

## Can regional culture values affect the entrepreneurial intentions of Sport Science students? An analysis of two Spanish regions

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### Abstract:

Entrepreneurship is a key factor in fostering the development of the countries and regions economies. The regional culture is an aspect that can affect the entrepreneurial intentions of university students and it has not been investigated in students of the sport sector. Therefore, the aims of this study are to know if there are differences between the entrepreneurial intentions and their different entrepreneurial variables among students of Sport Sciences (SS) of two Spanish universities of different regions (Valencia and Sevilla), and to know if the predictive variables of the entrepreneurial intentions of these students are different. Thus, a survey has been administered to 172 Sport Sciences (SS) students from the last course of Valencia and Sevilla. The results show that there are statistically significant ( $p < .05$ ) differences between the Sport Science students from Valencia and Sevilla in the variables of perceived control behaviour, subjective norm and attitude toward behaviour. As for the predictor variables of the entrepreneurial intentions also differences were found, being in the case of the Valencia' students the attitude towards the behaviour the only predictive variable. In the case of the Sevilla' students all the cognitive variables related to the Theory of Planned Behaviour (TPB), as well as proactivity were predictive variables of the entrepreneurial intentions. These results are discussed, highlighting the influence of the regional culture on the entrepreneurial intentions of these students. Finally, it concludes that the culture plays an important role in the entrepreneurial intentions of Sport Sciences students and a series of practical implications for the sports politicians and governors of the different universities are presented.

**Key Words:** regional variations, entrepreneurial intentions, sport, university, Sport Sciences students

### Introduction

The 2020 Enterprise Action Plan (European Commission, 2013) shows that Europe has suffered since 2008 the consequences of one of the worst economic crisis of the last 50 years (more than 25,000,000 unemployed), proposing as a solution to this the generation of entrepreneurs. Entrepreneurship can be seen as a promising option for job placement for young university graduates, as well as contributing to the development of sustainable socioeconomic well-being (Lanero, Vázquez, Gutiérrez, & García, 2011). It is for this reason that universities play a fundamental role in the economy, since the economic and social development of regions, states and countries is strongly related to their ability to approach knowledge (Schmitz, Urbano, Dandolini, de Souza, & Guerrero, 2016).

In recent years, research on entrepreneurship in academia has grown in parallel with the emergence of the entrepreneurial spirit in the university context (Miranda, Chamorro-Mera, & Rubio, 2017). However, in spite of the increase of studies related to the intentions of university students, studies with students of non-business disciplines have been scarce (Jones & Jones, 2014), and even more Sport Sciences'(SS) studies in our country (González-Serrano, Crespo, Pérez-Campos, & Calabuig, 2017). This is particularly worrying because, according to Ratten and Ferreira (2017), the trends in the sports industry reflect a growing need to be enterprising in products, services, technologies and market development.

On the other hand, the entrepreneurial spirit is immersed in the norms and cultural values that exist in a society, being very important a greater understanding of the relationship between the cultural aspects and the entrepreneurial activity for its implications in the development and the growth at the national and regional level (Krueger, Liñán, & Nabi, 2013). Although comparative studies have been found with students from universities of different autonomous communities, none has been found with students of Sport Sciences. It is therefore that this article seeks to cover two gaps in the literature on entrepreneurship. On the one hand, to cover the existing gap of the study of entrepreneurial intention in students of Sport Sciences in Spain, and on the other hand, to

know the role that the culture of a region could play in the entrepreneurial intentions of these students by using a sample from two Spanish universities from different autonomous communities.

To this end, this article is structured in six sections. In the first one, the study of the entrepreneurial intentions with university students is presented, exposing the existing regional differences between the two communities of origin of the sample students (Valencian Community and Andalusia) and considering the hypotheses of study. The following section describes the sample, the instrument used, the procedure performed for the data collection and the statistical analyzes performed. Next, the results are presented with which the objectives and hypotheses of the previously studied study are achieved. Finally, the discussion of the results is presented, as well as the conclusions and practical implications, with a series of limitations and future lines of study.

