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Influence of personal variables on entrepreneurial intention: a comparative study between Poland and Spain

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ABSTRACT

This article analyses the influence of personal variables on entrepreneurial intentions of students from Poland and Spain. The article presents an integrated structural model that has been developed from a set of student perceptions from both countries. A small number of variables included in the model allows explaining and managing the formation of the intention in the context of higher education. This study provides answers to the following questions: What role do personal variables play as motivation in the formation of entrepreneurship in the case of young people? Is the motivation stronger than self-efficacy? What are the differences in the perceptions and ratings of students in Poland and Spain? How can these variables be enhanced? This work used a causal quantitative methodology based on structural equations (PLS) and the Smart PLS-3.0 program. The PLS model was chosen for its advantages in the study of human behaviour and its optimal predictive potential, and because it allows the use of reflective indicators. In the causal model generated with a sample of 721 respondents from Poland and Spain, it was found that personal values initiated the chain of effects that influenced the attitude and, through it, successively resulted in motivation, self-efficacy and entrepreneurial intentions. Therefore, the subjective variables (values and attitudes) have a positive and significant influence on the action variables (motivation and self-efficacy), and these affect entrepreneurial intentions. The absence of significant regional differences in the responses to the items and the causal relationships of the model suggests the possibility of developing integrated and homogeneous programmes for the entire segment, thereby achieving synergies. The results suppose a theoretical and practical contribution to the promotion of entrepreneur intentions of university students inside and outside the educational context, suggesting a possible effect of personal variables on entrepreneurial intentions.

KEY WORDS

entrepreneurial intention (EI), self-efficacy, motivation, enterprising attitude, value

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Introduction

The literature confirms the need to identify and strengthen the factors, on which the process of creating new companies depends, due to the high influence that entrepreneurship has on the economic growth and development of countries (Urbano, Aparicio & Audretsch, 2018). In the studies developed by researchers and the reports and documents prepared periodically by the GEM (Global Entrepreneurship Monitor), it is confirmed that these factors are eminently contextual and personal (Busenitz et al., 2014). Although the contextual factors of entrepreneurship

are important, the human capital approach predominates in the literature, according to which the entrepreneur is the key to success in the process of creating a new company (Fuller et al., 2018). It is the entrepreneur who must be enthusiastic and put some effort into creating a new company, thereby obtaining intrinsic (autonomy, personal satisfaction) and extrinsic (economic) benefits (Werthes et al., 2018).

The studies of entrepreneurs have been largely descriptive and have focused on specifying their role and identifying their most important attributes, generally analysed through their perceptions (Mottiar et al., 2018). Among the entrepreneurial attributes, intention — the variable that best predicts entrepreneurial behaviour — has special relevance in the literature (Lee & Wong, 2004; Salhi, 2018). The study of entrepreneurial intentions was aimed at the development of causal models, such as the Shapero and Sokol model (1982) of the entrepreneurial event and the planned behaviour model by Ajzen (1987, 1991). The models are the two most extensively tested competing theories that have been used to explain entrepreneurial intention. Intention-based models are implemented successfully not only in social psychology but also in marketing and management (Wach & Wojciechowski, 2016). The models have received some criticism, and several authors have emphasised the importance of further clarifying the role played by certain personal variables, such as motivation, without including contextual variables (Hien & Cho, 2018).

In the study of the personal factors responsible for entrepreneurship, comparative studies at a regional level have also become very important (Acs, Autio & Szerb, 2014). In the development of this perspective, it has been considered that globalisation and the revolution of ICT have altered the meaning of entrepreneurship within the framework of national borders and have homogenised the cognitive and behavioural patterns related to the process of creating a new company (Udretsch et al., 2017). According to the studies, regional differences in entrepreneurship are mainly related to personal variables that can lead to variations in the quantity and quality of entrepreneurship (Trettin & Welter, 2011). Despite these findings, is the literature recognises the necessity to study the entrepreneur at a regional level in greater depth (Hong et al., 2015). Particularly relevant is the homogenisation of cognitive and behavioural patterns in the case of younger generations, as is the case of the so-called Generation Y or Millennials. In their analyses, Yusof et al. (2007) and Nabi et al. (2010) highlighted the interest in the quantitative importance and the role of the generational change in the current generations of entrepreneurs. Should these homogenisation processes be confirmed, it could allow adopting educational and institutional measures to promote homogenous and global entrepreneurship in that particular population segment (Charters et al., 2011; Stuetzer et al., 2016).

