

**Individualism and entrepreneurship: Does the pattern  
depend on the social context?**

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**Abstract**

This article argues that cultural and personal values are relevant in the formation of entrepreneurial intentions, and that the interplay between both value-levels deserves attention. Individualist values such as achievement, pleasure, self-direction, and an exciting and stimulating life are related to entrepreneurial intention and activity, both at the cultural and personal level. From a sample of 2069 adults with a university degree, the results support a double effect of culture on entrepreneurial intention: the personal values effect (a more individualist culture leads to more members exhibiting higher entrepreneurial intentions) and the outliers' effect (those who are more individualist than the average in their culture will exhibit a higher entrepreneurial intention). Within the two individualist dimensions considered (i.e. self-enhancement and openness to change), the relationship of self-enhancement to entrepreneurial intention is stronger than that of openness to change. The implications of these results are discussed and some avenues for future research are proposed.

**Keywords:** Individualism, cultural values, personal values, context, entrepreneurial intention

## Introduction

Cultural differences in entrepreneurship are known to exist and manifest themselves in, for instance, consistent national differences in entrepreneurial activity (e.g. Kelly et al., 2012). These differences cannot be fully explained by economic factors alone (Frederking, 2004). A substantial portion of these differences has been attributed to the socio-cultural context (Thornton et al., 2011). Hayton and Cacciotti (2013) see culture as the set of basic common values and beliefs which contributes to shaping people's behaviour in a society. The notion of culture also includes patterns of thinking, feeling and acting. These are learned and shared by people living within the same social context (Schwartz, 2008). However, few studies have analysed the influence of the socio-cultural context on entrepreneurship, especially in the early pre-action phase of the entrepreneurial process (some exceptions to this are Bosma and Schutjens, 2011; Kibler, 2013; Liñán et al., 2011).

The formation of entrepreneurial intentions is one of the main areas of interest in the field of entrepreneurship, since they are considered as the best predictor of entrepreneurial behaviour (Kautonen et al., 2013; Krueger, 2009). Ultimately, the start-up decision is intrinsically personal, and, therefore,

values, attitudes and perceptions may differ between individuals (Iakovleva et al., 2011; Liñán et al., 2013b). That is, the motivations leading people towards entrepreneurship, and the perceived rewards are probably different for each individual, depending on their personal values (Jaén and Liñán, 2013; Moriano et al., 2007). Individualist values have been repeatedly associated with entrepreneurial intentions and behaviour (Hayton et al., 2002; Morris and Schindehutte, 2005). In countries with a similar level of development, a more individualist culture is linked to a higher entrepreneurial activity (Liñán et al., 2013a; Pinillos and Reyes, 2011). Similarly, at the personal level of analysis, people prioritising individualist values tend to exhibit higher entrepreneurial intentions (Jaén et al., 2013), after controlling for some personal characteristics (Langowitz and Minniti, 2007).

The social context surrounding the individual is bound to have an influence on the person's motives, cognition, intention and action (Kibler and Kautonen, 2014; Welter, 2011). Therefore, people's start-up decisions may be influenced by the predominant values in the social context in which they are embedded (Hayton et al., 2002; Pinillos and Reyes, 2011). Since intra-country variation in value priorities of individuals is large, the person's individual values will not necessarily match those of the society in which they live (Fischer and Schwartz, 2011). It could be argued that the level of value-congruence or

value-divergence between the individual and his/her culture may be important in explaining entrepreneurial behaviour. In particular, “individuals” not sharing predominant cultural values –i.e., “cultural outliers” - may be more prone to becoming entrepreneurs. More recently, Rauch et al. (2013) find that both personal and cultural values affect the innovation-growth relationship in firms, with the strongest effect occurring when the difference between some of the personal and cultural values is higher.

Intra-country variation in values is also present at the cultural level (García-Cabrera and García-Soto, 2008). Regions within a country may present cultural values differing from those of neighbouring regions. Since regions are a closer social context, they may be more important as a reference for individuals. Thus, the interplay between personal and cultural values –i.e., the level of value-congruence or value-divergence between person and context- may affect the person’s motives, attitudes and intentions towards entrepreneurship. In this sense, the main aim of this article is to investigate the relationship between individualist values and people’s entrepreneurial intentions, and how this relationship is affected by the predominant cultural values in their social context (i.e. region). That is,

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the extent to which value divergence between people and their social context contributes to explaining entrepreneurial intentions.

After this introduction, the theoretical background is considered and hypotheses are derived. Next, the methodology and results are described. The following section offers a discussion of the findings, implications, future research lines and limitations. The article ends with a brief conclusion.

**Theoretical background**

First, a brief description of the entrepreneurial intention model to be used is presented. Then, the relationship between entrepreneurial intention and individualist values at the personal and cultural levels is reviewed. Finally, the congruence/divergence between values at both levels is considered. Hypotheses are derived throughout.

