ENTREPRENEURIAL INTENTIONS AMONGST STUDENTS IN DIVERSE CULTURAL CONTEXTS

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Abstract
The current study aimed to identify the determinants of entrepreneurial intentions, based on the TPB framework, for 270 students from 9 different countries with different cultural characteristics. Structural equation modelling was used for primary data analysis. The obtained empirical results indicated that entrepreneurial intentions amongst students are influenced directly and positively by personal attitude and perceived behavioural control. These motivational factors mediate the causal relationship between subjective norms and entrepreneurial intentions, whereas subjective norms exert a stronger effect on personal attitude and perceived behavioural control in the less individualistic country. The attained empirical results converge to the idea that the TPB model is applicable in different cultural contexts, being necessary national programmes and measures to encourage entrepreneurial intentions and behaviours that consider cultural values, with potential positive effects on economic growth and on the labour market. The comprehended research took in consideration a single cultural dimension (collectivism versus individualism) and only from certain regions from the countries included in the panel, thus not permitting to generalise the obtained empirical results.

Keywords: Entrepreneurial intention, Cultural differences, Behavioural motivation, Student entrepreneurship.

1. INTRODUCTION

Entrepreneurial intention is defined as the engagement to start a new business (Krueger, 1993 in Shirokova et al. 2016), a necessary precursor for actual entrepreneurial behaviour, of effective implementation of the proposed business (Fayolle et al. 2006 in Liñán and Chen 2009).

The intention to effectuate an entrepreneurial behaviour is voluntary and conscious, for this reason there were attempts to explain it through the cognitive approach (Garcia-Rodriguez et al. 2015). The
theory of planned behaviour (TPB) of Ajzen (1991) offers a general theoretical framework permitting to understand the formation of the entrepreneurial intention through three motivational elements: favourable or unfavourable personal attitude towards the entrepreneurial behaviour, subjective norms regarding the manner in which a person perceives others opinions regarding the given behaviour, and perceived behaviour control as personal reflection on the capacity of one person to comprehend entrepreneurial behaviour. At country level, a part of the active population is oriented toward entrepreneurship, while within the raw of these, youth plan their entrepreneurial carriers. In this sense, TPB demonstrated its predictable character in numerous empirical studies, aiming to establish the determinants entrepreneurial intentions amongst students (Kolvereid 1996; Tkachev and Kolvereid 1999; Autio et al. 2001; Jacob and Richter 2005; Iakovleva et al. 2011; Farkas and Gubik 2013; Nițu-Antonie and Feder 2015).

Culture, though its fundamental values and principles specific to a category of persons of a society, generates individuals a set of certain personality features and motivations, leading to the specific behaviour (Hofstede 2001; Mueller and Thomas 2001). Cultural dimensions differentiating countries or regions, as conceived by Hofstede (1984, 1991), takes in consideration: power distance (the degree of equality or inequality perceived between the members of a society); attitude towards uncertainty (the management of unpredictable, ambiguous or uncertain situations); individualism versus collectivism (the extent of encouraging interpersonal relationships and personal achievement, emotional independence to a group or collective); masculinity versus femininity (the extent to which emphasizes the support and acquisition of material things/ relationships between people, concern and carry for them); short-term orientation versus long-term orientation of individuals (the extent to which individual goals are defined in short/ long run). The permanent character of cultural values manifestation specific to a particular geographical area leads to influence on entrepreneurial intention to a greater extent than economic issues which have a certain dynamic time (Hofstede et al. 2004; García-Cabrera and García-Soto 2008; Liñán et al. 2011). Comparative empirical studies used TPB as theoretical base to determine the role played by cultural differences in forming entrepreneurial intentions, at the level of two (Ozaralli and Rivenburgh 2016) or more countries (Moriano et al. 2012). As TPB emphasize, the determinants of entrepreneurial intention, may partially mediate the relationship between entrepreneurial intention and cultural dimensions. Some empirical results indicated that in the case of persons originated from countries characterised as less individualistic, with high uncertainty avoidance, masculinity and limited power distance avoidance tend to have higher entrepreneurial intentions (Schlaegel et al. 2013). Some researchers aiming to analyse the direct and mediated influence of cultural dimensions on
entrepreneurship presents contradictory results (Wennekers et al. 2007; Thurik and Dejardin 2011; Şahina and Asunakutlb 2014), being necessary a continuation with a more detailed approach of the empirical studies.