The literature also provides evidence of the need to study entrepreneurial intention among university students, since most countries consider entrepreneurship a labour option, which is increasingly valued by this segment (Oftedal et al., 2018). It has also been verified that education allows distinguishing people who become entrepreneurs from those who do not (Tsordia & Papadimitriou, 2015). Finally, as entrepreneurs are made rather than born, the role of education in the learning of entrepreneurship and the development of the personal variables, on which this process depends, seems evident, as is the case of values, motivation and self-efficiency (Nabi et al., 2018).

To address the concerns and suggestions found in the literature, this comparative study, dedicated to entrepreneurial intentions of university students in Poland and Spain, has been deepened within the framework of the human capital approach. The two countries have been chosen because, although both are members of the EU, Poland was part of a different social and geopolitical context until two decades ago and has started a process similar to that developed by Spain in the eighties of the last century. Entrepreneurship has been studied in Poland and Spain considering contextual but not personal variables (Morinao et al., 2011). Although these are two socio-cultural and institutional contexts that a priori show great differences with respect to entrepreneurship, the prevalence of a homogenising generational approach of cognitive and behavioural patterns is assumed in this work. For this reason, the authors present an integrated structural model that has been developed using a set of perceptions of young students from Poland and Spain. The small number of variables included in the model allows explaining and managing the formation of the intention in the context of higher education. This study provides answers to the following questions: What role do personal variables play as motivation in the formation of entrepreneurship in the case of young people? Is the motivation stronger than self-efficacy? What are the differences in the perceptions and ratings of students in Poland and Spain? How can these variables be enhanced? Regarding the structure of the work, the analysis of

the intent and the hypotheses associated with the proposed model are addressed first, followed by results, discussion, conclusions and implications of the study.

1. Literature review and hypotheses

The entrepreneurial intention is a measure of the will and effort that the entrepreneur is willing to make to create a company (Fuller et al., 2018). It is a variable that best predicts entrepreneurial behaviour, as was shown in the review work of 409 articles on entrepreneurship carried out by Liñán and Fayolle (2015). Previous work has shown that intention depends above all on personal factors. This relationship is especially evident in the explanatory causal models of intention (Elfving, Brännback & Carsrud, 2009). The best-known models of the intention to undertake training are the planned behaviour model (Ajzen, 1987, 1991) and the entrepreneurial event model by Shapero and Sokol (1982).

In the Shapero and Sokol model, the intention is formed based on perceived desirability, viability and the propensity to act (Krueger et al., 2000). For its part, the theory of planned behaviour argues that the intention to create a company depends on the influence of three variables: the attitude towards behaviour, the perceived behavioural control and the subjective norm, with attitude being the initial variable of the chain of direct and indirect effects that lead to intention (Ajzen & Fishbein, 2005; Ajzen & Cote, 2008). The attitude in this second model is equivalent to the perceived desirability included in the first model, and behavioural control is a form of perceived viability, included in the model by Shapero and Sokol (1982). In the second model, Ajzen adds the subjective norm, which also influences entrepreneurial intention. Both models have been empirically contrasted and provide satisfactory predictions of intention. However, both the entrepreneurial event model and the planned behaviour model have received methodological criticism and many authors believe that efforts should be made to incorporate new personal variables and new relationships into the models (i.e. Autio & Acs, 2010).

As already noted, explanatory models of intention consider attitude as a personal variable in the initial succession of effects that lead to entrepreneurial intention. However, to address the suggestions of other authors in this study, values were included as a personal variable antecedent to the attitude that constitutes the link between contextual variables and personal variables. Although the literature accepts that companies are created voluntarily and intentionally (Bullough et al., 2014), it is the process of socialisation which, to a large extent, makes possible the unconscious internalisation of the values that will ultimately lead to the development of attitudes favourable to entrepreneurship, on which the entrepreneurial behaviour will depend (Lanero et al., 2014; Hui-Chen et al., 2014). The values are at the origin of any behaviour, in addition to having high stability and, to a large extent, determined by the shared culture predominant in society (Jahanshahi et al., 2017). Considering the above, the first hypothesis was established:

Hypothesis 1: Values have a direct and positive influence on the entrepreneurial attitude