*Entrepreneurial intentions and university students: cognitive variables, entrepreneurial skills and regional differences*

Education systems should promote skills that enable students to improve their employability (Teijeiro, Rungo, & Freire, 2013), so it should be a priority to identify the useful mechanisms to facilitate and to emerge the interest for the enterprise, as well as its initiatives in pre-graduate students (Lanero et al., 2011). In the last few years there are a great number of studies that argue that the entrepreneurial intentions play a very important role in the decision to start a new company (Liñán & Chen, 2009). Ajzen's Theory of Planned Behaviour (TPB) has been one of the most widely used theories in the study of entrepreneurial intentions (e.g. Fayolle, Gailly, & Lassas-Clerc, 2006; Moriano, Palací, & Morales, 2006). This theory exposes that the intention is based on three motivational factors: the perceived behaviour control, the attitude towards the behaviour and the subjective norms, and that the more positive they are, the greater entrepreneurial intentions they will have.

As far as the differences in entrepreneurship between countries or regions are persistent, Davidsson (1995) notes that a substantial part of these differences has been attributed to culture. Culture influences through two main mechanisms: first, a favourable culture towards entrepreneurship would lead to social legitimation, making the entrepreneurial career more valuable and socially recognized, and secondly, a culture that shares values and patterns of thought would lead that more individuals have psychological traits and attitudes consistent with entrepreneurship. It is therefore necessary to take into account that some socio-cultural practices, values and norms lead more to encourage entrepreneurship and others to inhibit it (Krueger, Liñán, & Nabi, 2013).

According to Vaillant and Lafuente (2007) the formal factors (rules and regulations) are practically equivalent in all the Spanish regions. Therefore, following the idea of North (1990) the differences could be found rather in the informal factors (attitudes, beliefs and values) than in the formal ones. This is in congruence with Bandura's Theory of Social Learning (1977), which states that environmental factors have a great influence on learning and higher cognitive processes.

For this reason, in this study we have analyzed students from universities belonging to two different Spanish autonomous communities: Valencian Community (University of Valencia is from Valencia city) and Andalusia (University of Sevilla is from Sevilla city). In fact, youth unemployment rates in 2016 in both are different according to EPA (2017), with 57.79% in Andalusia and 46.16% in the Valencian Community (VC). Therefore, the youth unemployment rate in Andalusia is around 10% higher than the rate of youth unemployment in the VC. However, if the TEA of both men and women is analyzed according to the Global Entrepreneurship Monitor of Peña, Guerrero and González-Pernía (2016), in Andalusia the total TEA (11.40%) is higher than in the VC (8.20 %). Therefore, the following hypothesis is proposed:

H<sub>1</sub>: The entrepreneurial intentions will be significantly higher in the students of last year of Sport Science of Sevilla with respect to those of Valencia.

Mueller and Thomas (2001) point out that not only personality characteristics related to entrepreneurship vary between cultures, but that this can also be an important factor to emphasize these characteristics related to entrepreneurship. Data from the Global Entrepreneurship Monitor (GEM) of Peña et al. (2016) shows that in the perception of knowledge and skills to entrepreneurship, Andalusia is positioned as the fifth Autonomous Community above the percentage of the Spanish average, while the Valencian Community is among the last four. Therefore, a greater percentage of the Andalusian population is perceived with good knowledge and skills to entrepreneurship. Taking these data into consideration, the following hypotheses are presented:

H<sub>2</sub>: Sport Sciences students in Sevilla will present significantly higher mean scores in the control variables of perceived behaviour than the last year students of Sport Science in Valencia.

H<sub>3</sub>: Sport Sciences students from Sevilla will present higher scores on all variables related to the skills or entrepreneurial characteristics of the Sport Sciences students of Valencia.

As for the reference models, Andalusia is the second Spanish Autonomous Community whose percentage is higher (around 40%), well above the average percentage of the Spanish population. In contrast, the Valencian Community is among the three Spanish Autonomous Communities with a lower percentage of reference models (around 30%). Therefore, the following two hypotheses are proposed

H<sub>4</sub>: Sport Sciences students final students in Sevilla will present significantly higher mean scores in the attitude variable towards the behaviour that last year's Sport Science students of Valencia.

H<sub>5</sub>: Sport Science students in Sevilla will present significantly higher average scores in the subjective norm variable than the last year students of Sport Science in Valencia.

Therefore, they are two regions that, although they are in the same country, have different entrepreneurial characteristics, so it is interesting to analyze if there are differences between university students of SS in these two Autonomous Communities. For this reason the following hypothesis is also stated:

H<sub>6</sub>: The cognitive variables of the TCP and entrepreneurial abilities that explain the intentions to undertake of the students of the last course of the Sport Sciences' Degree will be different depending on the city of origin.

