



The influence of collectivistic personal values on the formation of entrepreneurial intentions

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Abstract

This article analyses the specific role of collectivistic personal values as an antecedent of entrepreneurial intention. While previous studies have focused on individualistic values, the influence of collectivistic values has remained largely ignored. We study this influence on a sample of 413 university students from the United Kingdom and Spain. The results are consistent in both countries, suggesting that an emphasis on collectivistic personal values triggers an indirect, negative effect on entrepreneurial intentions through both personal attitude and perceived behavioural control. However, it also induces an indirect positive effect through subjective norms. The study indicates that not only individualistic values but the complete personal-value structure is influential in explaining the formation of entrepreneurial intentions.

Keywords

collectivistic values, entrepreneurial intention, personal values, structural equation modelling, theory of planned behaviour

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Introduction

In contemporary research, intention models have frequently been employed in entrepreneurship studies. Intention is considered as the most immediate and important variable for the prediction of the future behaviour of entrepreneurs (Adam and Fayolle, 2015). The literature on entrepreneurial intentions is extensive with multiple papers analysing entrepreneurial intention models (Liñán and Fayolle, 2015). However, much remains to be ascertained regarding the manner in which entrepreneurial intentions are formed. The contemporary literature (Liñán and Fayolle, 2015; Schlaegel and Koenig, 2014) has called for more empirical studies to provide an explanatory understanding of the underlying mechanisms within the entrepreneurial process.

Personal values represent potentially relevant variables in this respect (Morales et al., 2019); within psychology research, they are important in explaining human actions (Bardi and Schwartz, 2003). These values have been regarded as one of the most significant drivers in guiding intentions and subsequent behaviour (Herek, 1986; Maio et al., 2001; Murray et al., 1996). According to Fayolle et al. (2014), personal values play a major role in entrepreneurship. In particular, much research has studied the individualistic personal values of entrepreneurs, by focusing on the consequences of entrepreneurial success, competitiveness, innovation and efficiency (Birch, 1981; Birch and MacCracken, 1983; Hayton et al., 2002; Peterson, 1988; Reynolds and Freeman, 1986; Wagner and Moch, 1986).

Yet, individuals may stress the importance of a variety of basic values (Schwartz, 1992). Despite the main interests in individualistic values of entrepreneurship researchers (Morales et al., 2019), collectivistic values are also important as motivational goals and guiding principles for individuals. In this respect, a specific research theme has focused on the moral responsibility and ethical behaviour of entrepreneurs (Amable, 2010; Anderson and Smith, 2007; Brenkert, 2009; Harris et al., 2009; Scharff, 2016). It is argued that an emphasis on collectivistic values may see the entrepreneur influencing moral and ethical norms in new situations and contexts (Kaptein, 2017). This implies a greater consideration of the consequences for others, both for those in close relationships and for society in general. In this vein, collectivistic values can encourage entrepreneurs to infuse their ventures with an element of sustainability, solidarity, business ethics, corporate social responsibility, gender equality and loyalty, among other factors (Barnett and Karson, 1987; Costa et al., 2001; Hemingway, 2005; Shephard, 2008). Thus, the collectivistic values of potential entrepreneurs are important for the definition of their identity as entrepreneurs and, consequently, their intention to start a venture. Nevertheless, there is still a paucity of research on how personal values, in general, influence the decision-making processes of potential entrepreneurs. One of the few studies carried out in this field is that of Yang et al. (2015), though their focus was solely on the influence of personal values on personal attitudes (PAs).

In this study, the role of collectivistic personal values in the formation of the entrepreneurial intention is investigated. According to Ajzen's (1991) theory of planned behaviour (TPB), entrepreneurial intention is developed from three motivational antecedents. The influence of the collectivistic personal values on all three antecedents – PA, subjective norms (SNs), and perceived behavioural control (PBC) – is analysed. Empirical analysis was conducted in two regions, from different countries (the United Kingdom and Spain), with these being clearly different in terms of history and culture. Nonetheless, they are both large, developed economies, exhibiting similar entrepreneurship rates. In 2017, 9.3% of the working-age population in the United Kingdom was expected to start a business within the next three years (Hart et al., 2018). Despite the rate in Spain being lower, at 6.8% (Peña et al., 2018), the two economies have relatively high rates of potential entrepreneurship, suggesting that creating a business is considered a valued career option. Furthermore, the two countries share similar characteristics in that they both enjoy innovation-driven and mature economies (Liñán et al., 2013). These economies are shifting towards the

service sector and catering for an increasingly more affluent population. As noted by Bosma et al. (2008), they are both focused on knowledge generation and the development of innovative, opportunity-seeking entrepreneurial activity.

Following this introduction, the article proceeds as follows. First, the theoretical framework is presented, and our hypotheses regarding how collectivistic values affect the formation of the entrepreneurial intention are developed. The methodology and results are presented in the subsequent sections, with the article finishing with the discussion and conclusion sections, wherein a reflection upon these results is included.

Theoretical framework

Collectivistic personal values and the entrepreneurial intention

This article is based on an integration of values and intention theories. The Theory of Human Values, developed by Schwartz (1992), stresses the importance of personal values in affecting decision and action. Values are defined as desirable goals serving as guiding principles in life (Schwartz, 1992; Schwartz and Bardi, 2001). These personal values orient decision-making and boost value-congruent behaviour (Bardi and Schwartz, 2003; De Dreu and Nauta, 2009; Schwartz, 2010, 2012). In this theory, it is assumed that values tend to be relatively stable over time (Bardi et al., 2009), and therefore, exert a long-lasting effect on motivation and intention (Morales et al., 2019; Yang et al., 2015).

Widely used in the taxonomies of values found in the literature, Schwartz’s theory is deemed the most well developed (Yang et al., 2015). Schwartz’s (1994) value theory is based on a circular structure made up of 10 different basic values: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, conformity, tradition and security. These basic values may be grouped into four dimensions: self-enhancement, openness to change, self-transcendence and conservation. The first two value-dimensions are more closely related to an individualistic orientation (Konsky et al., 2000). That is, they tend to be accentuated by individuals who consider themselves more as unique human beings deserving attention and satisfaction. In contrast, conservation and self-transcendence are associated with a less individualistic or more collectivistic orientation

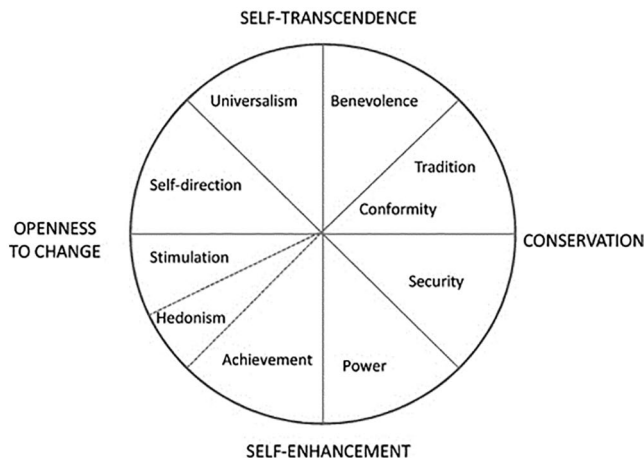


Figure 1. The theory of basic human values.
Source: Based on Schwartz (1992, 1994).