Attitudes are closely related to the favourable predisposition of a person towards an object or behaviour, in this case, the behaviour of creating a company (Ajzen & Fishbein, 2005; Tomczyk, Lee & Winslow, 2013). In the models that explain the formation of entrepreneurial intention, attitudes influence the intention and behaviour through other mediating variables, such as motivation and self-efficacy (Wyrwich, 2015). Specifically, in the educational context, it has been proven that the motivation to start a business and the perceived self-efficacy are effectively influenced by attitudes of students towards entrepreneurship, and the attitude can explain 50% of the variance (Schwarz et al., 2009; Lheureux & Auzoult, 2017). Hence, the following hypothesis:

Hypothesis 2: The attitude towards entrepreneurship directly and positively influences the entrepreneurial motivation

Motivation is considered a fundamental variable in the process of creating a company and is a factor with sufficient explanatory potential for entrepreneurial intention (Chen et al., 2017; Mahto & McDowell, 2018). The reasons that motivate entrepreneurs to create a company are diverse, and all of them are classifiable as internal or external (Kirkwood, 2009). The external factors of motivation include the desire to increase income or obtain social status, and among them all, the need for achievement and the desire for independence and autonomy stand out (Fayolle & Liñán, 2014). Extrinsic motivation is associated with "pull" factors, which invite the subject to become an entrepreneur, and is particularly related to entrepreneurial intention, which in turn influences

behaviour (Fayolle, Liñán & Moriano, 2014). The internal motivation is related to "push" factors, which push the person to become an entrepreneur, and is associated with perceived self-efficacy. Self-efficacy is defined as the perception or belief of the subject in its own capacity to achieve a positive result (Kirkwood, 2009). Given the above, it seems understandable to accept that individuals feel more self-reliant when they possess a high intrinsic motivation to perform the behaviour (Tsai, Chang & Peng, 2016). Therefore, the third hypothesis dictates that:

Hypothesis 3: The motivation that pushes a person to become an entrepreneur has a positive and direct influence on self-efficacy.

Self-efficacy is one of the essential attributes of a potential entrepreneur and the main antecedent of intention (Fuller et al., 2018). This may be because self-efficacy entails certain levels of personal competence that are linked to the perception of control in the face of behaviours that assume a certain risk, as in the case of entrepreneurship (Cho & Lee, 2015). The perception of self-efficacy involves evaluation of confidence of an individual regarding certain internal (personality) and external (environment) aspects that can be limiting or facilitating the behaviour (Byrant, 2007). Additionally, self-efficacy influences the establishment of goals, the expectations of results as well as the amount of effort the entrepreneur devotes to start up the company, despite the presence of other alternatives, and perseverance in the face of difficulties and challenges (Zhao et al., 2005; Trevelyan, 2011). Previous research has shown a significant and positive relationship, both direct and indirect, between self-efficacy and intention (Akmaliah, Pihie & Bagheri, 2013), also in the case of university students (Carr & Sequeira, 2007). This gave rise to the following hypothesis:

Hypothesis 4: Self-efficacy has a positive and direct influence on entrepreneurial intention

Considering the hypotheses, the proposed model is as follows (Fig. 1). This model is characterised and differentiated from other models by its simplistic, equable and practical a, and exclusively personal variables. Unlike other models, the model starts with the personal values of the respondent, and introduces motivation.

One might think that the causal relationships associated with the previous hypotheses could be different depending on a country that studied in this work, that is, Poland or Spain. However, in this study, we have been assuming the greater homogenising weight of a generational approach in a context of globalisation in the face of the differentiating effect that the contextual variables of each country could exert (Nowak, Tach & Olsen, 2006). Therefore, starting from the premise that young people of the Generation Y share perceptions, values and attitudes (Charters et al., 2011), which has led in this work the joint study of the samples of young people from Poland and Spain, the fifth hypothesis is proposed:

Hypothesis 5: There are no significant differences in the perceptions about entrepreneurship between young people in Poland and Spain (responses to the items), nor in the causal relationships of the proposed causal model.

2. Research methods

This work used a causal quantitative methodology based on structural equations (PLS) and the SmartPLS-3.0 program. The PLS model was chosen for its advantages in the study of human behaviour, for its optimal predictive potential and because it allows the use of reflective indicators (Hair et al., 2011). Discriminant analysis has also been used in a descriptive methodological context.