*Entrepreneurial intention*

Entrepreneurial intention (IE) is defined as the conscious state of mind that precedes action and directs attention towards a goal, such as starting a new business (Fayolle et al., 2014). Forming an intention to

develop an entrepreneurial career is the first step in the often long process of venture creation (Kessler and Frank, 2009). Several models have been used to explain the entrepreneurial intention, although they have not been as influential as the Ajzen's (1991) Theory of Planned Behaviour (TPB, Griffiths et al., 2009; Kautonen et al., 2013; Van Gelderen et al., 2008). Unlike other EI models, the TPB offers a coherent and generally applicable theoretical framework. This enables us to understand and predict EIs by taking into account not only personal but also social factors (Moriano et al., 2012). As such, personal history and characteristics and skills can predispose individuals towards EIs, as can the social context (social support and culture). However, according to the TPB, only the three factors -Attitude towards Entrepreneurship, Subjective Norms, and Perceived Behavioural Control (PBC)- predict EI directly (Kautonen et al., 2013). Other background factors, such as broad life values, demographic variables (education, age, gender, income, etc.), and exposure to media and other sources of information, will influence EIs indirectly, through one or more of these three TPB components (Ajzen, 2011). This is the case, for instance, of labour experience -a relevant source of information, skill-development and knowledge that may be relevant in the start-up decision (Dahlqvist et al., 2000)- or role models – facilitating vicarious learning (Bosma et al., 2012).

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Therefore, the following hypothesis is derived regarding the TPB model:

*H1. Entrepreneurial intention is positively related to: Attitude towards Entrepreneurship (H1a), Subjective Norm (H1b) and PBC (H1c)*

*Personal values and entrepreneurship*

Personal value priorities serve as a guide for human decisions and actions (Schwartz, 2011). Thus, values guide individual decision-making and motivate behaviour that is congruent with them (Bardi and Schwartz, 2003). Schwartz (2006) proposes a circular structure of values describing 10 basic human values types that may be grouped into four dimensions. Among them, “openness to change” (including self-direction and stimulation values) and “self-enhancement” (including power and achievement values) are considered as individualist dimensions.

In this sense, people facing a similar situation may form different decisions and take subsequent actions depending on their value priorities (Schwartz, 2006). Thus, individuals who prioritise stimulation or self-direction values would likely be attracted by a challenging job offer, whereas those who value security might find the same offer threatening and unattractive (Jaén and Liñán, 2013).

Those stressing openness to change attach high importance to independent thought and action. The excitement and challenge of life are important motivations for them (Schwartz, 2006). They like exploring new ways of doing things and are not afraid of opposing conventional roles or systems (Holland and Shepherd, 2013). Learning is an important stimulus for them, and they tend to use their intellectual capacity to develop new products and services (De Clercq et al., 2013). An emphasis on self-enhancement, in turn, will lead people to giving priority to the satisfaction gained from the successful achievement of personal interests, even at the expense of others, if necessary (Schwartz, 2006). They tend to enjoy the power implied in controlling resources, and highly value income and recognition (Holland and Shephard, 2013). All of these characteristics are usually related to entrepreneurial activity (Tomczyk et al., 2013).

Although research on the values of entrepreneurs is relatively scarce (Holland and Shepherd, 2013), it indicates a significant relationship between certain values of an individualist nature and entrepreneurial behaviour. Similarly, Moriano et al. (2007) found that individualist values (i.e., power, achievement, stimulation and self-direction) positively predict the individual EI of university students.

Since entrepreneurship is a complex process that involves facing several different phases, each type of individualist values might be activated to solve each one of them. That is, the priority attached to openness to change could be related to the identification and evaluation of opportunities, while the emphasis on self-enhancement could be linked to the effective exploitation of the opportunity. Therefore, individuals attaching high importance to both types of values (openness to change and self-enhancement) will be more strongly motivated to perform the behaviours required in each phase of the entrepreneurial process. Thus, they will exhibit an even stronger entrepreneurial intention, so a positive joint or interaction effect may be expected. This leads to the following hypothesis:

*H2. People prioritising individualist values will exhibit a higher entrepreneurial intention*

*Cultural values and entrepreneurship*

In the case of entrepreneurship, researchers have argued that a country's culture, values, beliefs and norms affect the entrepreneurial orientation of its residents (Díaz-Casero et al., 2012; Hechavarria and Reynolds, 2009). It has been argued that, in developed countries, a stronger cultural emphasis on individualist values is linked to higher entrepreneurial activity (Mueller and Thomas, 2001; Pinillos and

Reyes, 2011). This influence may occur through social legitimation (Frederking, 2004). In this light, the entrepreneurial activity will be more valued and socially recognised in that culture, thus creating a favourable institutional environment (Liñán et al., 2011). This will cause more people to try to start their ventures, irrespective of their personal beliefs and attitudes (Etzioni, 1987). Recent research has confirmed that the social legitimation of entrepreneurship is associated with EI and behaviour (Kibler et al., 2014). Even though the relationship may be more complex than initially thought, a model of entrepreneurial culture involving high individualism seems to be appropriate, at least under higher levels of economic development (Hayton and Cacciotti, 2013).

At the cultural level, individualist values such as achievement, pleasure, self-direction, and an exciting and stimulating life are related to entrepreneurial intention and activity (Morris and Schindehutte, 2005; Wdowiak et al., 2007). In contrast, where values relevant to economic innovation and personal success may conflict with traditional cultural values, entrepreneurship may not be approved of by society (Morris and Schindehutte, 2005) and the hostile environment may hamper EIs (Wdowiak et al., 2007).