(Konsky et al., 2000). These tend to be emphasised by people who largely consider themselves as part of a group. A graphic representation of this theory is presented in Figure 1.

This research is focused on those collectivistic values included in the conservation and self-transcendence dimensions. As such, we analyse the role of conformity, tradition and security (conservation), universalism and benevolence (self-transcendence). The conservation dimension underlines order, self-restriction, preservation of the past and resistance to change. In turn, the self-transcendence dimension captures the values that emphasise concern for the welfare and interests of others (Schwartz, 2012).

Finally, these collectivistic values are linked to entrepreneurial intention. Since intentions are central to the entrepreneurship process, they represent the first step in a succession of decisions and actions leading to becoming an entrepreneur (Bird, 1988; Kautonen et al., 2015), so an entrepreneurial intention model is applied. Intentions depict the transformation of beliefs, perceptions and other exogenous factors into the outcome that immediately precedes the action itself (Ajzen, 2001). In short, intentions represent the most accurate proxy for the corresponding behaviour (Fayolle et al., 2014; Fishbein and Ajzen, 1975; Liñán and Chen, 2009; Miller et al., 2009; Schwarz et al., 2009).

TPB, in particular, is the most commonly used framework in entrepreneurship research (Schlaegel and Koenig, 2014). It explains the intention to enact a behaviour as a result of the following three antecedents: PA towards this act, SNs and PBC. First, PA refers to the degree to which a person has a positive or negative evaluation, or appraisal, of entrepreneurial behaviour (Ajzen, 1991). Second, SNs denote the support expected from the people of reference (family, friends and so forth) if the individual decides to perform this behaviour, and third, PBC indicates the perceived ease or difficulty in undertaking entrepreneurial action. More positive perceptions of these antecedents lead to a higher level of entrepreneurial intentions (Lee et al., 2011). Accordingly, TPB is the second pillar upon which our theoretical framework is built. According to TPB, other cognitive-level variables should affect intention indirectly, through its antecedents (Krueger, 2007). Personal values represent an example of such an indirect influence and, in particular, our focus centres on the values within the conservation and self-transcendence dimension.

The conservation dimension

The conservation dimension, proposed by Schwartz (1992), accentuates the personal values of tradition, conformity and security; individuals that emphasise these values tend to avoid situations of uncertainty and change. It could be argued that these individuals have a deeply rooted socio-cultural orientation (Yang et al., 2015), tending to subordinate their own personal interests in favour of socially imposed expectations. Individuals prioritising the personal value of tradition attach high importance to respect, commitment and acceptance of customs related to culture or religion (Schwartz and Boehnke, 2004). Similarly, the assertion of conformity entails maintaining control over actions, inclinations and impulses that impose upon others. Violation of social norms or expectations is also avoided (Schwartz and Boehnke, 2004). In addition, the personal value of security implies the avoidance of risky situations or of those implying uncertainty and change in the close environment (Yang et al., 2015). The entrepreneur is identified with continuously challenging the status quo (Shane and Venkataraman, 2000) and the rupture of social expectations (De Clercq and Voronov, 2009). Such individuals fail to accord with the values of the conservation dimension. Likewise, individuals who emphasise the conservation dimension are reluctant to perform actions that imply breaking with customs and tradition (Yang et al., 2015). Therefore, this information indicates that individuals highlighting conservation values might exhibit an unfavourable PA towards entrepreneurship. Thus, the following hypothesis can be established:

H1a. Individuals accentuating conservation values (conformity, tradition and security) will exhibit a less favourable PA towards entrepreneurship.

Individuals who emphasise the conservation dimension attach great importance to the opinion of key referents (parents, teachers, friends, etc.) and to the surrounding environment (religion, customs, traditions and so forth; Schwartz and Boehnke, 2004). Hockerts (2017) affirms that a feeling of belonging to this close environment generates expectations of a relationship of reciprocity. As such, among the members of the closest groups and significant members therein, a ‘moral obligation’ of loyalty and support for group decisions is evident (Mair and Noboa, 2006). Therefore, just as individuals feel compelled to support the other members of their closest group of referents, so they would expect mutual support for their decisions. In this way, this ‘moral obligation’ of loyalty and reciprocity with close referent people would cause individuals to expect support when they decide to create a firm. Thus, we propose the following hypothesis:

H1b. Individuals accentuating conservation values (conformity, tradition and security) will exhibit more positive SNs regarding entrepreneurship.

Generally, individuals take one of two approaches to their decision-making process (Crowe and Higgins, 1997), by adopting one of the following regulatory foci: promotion or prevention. On the one hand, under a promotion regulatory focus, the individual is concerned with the advancement, growth, accomplishments, hopes and aspirations that can be attained by performing a given behaviour. On the other, the prevention regulatory focus is concerned with safety, responsibilities and obligations, in an effort to avert negative and/or uncertain outcomes.

For the individual prioritising the conservation dimension, it is harmony and stability of society, relationships and of the self that constitute crucial factors (Schwartz, 1994). In this respect, security is associated with an emphasis on ‘avoiding risky situations’ and ‘avoiding everything that might go wrong’. Furthermore, tradition and conformity imply respect for traditions and social norms (Schwartz, 1994). The perspective of creating a venture means making decisions and behaving in ways that break with traditions and social norms. Thus, for people who accentuate conservation values the process of business creation is a potential source of ‘social sanction’. Individuals accentuating the conservation dimension are likely to follow a prevention regulatory focus rather than one of promotion. Consequently, they should be more conscious regarding the inherent difficulties that starting up a company involves (Brockner et al., 2004; Higgins, 1998). These individuals are more likely to see new venture creation as a difficult and complex process. Accordingly, individuals emphasising conservation values may feel less capable of successfully starting up a firm. These arguments lead us to propose the following hypothesis:

H1c. Individuals accentuating conservation values (conformity, tradition and security) will exhibit a less favourable PBC.

The self-transcendence dimension

The dimension of self-transcendence encompasses the personal values of benevolence and universalism (Schwartz, 1992). Accentuating the benevolence value indicates that an individual tries to help other members of the closest group (relatives, ethnic group, close friends and so on) and contributes to the welfare within the family and other primary groups (Schwartz, 2012). Subjects highlighting the personal value of universalism stress the importance of tolerance, social justice and equality (Schwartz, 1992). Notwithstanding, entrepreneurship is strongly characterised by an

'egoistic passion' (Locke and Baum, 2007), which opposes the spirit of altruism, respect, tolerance and the protection of the welfare of others (Hirschi and Fischer, 2013).¹ Self-transcendent individuals are expected to appreciate the contribution to general social well-being as a major element valuing the rewards of time spent with their family and significant others (Schwartz, 1992). In contrast, starting a new venture implies a high commitment in terms of effort, resources and time; so, for those emphasising the self-transcendence value dimension, entrepreneurship represents a large opportunity cost (Yang et al., 2015). These individuals may have a less favourable PA towards entrepreneurship; accordingly, the following hypothesis is proposed:

H2a. Individuals accentuating self-transcendence values (benevolence and universalism) will exhibit a less favourable PA towards entrepreneurship.