Finally, according to Liñán, Urbano and Guerrero (2011), the relationship between the university culture and the students' entrepreneurial intentions needs more attention, so this study will also analyze the role of the university environment in the entrepreneurial intentions of these students. Therefore, the objectives of the present study are to know if there are differences between the entrepreneurial intentions and their different entrepreneurial variables among the students of Sport Sciences of two Spanish universities of different regions (Valencia and Sevilla), and to discover if the variables that predict the entrepreneurial intentions of these students vary according to the region of belonging.

## Material and methods

### Participants

The sample is composed by 172 students of the last year (4<sup>th</sup>) of Sport Sciences' degree from two different cities and universities; Valencia and Sevilla (Spain) were 75.60% of the participants belong to the University of Valencia while 24.40% belong to the University of Sevilla. The sample of 4<sup>th</sup> year's Sport Sciences students of Valencia is composed by 130 students of a total of 150 students who were enrolled in the academic year 2016/2017. With regard to the sample of students of the University of Sevilla, the number of students was 42 students who were enrolled in the 4<sup>th</sup> grade of Sport Sciences' Degree, out of a total of 60 students who were enrolled in the academic year 2016/2017.

According with the entrepreneurship courses the 11.50% of the Sport Science students of Valencia have participated in entrepreneurship courses, while the 9.50% of students of Sevilla have participated in them. Taking into consideration the work experience, the 77.90% of Valencia's students have it, while only the 47.60% of Sevilla's students have it. Finally, according the knowledge of closed entrepreneurs, the 70.30% of Valencia's students know entrepreneurs; while the 66.70% of Sevilla's students know close entrepreneurs. The detailed characteristics of the sample are shown in Table 1.

**Table 1.** Characteristics of the samples: students of SS from Valencia and students of SS from Sevilla

	Valencia	Sevilla
Sample (total population)	130 (150)	42 (60)
Sex	Male % (n)	76% (32)
	Female % (n)	24% (10)
Age (Standard deviation)	22.74 (2.69)	23.13 (4.01)
Entrepreneurship course	11.50%	9.50%
Work experience	77.90%	47.60%
Closed entrepreneurs	70.30%	66.70%

### Instruments

As a tool for collecting information, a questionnaire was used composed of the different scales shown below:

Perceived Behaviour Control Scale of Liñán and Chen (2009). It is composed of six items which refer to entrepreneurship capacity. Cronbach's alpha of this scale was .93 for the sample of Valencia's students and .95 for the sample of students from Sevilla.

Entrepreneurial Intentions Scale of Liñán and Chen (2009). It is formed by six items which measure the level of agreement or disagreement with the propensity to be an entrepreneur or to create a venture. Cronbach's alpha of this scale presents a value of .96 for the sample of students of Valencia and of .97 for the sample of students of Sevilla.

Attitude Towards the Behaviour Scale of Liñán and Chen (2009). It is composed of five items measure the level according to the different professional career. Cronbach's alpha of this scale has a value of .93 for the sample of students of Valencia and a value of .89 for the sample of students of Sevilla.

Entrepreneurial Capacities Scale of Liñán (2008). It is constituted by six items that refer to the level of the capacities to be enterprising. Cronbach's alpha of this scale presented a value of .82 for the students of Valencia and of .87 for the students of Sevilla.

Subjective Norms Scale of Liñán and Chen (2009). It is composed of three items measure the approval of the decision to create a company by the people of the closest environment. Cronbach's alpha of this scale has a value of .86 for the sample of students of Valencia and a value of .82 for the sample of students of Sevilla.

Entrepreneurial attitude scale of Roth and Lacoa (2009), verified its psychometric properties by Durán Aponte (2009). This scale is composed of four dimensions. The first dimension is that of optimism which is composed of four items. The second dimension is proactivity and the third dimension is that of persistence-resilience, both scales being composed by four items each. Finally, there is another dimension of creativity-imagination composed of three items. Cronbach's alpha of this scale was .89 for the student sample of Valencia and .88 for the student sample of Sevilla.

Risk-Taking Scale of Langkamp (2012). This scale consists of three items that measures risk propensity. Cronbach's alpha of this scale was .73 for the student sample of Valencia and .84 for the Sevilla sample. Finally, to point out the items, a 7-point Likert scale was used in all cases, where 1 totally disagreed and 7 fully agreed.

