

Entrepreneurial Potential, Realism and Optimism as Predictor Variables of Entrepreneurial Intention: Differences Between Spain and Portugal

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Abstract

In the psychological literature, intentions appear to be a good predictor of future planned behavior (Ajzen, 1991). This factor is directly associated with people's ability to create a business and self-employment as a strategy of progress and independence. The present study is an attempt to analyze whether there are differences between university students in Spain and Portugal regarding entrepreneurial intention and potential using the PROE instrument (Pessimism, Realism, Optimism and Entrepreneurship). The sample comprises 110 university students with a mean age of 21 years, 68.8% of whom were

women and 29.5% were men. All factors evaluated have good internal consistency, and it was concluded that there are significant differences between Spanish and Portuguese students in their entrepreneurial potential, realism and optimism, with the establishment of social networks and economic motivation being the differential factors in the two populations.

Keywords:

Entrepreneurial potential, realism, optimism, entrepreneurial intention

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Introduction

Enterprise creation has attracted the interest of academics, politicians, economists, sociologists, psychologists and others because it is considered an engine of economic growth, employment creation, and citizen comfort and a promotor of competitiveness (Saraiva and Paiva, 2014; Raposo and do Paço, 2011; Sánchez, 2011a, 2011b; Shane and Venkataraman, 2000; Van Praag and Versloot, 2007). For these reasons, it is important to investigate the entrepreneurial potential of students to be able to objectively assess the viability of the implementation of entrepreneurial initiatives and thus attain the goals proposed.

The definitions of entrepreneurship that most stand out are those given by Schumpeter (1952), who considered that “an entrepreneur in an advanced economy is an individual who introduces something new in the economy, a method of production not yet tested by experience in the branch of manufacturing concerned, a product with which consumers are not yet familiar, a new source of raw material or of new markets and the like”; authors such as López, Ramírez and Casado (2012) state that “entrepreneurship is a key phenomenon for understanding the social reality of post-industrial societies and has positive effects on the economy both locally and globally” (my translation). Adding to these conceptions, it is important to consider the contribution of authors such as Longenecker and Schoen (1975), who sought to define the “essence of entrepreneurship” by describing the three components that reside at the center of the phenomenon: innovation, risk-taking and independence of action. In this respect, Hashimoto (2006) states that the only way to tell whether there is entrepreneurial intention is when these three elements are present together.

In the present study, the contributions of researchers regarding personality traits and the different behavior found in entrepreneurs are essential. Thus, when studying the personality dimensions of entrepreneurs, it is essential to identify and develop what a large number of scholars consider the thrust for developing today’s economy (Druker, 1994; Reynolds, Bygrave, Autio, Cox and Hay, 2003; Pinchot, 2004). It is therefore necessary to delve more deeply into the psychological traits of entrepreneurs to determine what composes them and what kind of personality profiles entrepreneurs have.

One of the most common definitions of personality is the one of Allport (1961), who stated that “personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to the environment,” thus relating two interdependent variables: the internal causes and the environment of the subject. For Allport, all individuals possess certain types of traits, which are those that make up our personality, and some traits occasionally dominate others. These are called “cardinal traits.” Other authors, such as McCrae (1982), defend the idea that these personality traits are not a sum of behavior but do comprise specific behavior that associates these factors to other variables in personality that in this case are cognitive, such as values, beliefs, and motives. The literature particularly emphasizes one such group of factors studied: optimism, realism and pessimism.

Optimism has been recognized as a common attitude in human beings, and in the present study of the concept, we shall use as a reference the definition postulated by Scheier and Carver (1985), who speak of discretionary optimism as a person's belief that more positive events than negative events will happen to them; we likewise consider the concept postulated by Welsch and Young (1982), who view optimism from the economic perspective, defining it as the tendency to consider the expansion and growth of new enterprises as very likely.

Furthermore, optimism is considered to be a desirable trait in entrepreneurs, both in individuals who want to be entrepreneurs and in those actually planning to create a new enterprise. Different studies have analyzed the relation between optimism and personality traits and between optimism and emotional intelligence and found that optimistic individuals have low levels of neuroticism and high levels of extroversion and emotional stability and that they are positively related with friendliness and responsibility (Carver, Scheier, and Segerstrom, 2010; Kam and Meyer, 2012).