The main objective of the undertaken research was to establish the motivational antecedents which may determine entrepreneurial intentions amongst students from efficiency and innovation oriented origin countries (Porter et al. 2002), different from cultural point of view, based on the theoretical foundation of TPB (Ajzen 1991).

The study includes three main parts, as follows: the theoretical and empirical framework regarding the effects of behaviour motivations on entrepreneurial intentions, in conformity with TPB, in different cultural contexts, respectively establishing hypotheses for evaluation; research methodology and obtained results subsequent to research hypothesis validation; conclusions and research limitations, along with prospective directions for empirical investigation.

2. LITERATURE REVIEW AND HYPOTHESES

Multiple empirical investigations, based on the TPB research, confirmed the legitimacy of the relationship between motivational factors and entrepreneurial intentions, for given groups, mainly students, from countries characterised by different cultures and economic contexts (Liñán and Chen 2009; Shook and Brătianu 2010; Finisterra do Paço et al. 2011; Liñán et al. 2011; Farkas and Gubik 2013; García-Rodríguez et al. 2015; Feder and Niţu-Antonie 2017).

Motivational factors considered as potential antecedents of entrepreneurial intentions regards: personal attitude towards the business initiating behaviour, subjective norms influencing it and perceived behaviour control. Personal attitude is the result of a positive or negative evaluation of entrepreneurship, realized by an individual based on a set of accessible behavioural beliefs and his/her power to appreciate is weighted with the considered results foreseen to be obtained. Subjective norms emphasize the pressure of social perception regarding entrepreneurship exercise on the individual, depending on the social environment in which the person acts. While the social environment postulates rules indicating how individuals should behave, creating normative beliefs at group or society level. A person’s compliance to these rules is related to the motivation given by the desire to follow them and thus trigger or not the decision to have an entrepreneurial career. Perceived behavioral control refers to people’s perceptions of their capabilities as entrepreneurs, according to the belief that they will or will
not activate this capability. The relative contributions of these three motivators for explaining entrepreneurial intention are not set in advance (Liñán and Chen 2009), requiring the replication of TPB for every situation.

In these circumstances, the research hypothesis was formulated as follows:

H1: Entrepreneurial intention relates positively to (H1a) personal attitudes toward entrepreneurship and (H1b) high perceived behavioural control.

Regarding subjective norms, some empirical studies identified a direct link between this motivational characteristic and entrepreneurial intention (Tkachev and Kolvereid 1999; Kolvereid and Isaksen 2006; Moriano et al. 2012; García-Rodríguez et al. 2015; Feder and Niţu-Antonie 2017). Other studies did not discovered a significant direct relationship (Autio et al. 2001; Krueger et al. 2000; Liñán et Chen 2009), leading to the idea of a possible indirect effect on entrepreneurial intention, personal attitude and perceived behavioural control mediating this causal relationship.

Consequently, the following research hypotheses were formulated:

H2: Subjective norms positively influence personal attitude.

H3: Subjective norms positively influence perceived behavioural control.

Cultural dimensions according to Hofstede’s model (1984, 1991) have proven their usefulness in studies aimed at identify the extent to which cultural aspects specific to a country are related to the entrepreneurial intentions of its population (Pruett et al. 2008).

The individualism versus collectivism dimension was proven with the most representative for influencing motivational factors of the entrepreneurial intentions from TPB, according to the research conducted by García-Rodríguez et al. (2015), Liñán and Chen (2009), Moriano et al. (2012). Krueger (2000) argues that cultural dimensions influence entrepreneurial intentions, primarily through subjective norms from the TPB framework.

In cultures characterized by collectivism, subjective norms may determine entrepreneurial intention according to Tkachev and Kolvereid (1999). Other studies did not found a direct relation between subjective norms and entrepreneurial intentions, nor in collectivist cultures, also nor in the individualistic ones, according to Moriano et al. (2012). These results suggested an indirect influence of subjective norms on entrepreneurial intentions, through personal attitude and perceived behavioural control, in a greater extent in collectivistic culture than within the individualistic ones.
Therefore, the following research hypothesis was formulated:

H4: Subjective norms exert a stronger effect on (H4a) personal attitude and (H4b) perceived behavioural control in the less individualistic country.

3. RESEARCH METHOD

In order to analyze the main determinants of entrepreneurial intentions at individual level within several countries, a national culture specific perspective was employed, as particularity to this study.