#### Procedure

The sample was selected by non-probabilistic sampling of intentional or convenience type. The questionnaires were administered on paper to the students of the University of Valencia during the classes. They were also administered online through the Limesurvey web-based platform. In the case of students from Sevilla, all questionnaires were administered in electronic format. The questionnaires were completed during the months from December 2016 to March of 2017. As for the time required to complete the questionnaire, this was about 15-20 minutes.

#### Statistical analysis

Statistical analyzes were performed using the SPSS software version 21. First, a reliability analysis of the scales was performed using the Cronbach alpha statistic (see instrument section). A differential analysis between groups was then performed to analyze the differences according to the variable origin of the students. For this purpose, the *t* test for independent samples was used, previously applying the Levene test to verify the homogeneity of the variances. It should be noted that the size of the effect was taken into account, using Cohen's *d* (Cohen, 1977), and taking as reference the following values: .20 (small effect), .50 (medium effect) and .80 (large effect).

Subsequently a correlation analysis was performed, using the Pearson correlation test with the purpose of verifying the relationship between the variables under study. Finally, a multiple hierarchical linear regression analysis was performed to verify the predictor variables of the scale entrepreneurial intentions according to the region of provenance of the Sport Science students.

#### Results

The differences between the students of last year of Sport Sciences' Degree of Valencia and Sevilla in the variables of the TPB were analyzed, being statistically significant differences in all the variables ( $p < .05$ ), except for the entrepreneurial intentions. The lowest scores were obtained in both groups for entrepreneurial intentions and in the perceived behaviour control, and the highest scores were presented for students of both groups in the subjective norms. In the case of attitude towards behaviour, the students of Sevilla ( $M = 4.98$ ;  $DT = 1.34$ ) presented higher mean scores than students from Valencia ( $M = 4.43$ ;  $DT = 1.54$ ), showing statistically significant differences ( $p = .01$ ), with a small - medium effect size (Cohen's  $d = 0.35$ ). In relation to the variables of perceived behaviour control and subjective norms, in both cases the Valencian' students had higher mean scores ( $M = 3.40$ ,  $DT = 1.45$ ,  $M = 2.93$ ,  $DT = 1.91$ , respectively) than the SS students of Sevilla ( $M = 5.82$ ,  $DT = 1.19$ ,  $M = 5.32$ ,  $DT = 1.11$ , respectively). The effect size in the case of the behaviour control variable was small-medium (Cohen's  $d = 0.39$ ), and in the case of the subjective norm variable it was somewhat superior, being this effect almost medium (Cohen's  $d = 0.43$ ). On the other hand, focusing on the entrepreneurial characteristics, the averages of these were high for both groups, presenting average scores above 4.50 (on an ascending Likert scale of 7 points). In all cases, with the exception of the proactivity variable, it was the Sport Science students from last year of Valencia who had higher mean scores, and these differences were not statistically significant in any of the cases ( $p > .05$ ).

**Table 2.** Differences according to the city of membership of the Sport Science students according to the variables of the TPB, the entrepreneurial characteristics and the climate of the university about the intentions to undertake

Items	Sport Science Students of Valencia(DT)		Sport Science Students of Sevilla (DT)		<i>t</i>	<i>p</i> value	Cohen's <i>d</i>	
	$\bar{X}$	DT	$\bar{X}$	DT				
TPB	Entrepreneurial intentions	3.44	1.70	3.75	1.59	-1.28	.20	-
	Perceived Behaviour Control	3.40	1.35	2.93	1.31	2.48	.01	0.35

		Valencia		Sevilla		Mean		DT	
		V	S	V	S	V	S	V	S
ENTREPRENEURIAL CHARACTERISTICS	Attitude Toward Behaviour	4.43	1.54	4.98	1.34	-2.65	.01	0.39	
	Subjective Norm	5.82	1.19	5.32	1.11	3.05	.00	0.43	
	Risk Taking	5.02	1.11	4.69	1.30	1.86	0.65	-	
	Proactivity	5.51	0.90	5.57	0.96	-.42	.68	-	
	Creativity and imagination	5.28	0.98	5.05	1.19	1.45	.15	-	
	Opportunity recognition	4.56	1.43	4.47	1.25	.66	0.45	-	
	Development of new products and services	4.55	1.28	4.50	1.53	.82	0.23	-	
ENVIRONMENT	University's Climate	4,41	1.33	4.51	1.37	-.54	.59	-	

Note: \*  $p \leq .05$ ; \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$ ; □ = Mean; DT = Typical Deviation; - = Not calculated because there were no statistically significant differences.