This result has also been confirmed by Noseleit (2010). Since some studies have found considerable intra-country variation in cultural values (García-Cabrera and García-Soto, 2008), it seems justified to

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concentrate on the regional level of analysis. Thus, regional values -averaged shared values in the region- will be taken to represent the predominant culture in the region. Therefore, the following hypothesis is derived:

*H3. A region's culture stressing individualist values will be associated with a higher entrepreneurial intention of its members.*

*The interplay of personal and cultural values in entrepreneurship*

There inevitably exists a variation between personal and cultural values, since individual value priorities do not necessarily match predominant societal values (Fischer and Schwartz, 2011). That is, in any given culture, some people will share the predominant cultural values, while others will prioritise alternative values. Thus, the level of value-congruence or value-divergence between individuals and groups is bound to affect their perception of reality and, hence, their decisions and behaviour (Posner and Schmidt, 1993; Schwartz, 2011). Nevertheless, very little is yet known about the full implications stemming from the interplay between personal and cultural values (Fayolle et al., 2014).

Since most local organisations will probably be embedded in the predominant societal culture, people sharing cultural values will feel comfortable working for these companies (Posner and Schmidt, 1993).

In contrast, “cultural outliers” (those not sharing predominant cultural values) may feel there are no satisfactory employment opportunities for them (Vinogradov et al., 2013). In this case, they may consider alternative (less-conventional) career paths such as entrepreneurship. In addition, several studies have shown that entrepreneurs and business owners hold values which are different from those of employees and non-owner managers, and that these specific value patterns transcend cultures (Alexander and Alexander, 2003; Chaganti and Greene, 2002).

Therefore, the formation of the EI will probably be different between, on the one hand, people sharing predominant regional values and, on the other hand, “individualist outliers” (both those more individualist than the average, and those who are less individualist than the average in their region). For people sharing the same values in their region, the cultural values are expected to be more relevant in determining their EI (Fischer, 2006; Fischer and Schwartz, 2011). In contrast, people who are substantially more (or less) individualist than the average citizen in that region may be more affected by their own personal values and not so much affected by the cultural values in that region (Fischer, 2006).

Therefore, it may be reasonably argued that the level of congruence or divergence between personal and regional values is important in predicting EIs, with people who are more individualist than the region's average exhibiting a higher intention, while people who are less individualist than the average show a lower intention.

In particular, individuals who are more open to change than the average in their region will be specially inclined to satisfy their curiosity in identifying opportunities, while those who are more self-enhancers than the average will more strongly seek the successful implementation of these opportunities. It may be expected that those individuals prioritising both complementary types of individualist values more (less) than the average in the region present an even higher (lower) entrepreneurial intention. Thus, the following hypothesis is proposed:

*H4: The divergence between personal and regional values is associated with entrepreneurial intentions (EI) for each type of value, and also for both of them together, such that: (H4a) people prioritising individualist values more than the regional average will exhibit a higher EI, while (H4b) those prioritising individualist values less than the regional average will exhibit a lower EI.*

## Method

### *Participants and procedure*

This empirical study has been conducted on a sample of the Spanish adult population who have a high education level. Participants were alumni from different collaborating universities. They were invited by their university to voluntarily participate in the study by completing an on-line questionnaire. They were assured of the anonymity of responses, but were invited to provide contact data if they wanted to participate in a follow up. Highly-educated individuals are chosen because they present a higher entrepreneurship level (Kelly et al., 2012). Responses from seven regions (i.e., Andalusia, Castille-Leon, Catalonia, Valencia, Galicia, Madrid, and the Basque Country) were selected for the analysis, since they represent 74.3% of the country's population (see Figure 1), and provide sufficient responses in each region to estimate regional (averaged) cultural values. Additionally, to ensure consistency, individuals with previous self-employment experience and immigrants were excluded<sup>1</sup>. Thus, a final sample of 2069 alumni was used (mean age 27.56; SD = 4.51; 40.7% male, 59.3% female).

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<sup>1</sup> Of the total sample of 2974 respondents, 623 were immigrants to the region and 394 were self-employed (with 112 of them being both). Thus, a total of 905 individuals were excluded from the analysis.

*Insert Figure 1 about here*

*Measures*

The research instrument included the Entrepreneurial Intention Questionnaire (EIQ, Jaén and Liñán, 2013; Jaén et al., 2013) and Schwartz’s Portrait Value Questionnaire (PVQ, Schwartz, 2008; Schwartz et al., 2001). The former measures EI and its antecedents, whereas the PVQ measures value priorities. The EIQ is comprised of four 7-point Likert-type subscales (0-6): attitude towards entrepreneurship, subjective norm, PBC and EI. The EIQ follows Ajzen’s (2002a) methodological recommendations on how to construct a TPB questionnaire using composite measures of attitudes and the subjective norm. Its psychometric properties have been confirmed elsewhere (Jaén and Liñán, 2013; Jaén et al., 2013). The EI scale consists of five items with a Cronbach’s  $\alpha$  of .89. An example item for EI is “I am determined to start a business in the future”.

The first independent variable, attitude towards entrepreneurship, was measured through two sets of six items assessing, respectively: 1) the expected outcomes of an entrepreneurial career; and 2) the

desirability of these outcomes. Following Ajzen (2002a), each outcome expectation was multiplied by its expressed desirability to measure the overall attitude. The Cronbach's  $\alpha$  for this scale was .74.