The many researchers who have analyzed the particularities and attributes of entrepreneurs agree that this personality dimension is a characteristic typical of entrepreneurs. However, optimism is not considered exclusively as a positive dimension in entrepreneurial capability, since it also has negative connotations in entrepreneurs who, due to an excess of confidence, overestimate their probabilities of success (Baron and Shane, 2005; Hey, 1984). In addition, excess optimism can lead to disadvantages in relation to psychological wellbeing (Shepperd, Findley-Klein, Kwavnick, Walker and Pérez, 2000; Shepperd, Fernández and Ouellette, 1996) and to the smooth working of an organization (Cooper, Woo and Dunkelberg., 1988; Hmieleski and Baron, 2009; Lovallo and Kahneman, 2003). Most researchers agree that it has not been empirically demonstrated that entrepreneurs are optimists or what the different levels of optimism are among entrepreneurs, so some studies have focused on another factor: realism.

Authors such as Liang and Dunn (2008) define realism as the tendency to consciously reflect on reality and real future options and to carry out rigorous research to make good decisions. Realism can be considered as one of the characteristics or traits that all entrepreneurs should have since it increases the likelihood of making good and successful decisions.

The factors of optimism and realism and even pessimism have often been related, but in the literature, scholars such as Liang and Dunn (2010a; 2010b) note that neither realism nor pessimism has figured prominently in the psychology of entrepreneurship, despite the theoretical and practical importance that both factors could entail. Other authors, such as Sweeny, Carroll and Shepperd (2006), propose that both realism and pessimism are aspects that provide a good perspective for entrepreneurs facing unfavorable economic factors who wish to avoid financial losses (Liang and Dunn, 2010a). Wrosch and Scheier (2003) reached the conclusion that people who are optimists, unlike pessimists, more frequently employ active and emotion-based confrontation strategies when facing adverse situations. Scholars such as Chang (2001) define dispositional pessimism as a widespread expectation that bad things will happen.

There are important reasons why the relation among optimism, pessimism and realism should be analyzed. The first is that the latter two personality dimensions have not been profoundly studied in the context of economics and entrepreneurship, so we do not yet understand what they mean and how they can affect entrepreneurs (Liang and Dunn, 2008). The second reason is that there is a need to investigate all questions that have previously been posed in the literature on entrepreneurs' attitudes and decision-making (Liang and Dunn, 2008). The third and final reason is that there are many differences between the theoretical framework used in the research studies carried out on entrepreneurship and their results. We know that optimism can correlate positively with certain attitudes of entrepreneurs, so it is also of interest to see whether pessimism and realism also show a positive correlation with entrepreneurship.

In studies on entrepreneurs, two concepts are solid: entrepreneurial ability and the lack of an accepted definition concerning the boundaries of the term entrepreneurship from the perspective of the intention to create a new venture, or what W. Gartner (1985) called the domain of entrepreneurship. With this definition of domain, Gartner attempted to limit and thus provide cohesion to the field of entrepreneurship studies. He proposed a method of study in which the intention to create a venture is found within four variables: processes, individuals, organizations and the environment (Gartner, 1985). He furthermore defined these four variables separately. According to this author, processes are the actions taken to start a venture, individuals are the person or persons who participate in the creation of new organizations, organizations are the type of venture being started, and the environment is what surrounds and influences the new venture. Other authors, such as S. Venkataraman, (1997), defined the domain of entrepreneurship as "a scholarly field [that] seeks to understand how opportunities to bring into existence "future" goods and services are discovered, created, and exploited, by whom, and with what consequences." Unlike Gartner, this author established only two variables, one of them being "entrepreneurial intention": the way in which subjects recognize an opportunity as such and the way in which to take advantage of this opportunity (Shane and Venkataraman, 2000).

