards entrepreneurship	3.56 (0.90)	3.29 (0.96)	0.008
Perceived behavioural control	2.91 (0.78)	2.66 (0.82)	0.005
Creativity	3.70 (0.59)	3.57 (0.61)	0.051
Spirituality	4.46 (2.35)	4.85 (2.55)	0.142
Emotional intelligence (Total)	3.77 (0.48)	3.70 (0.56)	0.217
SEA – Self-emotion appraisal	3.89 (0.58)	3.77 (0.69)	0.067
OEA – Others' emotion appraisal	3.87 (0.56)	3.82 (0.69)	0.548
UOE – Use of emotion	3.89 (0.64)	3.91 (0.66)	0.833
ROE – Regulation of emotion	3.50 (0.78)	3.38 (0.77)	0.170
Constructs	, ,	Work experience	
	Some (n = 250)	None (n = 95)	Student's T Test
Entrepreneurial intention	3.16 (1.03)	2.76 (0.89)	0.001
Personal attitudes towards entrepreneurship	3.51 (0.95)	3.24 (0.88)	0.015
Perceived behavioural control	2.88 (0.82)	2.58 (0.72)	0.002
Creativity	3.68 (0.61)	3.52 (0.58)	0.027
Spirituality	4.51 (2.51)	4.94 (2.25)	0.143
Emotional intelligence (Total)	3.76 (0.52)	3.69 (0.51)	0.267
SEA – Self-emotion appraisal	3.86 (0.63)	3.77 (0.64)	0.263
OEA – Others' emotion appraisal	3.87 (0.62)	3.79 (0.62)	0.311
UOE – Use of emotion	3.93 (0.65)	3.82 (0.64)	0.182
ROE – Regulation of emotion	3.44 (0.83)	3.46 (0.64)	0.874
Constructs		Own business ownership	
	Yes (n = 19)	No (n = 326)	Student's T Test
Entrepreneurial intention	3.19 (1.09)	3.04 (1.00)	0.522
Personal attitudes towards entrepreneurship	3.42 (0.98)	3.44 (0.94)	0.932
Perceived behavioural control	3.27 (0.74)	2.77 (0.80)	0.008
Creativity	3.99 (0.57)	3.62 (0.60)	0.009
Spirituality	4.28 (2.71)	4.65 (2.43)	0.520
Emotional intelligence (Total)	3.85 (0.33)	3.74 (0.53)	0.371
SEA – Self-emotion appraisal	4.01 (0.33)	3.83 (0.64)	0.208
OEA – Others' emotion appraisal	3.96 (0.41)	3.84 (0.63)	0.414
UOE – Use of emotion	3.91 (0.43)	3.90 (0.66)	0.953
ROE – Regulation of emotion	3.53 (0.75)	3.44 (0.78)	0.649

Results are presented in the form of: mean values (standard deviation)

Source: Elaborated by the author

The relationship of constructs under study with age, with the cycle of studies (1st Cycle / 2nd Cycle) and with the residence (to study in the city where he resides or in another city) was also studied. Regarding age, there is no association with any of the constructs (Spearman's Correlation Coefficients less than 0.10 and not significant - p> 0.05). There were no statistically significant differences in either of the constructs in the graduate and postgraduate degrees, nor among the students who study in the city where they live and those who do not (p> 0.05 in the Student T-Test for Independent samples).

#### 5. Conclusions and Implications

It is believed that this study contributes to the development of research in the field of entrepreneurship, in its application to the university context. Research on the predictive role of spirituality, Emol and creativity in entrepreneurial intentions is still relatively small. In this study, the results point to several associations between the constructs that should be explored through more complex statistical methods in future research. It is considered that the results of this study provide an additional contribution to the deepening of the research carried out in the context of spirituality and Emol, especially the one that relates these concepts to entrepreneurship. As far as we know, this was

the first study to be carried out in this HEI on the theme of spirituality, especially in its connection with the entrepreneurial intention. However, contrary to what was expected, the results obtained show no or slight influence of spirituality on the various concepts studied. The results do not support the idea that the introduction of spiritual values into entrepreneurship development programs is relevant.

The importance of entrepreneurship is widely recognized by academic, government, and organizational actors. The role of HEIs in promoting entrepreneurship is evident. These types of institutions are considered as structuring places in creating a culture and an entrepreneurial environment among their students. The results of the present study can be useful to HEI as it allows them to understand some of the skills to be developed in the students in order to increase their entrepreneurial intentions. The results indicate that creativity is related to the entrepreneurial intention. Thus, the university that was studied should encourage creativity as one of its key values and consistently create opportunities for students to think creatively and use their skills creatively. One way to do this is to provide students with tools that allow them to perceive, understand and better manage their emotions.

Considering that the results point to the existence of relationships between entrepreneurial education and PA, PBC, and entrepreneurial intentions, the HEI under study should continue to adapt the classroom programs in a way that allows the development of knowledge and skills related to entrepreneurship. The use of a format based on the creation of a business is advantageous for students because it makes them able to perceive and develop new business opportunities.

This study has some limitations that may be addressed in future research. All the variables under analysis were measured from the perceptions of the same key informant, so there are risks associated with the common method variance. On the other hand, having used a convenience sample implies that the results cannot be generalized. A final aspect relates to the fact that a measurement method based on self-description has been used, thus, there are inherent risks to this approach as there is no certainty that participants will perform correct self-analyses. In future studies, other profile variables could have been proposed and tested for their correlation with the concepts under analysis.

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