Subjective norms were measured with two sets consisting of three items each to determine the extent to which the respondents thought significant others (e.g., parents) would approve of their entrepreneurial career choice, as well as their motivation to comply with these reference people. Subjective norms are proportional to the sum of the weights of each normative belief multiplied by the individual motivation to meet each referent's expectations. The Cronbach's  $\alpha$  for this scale was .79.

PBC has been measured through a six-item scale, combining elements of self-efficacy and controllability, in line with the theory (Ajzen, 1991; Ajzen, 2002b) and previous research on EIs (Kolvereid and Isaksen, 2006; Moriano et al., 2012; Van Gelderen et al., 2008). The Cronbach's  $\alpha$  for this scale was .90.

A confirmatory factor analysis was run to assess the psychometric properties of these TPB scales. Only one reversed item in the intention scale and one item in the personal attitude scale had to be dropped due to low factor loadings. After that, model fit was satisfactory ( $\chi^2/df = 5.141$ ; GFI = .974; AGFI = .962; CFI = .982; RMSEA = .040). The final EI scale, thus, consists of 4 items (Cronbach's  $\alpha = .95$ ), while the final Attitude towards Entrepreneurship scale consist of 5 items (Cronbach's  $\alpha = .74$ ).

As indicated above, personal values have been measured through Schwartz’s PVQ (Schwartz, 2006; Schwartz, 2008; Schwartz et al., 2001). The PVQ scale is comprised of 40 6-point Likert-type items overall (from 0 to 5) describing a person and asking the respondent to state the extent to which this person is like her/him. Of them, 14 items correspond to the individualist values of Self-Direction (4 items), Stimulation (3 items), Achievement (4 items) and Power (3 items). The priority assigned by the respondent to each item is computed as the difference between the score in this item and the respondent’s average score for the 40 items. If the difference is positive, the item corresponds to a prioritised value, while a negative difference corresponds to a relegated value. In Figure 2, values are organised by motivational similarities and dissimilarities. As may be seen, these four values are then grouped into two higher-order categories, with “Openness to Change” encompassing Self-Direction and Stimulation (Cronbach’s  $\alpha = .73$ ), while “Self-Enhancement” is made up of Achievement and Power values (Cronbach’s  $\alpha = .82$ )<sup>2</sup>.

*Insert Figure 2 about here*

<sup>2</sup> The additional value of Hedonism is also considered as individualist. However, according to Schwartz (2006), Hedonism may be classified in either of the two higher-order categories (Openness to change and Self-enhancement). For reasons of clarity, we have dropped it.

The regional-level values have been computed as the average of personal values for those who are native to each region (excluding immigrants). They are presented in Table 1. The regional value differences in Spain are not substantial, reflecting the common institutional framework and shared history in the country. Openness to Change is a relatively prioritised value in all regions, while Self-Enhancement is a relatively relegated or unimportant value. Nevertheless, these intra-country differences are high when compared to other, more homogeneous nations (Davidsson, 1995), and even larger than those found between some European countries (Schwartz and Ros, 1995).

Additionally, the development level of each region may affect cultural values and may also exert an influence on the entrepreneurial attitudes of its members. A number of works have found a relationship between economic development and entrepreneurship (Liñán et al., 2013a; van Stel et al., 2003). In particular, Gross Domestic Product per capita (GDPpc) is commonly used to account for economic development in both entrepreneurship (Lee and Peterson, 2000; Minniti et al., 2006) and cultural studies (Hofstede et al., 2004; Schwartz, 2004). In this article, the relative level of GDPpc, compared to the national average, has been taken as a proxy for the regional level of economic development. Since all

the regions studied belong to the same country, they share common institutional and macro-economic frameworks. This is useful to minimise and control for the influence of variables not considered in the analysis. Once income level is taken into account, the differences found between regions may be reasonably attributed to diverging cultural values.

*Insert Table 1 about here*

The level of value divergence has been computed as the difference between each person’s individual values and the average in his/her region. For this variable, a positive (negative) value reflects an individual prioritising that value more (less) than the regional average, and has been labelled as “more individualist outlier” (“less individualist outlier”).

Finally, some demographic and socioeconomic characteristics of individuals have been included as control variables: age (years), gender (0=female, 1=male), socioeconomic level (categorical with five levels from 1=low to 5=high), labour experience (0=no, 1=yes), family entrepreneurial role-model (0=no,

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1=yes), and contact with entrepreneurship centres (0=no, 1=yes). These are typical examples of demographic variables affecting entrepreneurship (Langowitz and Minniti, 2007).

### *Data analysis*

Hierarchical linear regression models were estimated to test our hypotheses. Demographic variables were entered first, then TPB variables, and then regional-level values. Then, two alternative models are compared: one of them including personal-level values (Models 4 and 5) and the other including value-divergence measures (Models 6 and 7). Multicollinearity was controlled for and no problems were found in this respect. Only when averaged regional values were included in the model, was there some evidence of multicollinearity. This was solved by standardising all variables. Correlations between the variables used in the analysis are reported in Table 2, together with descriptive statistics.

*Insert Table 2 about here*

## **Results**

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As may be seen in Table 2, the EI is positively and significantly correlated with Attitude, Subjective Norms and PBC, as the TPB predicts, which is in accordance with our hypothesis H1. Moreover, the EI is also positively related to the individualist values, providing initial support for our hypothesis H2.