Despite these criticisms, the model of personality traits is still the most commonly used psychosocial theoretical model to study entrepreneurs (McKenzie, Ugbah, and Smothers, 2007). In addition, authors such as Reynolds, Hay and Camp (1999) and Sánchez (2010a) point to education as an important factor for promoting entrepreneurship, for different reasons. First, education provides individuals with independence, autonomy, and self-confidence. Second, thanks to education, individuals are exposed to different career options. Third, education broadens individuals' horizons in that the most competent persons will receive opportunities, and finally, education offers knowledge that can be used to develop new entrepreneurial opportunities. According to the European Commission (2006), entrepreneurship refers to the ability of an individual to convert ideas into action. It includes creativity, innovation, and risk-taking and the ability to plan and manage projects with a view to attaining goals. Entrepreneurship education is thus compatible with everyone in their day-to-day life at home and in society, and it makes individuals more aware of the context of their work and more capable of taking advantage of opportunities, providing a foundation for entrepreneurs to establish social or commercial activity. The Commission also stated that entrepreneurship education was not only about instructing an individual in how to

run a business but also promoting creative thinking and fostering self-esteem and autonomy: entrepreneurship education goes far beyond teaching students to create a venture.

The higher levels of the entrepreneurship initiative are associated with individuals who have at least a minimum of education, so most research posits that entrepreneurship is found within the entrepreneur, in types of characteristics or behavior that are frequent in an entrepreneurial personality despite the environment (Holmgren, From, Olofsson, Karlsson, Snyder, and Sundtröm, 2004; Sánchez, 2010b).

The goal of entrepreneurship education is to lead people, especially young people, to become responsible and enterprising and be able to contribute not only to economic development but to sustainable economic development. Thus, education, together with a series of business-related competences, knowledge and an enterprising spirit, is important in the development of certain values, beliefs and attitudes that will help students consider the business context as a possible valid and attractive option for employment. Many of the research studies carried out in regard to this concept use samples of university or secondary school students, but other authors recommend that the learning process should begin at the earliest age possible.

Authors such as Garavan and O'Cinneide (1994) posit a series of objectives that entrepreneurship education should fulfill: first, it should serve to provide students with useful knowledge for starting a business; second, it should increase students' abilities in the use of techniques and in how to make a plan for action; third, it should prepare them to identify and activate abilities related to entrepreneurship; fourth, it should lead students to develop a series of behavior linked to a positive outlook regarding change; fifth, and finally, the most important objective of entrepreneurship education is fostering enterprise creation.

Another factor that surprisingly has not been studied to a great extent is motivation, which is manifested as a kind of internal energy that propels subjects to obtain what they want or need. Some scholars, such as Murray (1938, 1973), posit the idea that this need the subject feels represents the energy constituted by perception and cognition and that furthermore, it is what leads a person to take action with the intention of transforming the need into what he or she wants. This leads to the idea that need may not stem exclusively from internal sources but can also be caused by energies in the environment that are determined by external forces.

A very well-known definition of motivation is the one of S. Robbins (2005), who described it as the process responsible for the intensity, direction, and persistence in the efforts of a person to attain a particular objective. Many authors join this concept of motivation to the concept of behavior. D. McClelland (1968, 1973, 1975, 1989) felt that the behavior shown by individuals is exclusively the result of that person's needs and that these needs can be educated socially. This author believes that the primordial reasons influencing human attitudes are four: avoidance, power, need for achievement and affiliation. At first, these needs were believed to be innate and automatic, but later, it was observed that they had to do with relations established among individuals. McClelland affirmed that we are not born with these needs but rather that they are learned or obtained socially.

Much of the research in this field has focused on personality traits such as emotional intelligence, achievement motivation, expectations of control, self-efficacy, expectations of success, and the Big Five personality traits (extroversion, agreeableness, openness, conscientiousness and neuroticism), but there has been much less interest in studying them in relation to factors such as realism, optimism, entrepreneurial intention, and entrepreneurial potential. Therefore, the specific objective of the present study is to find the extent to which entrepreneurial intention is related to the rest of the variables, considering the country in which the university student participants reside, Spain or Portugal.