Regarding the SNs, self-transcendent individuals considering the possibility of creating a new venture have, among other motivations, the notion of helping others, both within the closest group (benevolence) and in broader society (universalism) (Schwartz, 1992). For this reason, individuals considering new venture creation as a way to help others expect those around them to share that vision of entrepreneurship. As such, these potential entrepreneurs expect support from those who benefit from the success of the new firm. Accordingly, the following hypothesis is proposed:

H2b. Individuals accentuating self-transcendence values (benevolence and universalism) will exhibit more positive SNs regarding entrepreneurship.

Finally, stressing self-transcendental personal values implies recognition of the importance of contributing positively to the improvement of the close environment (Holland and Shepherd, 2013). This concern, regarding improving the environment and helping others, might generate a burden in the form of greater responsibility. These individuals should be more aware of the possible effects of their behaviour on those close to them, on society in general and on the natural environment. This represents additional variables for consideration in the eventual process of venture creation. By taking these variables into account, the business venture process represents a more complex and difficult target to achieve as such, the individual might perceive a lower level of behavioural control. Accordingly, the following hypothesis is formulated:

H2c. Individuals accentuating self-transcendence values (benevolence and universalism) will exhibit a less favourable PBC.

Research model

Figure 2 presents an overview of our research model and the proposed hypotheses. This represents our conceptual framework in which the motivational antecedents mediate the relationship of the conservation and self-transcendence dimension values, on the one hand, and the entrepreneurial intention, on the other.

Methodology

Sample

This study is based on survey data collected in two different regions: Hampshire in the United Kingdom and Catalonia in Spain; the two regions share similar economic and social conditions. In the United Kingdom, the data come from a local university in the county of Hampshire, while in

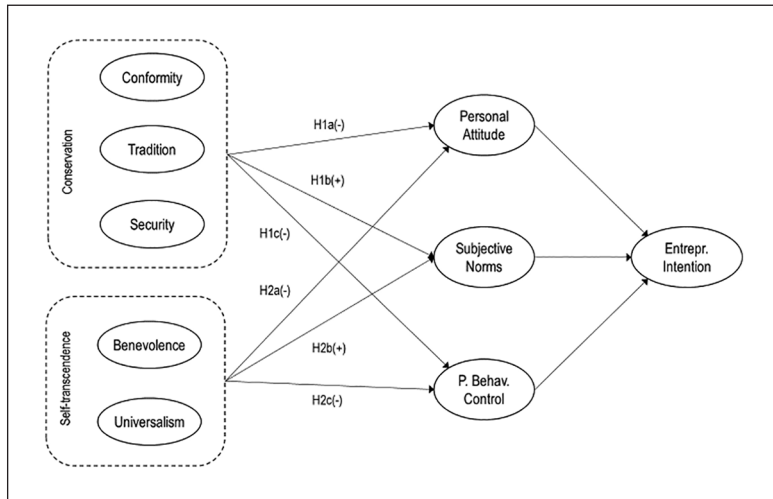


Figure 2. Collectivistic personal values in the formation of entrepreneurial intentions.

Table 1. Descriptive analysis.

Descriptive statistics	UK (N=200)		Spain (N=213)		Both (N=413)	
	Mean	SD	Mean	SD	Mean	SD
Age (years)	25.70	4.081	26.89	3.957	26.32	4.056
Gender: female=0; male=1	0.49	0.501	0.43	0.497	0.46	0.499
Entrepreneurship centre (yes=1; no=0)	0.08	0.264	0.12	0.327	0.10	0.299
Ever self-employed? (yes=1; no=0)	0.29	0.453	0.14	0.353	0.21	0.410
Schooling level of the father ^a	3.07	0.980	2.54	1.304	2.80	1.186
Schooling level of the mother ^a	3.04	1.002	2.62	1.303	2.82	1.183
Family entrepreneur (yes=1; no=0)	0.65	0.480	0.62	0.486	0.63	0.483
Socio-economic group ^b	2.85	0.825	2.99	0.682	2.92	0.756

SD: standard deviation.

^a 1 = primary education, 2 = secondary education, 3 = vocational training, 4 = university, 5 = other.

^b 1 = lower, 2 = lower-middle, 3 = middle, 4 = upper-middle, 5 = upper.

the Spanish subsample, it originates from several universities in the Catalonian region. Information of a more descriptive nature is presented in Table 1.

Given that young adults in the 25- to 35-year age range with a higher level of education consistently exhibit the highest entrepreneurship participation rates (Singer et al., 2018), university students constitute our sample. Trained to experiment with their ideas in real-life situations, students learn and adapt them as they leverage who and what they know to create valuable opportunities (Singer et al., 2018). Questionnaires were distributed to students who attended business-related courses, the British and Spanish samples presented similar characteristics. The target sample was made up of students enrolled in undergraduate and master programmes, with an initial of 479 responses obtained. There were 61 respondents above the age of 35, with these cases removed from the analysis due to their motivations and experience likely differing from those in the younger, target group. In addition, five questionnaires were excluded due to their high level of missing data.

The final sample included 413 usable questionnaires with 200 questionnaires collected in the United Kingdom and 213 obtained from Spain.

As shown in Table 1, the general characteristics of the two subsamples were similar. The most notable differences related to the self-employment experience, which was substantially higher for the UK respondents (29% of UK respondents had this experience vs 14% in Spain). In the same vein, the UK respondents reported a slightly higher educational level than their parents. With regard to parents with university qualifications, the percentage was similar (approximately 30%) in the two subsamples. In Spain, it was more common that parents were found to have only primary education (around 30% of the respondents, whereas the corresponding percentage was less than 5% in the United Kingdom), with the same trend regarding secondary studies or vocational training (only 16%–19% of respondents in Spain reported a parent in one of these categories vs 25%–30% for their UK counterparts).

Measures

The dependent variable is the entrepreneurial intention, which was measured through the well-established Entrepreneurial Intention Questionnaire (EIQ; Liñán and Chen, 2009; Liñán et al., 2016). The scale was made up of five statements, with the response range varying from 0 to 6, where 0 meant ‘Totally disagree’, while 6 signified ‘Totally agree’. As an example, one item was ‘I am willing to make any effort to become an entrepreneur’. One item was intentionally reversed to prevent acquiescence bias.

The EIQ was also employed to measure the TPB antecedent variables: PA, SNs and PBC. Likert-type scales with a response range of 0 to 6 were also applied here, where 0 was ‘not at all desirable’ or ‘totally disagree’ and 6 indicated ‘totally desirable’ or ‘totally agree’. For the PA, both the desirability of six specific outcomes and the expectation that these outcomes could be met through entrepreneurship were assessed. Example items for these outcomes include ‘starting a new business would involve being creative and innovative’ and ‘to what extent is being creative and innovative desirable for you in general?’ These responses were then multiplied to obtain a valuation of entrepreneurship.