Table 3 presents the results of the regression analysis. Model 1 includes only control variables at the individual level. As expected, although some significant relationships were found, the explanatory capacity is very low (adjusted  $R^2=.076$ ). Also, their influence diminishes as new relevant variables are included in the following models. Model 2 includes the three motivational antecedents of the EI, and the results provide clear support for Hypothesis H1, since the three of them are highly significant in explaining intention (adjusted  $R^2=.398$ ). Model 3 includes regional level variables (averaged regional values and GDP per capita), finding initial support for Hypothesis H3 (regional openness to change being only marginally significant), with adjusted  $R^2=.404$ ).

*Insert Table 3 about here*

Model 4 includes personal level values (adjusted  $R^2=.425$ ). As may be seen, the personal level of both values significantly explains intention, thus Hypothesis H2 is supported. However, it is interesting to note that the path coefficients for regional-level values become lower and only marginally significant in Model 4<sup>3</sup>. Additionally, an interaction effect was included in Model 5 (adjusted  $R^2=.426$ ), the variable was made categorical to avoid multicollinearity problems. In Model 5, individuals jointly prioritising both values show an even higher level of EI (a positive and significant interaction effect), whereas personal-level openness to change becomes non-significant<sup>4</sup>.

To test Hypothesis H4, we estimated the level of divergence between the personal values and the averaged regional values. This difference has been included in Model 6 instead of personal values. That is, in Model 6 we included averaged regional values and the value divergence between person and region. These value-divergence variables are significant and, at the same time, regional values are also

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<sup>3</sup> This suggests the possible existence of a mediation effect by personal values. This was tested using the 4-step procedure proposed by Baron and Kenny (1986), and the Sobel (1982) test, as implemented by Preacher and Hayes (2004). While the latter confirms the existence of this mediation both for openness to change (Sobel test = 5.766,  $p<.001$ ) and self-enhancement (Sobel test = 6.551,  $p<.001$ ), the conditions set in the former were fulfilled for self-enhancement, but not so for openness to change. As Preacher and Hayes (2004) point out, the Baron and Kenny (1986) approach tends to miss some true mediation effects (Type II error), and the Sobel test is thus to be preferred.

<sup>4</sup> This result would also be compatible with openness to change moderating the Self-Enhancement/EI relationship, as one reviewer has noted. Nevertheless, since Schwartz's (2006) value theory places values at the same level of importance in conforming motivation, intention and behaviour, we have preferred to interpret this as an interaction.

significant in this model. Therefore, in Model 6, the region’s culture and the person-region difference in values are both explaining the EI level (adjusted  $R^2=.425$ ). Thus, we find joint support for Hypotheses H3 and H4. Model 7 adds the interaction term (again, as a categorical variable to avoid multicollinearity), which is non-significant (adjusted  $R^2=.425$ ). The only noticeable difference from Model 6 is that the significance level for regional openness-to-change value is stronger, whereas the corresponding personal value-divergence is less significant.

Finally, the sample was divided into groups based on their level of value-divergence between the person and his/her region (to test hypotheses H4a and H4b). For each value (openness to change and self-enhancement), the person-region value difference was categorised into three levels. Individuals whose value difference is positive (negative) and higher (lower) than the average by one standard deviation have been classified as “more individualist outliers” (“less individualist outliers”) in the corresponding value. The remaining individuals have been included in the “Average-in-region” category for that value.

*Insert Table 4 about here*

Table 4 presents the average EI value for the three categories of respondents. A t-test was performed to compare average EI for the more individualist and less individualist outliers with that of the average-in-region individuals. As shown on Table 4, all differences were significant<sup>5</sup>. Table 4 also reports the percentage of individuals in each group stating a high (low) entrepreneurial intention (i.e., an EI that is higher -lower- than one standard deviation above -below- the mean value). Those who are less individualist than the average exhibit significantly lower intention levels (H4b confirmed), and the opposite is true for more individualist outliers (H4a confirmed). In particular, a “more individualist outlier” in self-enhancement is clearly associated with a higher average EI. In this latter group, the percentage of individuals reporting high EI is over 26%. In contrast, the percentage of respondents with a low EI is substantially larger in the less individualist outliers group for both values (34.4% for self-enhancement and 36.6% for openness to change).

To summarise the results from Table 4, over a third of the less individualist outliers report low EI, and very few of them (less than 10%) report a high EI. In contrast, the effect of being a more individualist

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<sup>5</sup> Nevertheless, when a one-way ANOVA was performed, the difference between the EI of average-in-region and more individualist outliers for openness to change was not significant. This is in accordance with the lower regression coefficients and significance levels for openness to change values in Table 3.

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outlier is positively related to a larger proportion of individuals with a high EI (26.6% for self-enhancement and 21.2% for openness to change), but in this category we still find a discernible group of respondents with a low EI (15.4% for self-enhancement and 18.9% for openness to change).

**Discussion**

The results from this article show that individualist personal and cultural values are significant and important in the formation of EIs. But this article also advances knowledge in the field by helping understand possible mechanisms through which these values are related to the EI. Thus, culture may act through two different mechanisms. In the first place, the “personal values” effect (Davidsson, 1995) would make people in more individualist regions be more individualist themselves and, in turn, cause each of them to exhibit a higher EI. This is clearly consistent with Models 4 and 5, when regional and personal values are included together in the analysis.