Then, it was performed an analysis of Pearson's correlations between the different variables and the entrepreneurial intentions. As shown in Table 3, all variables were found to be significantly correlated with the entrepreneurial intentions, with the exception of the university climate towards entrepreneurship in both groups, as well as the proactive variable in the case of the Valencian students group.

The highest correlations were found between the entrepreneurial intentions with the variable attitude towards the behaviour in the group of students of Valencia ( $R = .83$ ;  $p < .001$ ) and in the group of students of Sevilla the variable perceived behaviour control ( $R = .73$ ;  $p < .001$ ). As for the weaker correlations with the variable entrepreneurial intentions, they were found in the group of students in both the Valencia ( $R = .21$ ;  $p < .05$ ) and Sevilla ( $R = .23$ ;  $p < .05$ ) with the subjective norm variable. The following results can be observed in Table 3.

**Table 3.** Correlations between SS students' intentions to undertake according to city of membership, with the variables of the TCP, the entrepreneurial characteristics and the climate of the university

	1		2		3		4		5		6		7		8		9		10		
	V	S	V	S	V	S	V	S	V	S	V	S	V	S	V	S	V	S	V	S	
1. EI	1.00	1.00																			
2. PBC	.56***	.73***	1.00	1.00																	
3. ATB	.83***	.64***	.57***	.55***	1.00	1.00															
4. SN	.21*	.23*	-.04	.19	.26***	.62***	1.00	1.00													
5. UC	.09	.00	.19*	.30**	.11	.16	.05	-.06	1.00	1.00											
6. PRO	.12	.50***	-.00	.38***	.19*	.23*	-.01	.15	.02	.04	1.00	1.00									
7. CRE	.39***	.54***	.28***	.62***	.37***	.64***	.08	.34**	.12	.10	.47***	.31**	1.00	1.00							
8. RO	.45***	.33***	.40***	.52***	.40***	.15	.05	-.13	.19*	.31**	.45***	.32**	.61***	.32**	1.00	1.00					
9. DNPS	.45***	.48***	.52***	.65***	.43***	.62***	.02	.30*	.13	.18	.12	.27*	.47***	.71***	.49***	.52***	1.00	1.00			
10. TR	.39***	.56***	.37***	.65***	.44***	.75***	-.00	.27*	.07	.11	.30***	.26*	.46***	.79***	.49***	.23*	.44***	.72***	1.00	1.00	

Note: correlations are statistically significant \*\*  $p < .01$ ; \*  $p < .05$ ; \*\*\*  $p < .001$ ; V = Valencia; S = Sevilla; EI = Entrepreneurial Intentions; PBC = Perceived Behaviour Control; ATB = Attitude towards ; SN = Subjective Norms; UC = University Climate; PRO = Proactivity; CRE = Creativity; RO = Recognition of Opportunities; DNPS = Development of New Products and Services; TR = Taking Risks.

Finally, to verify the relationships between the entrepreneurial intentions, the variables of the TPB and different abilities related to the entrepreneurship, a hierarchical multiple regression model was performed. In the first step the variables of perceived behaviour control, attitude toward behaviour and subjective norms (TPB) were introduced. Secondly, all the entrepreneurial skills of risk taking, proactivity, recognition of opportunities,

creativity and development of new products and services were introduced. In this way four different hierarchical regression models were proposed, two of them for each group of students.

In the first model of Valencia students it can be observed that in the first step, the variable attitude toward behaviour ( $\beta = .75; p < .001$ ) was the only significant predictor of the entrepreneurial intentions. In this step the factors of the TPB were able to predict the 69% of the variance of the entrepreneurial intentions ( $F_{(3)} = 85.787; p < .001$ ). The Table 4 shows the results.

In the second step, with the inclusion of entrepreneurial skills, the explanation of the model did not improve significantly ( $\Delta R^2 = .02; p = .11$ ). In this step, only the attitude toward entrepreneurship continued to be the only significant predictor variable ( $\beta = .07; p < .05$ ) of the entrepreneurial intentions. Thus, with this model ( $F_{(8)} = 34.566; p < .001$ ) it was able to explain a higher percentage of the variance of the intentions to undertake (70%).