2.1. Sample and data collection

The sample was composed of young university students from Poland and Spain, attending to the suggestions of other authors regarding the importance of higher education in entrepreneurship and

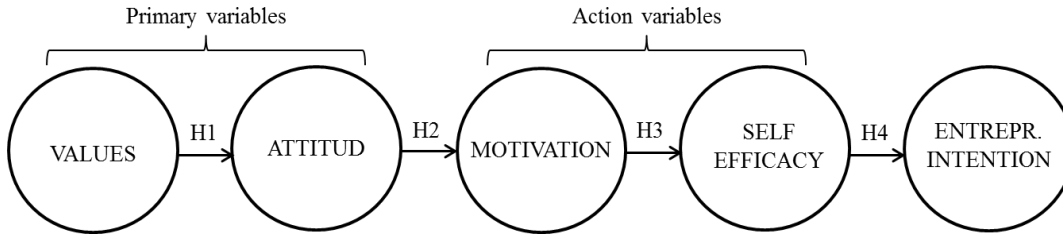

Fig. 1. Theoretical model

the need to study this population segment in greater depth (Bergmann, Hundt & Stenberg, 2016). Numerous authors noted that university students constituted a segment of interest for the study of entrepreneurship in general and the entrepreneurship intention in particular (i.e. Nabi et al., 2018; Oftedal et al., 2018).

The sample was intentionally chosen (Pina-Stranger et al., 2013) to be made of students from faculties related to business training since in this context, it is easier to approach and promote entrepreneurship. However, to administer the questionnaire, the days and times were chosen randomly among those with the greatest attendance of the students to the classrooms, so that the number of students in the sample of each of the courses was representative of the one that exists in the degree. The research was conducted in the first quarter of 2019.

Table 1 presents the data of the sample, formed of 721 respondents. The initial sample included 23 respondents who were excluded because they left items unanswered, or they gave all the items the same score. The size of the sample and that of the subsamples meets the minimum rule of being 10 times greater than the number of variables observed (items) in quantitative studies when the questionnaire is used (Nunnally, 1978). It is also superior to 200 respondents, an adequate size when structural equations are used (Hair et al., 2011). For a more precise assessment, the effect size (0.15), the indicator α (0.05) and the power (power) (0.95) were specified with a total of 10 observed predictor variables (items) (Cohen, 1988; Chin & Newsted, 1999; Buchner & Lang, 2009). Regarding age, 97% of the respondents were between 18 and 23 years old.

Tab. 1. Description of the sample

Gender	Country		Total
	Spain	Poland	
Male	144	175	319 (44.24%)
Female	195	207	402 (55.76%)
Total	**339 (47.02%)**	**382 (52.98%)**	**N=721**

2.2. Measures and the instrument

In this work, the questionnaire was used to collect the information, as it is usual in this type of study. To ensure the validity of content in the design of the questionnaire, a group of two experts from Poland and Spain and eleven students (6 from Spain) analysed the literature to identify the variables to be observed (items) and possible relationships (Roy, Dewit & Aubert, 2001). The Delphi technique was used in two rounds to construct the basic relationship of the contents to be measured by the items (Chan et al., 2001; Morris et al., 2013).

The items corresponding to entrepreneurship intention, attitude and self-efficacy were designed according to the contributions of Liñán and Chen (2009) and Muhammad, Aliyu and Ahmed (2015). For the design of the items related to motivation, the suggestions of Antonioli et al. (2016) on intrinsic and extrinsic motivation were accepted. Following a pretest, the final questionnaire was left with 10 items (Tab. 2), following the principles of brevity and simplicity, thereby reducing the costs and methodological problems associated with the use of a large number of indicators (Bergkvist & Rossiter, 2007). A Likert scale with five response alternatives (from 1: strongly disagree, up to 5: strongly agree) was used.

3. Results

To identify the latent variables, to which the items belong, an exploratory factorial analysis with varimax rotation was first carried out, using the principal component method (Anderson & Gerbing, 1988). After a series of analyses, a structure of five latent variables or factors was obtained, each with two items (Tab. 2). The inclusion of only two items per factor was accepted because the variables that make the factors have a high correlation with each other (greater than 0.70) and a reduced correlation with other variables (Yoo & Donth, 2001; Worthington & Whittaker, 2006; Yong & Pearce, 2013). The factors or latent variables of the model are values (VA), attitude (AT), motivation (MO), self-efficacy (SE), and entrepreneurial intention (EI).