However, the most important contribution of the article relates to the insight about the second transmission mechanism between culture and entrepreneurship. The results support that it is possible to move beyond the artificial separation of ‘context’ and ‘individual’ in entrepreneurship studies to

investigate the complex interweaving of individual and cultural levels that comprises entrepreneurial activity (Spedale and Watson, 2014). In particular, “more individualist outliers” (individuals with higher-than-average individualist values) present a higher EI, while “less individualist outliers” (lower-than-average individualist values) show a lower intention. In fact, when personal values are split up between the cultural value and the personal-regional difference, both elements are significantly related to the EI. Therefore, the existence of an intra-cultural variation in personal values may be an important element and deserves close attention (Fischer and Schwartz, 2011).

In comparing both individualist values, the results show that self-enhancement is more strongly related to the EI than is the case for openness to change. In the three instances (regional, personal and value-divergence variables), the coefficient for self-enhancement is higher and more significant. This indicates that, at least within the Spanish regions, entrepreneurship is seen as more connected to the fulfilment of power and achievement values, such as wealth, control over resources and social recognition. In contrast, the connection of self-direction and stimulation values to entrepreneurship is not so strong.

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Our study focuses on EIs, and “more individualist outliers” are found to present a higher level. Nevertheless, personal perceptions may also play a role in the intention-behaviour link. Thus, “more individualist outliers” may also perceive that there are more favourable alternative career options and, therefore, they will only start a venture if they find a highly profitable potential opportunity (opportunity-driven entrepreneurship). In turn, “less individualist outliers” would be less interested in entrepreneurship and may only start up if they are pushed by a negative work situation (i.e., unemployment). Thus, “less individualist outliers” could be an important source of necessity or push entrepreneurs.

An additional consideration is the existence of a possible compensating effect between the personal values and the cultural outlier effects of culture. That is, the more individualist a culture is, the higher the EI of its citizens will be. But, at the same time, there is less room for the existence of “more individualist outliers”. In contrast, in less individualist cultures, the average intention level will be lower, but there will be a potentially larger group of “more individualist outliers”. The existence, strength and consequences of this compensating effect deserve attention.

The significant results for regional cultural values in our study are even more important since we are carrying out the study in a single country, with a common economic and institutional framework. In this “controlled” environment, regional-value variables are found to be significant. These results confirm and help explain previous findings by Pinillos and Reyes (2011) and Liñán et al. (2013a) in cross-country analyses. Thus, in the case of developed countries with similar economic and institutional frameworks, a more individualist culture contributes to increasing the EI of the local population.

### *Implications*

The implications of these results spread out in several directions. In general, when designing initiatives to promote entrepreneurship, the need to consider the average regional level of individualism and the specific value level of the target group is advisable. The effectiveness of such measures and their impact on individuals will be different in each case. In particular, for entrepreneurship education, the need to consider value priorities becomes obvious. High self-enhancement or openness to change will be associated with an already high EI. This may be the case in elective entrepreneurship courses, or among nascent entrepreneurs contacting entrepreneurship centres. For these people, providing resources to

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facilitate the consolidation and implementation of this intention becomes more relevant. In this sense, the contact with role models from their same origin and other initiatives to develop support networks will probably be most effective.

In contrast, for less individualist participants (as may be the case with participants in compulsory entrepreneurship courses, or unemployed people participating in training programmes) the course would probably need to focus on developing self-efficacy and a more positive attitude towards entrepreneurship, since they are strong predictors of intention.

The present article may also help explain the contradictory findings of previous research. Samples with different characteristics will lead to diverging results. Even if the sample comes from the same country and ethnic group, the values of respondents may alter the outcomes from the analysis. In a simpler case, a sample of students in the same university, same age and specialising in the same subject (typically business) may yield substantially different results if a comparison is made between students taking/not taking an elective entrepreneurship course. The former will probably be relatively individualist (self-selection bias), while those not taking the course could be less so.

### *Future research lines*

In our analysis, averaged regional values are computed without a consideration of immigrants, since they come from an alien culture and may bias results. It would be interesting to consider the values of immigrants when compared to the host culture, and see the extent to which value congruence or divergence between both may affect the EI of these people. Initially we would expect that the local culture would have no effect on the immigrants' EI. They come from a different culture, with relatively few reference people among the native population. Besides, their access to the labour market is limited and restricted to relatively few occupations (Levie, 2007).

Similarly, those with self-employment experience were left out. The rationale for this decision is that they may have changed their personal values, motivations and intentions as a result of this experience.

But this is to be tested and, in this sense, longitudinal studies may be very helpful in explaining how values and motivations change throughout the process.

A number of additional avenues for future research are opened by this article. The conclusions derived from this study should be taken as exploratory until future research confirms or refutes them. In particular, diverse samples are needed, including groups of the population with a lower educational level.

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Cross-country analysis should serve to confirm the international applicability of these results. In this sense, since this study has been conducted in a developed country, a replication of this study in countries with different levels of development is needed (particularly in developing ones) before general applicability may be claimed.

*Limitations*

This article, as any research endeavour, suffers from a number of limitations. In the first place, an alternative operationalisation of the variables may be possible. There is no agreement between authors on whether individualism and collectivism are opposing poles of a single dimension (Hofstede et al., 2004; Pinillos and Reyes, 2011). We have only concentrated on the individualist values, but the consideration of collectivism may add to the analysis. Secondly, the sample is made up of adults having completed university education (alumni) and the results may not be the same if a different sample is used.