Very few of the new ventures created in Spain have been innovative, although it seems that innovative companies perform much better than less innovative companies (Centro de Estudios Económicos Tomillo, 2002). Recent research studies have observed that there are two types of factors that make a company innovative: the internal and external traits of the company. Among the external factors, the most important is the environment. No clear results or valid evidence have been found regarding the influence of a company's milieu. Many authors have stated that innovation is a means of increasing economic growth (Solow, 1956; Romer, 1986; Nadiri, 1993; Coe and Helpman, 1995; Wong, Ho, and Autio, 2005). In addition, entrepreneurship is a driver of innovation, as some studies have found that it plays a very important role in growing the economy (Wennergren and Thurik, 1999; Carree and Thurik, 2003; Audretsch and Fritsch, 2003).

This theoretical frame that we have developed allows us to formulate our principal working hypotheses: 1) personal variables or characteristics determine entrepreneurial intention, and 2) these personal characteristics differ according to whether the students are Spanish or Portuguese.

Methodology

Participants

The sample comprises 110 university students, 65 of whom are students of psychology at the University of Salamanca, Spain, and 45 are students at the Polytechnic Institute of Guarda, Portugal (technology and management). The mean age of the sample is 21; 77 are women (68.8%) and 33 are men (29.5%). Most of the Spanish students are in their final year of the degree program in Pedagogy, whereas the Portuguese students are in the final years of their studies in management (accounting and administration). The only requirement for participating in the study was to be a university undergraduate.

Materials

The PROE questionnaire (Sánchez, 2016) was used to collect the data. This questionnaire measures the factors of optimism, pessimism, realism and entrepreneurial potential. It contains 86 items with a Likert type format of five possible responses (1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree and 5= strongly agree). It is divided into four parts; the first measures self-efficacy; the second,

entrepreneurial potential; the third, realism and optimism and the fourth part measures entrepreneurial intention.

The PROE was drawn up by collecting various items from different questionnaires: the adaptation of the realism scale by Liang and Dunn (2010a) to Spanish, carried out by J. López, and A. Ruiz-Ruano, (2015); the LOT or Life Orientation Test in its revised version, LOT-R (Scheier, Carver, and Bridges, 1994); the items on entrepreneurial intention (Sánchez, 2015) and the items on entrepreneurial potential (Sánchez, 2016).

Procedure

The questionnaire was applied individually and took 15 min to complete.

Participation in this study was entirely voluntary and was carried out according to the instructions of the evaluator. No compensation or incentives were offered for participation, except for the gratitude expressed on the last page of the questionnaire. Participants were given the option at the end to supply their email addresses if they wished to learn the results of the research study.

Statistical Analyses

Data analysis was performed with the IBM SPSS Statistics program (version 19 for Windows). For analysis of the items, we used one of the methods most commonly employed by researchers for testing internal consistency to verify the reliability of the tests and scales, Cronbach's alpha. According to several authors, an alpha value higher than .70 points to good internal consistency.

To analyze the association among the variables, in this case quantitative, we used two techniques, correlation and regression analyses. To observe the differences between the Spanish and Portuguese students, we used the corresponding analysis of variance.

Results

Internal Consistency

In the present study, we measured the reliability of the following factors: entrepreneurial intention, entrepreneurial potential (comprising the sub-factors of self-efficacy, communication and persuasion ability, ability to manage a social network, leadership, ability to innovate, economic motivation, risk-taking propensity), optimism, realism and proactiveness.

In relation to *entrepreneurial intention*, the results were a Cronbach's α of .879; for the *entrepreneurial potential* of the students, Cronbach's α for each sub-factor was as follows: *Self-efficacy*, .75; *Communication and persuasion ability*, .70, *Ability to manage a social network*, .88, *Leadership*, .81, *Ability to innovate*, .80, *Economic motivation*, .86, *Risk-taking propensity*, .74, *Realism*, .80, *Optimism*, 0.87, *Proactiveness*, .78

Relations Between The Variables

Below, we present the most important results of the present study: first are the results from the whole sample, followed by the results for the Spanish and the Portuguese students separately.