In the case of the students of Sevilla, in the first model it can be observed that in the first step, the variables attitude towards the behaviour ( $\beta = .47; p < .001$ ), control of the perceived behaviour ( $\beta = .20; p < .001$ ) and subjective norm ( $\beta = -.16; p < .001$ ) proved to be significantly predictive variables of the entrepreneurial intentions. In this step all factors of TPB were able to predict 62% of the variance of the entrepreneurial intentions ( $F_{(3)} = 34.924; p < .001$ ). In the second step, with the inclusion of entrepreneurial skills, the explanation of the model improved significantly but a very small percentage ( $\Delta R^2 = .11; p = .001$ ). In this step all previous variables continued to be significantly predictive variables ( $\beta = .07; p < .05$ ) of the entrepreneurial intentions in addition to the proactivity ability ( $\beta = -.30; p < .001$ ). Thus, with this model ( $F_{(8)} = 15.538; p < .001$ ) it was possible to explain a higher percentage of the variance of the entrepreneurial intentions (66%). Table 4 shows the results:

**Table 4.** Hierarchical linear regression analysis according to the variables of the TPB, the entrepreneurial characteristics of the personality about the entrepreneurial intentions

Variable		Entrepreneurial Intentions			
		$\Delta R^2$		B standardized	
Predictors		Sport Sciences Students of Valencia	Sport Sciences Students of Sevilla	Sport Sciences Students of Valencia	Sport Sciences Students of Sevilla
Step 1		.69	.62		
TPB VARIABLES	Perceived Behaviour Control			.13	.20***
	Attitude Toward Behaviour			.75***	.47***
	Subjective Norm			-.01	-.16***
Step 2		.02	.11***		
TPB VARIABLES	Perceived Behaviour Control			.07	.48***
	Attitude Toward Behaviour			.73***	.72***
	Subjective Norm			-.01	-.30*
ENTREPRENEURIAL SKILLS	Risk Taking			-.03	-.23
	Proactivity			.11	.30***
	Creativity and imagination			.08	.10
	Opportunity recognition			.13	.23
	Development of new products and services			.04	.05
Total R <sup>2</sup> adjusted		.70***	.66***		

Note: \*  $p < .05$ ; \*\*\*  $p < .001$ ;  $\Delta R^2$  = increase of R<sup>2</sup>; B = regression coefficient.

## Discussion

The sport entrepreneurship is a new field with limited studies specifically carried out in this area at the international level, being especially scarce in Spain (González-Serrano, Valantine, & Crespo-Hervás, 2014). This is why the following study has sought to contribute in an empirical way to the literature of sport

entrepreneurship, specifically by studying the cognitive and psychological variables and their relationship with the entrepreneurial intentions of Sport Sciences students taking into account the role of regional culture.

In relation to those found between these two groups of students, only statistically significant differences were found in perceived behaviour control, attitude towards behaviour and subjective norms (cognitive variables). In the attitude towards the behaviour the students of Sevilla presented scores significantly higher to the students of Valencia. This means that the students of Sevilla consider an entrepreneurial career more favourable than the students of Valencia. This may be due to the fact that in Andalusia they have more reference models of entrepreneurs than in the VC. Regarding the variable perceived control behaviour, the Sport Sciences students from Valencia presented the highest means, which means that the students of Valencia perceived with greater abilities and knowledge to entrepreneurship than those of Sevilla. Although data from the GEM of Peña et al. (2016) indicate that the Andalusians perceived that they possess more skills and knowledge about entrepreneurship, this may be due to the characteristics of the sample, since a greater percentage of Sport Sciences students from Valencia had participated in specific courses on entrepreneurship. These results are in line with the study of González et al. (2017) that demonstrated the positive influence on entrepreneurial intentions in the Sport Science students who participated in this type of courses.

Regarding the subjective norms variable, in spite of presenting higher reference models students from the Andalusia (Sevilla) according to GEM of Peña et al. (2016) data, were the Valencian students who presented higher averages in this variable. These results may be due to the fact that the reference models do not belong to close people (family, friends or friends), and the reference models of Valencia's students maybe they are. However, in the skills related to entrepreneurship, there were no statistically significant differences between the two groups of students, although according to the GEM of Peña et al. (2016) data the Community of Andalusia was perceived with more skills on entrepreneurship than the Valencian Community. One explanation for this can be the characteristics of the sample, due to the greater work experience that the students of Valencia presented with respect to those of Sevilla, which could make them develop those competences related to the entrepreneurship.