Sample Characteristics

The study concentrates on nine countries from the European, American and Asian continents, and based on data from Baltador (2016) for Moldova and Hofstede (2017) for the rest of countries, based on individualism (higher scores [>50]) versus collectivism (lower scores [<50]) cultural dimension the countries were reclassified. Similar to the approach employed by Moriano et al. (2012), two main country panels were created: (i) individualistic countries (IC): Austria, Denmark, Hungary, Italy, United Kingdom, United States; respectively (ii) collectivistic countries (CC): India, Moldova, and Romania.

![Figure 1. Country specific scores on individualism/collectivism cultural dimension](image-url)
For primary data collection purposes, potential future entrepreneurs from each of the 9 selected countries in 2016 (country sample n=30, pooled sample N=270). In all the selected countries the original English version of the structured questionnaire was applied to eliminate any translation related issues (Hair et al., 2014) or understanding related bias, being either the native or the most well-known foreign language of the implicated students. Involvement in the study was voluntary, anonymous responses were assured by the self-administered questionnaires. Participants in the study were students with academic entrepreneurial education background, as follows: 180 respondents from individualistic countries: Vienna University of Economics and Business in Austria, Aarhus Business School in Denmark, Corvinus University in Hungary, Maria Santissima Assunta Roma University in Italy, Nottingham Trent University in the United Kingdom, University of California in the United States of America; respectively 90 respondents from collectivistic countries: Bangalore in India, Academy of Economic Studies of Moldova, West University of Timișoara in Romania.

The heterogeneous sample can be distinguished based on gender, age of respondents and level of studies. Regarding the respondents from individualistic countries, 56.1% were males and 43.9% females, the average age of the participants was between 23 and 24 year, while 45% had B.A. level fundamental higher education studies and 55% with advanced M.A. level academic background. In comparison, respondents from collectivistic economies, 70% were females and 30% males, the average age of the participants was between 22 and 23 year, while 56.7% had B.A. level fundamental education and 43.3% with advanced M.A. level academic background.

**Measurement Instruments**

The research model, with the three independent and one dependent variable, had been operationalised using traditional latent reflective scales, in the form of self-reported 5-point Likert type measures. Similar to previous study of Feder and Nițu-Antonie (2017), both the behavioural motivations (independent variables) and
entrepreneurial intention (dependent variable) are derived from Liñán and Chen’s (2009) scale, as follow: 5 reflective items for personal attitude, 6 reflective items for perceived behavioral control, 3 reflective items for subjective norms, and 6 reflective items for entrepreneurial intentions. Culture was included as moderator variable, measured on a two extreme type dimension, individualism versus collectivism, permitting to create two panels, as indicated previously.

**Data Analysis Procedure**

The empirical data analysis involved several statistical techniques. In SPSS have been evaluated the traditional descriptive statistics (mean, standard deviation, skewness, kurtosis), followed by psychometric analysis based on reliability (α Cronbach) and validity (Pearson correlation and average variance extracted) evaluation, along with factor analysis. Subsequently, in AMOS have been tested the proposed hypotheses, based on the structural equations model, as the most accurate description of causal, multiple and sequential relationships between variables, considered the most suitable approach by Moriano et al. (2012), Farkas and Gubik (2013). Finally, for testing statistically significant differences between the individualistic and collectivistic panels, z-scores were computed for between-group divergence statistics.

### 4. EMPIRICAL RESULTS

The preliminary statistical analysis included the descriptive analysis of primary data in the form of mean, standard deviation, skewness, and kurtosis evaluation for the pooled total sample, for the individualistic country panel, and the collectivistic country panel.