Next, the values were obtained for each one of the observed variables (items). It is noteworthy that in Table 2, the items most valued by young people were those related to attitude and motivation. On the contrary, the least valued items were those related to entrepreneurial intention, although they obtained values higher than 50% of the maximum value that the item could have obtained if all the subjects had given it a value of five.

Regarding the causal analysis of the proposed model, the measurement model was first evaluated, which relates the observable variables and their latent variable, and, subsequently, the structural model, which relates some latent variables with others (Thai & Turkina, 2014). The analysis of the measurement

Tab. 2. Valuations, Load (λ), compound reliability (FC) and average extracted variance (AVE)

Variable	Item	[%]	Load λ	FC	AVE
VA	VA1: I value entrepreneurship as an alternative to employment	76.70	0.867	0.844	0.730
	VA2: I value entrepreneurship because it allows growth	77.98	0.842		
AT	AT1: Entrepreneurship has more advantages than disadvantages	78.36	0.806	0.794	0.659
	AT2: I am in favour of entrepreneurship and the creation of companies	89.68	0.817		
MO	MO1: I would be motivated to be an entrepreneur	82.66	0.916	0.888	0.798
	MO2: It would motivate me to be an entrepreneur to achieve autonomy	80.64	0.870		
SE	SE1: I think I would succeed if I created a company	73.43	0.881	0.897	0.813
	SE2: I have confidence in myself to start a business	74.92	0.922		
EI	EI1: I intend to be an entrepreneur	68.88	0.946	0.942	0.890
	EI2: In the future, I think I have my own company	72.12	0.942		

VA: values, AT: attitude, MO: motivation, SE: self-efficiency, EI: entrepreneurial intention

Tab. 3. Discriminant validity (Fornell and Larcker criteria)

	VA	AT	MO	SE	EI
VA	**0.855**				
AT	0.447	**0.812**			
MO	0.431	0.445	**0.893**		
SE	0.257	0.384	0.512	**0.902**	
EI	0.265	0.331	0.540	0.688	**0.944**

Tab. 4. Direct relationships and their significance (β)

Hypothesis	(B)	T	P	Confirm.
H1: VA → AT	0.447	14.388	0.000	Yes
H2: AT →MO	0.445	12.515	0.000	Yes
H3: MO → SE	0.512	17.973	0.000	Yes
H4: SE → EI	0.688	37.114	0.000	Yes

model involved studying the reliability and validity of the relationships between the observed variables (items) and the latent variables to which they were associated. Regarding the individual reliability of the item, the simple correlations of the indicators with the construct they intend to measure were analysed, showing that the observed variables reached the minimum required load level ($\lambda \geq 0.70$) (Tab. 3). Therefore, it was accepted that the indicators were part of their corresponding constructs.

Regarding the study of the composite reliability (CR), an indicator similar to Cronbach's alpha is more recommendable in the context of structural equations, all the values have been above 0.70, for which it is verified that the model of the measure is internally consistent and all indicators or variables observed measure their corresponding latent variable (Bagozzi & Yi, 1988; Hair et al., 2014).

Convergent validity and discriminant validity were also analysed. To evaluate the convergent validity of the model, the average extracted variance (AVE) was calculated. In all cases, the result was higher than 0.50, so it was found that more than 50% of the variance of the construct was due to its indicators (Chin, 2010) (Tab. 3). Regarding the discriminant validity, it was found that each construct was significantly different from the others and was not related to them according to the theory. In this sense and following Fornell and Larcker (1981), it was found that the square root of the variance extracted (AVE) (in the diagonal of Tab. 3) was greater than the variance shared between the construct and the other constructs of the model (Chin, 2010).

Regarding the evaluation of the structural model, it was found that the exogenous latent variables contributed to the explanation of the variance of the endogenous latent variable (EI) in a significant way, since the path coefficients (β) (standardised regres-

Tab. 5. Indicators R2, Q2 and GoF

	R^2	AVE	Q^2
AT	0.200	0.659	0,124
MO	0.198	0.798	0,148
SE	0.263	0.813	0,201
EI	0.473	0.890	0,396
Media	0.284	0.790	
GoF	**0.474**		

Tab. 6. Discriminant analysis. Basic indicators

Auto-value	Canonical Correlation	Lambda Wilks	Sig.	Centroids	
				Spain	Poland
0.918	0.692	0.521	0.000	-1.015	0.901

Tab. 7. Discriminant analysis. Standardised coefficients (SC)