On the other hand, in relation to the predictors of the entrepreneurial intentions the results show that they are different depending on the origin of the students, like the study by Liñán et al. (2011). In the case of the students of Valencia, only the attitude towards the behaviour has been proved to be a predictive variable. These results are in line with those of Miranda et al. (2017) in a study carried out with students from different Spanish universities, who also found that the attitude towards entrepreneurship behaviour was the main and only antecedent of the entrepreneurial intentions. These same results were obtained by Piperopoulos and Dimov (2015) who explained that although high levels of perceived behaviour are shown, this does not translate into greater intentions to undertake, because the environment is an influential factor in this process.

With regard to the predictive variables of the students of Sevilla, all the variables of the TPB (attitude towards the behaviour, perceived behaviour control and subjective norm), have been proved to be predictors of the entrepreneurial intentions, with the subjective norm variable having a negative effect. These results are in line with Armitage and Corner (2001) who in their meta-analytical study, subjective norms are usually the weakest predictor. The coefficient so small and negative can be because these students have a very strong internal locus of control (Ajzen, 2002) and therefore the valuation of their close environment is practically irrelevant. In addition, the variable proactivity proved to be also predictor of the entrepreneurial intentions of the students of this group of students. These results are in line with those of Sánchez, Lanero and Yurrebaso (2005), who also demonstrated the influence of proactivity on the entrepreneurial intentions of university students.

Therefore, these differences reveal the influence of culture on the intentions of students of Sport Science of two different autonomous communities, highlighting the role of culture through the psychological and cognitive variables that predict the intentions of undertake. These results, as stated by North (1990), highlighted that the future will not only depend on the knowledge that people possess, but will depend on the institutions that protect from the uncertainties of the environment and the intentions that these institutions are able to generate in people.

## Conclusions

The results of this research have several implications for practice, teaching and research, contributing to the development of the theory on the main factors that lead university students to choose entrepreneurship as a professional career specifically for students in the sports field. They serve both for the politics makers of the universities to know their results in the transmission of knowledge as well as the regional authorities to know if their universities influence the potential of their students as future entrepreneurs and therefore to improve in the design of their policies. A key task to promote the value of university knowledge and the creation of value in society is to know the degree of entrepreneurial intention of university students, as well as what kind of attitudes or entrepreneurial personality traits or skills that should be developed in their educational policies.

The educational policies to be carried out for each of the students must be different, presenting our results relevant implications for the elaboration of these according to the cultural factor. In the case of the

Faculty of Sciences of Sport Science of Valencia, its rulers should focus on educational policies that increase the attitude towards entrepreneurship behaviour in their students.

Likewise, in the case of Sevilla, they should encourage mainly in fomenting the attitude towards the conduct the entrepreneurship, since it is the one variable that presents greater influence in the regression model. However they should also promote the control of perceived behaviour or self-efficacy and proactivity. In the Table 5 some activities to promote entrepreneurial intentions depending of student's provenance are presented.

**Table 5.** Proposal of activities to promote the entrepreneurial intentions taking into account the provenance of SS students: Sevilla and Valencia

Variables	Sport Sciences Students Valencia	Sport Sciences Students Sevilla
Attitude Toward Behaviour (+)	Entrepreneurs of the sector in the classroom Workshop or seminars on entrepreneurship Videos about entrepreneurship stories in sports Visits to companies or businesses of sports entrepreneurs	
Perceived Behaviour Control (+)		Creation of projects and business plans Creation of strategic plans Sports coaching
Subjective Norm (-)		Small individual works to promote internal locus of control
Proactivity (+)		Creation of strategic plans Creation of feasibility projects and business plans Contests of the best ideas

Finally, regarding the limitations and future lines of study, it is necessary to emphasize that the analysis performed has been linear so that it has not been possible to take into account the possible indirect influence of some variables through the variables of the TCP. Therefore in future studies multi-level analyzes should be carried out taking these aspects into account. Another limitation is that student samples have been compared from two universities in two different autonomous communities, so that future studies should compare students from more universities in other autonomous communities. Finally, it should be pointed out that this study is transactional and it is not possible to see the evolution of the entrepreneurial intentions, so that future studies should be carried out with samples of students from different universities.

### Conflicts of interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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