As seen in Table 1, the results of the correlation analysis show both positive and negative correlations between the variables. Among the most significant results is the positive correlation between **Proactiveness** and **leadership, optimism, risk**; between **Leadership** and **communication, risk**; between **Optimism** and **self-efficacy, Proactiveness**. These results mean that when the value of one of these variables increases, so does the other; furthermore, the coefficient value shows the quantity in the relation of the variables. The rest of the variables do not show a strong correlation.

Table 1: Correlation between the variables in the study

	1	2	3	4	5	6	7	8	9	10	11
1.ECONMOTIVE	1										
2.SELF-EFFICACY	0.028	1									
3.COMMUNICA	.252**	0.184	1								
4.SOCIALNET	- .261**	.293**	0.09	1							
5.LEADERSHIP	0.05	.380**	.499**	.329**	1						
6.INNOVATION	- .263**	.252**	0.169	.262**	.354**	1					
7.RISK	- 0.067	0.093	0.168	.299**	.302**	.247**	1				
8.REALISM	.196*	.228*	.241*	0.064	.288**	0.047	0.016	1			
9.OPTIMISM	0.037	.514**	.258**	.342**	.376**	.306**	.362**	.399**	1		
10. PROACTIV	0.118	.270**	.266**	.300**	.519**	.282**	.449**	.360**	.532**	1	
11.ENTREPREN INTENT	.283**	0.055	.216*	- 0.066	0.173	0.184	0.088	0.141	0.139	.270**	1

** Correlation is significant at the 0.01 (bilateral) level.
* Correlation is significant at the 0.05 (bilateral) level.

Regarding the results according to country, in the Spanish study population, the most significant correlation was between *communication* and *leadership*, at .474; no significant correlations were found for the rest of the variables.

The results of the Portuguese students, however, showed a significant correlation among the following variables: *Leadership* and *Proactiveness* (.711), *Risk*, *Optimism*, *Self-efficacy*, *Communication* and *Social network*; *Proactiveness* and *Optimism* (.723), *Self-efficacy*, *Realism*, *Risk* and *Social network*; *Self-efficacy* and *Social network*, *Optimism* and *Leadership*; *Optimism* and *Realism*; and finally, *Entrepreneurial Intention* (*Desirability*) and *Innovation*.

In the results of the linear regression, R squared, which shows the goodness of fit, yielded low values (.194) for both countries, which means that 19.4% of the participants had low entrepreneurial intention that was not due to the rest of the factors.

However, it is important to highlight the significance results (see Table 2), where the importance that the Spanish students give to social networks stands out, whereas the

Portuguese students show more interest in factors such as motivation and entrepreneurial intention as decisive factors for creating a venture.

Table 2: ANOVA Results

	COUNTRY	Mean	Standard Dev.	Sig. (bilateral)
ECONMOTIVE	SPAIN.SALAM	2.2513	.78623	.000
	PORTUGAL BEIRA	3.6519	.75864	
SELF-EFFICACY	SPAIN.SALAM	3.9744	.41167	.462
	PORTUGAL BEIRA	3.9037	.59298	
COMMUNICATION	SPAIN.SALAM	3.1282	.53584	.283
	PORTUGAL BEIRA	3.2444	.58344	
SOCIALNET	SPAIN.SALAM	4.2385	.62567	.001
	PORTUGAL BEIRA	3.7556	.80920	
LEADERSHIP	SPAIN.SALAM	3.5451	.49416	.724
	PORTUGAL BEIRA	3.5810	.56111	
INNOVATION	SPAIN.SALAM	3.7974	.60344	.161
	PORTUGAL BEIRA	3.6333	.59523	
RISK	ESPAÑA.SALAM	3.5262	.60267	.129
	PORTUGAL BEIRA	3.3600	.49101	
REALISM	SPAIN.SALAM	3.7231	.59165	.200
	PORTUGAL BEIRA	3.8571	.44346	
OPTIMISM	SPAIN.SALAM	3.8103	.57759	.594
	PORTUGAL BEIRA	3.7506	.57255	
PROACTIVENESS	SPAIN.SALAM	3.4954	.42073	.550
	PORTUGAL BEIRA	3.5467	.46982	
ENTREPRENEURIAL INTENTION	SPAIN.SALAM	3.2585	.90604	.021
	PORTUGAL BEIRA	3.6222	.61084	