Construct	Items	SC
VA	VA1	0.051
	VA2	-0.186
AT	AT1	0.124
	AT2	-0.174
MO	MO1	0.218
	MO2	0.277
SE	SE1	-0.091
	SE2	0.097
EI	EI1	-0.817
	EI2	-0.205

Tab. 8. PLS-GMA Analysis

Hypothesis	Spain Path (β)	Poland Path (β)	Dif. Path (β)	P Values
H1: VA → AT	0.453	0.436	0.017	0.388
H2: AT →MO	0.475	0.421	0.054	0.229
H3: MO → SE	0.495	0.457	0.038	0.278
H4: SE → EI	0.703	0.641	0.062	0.054

sion weights) reached levels above the optimal level ($\beta \geq 0.3$) (Sarstedt et al., 2014) (Tab. 4). All the direct causal relationships obtained a high significance ($P \leq 0.01$), as was revealed in the bootstrapping analysis with 500 sub-samples and 200 cases (Lanero et al., 2014). Therefore, all the hypotheses of the proposed model are confirmed.

The values towards entrepreneurship initiate the chain of effects that lead to the intention of creating a company in the segment studied. The relationships with greater weight (Tab. 4) occur between perceived self-efficacy (SE) and entrepreneurial intention (EI) (H4: $\beta = 0.688$), and between motivation (MO) and self-efficacy (SE) (H3) : $\beta = 0.512$).

In the study of the structural model, three additional indicators were calculated (Tab. 5): (i) indicator R2, which reports on the amount of variance explained by the model in each dependent latent variable; (ii) indicator Q2, developed by Stone (1974) and Geisser (1975) to measure the predictive relevance of dependent constructs; and (iii) the GoF (Goodness-of-Fit) test, which represents the geometric mean between the average of the AVE indicator and the average of R2 in relation to the endogenous constructs (Wetzels, Odekerken-Schröder & van Oppen, 2009). It was verified that the latent variables explained sufficient variance of the consequent variables, since the basic indicator R2 reached the minimum level of 0.1 proposed by Falk and Miller (1992) ($R2 > 0.1$). On the other hand, the values above zero of indicator Q2 ($Q2 \geq 0$) allowed verifying the predictive relevance of the model (Riquel & Vargas, 2013). Finally, a GoF value of 0.474 was obtained, which is higher than the minimum acceptable value (GoF = 0.25) (Wetzels, Odekerken-Schröder & van Oppen, 2009) (Tab. 5). Consequently, the model has predictive potential.

To contrast the fifth hypothesis (H5), a discriminant analysis was carried out first, to identify differences in the responses to the items by the Polish and Spanish students. The levels of the eigenvalue, the canonical correlation and the Lambda indicator (Tab. 6) suggest some significant difference.

The results of Tables 6 and 7 indicate that the only significant difference in the answers to the items by the students of Spain and Poland is the one related to the item EI1 ("I intend to be an entrepreneur"). The value for this item of the standardised coefficient (EC = -0.817) indicates that Spanish students have greater intention than Poles.

To analyse the differences in the causal relationships of the model between Spain and Portugal, a multigroup PLS-GMA analysis was carried out (Hair et al., 2014). The results obtained using 5,000 cases show that, considering the differences path $p \leq 0.05$ and $d\ p \geq 0.95$ are considered significant, there is no significant difference between Spain and Poland in the causal relationships of the proposed model.

4. Discussion

It has been noted in the review of the literature that universities are a potential source of future entrepreneurs, and that creation of a company is a job option increasingly valued by university students of any country (Tsordia & Papadimitriou, 2015). However, student assessments of their self-efficacy and entrepreneurial intention could be higher, without contradicting the previous statement. This may be because together with the third and fourth year students, who are the closest to making labour decisions, respondents belonging to the first and second years of their degree were included in the sample, even though they have more time to finish their studies without a pressing need to think of work alternatives. On the other hand, the sample was formed by a similar percentage of women and men, having in mind that women are often characterised as having a lower entrepreneurial intention (García & Welter, 2013), lower perceived self-efficacy (Fielden et al., 2003) and lower declared confidence (Maes et al., 2014).