**Conclusion**

The article addresses a novel area of research in cognitive entrepreneurship; namely, the interplay between personal-level and cultural-level values in the formation of entrepreneurial intentions. As such, its exploratory character should be highlighted. Nevertheless, the results obtained show clear support for the relevance and potential usefulness of this research.

The first contribution of this article to the literature concerns the relativity of personal-level values; i.e., it is not only its absolute level that matters, but the comparison with values shared in the culture where this person is embedded. Thus, the relationship between individualist values and people's entrepreneurial intentions is not univocal, but changes with the characteristics of the environment. It is the congruence/divergence with the local culture which matters. Identical personal values may have a positive or negative relationship with entrepreneurial intention, depending on the social context in which the person is placed. Secondly, the article refines our understanding of the contribution of cultural values to entrepreneurial intention. The article finds support for the existence of two alternative transmission mechanisms: "personal values" and "cultural outlier" effects.

Much research is still needed to fully understand the person-context relation in the field of entrepreneurship. We trust that this article has made a small contribution to this wider aim.

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**Table 1:** Average values and per-capita income at the regional level

Region	N	Self-enhancement	Openness to Change	GDP per capita*
Andalusia	595	-.5881	.3558	75.5%
Castille-Leon	390	-.6419	.3167	99.6%
Catalonia	105	-.6234	.3616	117.3%
Valencia	463	-.5319	.3222	88.7%
Galicia	178	-.7943	.2779	88.2%
Madrid	161	-.7101	.4674	129.9%
Basque Country	177	-.8094	.2204	135.8%
<b>Total</b>	<b>2069</b>	<b>-.6336</b>	<b>.3316</b>	<b>100.0%</b>

*Note: Immigrants excluded.*

*\* The Spanish average in per-capita income = 100%*

**Table 2:** Descriptive statistics and correlations between the model variables

	Min.	Max.	Mean	S.D.	1	2	3	4	5	6
1. Entrepr. Intention	-1.71	2.04	.00	1.00	1					
2. Attitude to Entrepr.	-3.21	2.27	.00	1.00	.476***	1				
3. Subjective norm	-2.65	2.20	.00	1.00	.338***	.345***	1			
4. Perceiv. beh. control	-3.31	1.99	.00	1.00	.536***	.491***	.294***	1		
5. Openness to Chg.	-1.33	2.09	.332	.494	.176***	.329***	.074**	.141***	1	
6. Self-Enhancement	-3.31	2.13	-.634	.669	.242***	.036	-.083***	.213***	-.119***	1

Note: N=2069. TPB variables are standardised. † =  $p < 0.1$ , \* =  $p < 0.05$ , \*\* =  $p < 0.01$ , \*\*\* =  $p < 0.001$ .

**Table 3:** Linear regression models on entrepreneurial intention

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Variables	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
Age	-.088***	-.045*	-.031 <sup>†</sup>	-.009	-.008	-.009	-.009
Gender	.168***	.117***	.111***	.092***	.091***	.092***	.092***
Socioeconomic level	-.003	-.049**	-.044**	-.053**	-.053**	-.053**	-.053**
Labour Experience	.029	.002	.009	.005	.003	.005	.004
Family Role Model	.077***	.028 <sup>†</sup>	.018	.016	.018	.016	.017
Contact to Entrep. centre	.192***	.133***	.122***	.110***	.111***	.110***	.111***
Attitude to Entrepreneurship	---	.234***	.226***	.216***	.215***	.216***	.216***
Subjective Norm	---	.148***	.149***	.176***	.178***	.176***	.176***
PBC	---	.351***	.358***	.318***	.318***	.318***	.318***
GDP per capita	---	---	-.023	-.025	-.025	-.025	-.025
Regional Openness to Change.	---	---	.033 <sup>†</sup>	.027	.030 <sup>†</sup>	.034 <sup>†</sup>	.034*
Regional Self-Enhancement.	---	---	.057*	.038 <sup>†</sup>	.037 <sup>†</sup>	.061**	.060**
Personal Openness to Change	---	---	---	.057**	.022	---	---
Personal Self-Enhancement	---	---	---	.155***	.119***	---	---
Interaction Personal OtCh-SfEnh	---	---	---	---	.061*	---	---
Person-Region Diff Openness to Chg.	---	---	---	---	---	.056**	.043 <sup>†</sup>
Person-Region Diff Self-Enhancement	---	---	---	---	---	.154***	.140***
Interaction Per.-Reg. diff. OtCh-SfEnh	---	---	---	---	---	---	.023
$R^2$	.078	.401	.407	.429	.430	.429	.429
Adjusted $R^2$	.076	.398	.404	.425	.426	.425	.425
$\Delta R^2$	.078***	.322***	.007***	.021***	.001*	.021***	.000