Similarly, the SNs measure was obtained by multiplying the expected support from significant referent people (immediate family, close friends and colleagues) by the motivation to comply with their opinions. Example items for this scale include ‘to what extent would your close friends agree if you decided to start a venture?’ and ‘how do you value the opinion of your close friends in this regard?’ In the case of PBC, a Likert-type scale with six statements was used, with responses ranging from 0 (‘totally ineffective’) to 6 (‘fully effective’). An example item for this scale would be ‘to what extent would you be able to effectively negotiate and maintain favourable relationships with potential investors and banks?’

Personal values were measured using Schwartz’s Portrait Value Questionnaire (PVQ) (Schwartz et al., 2001). The PVQ measures value priorities and is a scale that comprises 40 statements. The statements describe a person and ask the respondent to state the extent to which that person is similar to her or him. The response range varies from 0 (‘not at all like me’) to 5 (‘very much like me’). An example of these items is, ‘Forgiving people who have hurt her or him is important to her or him. (S)he tries to see what is good in them and not to hold a grudge’. The PVQ measures all 10 personal values as proposed by Schwartz (1992). Specifically, a total of 23 items correspond to the formation of the collectivistic personal values composing the self-transcendence and conservation dimensions and are grouped as follows: conformity (four items), tradition (four items), security (five items), benevolence (four items) and universalism (six items).

Two dummy variables were included. The country dummy was coded as 1 for respondents in the United Kingdom and 0 for those in Spain. This variable would control for any possible country differences in the level of any of the study variables. The level of individualism was also controlled for since the overall Schwartz value structure includes individualistic values, together with collectivistic values (Schwartz, 1992, 1994, 2010, 2012). To compute this variable, the mean of all individualistic values was first calculated for each respondent, with this new variable then dichotomised as either 1 (for respondents with individualism levels higher than the mean) or 0 (for respondents with individualism levels lower than or equal to the mean).

Despite the indication by Maxwell and Delaney (1993) that dichotomising continuous variables may be problematic, dichotomisation is carried out here for the individualism variable, given the existence of collinearity. Schwartz et al. (2012) reported the existence of frequent problems of high correlation and multicollinearity between the 10 basic values, particularly when a majority thereof is included together in the analysis. As explained by Falk and Miller (1992), multicollinearity in structural equation modelling is likely to lead to changes in the sign of coefficients, and to a reduction in significance levels.²

In addition, age (in years) and gender (1=man; 0=woman) were included as the controls on the TPB antecedents and the entrepreneurial intention. Both age (Bönte et al., 2009; Thorgren et al., 2016) and gender (Hechavarría et al., 2017; Klyver et al., 2013; Murnieks et al., 2020; Shinnar et al., 2012, 2018) have been demonstrated as being substantial predictors of entrepreneurial intent and action, particularly in the student samples (Shirokova et al., 2016; Sieger and Monsen, 2015).

Data analysis

Structural equation modelling (SEM) was employed to test the hypotheses. This modelling enables the simultaneous examination of the relationships between measured variables and latent variables (Gefen et al., 2000; Hair et al., 2017), and is most suitable when our model specification includes several dependent and exogenous variables, implying the need to estimate several regression equations simultaneously (Hair et al., 2017). More specifically, a partial least squares SEM (PLS-SEM or PLS path modelling) was applied. When the aim involves the development of new theories and exploratory research, then this statistical technique is more suitable than covariance-based SEM techniques (such as 'Linear Structural Relations' (LISREL; Gefen et al., 2000; Hair et al., 2017)). As indicated by Sánchez-Franco and Roldán (2005), PLS analysis provides results for both the measurement model (reliability and validity of indicators) and the structural model (hypothesised relationships). SmartPLS (v. 3.2.6) software was applied in the analysis.

Results

Measurement model

The proposed model (Figure 2) was run for the full sample, including the country and individualism control variables, with the results presented in Figure 3. The PA construct was defined as formative, since the specific motivations to become an entrepreneur had not to correlate with each other, and the aggregate attitude was formed as the summative evaluation of each of the motives (Hair et al., 2017). All the remaining constructs were measured as reflective, and in the case of the formative construct, meaningful and significant weights indicated sufficient reliability.

The measurement model was verified for the full sample following the standard practice in the field (Hair et al., 2017). The reversed item in the entrepreneurial intention scale was dropped due to its low loading. Similarly, the second item (pa2) in the PA construct was eliminated, since the

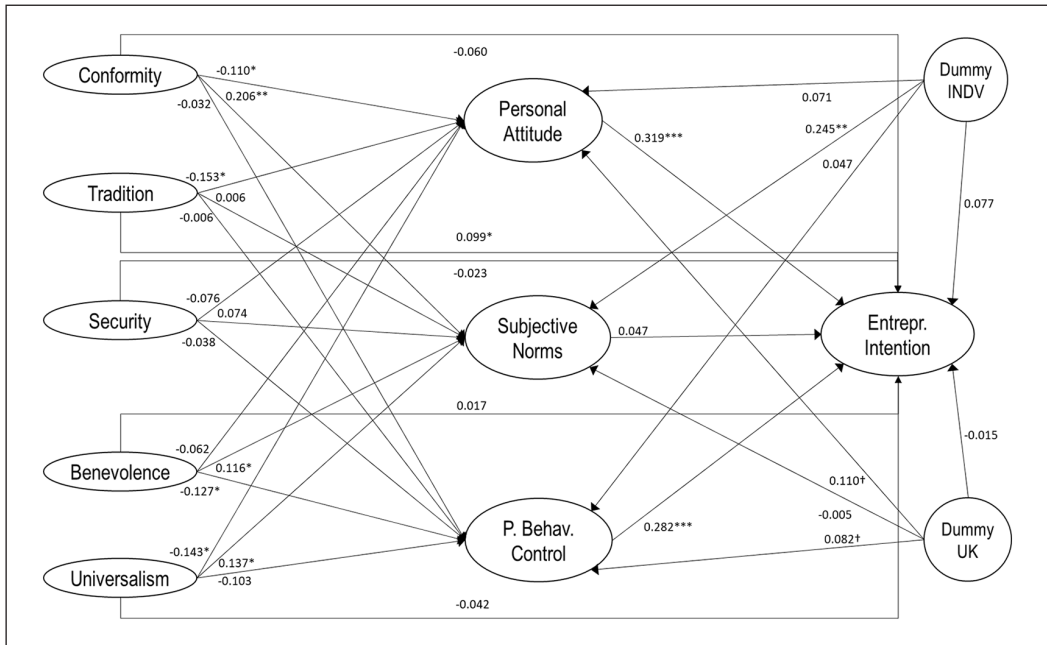


Figure 3. Results of the structural model with both individualism and country dummies. Significance levels: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

weight was negative and non-significant. The detailed results for the measurement model are reported in Table 3 in Appendix. All the indicators in the remaining reflective constructs had loadings above the usual 0.7 threshold. In addition, reliability was satisfactory (both Cronbach's alpha and composite reliability were above 0.7), as was construct validity (average variance extracted (AVE), above 0.5). Discriminant validity was assessed through both the Fornell–Larcker criterion and the heterotrait–monotrait ratio, and was satisfactory for all the indicators in each construct.