The generated causal model allows adequately explaining the formation of entrepreneurial intention using a small number of personal variables and without contextual variables. Some of the personal variables of the model were studied by other authors (i.e. subjective norm, self-efficacy) (Shapero & Sokol, 1982), yet others were not (i.e. motivation) (Autio & Acs, 2010). As in the explanatory models of the entrepreneurial intention developed by other authors, this study had values and attitudes of students, i.e. the variables that initiate the chain of direct and indirect causal effects that culminate in entrepreneurial intention (Ajzen & Cote, 2008). Therefore, the most internal "subjective" variables (values and attitudes) influence the variables associated with undertaken action (motivation and self-efficacy), and these affect entrepreneurial intention.

In response to the suggestions of other authors, the proposed model was provided by values that were included as a personal variable antecedent to attitude. It has been found that the values were at the origin of the entrepreneurial behaviour, firstly influencing the attitudes and then — the other personal variables (Jahanshahi et al., 2017). In the same way, it has been shown that in the educational context, attitudes influence the intention and behaviour directly through motivation and indirectly through self-efficacy (Wyrwich, 2015; Lheureux & Auzoult, 2017). The direct and positive influence of the motivation on self-efficacy and indirect on the entrepreneurship intention (García et al., 2016) confirmed that in the case of university students, "push" factors plaid an important role (Charles & Gherman, 2013). Additionally, the study found that the perception of self-efficacy positively and directly influenced the entrepreneurial intention of university students, as stated in other studies (Carr & Sequeira, 2007). This may be because the perception of self-efficacy includes a positive evaluation of the student confidence in the risk associated with certain internal and external factors of an enterprise (Cho & Lee, 2015).

The reduced significance associated with the differences found by country in the responses to the items and in the causal relationships of the model confirmed the premise that has been assumed in this study regarding the greater homogenising weight of the generational approach to the differentiating effect of the contextual variables of each country (Nowak, Tach & Olsen, 2006). Therefore, it is confirmed that regarding the variables included in this study, young students from Spain and Poland share perceptions, values and attitudes about entrepreneurship (Charters et al., 2011). The greater intention of Spanish students compared to the Poles can be explained by the weight of certain contextual factors linked to the existing entrepreneurship in both countries, which could include aspects such as tradition and entrepreneurial history, the existing norms, infrastructure and bureaucracy, and even issues related to religion.

Conclusions

The study responded to concerns of other authors regarding the need to study in greater depth and learn more about ideas and perceptions of university students regarding entrepreneurship in a regional comparative context. As previously confirmed, personal variables alone could determine entrepreneurial intention, this study could help promote the necessary attributes in the educational context, that is, motivation, self-efficacy and intention, among other

personal variables. In this sense, the study found that to carry out this task, a good attitude and disposition on the part of students is required, as suggested by evaluations given by students of both countries.

A training model was generated to promote entrepreneurial intention. It is statistically significant, fair and applicable at universities because the included variables were developed throughout all educational levels, including higher education. The logic of the proposed model allows to better understand the sequence of the process for the formation of entrepreneurial intention in the segment of university students, considering personal variables alone. This process begins with values, followed by attitudes, motivation, self-efficacy and intention. Therefore, the model moves from more subjective variables to variables of efficacy and personal action. The most abstract variables (values and attitudes) were those that influence the variables closest to the entrepreneurial behaviour: motivation, self-efficacy and intention. These results should also be considered in the teaching and learning process.

The social and subjective nature of personal variables included in the model allows concluding that although entrepreneurship is a conscious, intentional and voluntary process, the creation of companies is not exempt from conditions particular to every entrepreneur depending on the history of modelling and reinforcements received during the development. These aspects allow concluding that higher education must know the conditions that affect students regarding self-efficacy, motivation and intention, to change those that are unfavourable and enhance the favourable. This mission is transferable to the entire educational process since birth. Besides, at the age a person can effectively create a company, never before the age of 18, the development is finished.

The absence of significant differences according to the country of origin in the responses to the items and the causal relationships of the proposed model allow confirming the weight that globalisation and the development of ICT, among other factors, have on homogenisation in a comparative context of regional cognitive and behavioural patterns associated with entrepreneurship. This makes it possible to carry out more standardised and homogeneous interregional programmes associated with the teaching and learning process that affects the variables included in this study. This would achieve synergies.

The limitations of this study are associated with the inherent difficulty of standardised design and application of an adequate instrument to study perceptions about personal variables in populations of such different countries. The collaboration provided by the agents that have developed their activity in the two countries has facilitated this work. In the future, it is suggested to extend the model with contextual variables and carry out comparative studies focused on well-differentiated countries.

Literature

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