**Table 2. Descriptive Statistics Regarding the Analyzed Constructs**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Panel</th>
<th>PA</th>
<th>PBC</th>
<th>SN</th>
<th>EI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>3.5526</td>
<td>3.2414</td>
<td>3.9025</td>
<td>3.3735</td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>3.4978</td>
<td>3.1796</td>
<td>3.8870</td>
<td>3.2546</td>
<td></td>
</tr>
<tr>
<td>Collectivistic</td>
<td>3.6622</td>
<td>3.3648</td>
<td>3.9333</td>
<td>3.6111</td>
<td></td>
</tr>
<tr>
<td><strong>Standard deviation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>0.6907</td>
<td>0.6359</td>
<td>0.7717</td>
<td>0.7166</td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>0.6819</td>
<td>0.6424</td>
<td>0.8105</td>
<td>0.6762</td>
<td></td>
</tr>
<tr>
<td>Collectivistic</td>
<td>0.6990</td>
<td>0.6078</td>
<td>0.6909</td>
<td>0.7395</td>
<td></td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>-0.0446</td>
<td>-0.0091</td>
<td>-0.4329</td>
<td>0.1149</td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>0.0132</td>
<td>0.0485</td>
<td>-0.4519</td>
<td>0.1734</td>
<td></td>
</tr>
<tr>
<td>Collectivistic</td>
<td>-0.1807</td>
<td>-0.0783</td>
<td>-0.3146</td>
<td>-0.1314</td>
<td></td>
</tr>
<tr>
<td><strong>Kurtosis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>-0.1468</td>
<td>-0.2720</td>
<td>-0.3184</td>
<td>-0.1484</td>
<td></td>
</tr>
<tr>
<td>Individualistic</td>
<td>0.2386</td>
<td>-0.1404</td>
<td>-0.3439</td>
<td>0.4531</td>
<td></td>
</tr>
<tr>
<td>Collectivistic</td>
<td>-0.7059</td>
<td>-0.4912</td>
<td>-0.5080</td>
<td>-0.7521</td>
<td></td>
</tr>
</tbody>
</table>
Findings regarding the descriptive analysis revealed that respondents from both individualistic (Mean IC=3.2546) and collectivistic (Mean CC=3.6111) origin countries show above average level of entrepreneurial intention, being slightly higher in the second panel. Regarding the motivational characteristics, personal attitude (Mean IC=3.4978; Mean CC=3.2414), perceived behavioural control (Mean IC=3.1796; Mean CC=3.3648) and subjective norms (Mean IC=3.8870; Mean CC=3.9333). For all the construct, standard deviation (Min=0.6078; Max= 0.8105; ∈ [0,+1]), skewness (Min=-0.4519; Max=0.1734; ∈ [-2,+2]) and kurtosis (Min= -0.7521; Max=0.4531; ∈ [-2,+2]) indicators are within the range of normal distribution.

Regarding skewness, in the individualistic panel PA, PBC and EI are slightly right side oriented, while SN is slightly sloped towards left. Similarly, all the constructs in the collectivistic panel are slightly sloped towards the left side.

Regarding kurtosis, in the individualistic panel PA and EI have slightly leptokurtic, PBC and SN have slightly flatter distributions, and similarly all constructs in the collectivistic panel have slightly platykurtic distribution.

Concerning the modelled constructs measurement scales’ psychometric properties, a three stage evaluation was applied (Table 3). First, reliability measured with α-Cronbach, includes values between 0.5 and 0.7 are within the acceptable range (Hair et al. 2014). Second, factor analysis based on principal component extraction and varimax rotation, confirming significant factor loadings ([0.647; 0.923] >0.6) for all item-scale pairs. Convergent validity was assessed based on Pearson correlations for each item-scale pair and discriminant validity based on average variance extracted (AVE). Statistical results emphasize significant (p<0.01) and high (>0.5) correlations for convergent validity, respectively superior values of AVE, confirming discriminant scale validity.

The first four research hypothesis regards the effects of behavioural motivators on entrepreneurial intentions, either in direct manner (H1a and H1b), or either with indirect effect through mediators (H2 and H3), as presented in Table 4.
The first hypothesis (H_{1a}) investigates the direct, significant and positive influence of personal attitude (PA) on entrepreneurial intentions (EI). Based on estimates and significance levels from the modelled structural equations, statistically the relationship is valid both in the case of an overall evaluation of the countries, of individualistic and of collectivistic countries too, being significant and positive (p=0.000<0.05, β_1=0.482; β_2=0.412; β_3=0.562) for all the three country panels. Therefore, the study probe that H_{1a} is a valid hypothesis regardless the cultural background of the selected countries from the perspective of individualism/collectivism national cultural dimension.

The second hypothesis (H_{1b}) investigates the direct, significant and positive influence of perceived behavioural control (PBC) on entrepreneurial intentions (EI). Statistically, the relationship is for all the three country panels, being significant and positive (p=0.000<0.05, β_1=0.433; β_2=0.421; β_3=0.436). Similarly to the first hypothesis, H_{1b} is a valid hypothesis regardless the cultural background of analysed countries.