Structural model

Once measurement validity was confirmed, the results from the structural model were analysed in order to test our hypotheses. Table 2 presents the path coefficients and significance levels for the full sample, and for each of the national subsamples. Table 4 in Appendix reports the descriptive statistics and correlations between the latent variables in the model, and in this respect, the mean entrepreneurial intention in our sample is 3.33 (on a scale from 0 to 6), meaning the respondents report a slightly positive intention level (the mean is above the mid-point 3 in the scale).

In addition, each of our country subsamples has been compared with several related measures in order to crosscheck its representativeness. In particular, the GUESSS survey reports entrepreneurial intention levels for samples of university students in different countries (Sieger et al., 2018). The levels for England (although not the United Kingdom) and Spain are 2.21 and 2.51, respectively.³ These levels are lower than those in our sample (3.56 and 3.13, respectively), but this may possibly be explained by the higher mean age of the GUESSS respondents (37.0 and 28.7 years, respectively, compared with that of approximately 26 years in our sample).

The model in Figure 3 includes the two dummy variables. The UK respondents exhibit PA and PBC that are marginally more positive than is the case for their Spanish counterparts. As per the

Table 2. Path coefficients for the multigroup analysis.

	Full sample		SPAIN		UK		SPAIN-UK
	Path coeff.	SD	Path coeff.	SD	Path coeff.	SD	Path difference
D.INDIV → PA	0.077	0.072	-0.040	0.112	0.219*	0.101	0.259*
D.INDIV → SNs	0.244**	0.073	0.137	0.104	0.356***	0.096	0.220†
D.INDIV → PBC	0.054	0.079	-0.169	0.114	0.250*	0.100	0.418**
D.INDIV → EI	0.076	0.060	0.046	0.088	0.054	0.083	0.007
Conformity → PA	-0.111*	0.056	-0.093	0.100	-0.111	0.087	0.018
Conformity → SNs	0.206**	0.070	0.092	0.100	0.341***	0.097	0.249*
Conformity → PBC	-0.034	0.057	-0.061	0.091	0.006	0.082	0.067
Conformity → EI	-0.060	0.054	0.016	0.070	-0.110	0.083	0.126
Tradition → PA	-0.163**	0.061	-0.150	0.104	-0.094	0.089	0.056
Tradition → SNs	0.006	0.055	-0.034	0.084	0.082	0.078	0.116
Tradition → PBC	-0.016	0.060	-0.065	0.081	0.087	0.083	0.153†
Tradition → EI	0.100*	0.044	0.047	0.059	0.145*	0.066	0.099
Security → PA	-0.056	0.062	-0.136	0.096	-0.021	0.090	0.115
Security → SNs	0.073	0.062	0.017	0.086	0.169†	0.090	0.152
Security → PBC	-0.026	0.066	-0.090	0.098	0.000	0.087	0.090
Security → EI	-0.027	0.047	-0.041	0.070	-0.020	0.066	0.021
Benev. → PA	-0.082	0.056	-0.085	0.092	-0.062	0.076	0.022
Benev. → SNs	0.116*	0.053	0.103	0.078	0.127†	0.073	0.024
Benev. → PBC	-0.138*	0.064	-0.211*	0.094	-0.026	0.073	0.185†
Benev. → EI	0.021	0.049	0.058	0.066	-0.012	0.066	0.070
Univers. → PA	-0.167**	0.064	-0.230*	0.104	-0.062	0.089	0.167
Univers. → SNs	0.138*	0.069	0.053	0.095	0.229*	0.095	0.176†
Univers. → PBC	-0.115†	0.063	-0.230*	0.092	0.023	0.077	0.253**
Univers. → EI	-0.037	0.052	-0.066	0.081	-0.024	0.066	0.042
PA → EI	0.320***	0.052	0.350***	0.086	0.331***	0.070	0.019
SNs → EI	0.046	0.043	0.055	0.069	0.039	0.059	0.016
PBC → EI	0.282***	0.050	0.248**	0.074	0.332***	0.067	0.084

SD: standard deviation; PA: personal attitude; SNs: subjective norms; PBC: perceived behavioural control. Significance levels: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

other control variables, age is also positively related to PA and PBC. Meanwhile, gender is marginally significantly related to SNs and EI, and men, in particular, exhibit marginally higher intentions, whereas women expect to receive stronger support from referent others. The results for the individualistic-value dummy show that individualism is positively related to SNs. This means that respondents who accentuate individualistic values tend to expect stronger support from their people of reference. The relationships to PA, PBC and EI are also positive, but not significant, and once the level of individualism is controlled for, the distinctive influence of collectivistic values can then be analysed.

Regarding the values in the conservation dimension, negative relationships with PA (H1a) and PBC (H1c) were expected. In the first case, the path coefficients were negative for all three values, of which two were significant (conformity-PA = -0.110, $p < 0.05$; tradition-PA = -0.153, $p < 0.05$), while the third value is not significant (security-PA = -0.076). Thus, partial support for H1a was found. Regarding PBC, the coefficients were negative for all three values, although not significant. Therefore, no support was found for H1c. Finally, regarding H1b (the relationship of conservation

values with SNs), Figure 3 provided some weak support for this hypothesis, since the conformity-SN coefficient was positive and significant (0.206, $p < 0.01$), while the security-SN (0.074) and the tradition-SN (0.006) were positive but not significant.

With the focus on H2, regarding self-transcendence values and intention antecedents, clear support for hypotheses H2b was found, since both benevolence-SN (0.116, $p < 0.05$) and universalism-SN (0.137, $p < 0.05$) were positive and significant, as expected. The negative relationships from benevolence and universalism to PA (H2a) and PBC (H2c) were also partially supported. In the case of PA, both path coefficients were negative, although only one was significant (benevolence-PA = -0.062; not significant; universalism-PA = -0.143; $p < 0.05$). For PBC, both coefficients were again negative, but only one was significant (benevolence-PBC = -0.127; $p < 0.05$; universalism-PBC = -0.103; not significant). Hence, overall, partial support was found for H2a and H2c.

Figure 3 also shows the path coefficients from the antecedents of intention to the entrepreneurial intention itself. As may be seen, they are fairly robust, with PA and PBC exhibiting positive and significant relationships of a similar size, while for SNs the relationship (although positive) is non-significant. These results are consistent with previous studies (Autio et al., 2001; Krueger et al., 2000; Liñán and Chen, 2009).

Multigroup analysis

Finally, as a robustness check, a multigroup analysis was performed in order to compare the path coefficients for the Spanish and the UK subsamples. To this end, the country dummy had to be dropped. The individualist dummy variable was maintained as a control, as were age and gender. The results for the full sample are presented in Figure 4, while the correlations between the latent variables are included in Tables 5 and 6 in Appendix. As may be easily observed, these results are essentially the same as in Figure 3, with the only notable difference found in the path coefficient from universalism to PBC, which is now marginally significant ($\beta = -0.115$, $p < 0.1$). For the sake of simplicity, the coefficients for age and gender are not shown, although they remain the same as in the previous model.