Discussion

As posited by Soria, Zuniga, and Ruiz (2016), an element that is prior to entrepreneurial behavior is the existence of an entrepreneurial intention, defined as the self-recognition of the conviction of creating a business and the conscious planning to carry that out at a future moment. In the present study, it can be observed that both the Spanish and Portuguese university students show a significant relation between entrepreneurial intention and proactiveness, leadership and optimism and that the latter are positively associated with risk, communication and self-efficacy. This self-recognition can be seen in the importance the student population gives these factors as determinant in being able to consolidate their future business projects.

Thus, it is important to mention the results obtained by the Portuguese students participating, where a positive association was observed among leadership, proactiveness, self-efficacy, optimism and entrepreneurial intention itself and variables such as social network, realism and innovation. This shows a stronger association to favor self-employment, in which students tend to recognize the importance of being a proactive and self-efficacious leader to be able to plan and manage projects aimed at attaining objectives. This coincides with the proposal by the European Commission in 2006.

In the Spanish population, the importance of communication and leadership stands out in relation to attaining goals. These factors are mainly associated with personality traits that are extrapolated and strengthened in the university context.

Considered as a whole, the results show the difference between Spain and Portugal, with the Portuguese students showing higher results in regard to entrepreneurial intention. This result coincides with Sánchez (2009), who considers that the option of starting a business is slightly less rejected by Portuguese young people compared to their Spanish counterparts. To fully understand these findings, it is important to keep in mind that regional discrepancies in matters of venture creation are often attributed to the economic and socio-political conditions of each country. Furthermore, these results suggest that the relation between the level of entrepreneurship in a country and the country's economic infrastructure is not always a positive and linear one, such that differences can persist even when the political and economic circumstances of different countries are similar (Reynolds, Millar and Maki, 1995 quoted in Sánchez 2009).

Regarding the hypotheses posited for this study, we found a significant difference between entrepreneurial intention and entrepreneurial potential, realism, and optimism. We must also highlight the difference between the Spanish and Portuguese populations (Table 2); for the Portuguese students, entrepreneurial intention and economic motivation are more important, whereas for the Spanish students, the creation of social networks is more relevant when initiating a venture. These results coincide with the postulates of Grégoire, Corbett and McMullen (2011) quoted by Ruiz, Fuentes and Ruiz (2014), who analyzed sociological influences that were approximated by factors relating to business contact networks and social capital.

Moreover, the fact that the Portuguese students evidence greater interest in factors such as economic motivation and entrepreneurial intention as decisive in creating a business would make them more likely to fulfill the goals related to entrepreneurship. These results coincide with the study carried out by Santos and Caetano in 2015, in which they conclude that the rate of early-stage entrepreneurship in Portugal was higher in 2014; they explain these findings not as a result of opportunity but of necessity, where the Portuguese are convinced that they possess the skills and knowledge necessary for undertaking a venture.

Conclusions

Considering the results of our study, we can conclude that there are no differences between students in Spain and Portugal in terms of entrepreneurial potential, realism and optimism.

The formation of social networks is important for Spanish students when creating a business. Thus, the relational perspective is relevant to this population and should not be excluded, given that individuals make decisions conditioned by the context in which they interact with other people, which can be important in the formation of intentions.

The Portuguese students showed more interest in factors such as economic motivation and entrepreneurial intention as being decisive in starting a business, which should make them more disposed to fulfilling the goals related to entrepreneurship.

Both the Spanish and Portuguese students tend to relate proactiveness, leadership and optimism positively with risk-taking, communication and self-efficacy.

The Portuguese students positively associate the factors of leadership, proactiveness, self-efficacy, optimism and entrepreneurial intention with risk-taking, social networks, realism and innovation.

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