The third (H_2) and fourth (H_3) hypotheses investigate the direct, significant and positive influence of subjective norms (SN) on other behavioural characteristics, namely personal attitude (PA) and perceived behavioural control (PBC). From statistical perspective, the influence of subjective norms (SN) on personal attitude (PA) is valid and significant (p=0.000<0.05, β_1=0.353; β_2=0.374; β_3=0.334) for all the three panels, as well as is the causal relationship between subjective norms (SN) and perceived behavioural control (PBC) (p=0.000<0.05, β_1=0.342; β_2=0.340; β_3=0.357) for all country panels.
Based data included in Table 5, differences are probed between individualistic and collectivistic countries in terms of the influence hold by subjective norms on personal attitude ($z = -0.386$). Negative $z$-score along with regression weights demonstrate stronger effects of subjective norms in the case of individualistic countries than in collective ones, invalidating $H_{4a}$.

In the case of $H_{4b}$, subjective norms significant influence perceived behavioural control, based on positive $z$-score and regression weights the effect is higher ($z=0.186$) for the selected collectivistic countries than for the individualistic ones, thus validating hypothesis $H_{4b}$.

The validated research hypotheses ($H_{1a}$, $H_{1b}$, $H_2$ and $H_3$) showed that on one hand, the intention entrepreneurial amongst students, across all the analysed countries included in the panel, is influenced directly and positively by personal attitude and perceived behavioural control, and on the other hand, these motivational characteristics constitutes mediating factors within the positive relationship between subjective norms and entrepreneurial intentions of the questioned young people, confirming the results from the studies of García-Rodríguez et al. (2015), Şahina and Asunakutlub (2014), Liñán and Chen (2009).

The empirical results from the present research regarding the last hypothesis ($H_4$) showed that the individualism versus collectivism cultural dimension moderates the causal relationship between subjective norms and entrepreneurial intention of the surveyed students in all countries included in the panel, being mediated by individual attitudes and perceived behavioural control, according to the empirical results of the García-Rodríguez et al. (2015) study. The cultural dimension individualism versus collectivism influence the entrepreneurial intention of the investigated students through TPB motivational factors, subjective norms leads to greater personal attitude of students toward embracing entrepreneurial behaviour and the control perceived by them regarding this behaviour within the collectivistic countries versus the individualistic ones, according to results of Khristiansen and Indarti (2004).
5. CONCLUSIONS

The conducted study highlights personal attitude and perceived behavioural control as motivating factors that directly determines the entrepreneurial intention in the case of the 270 analyzed students from 9 different countries, respectively as mediating factors for the relationship between subjective norms and entrepreneurial intentions, increasing the TPB's predictability power. The intensity of the indirect causal link between subjective norms and entrepreneurial intentions is higher amongst questioned students from India, Romania, and Moldova, as collectivist countries, compared to the situation of the students from Austria, Denmark, Hungary, Italy, United Kingdom, and the United States of America, as individualistic countries, considered within the comprehended investigation.

The empirical study carried out by means of structural equations, emphasizes the role of TPB in explaining entrepreneurial intent in specific cultural contexts and provides evidence that this theory can be applied to different cultural backgrounds. According to the conducted study cultural values may influence individuals’ motivational characteristics with regard to the business oriented conduct, providing thus a deeper understanding of entrepreneurship. In this fashion, there can be designed programs and measures implemented at national level, by taking into account the cultural characteristics of each country involved in stimulating entrepreneurial intention and behaviour of young people (Liñán and Fernandez-Serrano, 2013), with possible positive effects on economic growth and on the creation of new workplaces (Kelley et al. 2013).

The obtained results cannot be generalized in terms of the investigation carried out under consideration of only one single cultural dimension of Hofstede’s national culture model, while intention and behaviour characteristics are focused on certain students from specific regions of the analyzed countries. Improving the reliability of the results requires as future research direction, the investigation of the predictability of TPB on wider and more heterogeneous samples of people from a higher number of countries, by taking into account also the psychological characteristics, the role of entrepreneurship education and several demographic variables (age, gender, parental entrepreneurship experience, etc.) as direct and indirect antecedents of entrepreneurial intention, under the conditions of considering culture and economic development level of countries are moderators. Conducting longitudinal studies to identify the causal relationship between intention and entrepreneurial behaviour, by taking into account the possibility that entrepreneurial activity may generate cultural changes in the lines of the investigated populations, constitute further future research directions.
REFERENCES