The path coefficients and significance levels for the multigroup analysis are presented in Table 2. Only four paths are significantly different in each sample, and in four other paths the difference is marginally significant. The effect of individualism on the TPB antecedents is stronger in the United Kingdom for PBC ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.418$; $p < 0.01$), for PA ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.259$, $p < 0.05$), and marginally for SNs ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.220$, $p < 0.1$). Clearly, higher individualistic personal values are associated with more positive antecedents of intention in the United Kingdom, but not with those in Spain.

When the focus is placed on the hypothesised relationships, the differences can be observed as concentrated on the relationship between certain collectivistic values and both SNs and PBC. In the case of SNs, the path from conformity is more positive ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.249$; $p < 0.05$) in the United Kingdom, as is marginally so for universalism ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.176$; $p < 0.1$). In turn, in the case of PBC, the path from universalism is negative in Spain but positive in the United Kingdom ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.253$; $p < 0.05$). There are also marginally significant differences for tradition-PBC ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.153$; $p < 0.1$) and benevolence-PBC ($|\beta_{\text{Spain}} - \beta_{\text{UK}}| = 0.185$; $p < 0.1$). Overall, the interpretation of these differences is that collectivistic values are more strongly related to higher SNs in the UK, whereas in Spain, they are more closely related to lower PBC (in particular, the self-transcendence values).

In each subsample, the results are consistent with the full model presented in section 'Structural model' above, although fewer path coefficients are significant, which is probably due to the smaller

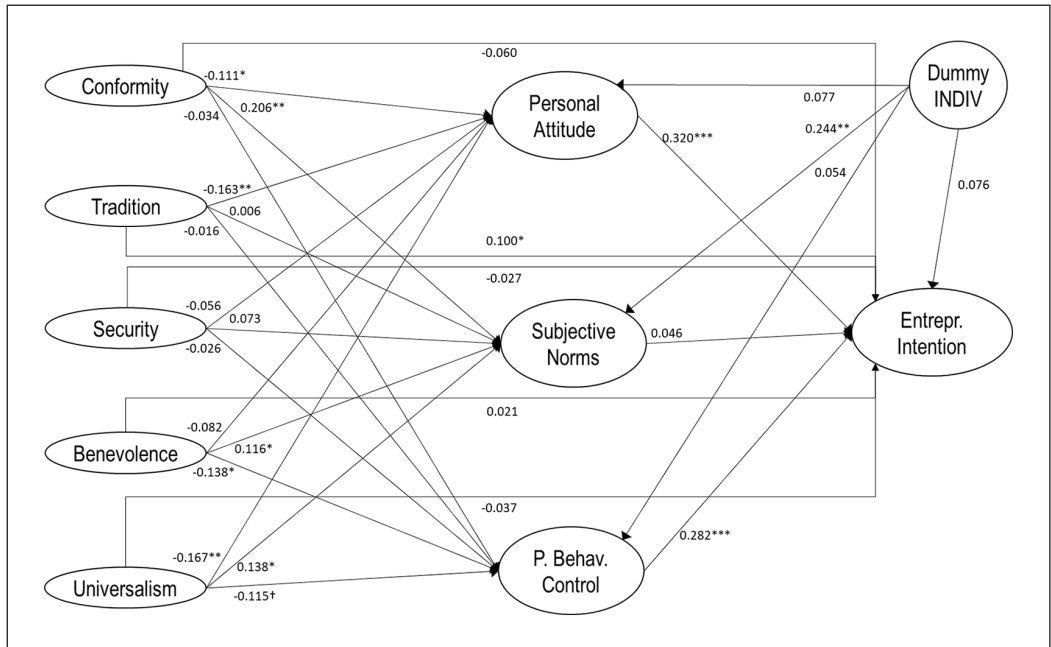


Figure 4. Results of the structural model with individualism dummy. Significance levels: † $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

sample sizes. The first set of hypotheses relates to conservation values (conformity, tradition and security) and their relationship with TPB antecedents. In the case of H1a, all the coefficients are negative, as expected, but none are significant. For H1b, five out of six coefficients are positive, as expected (the exception being tradition- $SN_{Spain} = -0.034$, not significant) and, in the UK sample, two of the coefficients are either significant (conformity- $SN_{UK} = 0.341$, $p < 0.001$) or marginally so (security- $SN_{UK} = 0.169$, $p < 0.1$). As per H1c, the three path coefficients for Spain are negative, while the coefficients for the United Kingdom are positive, although none are significant.

The second set of hypotheses concerns the influence of self-transcendence values (benevolence and universalism) on the TPB antecedents. Regarding PA (H2a), the coefficients are negative for both personal values in both subsamples, but only one coefficient is significant (universalism- $PA_{Spain} = -0.230$, $p < 0.05$). In the case of PBC (H2c), the coefficients are negative and significant for the Spanish subsample (benevolence- $PBC_{Spain} = -0.211$, $p < 0.05$; universalism- $PBC_{Spain} = -0.230$, $p < 0.05$), but they are non-significant for the UK subsample. Finally, with respect to H2b, the coefficients are positive in both subsamples, though only significant for the United Kingdom. The path from benevolence is marginally significant (benevolence- $SN_{UK} = 0.127$, $p < 0.1$), whereas the path from universalism is significant (universalism- $SN_{UK} = 0.229$, $p < 0.05$).

Discussion

The main contribution of this article is to highlight the relationship between collectivistic personal values and TPB antecedent variables and, consequently, entrepreneurial intention. Our findings indicate that Schwartz (1992, 1994) and Ajzen's (1991) theoretical frameworks are extremely compatible in predicting entrepreneurial intentions confirming previous studies that have explored this

integration (Liñán et al., 2016; Morales et al., 2019). The empirical analysis has been undertaken through an examination of a sample of working-age students from the United Kingdom and Spain with the results suggesting that collectivistic personal values could represent a major obstacle to start-up rates. More specifically, accentuation of these values leads to a less favourable evaluation (PA) and less perceived ability and control (PBC) regarding the process of new venture creation. This, in turn, implies lower entrepreneurial intention.

In the relationship between collectivistic personal values and SNs, the expected positive effect is found. Nevertheless, it was also found that SNs are not significantly related to EI, which is consistent with previous research (Armitage and Conner, 2001; Autio et al., 2001; Liñán and Chen, 2009; Moriano et al., 2012; Santos et al., 2017). In this respect, it is worth considering alternative specifications of the entrepreneurial intention model in which SNs are proposed to effect PA and PBC (Fretschner and Weber, 2013; Liñán and Chen, 2009). This could compensate for the negative relationship between collectivistic values and PA/PBC. Future research could analyse this possibility.