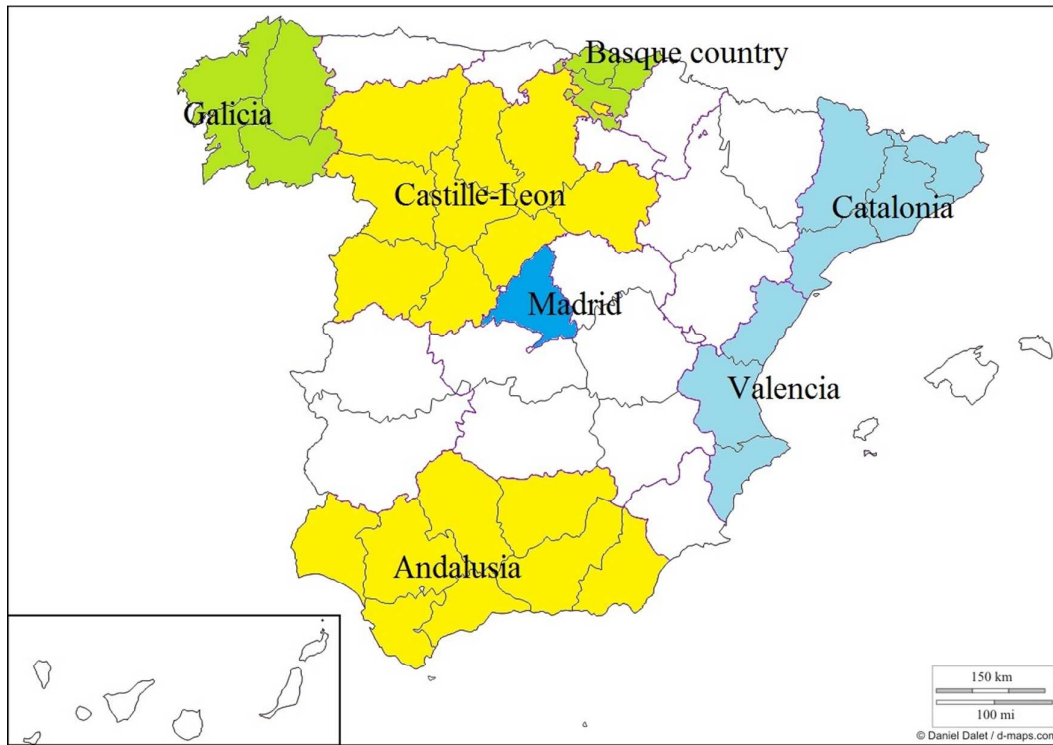
Note: N= 2069. Standardised coefficients reported: <sup>†</sup> =  $p < 0.1$ ; \* =  $p < 0.05$ ; \*\* =  $p < 0.01$ ; \*\*\* =  $p < 0.001$ .  $\Delta R^2$  for Models 4 and 6 based on Model 3

**Table 4. Entrepreneurial intention by level of value-congruence**

Openness to Change	N	Average EI	% High EI	% Low EI
More individualist outlier	286	.061**	21.2%**	18.9%†
Average in region	1463	-.067	15.7%	20.4%
Less individualist outlier	320	-.459***	5.3%***	36.6%***
Self-Enhancement	N	Average EI	% High EI	% Low EI
More individualist outlier	259	.244***	26.6%***	15.4%**
Average in region	1479	-.101	14.1%	21.3%
Less individualist outlier	331	-.429***	9.4%***	34.4%***

*Note: Significance levels refer to the comparison of each extreme group with the central category: † =  $p < 0.1$ . \* =  $p < 0.05$ . \*\* =  $p < 0.01$ . \*\*\* =  $p < 0.001$ .*

Figure 1. Culturally diverse regions in Spain.



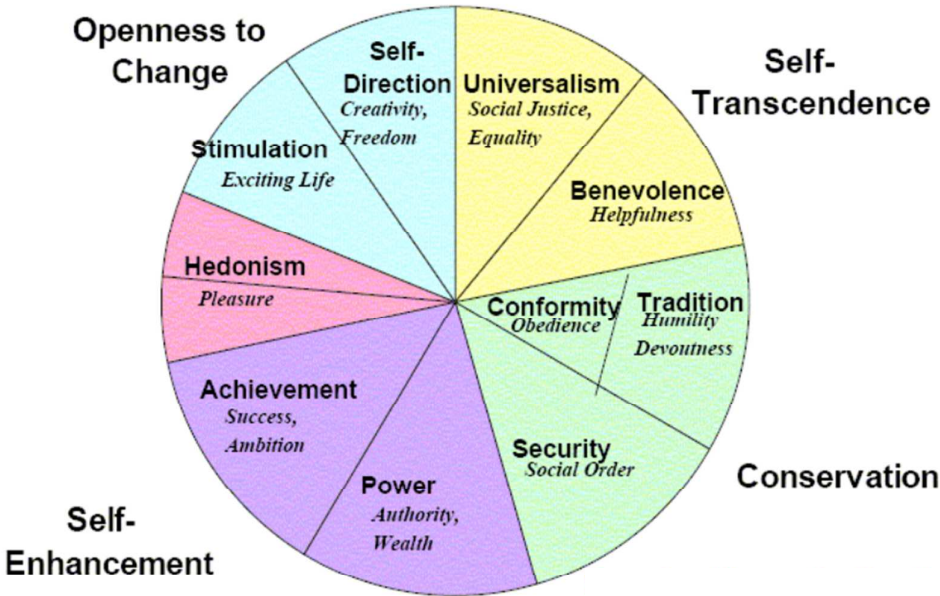


Figure 2. Personal Value Structure

Source: Schwartz (2006)