SNs are measured by multiplying normative beliefs with the motivation to comply with these beliefs (Ajzen, 1991; Ajzen and Fishbein, 1980). Normative beliefs represent the so-called social pressures to perform (or not perform) entrepreneurial behaviour (venture creation) (Ajzen, 1991). Yet, motivation to comply represents the urge to abide by the opinions of other referents (Ajzen, 1991; Belchior and Liñán, 2017). It may be the case that the conservation and self-transcendence dimensions are positively related with the motivation-to-comply element of the SNs. In this case, individuals accentuating collectivistic values will be more inclined to follow recommendations made by referent others, but will not necessarily expect them to support their entrepreneurial aspirations (the normative-belief element of the SNs). In addition, the positive relationship hypothesised herein may be compensated for by another negative influence that we have overlooked. For instance, potential entrepreneurs may have a conflicting view of their referent others. As noted above, they may expect support based on the 'moral obligation' towards in-group members (Hockerts, 2017), but may also believe referent others will not completely endorse the idea of the individual creating a new venture. These mixed feelings could explain the lack of significant results and differences between the two countries. It may be argued that the influence of social norms on entrepreneurial intentions is much broader and more complex than that of the other two TPB variables. That is, the SNs exhibit an effect different from that of PA and PBC. Future research should clarify this relationship through a more specifically designed research analysis.

Related to this difference, previous research suggests that the relative strength of the TPB antecedents in predicting entrepreneurial intention may differ depending on the industry and national sample under study (Kautonen et al., 2015; Kolvereid and Isaksen, 2006; Krueger et al., 2000). In this regard, certain conflicting results exist. For instance, some studies find a significant influence of SNs on entrepreneurial intention (Kautonen et al., 2015; Kolvereid and Isaksen, 2006), while others (as is our case) find no such influence (Liñán et al., 2016; Moriano et al., 2012). The possibility exists that the specific personal-value structure acts as a moderator in these relationships.⁴ In this respect, Sieger and Monsen (2015) found that controllability perceptions, which could be related to self-direction values, might moderate the attitude-intention relation. Based on our results, emphasising collectivistic values decreases PA and PBC but increases SN perceptions. At the same time however, these values could also weaken the influence of PA/PBC and/or strengthen the influence of SNs on entrepreneurial intentions. This may be so since, for people accentuating collectivistic values, the opinion of their group members could have greater influence upon entrepreneurial intention than may be the case for those emphasising individualistic values (Moriano et al., 2012). In this respect, Shinnar et al. (2018) found that women are less likely to act on their intentions. Based on our results, the different structures of values could constitute a significant moderator that

explains this difference, since women and men tend to exhibit different value priorities (Gupta et al., 2013). Future research could analyse whether specific personal values (either alone or in combination with other values) moderate the relationship between TPB antecedents and entrepreneurial intention.

Implications

Schwartz's (1992, 1994) value theory proposes a circular structure of values. Emphasis on certain values is associated with a low importance being attached to the opposing values. With this idea in mind, most research to date has focused on individualistic personal values, assuming that the relevance of the opposing collectivistic values will be low so they need not be considered. In turn, our research shows that, even after controlling for the level of individualistic personal values, the stress attached to collectivistic values is important and has an effect on the motivational antecedents of intention. That is, for any given level of importance ascribed to individualistic values, a higher relevance of self-transcendence or conservation values will imply a less favourable PA and a lower PBC, together with SNs of a more favourable nature. This has significant implications for entrepreneurship scholars and policy-makers. The whole value structure of individuals, not only certain values, such as self-direction, stimulation and achievement, is relevant in the assessment of their entrepreneurial potential. Nevertheless, further research is needed to understand the interaction between the values in each value dimension.

In particular, self-transcendence values are negatively associated with PA and PBC. However, the preoccupation regarding the welfare of others (Schwartz, 1994), inherent to these values, is clearly related to social entrepreneurship. In this regard, there is a contemporary discussion on morals and ethics involving more sustainable enterprises (Anderson and Smith, 2007). There have also been some calls to bring about a discourse that is more closely related to morality and ethics in entrepreneurship research (Brenkert, 2009; Dey and Steyaert, 2016; Harris et al., 2009; Morris et al., 2002). In this respect, previous findings show that those with individualistic personal values place less emphasis on understanding the reasoning and judgement behind the moral perspective that individual agents assume (Dey and Steyaert, 2016; Gielnik et al., 2015). By contrast, collectivistic values promote thoughts, feelings and behaviour towards connecting with others, and within one's own group (Triandis and Gelfand, 2012). From this perspective, there may be some relevant qualitative differences between entrepreneurs high in collectivistic values and those who do not prioritise these values. Arguably, therefore, accentuating these collectivistic values may decrease the chances of new venture creation, although doing so may contribute towards a more socially responsible behaviour on the part of the entrepreneur. Future research could provide new insights in this respect.

There are obvious implications related to these results, if confirmed, for entrepreneurship education. Despite the relative stability of values (Bardi et al., 2009), they are not completely fixed and may be modified through, for instance, education (Myyry et al., 2013). Education opens up the mind to new knowledge and helps develop fresh and new personal perspectives, which often then make the individual reconsider her or his value priorities (Schwartz, 2010, 2012). In the particular case of Business Schools, there is evidence of value change even when no specific value-transmitting activities are included in the academic curriculum (Arieli et al., 2016). This process takes place not only through purposeful actions by teachers, but also through peer interaction, which constitutes a key mechanism in value socialisation (Racko et al., 2017). More generally, Bardi and Goodwin (2011) identified several mechanisms leading to value change, including priming, adaptation, identification, consistency maintenance and direct persuasion attempts. Most of these mechanisms are likely to be present in educational programmes. In this respect, Westhead

and Solesvik (2016) found that women and men benefit differently from entrepreneurship education. These differences could be explained by the initial personal-value structure and value-changes during education. Value-transmitting training activities therefore, may be devised to contribute towards modifying the value structure of the participants. This reflects previous research that emphasised the importance of developing a more conscious entrepreneurial mind set (Krueger, 2007; McGrath and MacMillan, 2000; McMullen and Shepherd, 2006). Nevertheless, further research that would enable the most promising combination of values is still required, not only for the promotion of entry into entrepreneurship, but also for fostering responsible and sustainable behaviour as an entrepreneur.

The comparison with the general GUESSS results for the United Kingdom and Spain has shown that our sample of younger postgraduate students exhibit higher intentions than is the case for a wider sample of older students (possibly having returned to education after some experience at work). This raises another interesting point regarding the predictive ability in the TPB. A higher entrepreneurial intention need not turn into action. Scholars, such as Liñán and Chen (2009) and Van Gelderen et al. (2015), typically find that motivational antecedents explain 40%–60% of the variance in the entrepreneurial intention, and though this renders the TPB framework the most accurate model for the prediction of intentions (Schlaegel and Koenig, 2014), Kautonen et al. (2015) report that the ability of this model to predict behaviour is considerably lower, typically in the range of 20%–30%.

Hence, a substantial proportion of unexplained behaviour still requires clarification. The value structure, including both individualistic and collectivistic value dimensions, may hold the key to unlock this question. In this respect, contemporary research has analysed the role of security as a job motivation (Delanoë-Gueguen and Liñán, 2019), closely linked to the personal value of security. Such results indicate that security motivation not only decreases intention, but also has a direct negative effect on behaviour. Again, further research should be undertaken to explore the role of personal values, both collectivistic and individualistic, in the intention–behaviour link.

Limitations

This study, like any other, is not without its limitations. The sample is restricted to two regions in two different developed countries. Cultural studies have shown that individualistic values tend to prevail in these countries, while collectivistic values predominate in developing countries (Schwartz and Bardi, 2001). A sample that originates from a less developed economy may yield disparate results. Similarly, even though young adults are more inclined to start a new venture, other groups of the population are also relevant in this respect. The results found here may be inconsistent with those from a sample of an older population, or one with different characteristics (e.g. a lower level of education). For these reasons, future research should test the proposed research model on various countries and population segments prior to any generalisations being drawn.

Conclusion

To the best of our knowledge, this is one of few studies that analyses the relationship between collectivistic personal values and entrepreneurial intention. The results offer certain relevant insights concerning the importance of these values in the entrepreneurial process. These values are negatively related to attraction and perceived control towards entrepreneurship but positively related to SNs. This influence persists, despite controlling for the level of individualism within respondents and hence, collectivistic values exert an influence of their own on the formation of entrepreneurial intentions, over and above that of the more widely studied individualistic values. These results, if

confirmed, may substantially transform the study of values in entrepreneurship. The search for the key values that increase intention could well prove futile. Instead, it may turn out to be the specific combination of all individualistic and collectivistic values that is relevant in this process. Furthermore, the implications of accentuating values, such as universalism and benevolence, may be related to social entrepreneurship intentions and behaviour. This article therefore, opens up several highly interesting avenues for further research and we trust that the entrepreneurship research community will find them to be worthy of exploration.

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Notes

1. Social entrepreneurship could be a possible exception here. However, our argument refers to entrepreneurship in general.
2. The analysis was carried out with the continuous individualist-value dummy variable, but strong collinearity was present. For this reason, a dichotomic individualistic dummy variable had to be used.
3. The figures are corrected to make the response range comparable to that in our sample, since the GUESSS survey reply options range from 1 to 7, while our questionnaire options range from 0 to 6.
4. We are most grateful to an anonymous reviewer for pointing out this issue.

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Appendix

Table 3. Measurement model indicators.

Indicators		Loadings	Alpha	CR	AVE
Entrepreneurial intention	ei1	0.904	0.938	0.939	0.843
	ei2	0.916			
	ei4	0.946			
	ei5	0.906			
Subjective norms	sn1	0.869	0.783	0.837	0.692
	sn2	0.883			
	sn3	0.735			
Perceived behavioural control	pbcl	0.737	0.850	0.858	0.570
	pbcl2	0.715			
	pbcl3	0.765			
	pbcl4	0.765			
	pbcl5	0.743			
	pbcl6	0.800			
Personal attitude	pa1	0.349 ^a	-	-	-
	pa3	0.254 ^a			
	pa4	0.342 ^a			
	pa5	0.112 ^a			
	pa6	0.422 ^a			

CR: composite reliability; AVE: average variance extracted.

^aIndicator weights for the formative construct (PA).

Table 4. Means, SDs and correlations between latent variables for the full sample.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11.
1. Conformity	3.273	0.876	1.000										
2. Tradition	2.378	0.856	0.349	1.000									
3. Security	3.482	0.827	0.157	-0.025	1.000								
4. Benevolence	3.963	0.647	-0.093	-0.021	-0.334	1.000							
5. Universalism	3.955	0.738	-0.251	-0.013	-0.275	0.366	1.000						
6. PA	3.631	1.081	-0.172	-0.224	-0.030	-0.118	-0.156	1.000					
7. SNs	3.550	1.397	0.093	-0.029	-0.009	0.059	0.005	0.321	1.000				
8. PBC	4.131	1.015	-0.023	-0.024	0.026	-0.186	-0.160	0.501	0.247	1.000			
9. EI	3.332	1.691	-0.106	-0.007	-0.053	-0.120	-0.162	0.527	0.214	0.505	1.000		
10. Individual dummy	0.494	0.501	-0.323	-0.329	-0.192	-0.297	-0.424	0.264	0.073	0.152	0.230	1.000	
11. Country dummy	0.484	0.500	-0.009	-0.151	0.219	-0.271	-0.283	0.175	-0.005	0.132	0.123	0.215	1.000

SD: standard deviation; PA: personal attitude; SNs: subjective norms; PBC: perceived behavioural control; EI: entrepreneurial intention.

Table 5. Means, SDs and correlations between latent variables for the Spanish sample.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Conformity	3.194	0.844	1.000									
2. Tradition	2.397	0.806	0.387	1.000								
3. Security	3.269	0.869	0.267	0.110	1.000							
4. Benevolence	4.015	0.655	-0.139	0.025	-0.296	1.000						
5. Universalism	4.036	0.766	-0.264	-0.051	-0.278	0.384	1.000					
6. PA	3.426	1.114	-0.098	-0.174	-0.080	-0.117	-0.170	1.000				
7. SNs	3.553	1.411	0.005	-0.067	-0.032	0.070	-0.011	0.441	1.000			
8. PBC	4.005	1.076	0.039	-0.019	0.051	-0.220	-0.180	0.484	0.289	1.000		
9. EI	3.128	1.630	0.018	-0.009	-0.081	-0.083	-0.200	0.524	0.287	0.464	1.000	
10. Individual dummy	0.390	0.489	-0.306	-0.324	-0.250	-0.317	-0.444	0.196	0.075	0.050	0.159	1.000

SD: standard deviation; PA: personal attitude; SNs: subjective norms; PBC: perceived behavioural control; EI: entrepreneurial intention.

Table 6. Means, SDs and correlations between latent variables for the UK sample.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Conformity	3.358	0.903	1.000									
2. Tradition	2.358	0.908	0.324	1.000								
3. Security	3.711	0.713	0.057	-0.100	1.000							
4. Benevolence	3.906	0.636	-0.061	-0.162	-0.288	1.000						
5. Universalism	3.868	0.698	-0.265	-0.065	-0.167	0.225	1.000					
6. PA	3.853	1.001	-0.235	-0.215	-0.042	-0.085	-0.094	1.000				
7. SNs	3.547	1.385	0.172	0.001	0.024	0.044	0.031	0.183	1.000			
8. PBC	4.265	0.930	-0.080	0.013	-0.077	-0.083	-0.072	0.434	0.197	1.000		
9. EI	3.551	1.731	-0.214	0.030	-0.086	-0.103	-0.067	0.558	0.147	0.550	1.000	
10. Individual dummy	0.605	0.490	-0.352	-0.294	-0.255	-0.176	-0.322	0.328	0.077	0.222	0.262	1.000

SD: standard deviation; PA: personal attitude; SNs: subjective norms; PBC: perceived behavioural control; EI: entrepreneurial intention.